

**Pre-approved**

**by Decision of the Board of Directors**

of TGC-1

as of \_\_\_\_ 2020

(Minutes No. \_\_ as of \_\_ 2020)

**APPROVED**

by Decision of the General  
Shareholders Meeting of TGC-1

dated \_\_ 2020

(Minutes No. \_\_ as of \_\_ 2020)

**ANNUAL REPORT**  
**Public Joint Stock Company**  
**“Territorial Generating Company No.1”**  
on results of 2019

General Director of Gazprom Energoholding LLC

Managing organization of TGC-1

Denis Fedorov

Reliability of the data contained in the annual report of Public Joint Stock Company “Territorial Generating Company No.1” according to the results of work for 2019 is confirmed by the conclusion of the Audit Commission of TGC-1 (Minutes as of \_\_ \_\_, 2020)

Saint Petersburg

2020

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## 1. LETTER TO SHAREHOLDERS

**Dear Shareholders,**

TGC-1 continues to follow the Gazprom Strategy in the electric power industry for 2018–2027, the key goal of which is to ensure stable profit growth while maintaining high level of reliability of energy supply to consumers. To achieve it, in particular, it is envisaged to continue the implementation of projects to upgrade generating capacities and increase operational efficiency.

A number of generating facilities of the Company were selected within the framework of the new state program of competitive selection of capacities for modernization. The first batch of equipment for the project at the Avtovskaya CHPP has already been manufactured. Systematic investments in the renewal of fixed assets are aimed at maintaining high production efficiency and maintaining financial results after the peak of payments under the program of capacity delivery agreements.

The Company continues to pay attention to the development of hydropower facilities. In particular, at the Verkhne-Tulomskaya HPP, the most powerful in the Arctic Circle — 268 MW, a large-scale reconstruction of hydraulic units is carried out with an increase in capacity. In 2019, the Company was able to significantly advance in solving the strategic task in the field of heat supply in St. Petersburg. Joint solutions with the city administration allowed to increase funding for the repair program of heat supply systems, to increase the safety and reliability of operation of heating systems.

The effective use of the advantages of new combined cycle power units and gas turbine units, and hydro generation facilities allows TGC-1 to reach stable and positive financial results. TGC-1 revenue in 2019 increased by 4.3% and reached RUB 90.8 billion, and net profit by 33.8% up to RUB 9.5 billion. At the same time, the ratio of debt to EBITDA of the Company was significantly improved.

In 2019, the Board of Directors of TGC-1 decided to join the centralized cash flow and liquidity management system of the Gazprom Group (cash pooling). The use of a global financial management system will create an additional support tool for all companies of the Group and will increase the efficiency of liquidity management and receive interest income for the provision of free cash.

The successful development of TGC-1 is confirmed by the strengthening of the investment attractiveness of the company's shares and the objective growth of its market capitalization. The rating agency Fitch Ratings upgraded TGC-1's long-term ratings to BBB with a forecast of maintaining strong creditworthiness of the company until 2023.

TGC-1 production facilities are located in four regions of the North-West of Russia, many of those – above the Arctic Circle, where the ecological balance is fragile. In this regard, the company is working in detail on the implementation of environmental policies and is consistently minimizing its environmental impact. At the end of 2019, gross pollutant emissions from production facilities of TGC-1 decreased by 4.3% compared to 2018.

At the Pravoberezhnaya CHPP in St. Petersburg, local treatment facilities for industrial and storm sewage have been commissioned. Modern technologies make it possible to prepare effluents for reuse in the production cycle. As part of the Environmental Agreement between TGC-1 and the Murmansk Oblast, there were closed fuel oil drainage systems at the Centralnaya CHPP and South boiler house of PJSC Murmanskaya CHPP, which directly play an important role in improving the comfort of the Murmansk citizens.

Gazprom continues to support activities aimed at further increasing the profitability and shareholder value of the Group's electric power companies and implementing the PJSC Gazprom Electric Power Strategy for 2018 – 2027. I hope that the joint work of the Board of Directors and management, together with the support of shareholders, will continue to contribute to the Company's success and increase its profitability!

**Deputy Chairman of the Management Board, PJSC Gazprom,  
Chairman of the Board of Directors of TGC-1**

**Vitaly Markelov**

## **Dear Shareholders,**

The year 2019 became a landmark for TGC-1. The company within the Gazprom Group completed integration in accordance with the unified management standards of the Gazprom Energoholding Group, achieved record financial results and continued to develop energy digitalization projects in all regions of its presence.

The volume of electricity production by TGC-1, including PJSC Murmanskaya CHPP, for 2019 amounted to 28.3 billion kWh. Electricity generation at heat power plants for 2019 increased by 0.6%, while the volume of heat output amounted to 24.2 million Gcal.

The company pays great attention to projects aimed at improving the management of energy assets and improving production safety. There were such electronic systems as “Bypasses”, “Risks”, “Video recording during operational switching in electrical installations and work permits” developed and implemented. Some of them became unique for the electric power industry and allowed to strengthen competitive advantages over other companies in the industry.

In 2019, the TGC-1 team confidently confirmed its professionalism and willingness to develop and implement innovative approaches to solve complex production problems. Among the achievements of our employees are the first place for the team of the Karelsky Branch in the competitions for operating personnel of CHPPs with cross-connections, the third place in the competitions for repair personnel, individual victories of environmentalists, won in the professional skill competition Best Ecologist of Gazprom Energoholding Group. Two employees of TGC-1 became laureates of the International Contest of Scientific, Technical and Innovative Developments, held with the support of the Ministry of Energy of Russia.

The company systematically implements a program of repairs and upgrades. In 2019, in the Arctic Circle, at hydro power plants of the Kolsky Branch of TGC-1 the main stage of the introduction of modern systems for monitoring the operation of hydraulic units was completed. As a result, the plants switched to modern software and hardware of production management.

In strict accordance with the schedule and in compliance with modern standards of reliability, safety and environmental friendliness, a reconstruction project of the Verkhne-Tulomskaya HPP is being implemented. Already in Q1 2020, updated hydraulic unit No. 4 began supplying electricity and capacity.

TGC-1 is working to improve client services: electronic document management, a personal account have been introduced, and the ability to transmit readings through instant messengers and social networks has been created.

Dear Shareholders,

In 2020, the country will celebrate the centenary of the GOELRO plan. For this event, TGC-1 launched a multimedia informational and educational project.

The first hydro power plants of Russia, built according to the GOELRO plan — the Volkhovskaya HPP, the Nizhne-Svirskaya HPP, the Niva HPP-2 — are still operating in the company’s production complex.

Electrification is not only the incredible deeds of the past, but also our comfortable present. Thus, on 1 October 2020 TGC-1 will celebrate the 15th anniversary of the organization of the Company.

I am sure that the experience, skill, responsibility and indifference of our employees, the focus of the company’s partners on the joint resolution of the complex issues that time poses before us, will allow TGC-1 to continue to maintain leadership in the region.

**Managing Director, TGC-1**

**Vadim Vederchik**

## 2. COMPANY OVERVIEW

### 2.1. Key Indicators of the Company

#### Key operating performance indicators of TGC-1\*

	2018	2019	Δ (%)
Installed electric capacity, MW	6,950	6,918	-0.5
Installed heat capacity, Gcal/hr	13,745	13,485	-1.9
Electricity output, mln kWh	29,327	28,275	-3.6
Net electricity output, mln kWh	32,580	30,975	-4.9
Heat output, thousand Gcal	24,895	24,174	-2.9
Heat useful output, thousand Gcal	25,312	24,476	-3.3

\* Including PJSC Murmanskaya CHPP

#### Key financial indicators of TGC-1, RAS \* (RUB mln)

	2018	2019	Δ (%)
Revenue	87,080	90,837	4.3
Production cost	(76,300)	(78,998)	3.5
Gross profit	10,780	11,849	9.9
Profit before taxation	8,542	11,605	35.9
EBITDA	17,442	19,476	11.7
Net profit	7,099	9,495	33.8
Total assets	126,052	131,370	4.2
Earnings per share, RUB	0.00184	0.00246	33.7

\* RAS statements of TGC-1 do not consolidate financial performance of the subsidiaries

#### Key financial indicators of TGC-1 and its subsidiaries, IFRS (RUB mln)

	2018*	2019	Δ (%)
Revenue	92,455	97,256	5.2
Operating expenses	(77,429)	(85,599)	10.6
Operating profit	12,909	12,149	-5.9
EBITDA**	20,887	22,500	7.7
Profit before taxation	12,316	10,339	-16.1
Profit	10,421	7,990	-23.3
Total assets	167,912	182,504	8.7

\* The results of 2018 have been adjusted due to the transfer of the items "State subsidies", "Income from leased property" from other operating income to revenue.

\*\* EBITDA = operating profit + depreciation

### 2.2. Company Overview

Public Joint Stock Company "Territorial Generating Company No.1" (hereinafter referred to as TGC-1 or the Company) is the leading producer of electricity and heat in the Northwestern Federal District of Russia. TGC-1 was established on 25 March 2005 in the course of reforming the electric power industry of Russia. On 1 August 2016, in order to bring the company name into line with the Regulations of the Civil Code of the Russian Federation, JSC TGC-1 was renamed to PJSC TGC-1. Today, the Company unites generating enterprises from the Baltic Sea to the Barents Sea. The Company's generating assets comprise 52 power plants of various types in four constituent entities of the Russian Federation: St. Petersburg, the Republic of Karelia, Leningrad and Murmansk Oblasts.

Generated electricity is delivered to the domestic wholesale market of electricity and capacity as well as exported to Finland and Norway. TGC-1 is a strategic supplier of heat in St. Petersburg, Petrozavodsk, Murmansk, and Apatity and Kirovsk in Murmansk Oblast.

TGC-1 includes the following subsidiaries: JSC Murmanskaya CHPP (till 29 June 2015 – JSC Murmanskaya CHPP; till 05 March 2020 – PJSC Murmanskaya CHPP; power supply of Murmansk and

surrounding areas, share in authorized capital – 98.85%), JSC St. Petersburg Heating Grid (till 29 July 2016 – OJSC St. Petersburg Heating Grid; connection of heating networks in the area of operation of the Company’s CHPPs, share in authorized capital of 71.57%), as well as dependent companies of JSC HHC (till 18 June 2015 – OJSC HHC; transfer of heat energy from the Apatitskaya CHPP to consumers in the city of Kirovsk, with a share in authorized capital of 50%) and TGC-Service LLC (until 3 June 2013 – TGC-1-Service LLC; specialized repair company, share in authorized capital — 26%).

TGC-1 is a part of the Gazprom Group. Controlling stakes in Gazprom’s generating companies are consolidated on the balance sheet of Gazprom Energoholding LLC, a subsidiary of Gazprom, established to implement the Gazprom’s Strategy in the power industry, which enables to create an effective management system based on unified corporate standards.

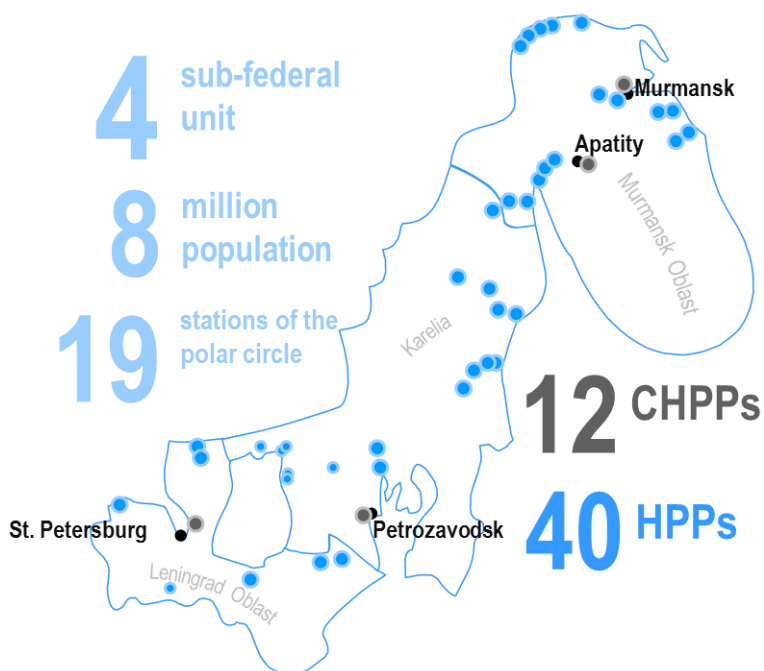
The key shareholders of TGC-1 are as follows:

- Gazprom Energoholding LLC – 51.79% of shares,
- Fortum Power and Heat Oy – 29.45% of shares.

Shares of TGC-1 are traded on the Moscow Exchange and included in Level 1 of the quotation list.

Fortum Power and Heat Oy, the second largest shareholder, is Scandinavian leading energy concern with the highest standards of business conduct. Fortum Power and Heat Oy makes a valuable contribution to the enhancement of the Company’s management efficiency.

Thus, being guided by international standards of business conduct, operating environmentally responsible production, and implementing an innovative social policy, TGC-1 is striving to take the leading position on the energy market, to be a reliable partner for investors, to take care of shareholders’ interests, and satisfy customers’ highest requirements.



## 2.3. The Company Events in 2019

### JANUARY

Analytical Credit Rating Agency affirmed TGC-1's credit rating at AA (RU), with a Stable outlook. TGC-1, together with the city center of volunteers and the public organization the Youth Initiatives, opened a skating rink and art site in the Governor's Park of Petrozavodsk. Kondopozhskaya HPP, the first of the GOELRO plan in Karelia, turned 90 years. On this day, a monument to hydro builders was inaugurated on the territory of the plant.

### FEBRUARY

At the Vasileostrovskaya CHPP, comprehensive control exercises were conducted to eliminate the threat of a man-made emergency. The interactive annual report of TGC-1 for 2017 became the winner of the Digital Communications Awards – 2019.

### MARCH

On the eve of the 55<sup>th</sup> anniversary of the northernmost underground hydro power plant in the world — the Borisoglebskaya HPP — a press tour was held for journalists from Moscow and Murmansk Oblast. TGC-1 and St. Petersburg State University launched a joint educational project, School of Energy Journalism and PR.

### APRIL

At the Narvskaya HPP, an exercise was conducted to test the actions of plant personnel and third-party organizations during the liquidation of an emergency during the passage of flood waters. At the Verkhne-Tulomskaya HPP, a new impeller of hydraulic unit No. 4 was installed. The progress of the work was observed by the Governor of Murmansk Oblast Andrey Chibis. In the village of Zelenoborsk, Murmansk Oblast, the final of the most popular children's and youth competitions in the Arctic region: the IX Ski Races for the Cup of the Kolsky Branch of TGC-1 took place. At the Pravoberezhnaya CHPP, local treatment facilities for industrial and storm sewage have been put into pilot operation. With the support of TGC-1, the XVI All-Russian Festival of Theatre Arts for Children "Harlequin" took place. TGC-1 project on developing human resources "Real energy men: the best in business", implemented in 2018, became the winner of the KonTEKst contest in the nomination "Best PR projects of energy companies and power engineering".

### MAY

The annual press conference "Gazprom's Power Generation Strategy" with Denis Fedorov, General Director of Gazprom Energoholding LLC, was held. At the St. Petersburg State Art and Industry Academy named after A. L. Stieglitz, the IX charity "Northern Ball" for orphans, disabled children and children from large families was held, arranged by the MASTER CLASS International Fund with support from TGC-1. Apatitskaya CHPP turned 60 years old.

### JUNE

The annual General Shareholders Meeting of TGC-1 was held. Within the framework of the Russian International Energy Forum, a round table discussion "Work with Debtors. Positive practices", organized by TGC-1, was held. The corporate website of TGC-1 was awarded a prize at the X Corporate Contest of Public Relations and Media Services of PJSC Gazprom's Subsidiaries and Organizations. Following the course towards digitalization of the Russian energy sector, TGC-1 implemented the unique Bypasses electronic system at all 12 CHPPs of the company in St. Petersburg, Leningrad and Murmansk Oblasts and in Petrozavodsk. Within the framework of the St. Petersburg International Economic Forum, St. Petersburg and TGC-1 entered into an agreement on cooperation in the implementation by the energy company of projects to modernize the CHPP in St. Petersburg.

## **JULY**

The head of Murmansk Oblast Andrey Chibis got acquainted with the work of new treatment facilities and the closed fuel oil drainage system at the Centralnaya CHPP of the Murmanskaya CHPP and examined the modern complex for the treatment of industrial and waste water, as well as the operation of steam-free heating and closed fuel oil drainage systems, which reduce the spread of fuel odor in the urban environment.

A meeting of the Expert Council on Energy and Innovations of the State Duma of the Russian Federation was held at the Pravoberezhnaya CHPP of TGC-1.

TGC-1 together with the cultural and educational project “Institute of Petersburg” opened a series of excursions to the Volkhovskaya HPP — one of the oldest operating hydro power plants. The event was confined to the 150<sup>th</sup> anniversary of the birth of Genrikh Graftio.

## **AUGUST**

At the Verkhne-Tulomskaya HPP, exercises were conducted to practice actions in response to an accident at a hydraulic structure — an earth dam of a hydro power plant.

The TGC-1 Office hosted the awarding ceremony for the winners of the XV Contest of Diploma Projects among Students of Higher Educational Institutions of the North-West, held by the TGC-1 Training Center.

The cooperation between Russia, Norway and Finland on the regulation of Lake Inari turned 60 years.

## **SEPTEMBER**

The shareholders decided to transfer the authority of the sole executive body to Gazprom Energoholding LLC.

An extraordinary General Shareholders Meeting of TGC-1 was held.

The rating agency S&P Global Ratings affirmed the rating of TGC-1 at the level of BBB-, with a Stable outlook.

Employees of TGC-1 took part in the festival of the Ministry of Energy #VmesteYarche in St. Petersburg, Republic of Karelia, Leningrad and Murmansk Oblasts.

The project of TGC-1, dedicated to the 150<sup>th</sup> anniversary of the birth of power engineer Genrikh Graftio, was launched in St. Petersburg. The exposition “I wrote my works with iron and concrete”, telling about the most important stages in the life of the founder of the school of Russian hydropower energetics, was opened at the St. Petersburg State Electrotechnical Institute, and walking tours were organized to places where the engineer lived and worked.

## **OCTOBER**

In the Czech Republic, the ČKD Blansko Holding plant, a subsidiary of TYAZHMASH, JSC carried out functional tests of the impeller for hydraulic unit No. 1 of the Verkhne-Tulomskaya HPP.

The Governor of St. Petersburg, Alexander Beglov, visited Power Plant No. 1 of the Centralnaya CHPP.

The Head of the Republic of Karelia Artur Parfenchikov held a working meeting with TGC-1 power engineers in the Prionezhsky district.

TGC-1 won a prize in the nomination “Popularization of the fuel and energy industry profession” of the V All-Russian contest “MediaTEK-2019” for the project “Real energy men – the best in business”.

TGC-1 and the Institute of St. Petersburg opened a series of lectures in the Sevcable Port space on the history of energy, architecture and industry.

## **NOVEMBER**

The interactive annual report of TGC-1 for 2018 received a platinum award at the international competition MarCom Awards-2019.

In Murmansk, within the framework of the annual conference exhibition “SevTEK 2019”, a round table was held on the topic “Actual Issues of Interaction between Management Companies and Resource Supply Organizations” organized by TGC-1 and Murmanskaya CHPP.

At the St. Petersburg Polytechnic University of Peter the Great at a meeting of the Academic Council, students and teachers of the departments of energy profile were awarded certificates on the appointment of special scholarships named after S.A. Kazarov from TGC-1 for the autumn semester of the 2019/2020 academic year.

## **DECEMBER**

At the Ural Turbine Plant in Ekaterinburg, the first batch of equipment intended for large-scale reconstruction of the Avtovskaya CHPP was accepted.

TGC-1 together with the Federal Bailiff Service in St. Petersburg held an information campaign at Pulkovo Airport about the need for timely payment for housing services and the consequences of the accumulation of debts “Goodbye, Peter’s city! Leaving for vacation without debt.”

On the anniversary of the Volkhov Front in 1941, the Governor of Leningrad Oblast, Alexander Drozdenko, made a working trip to the Volkhovskaya HPP.

TGC-1 launched the multimedia educational project “100 YEARS OF GOELRO”.

The interactive annual report of TGC-1 for 2018 was recognized as the best at the Silver Threads — 2019 contest.

### 3. TGC-1 IN THE INDUSTRY

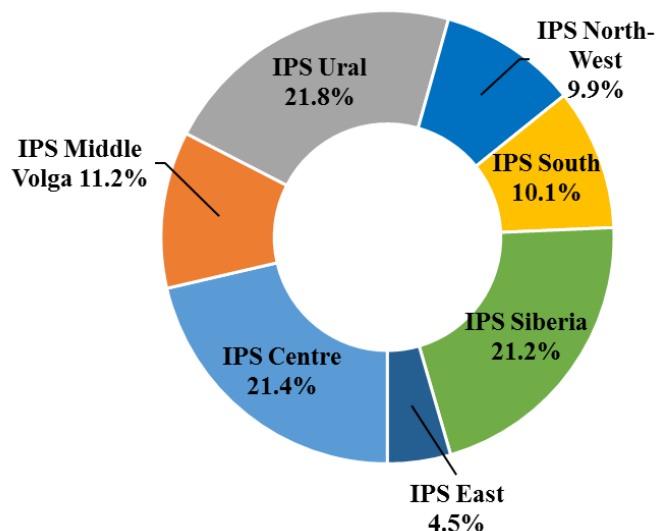
#### 3.1. Power industry situation<sup>1</sup>

The installed capacity of the power plants of the United Power System (UES) of Russia as of 31 December 2019 amounted to 246,342.45 MW, which is 1.3% more than as of 31 December 2018.

The increase in the installed capacity of the power plants of the UES of Russia in 2019 was due to:

- commissioning of new generating equipment in the amount of 2,969.9 MW;
- increasing the installed capacity of the existing generating equipment due to its remarking – 244.09 MW.

Generating equipment of the power plants of UES of Russia with a total capacity of 1,746.03 MW has been decommissioned.



**Fig. 1.** Installed capacity of IPS (Interconnected Power System) in the UES of Russia as of 31 December 2019

As of 31 December 2019, the installed capacity of IPS North-West amounted to 24,472.11 MW showing a decrease of 0.3% vs. 2018. The share of IPS North-West in the total installed capacity of UES of Russia was 9.9%.

In 2019, electricity generation by power plants of UES of Russia, including electricity generation from power plants of industrial enterprises, amounted to 1,080,555.4 million kWh (the increase vs. the volume of electricity production in 2018 amounted to 0.9%), including the distribution of annual electricity production by type of power plants as follows:

- TPPs – 679,881.0 mln kWh (decrease in generation of 0.3%);
- HPPs – 190,295.4 mln kWh (increase in generation of 3.6%);
- NPPs – 208,773.3. mln kWh (increase in generation of 2.2%);
- WPP – 320.8 mln kWh (production increase by 47.3%);
- SPP – 1,284.9 mln kWh (increase in generation of 69.4%).

The volume of electricity generation of IPS North-West in 2019 decreased by 0.5% and amounted to 112,788.6 million kWh. The production of TPPs increased by 1.8%, the production of HPPs and NPPs decreased by 9.2% and 1.2% respectively, the production of WPPs increased by 3 times. The share of electricity output by IPS North-West in the total output of Russia's power system is 10.4%.

<sup>1</sup>According to the "Report on the functioning of the UES of Russia in 2019", published on the website of the "System Operator of the Unified Energy System"

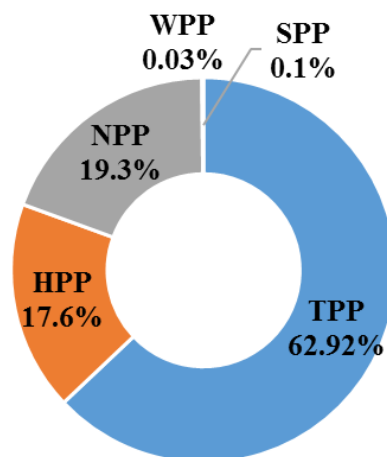


Fig. 2. Structure of electricity generation by the UES of Russia in 2019

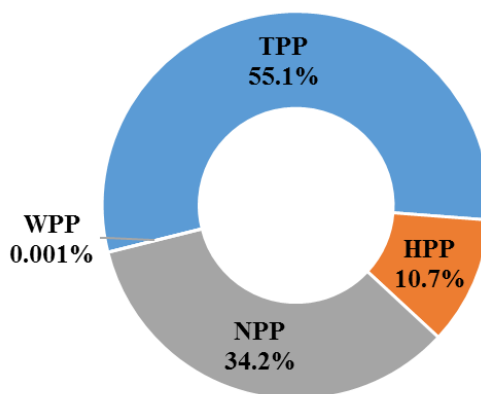


Fig. 3. Structure of electricity generation by IPS North-West in 2019

**Actual electricity consumption in the UES of Russia in 2019** amounted to 1,059,361.6 million kWh, which is 3,802.9 million kWh higher than the fact of 2018 (0.36%).

**The annual maximum consumption by UES of Russia** was detected on 24 January 2018 at 10:00 (Moscow time), at an average daily outdoor temperature of -15.3°C (2.8°C lower than the climatic norm and 0.2°C higher than the average daily temperature when passing the annual maximum of 2018), and amounted to 151.7 GW, which is 0.2 GW lower than the annual maximum of 2018.

**Table 1.** Dynamics of electricity consumption by power systems of Russia, mln kWh

Power system	2018	2019	Δ (%)
IPS Centre	242,565.20	241,945.9	-0.3
IPS Middle Volga	110,198.30	109,085.2	-1.0
IPS Ural	261,139.20	260,357.0	-0.3
<b>IPS North-West</b>	95,030.10	94,959.1	-0.1
IPS South	102,281.00	101,282.7	-1.0
IPS Siberia	210,147.80	211,423.3	0.6
IPS East	34,197.40	40,308.4	17.9
<b>UES of Russia</b>	<b>1,055,559.00</b>	<b>1 059 361,60</b>	0.4

**Table 2.** Dynamics of electricity consumption by IPS North-West, mln kWh

Power system	2018	2019	Δ (%)
Arkhangelsk Oblast and Nenets Autonomous Oblast	7,383.10	7,317.8	-0.88
Kaliningrad Oblast	4,438.60	4,451.9	0.3
Republic of Karelia	7,931.90	7,846.5	-1.08
Republic of Komi	9,110.80	9,029.8	-0.89
Murmansk Oblast	12,534.10	12,721.4	1.49
Novgorod Oblast	4,382.20	4,462.7	1.84

Pskov Oblast	2,244.90	2,211,4	-1.49
St. Petersburg and Leningrad Oblast	47,004.50	46,917.5	-0.19
<b>IPS North-West</b>	<b>95,030.10</b>	<b>94,959.1</b>	<b>-0.07</b>

## 3.2. History of the company

TGC-1 was established in 2005 during the reform of the electric power industry in Russia. However, the history of the company began much earlier — the first kilowatts were produced by the power plant, which is today part of TGC-1, back in 1897. Then in St. Petersburg, on Novgorodskaya Street, the Cologne Society Helios launched the first stationary power station in Russia.

In 1898, two more power plants started operating in the capital of the Russian Empire: of the Electric Lighting Society of 1886 on the Obvodny Kanal, and of the Belgian Anonymous Society on the Fontanka River Embankment. Today, the first three power plants of our country, which have been repeatedly reconstructed over the past years, are united by the Centralnaya CHPP of TGC-1.

In the 20-es of the XX century, the implementation of the legendary plan of state electrification (GOELRO plan) began. Today, the first hydro power plant built in accordance with it, the Volkhovskaya HPP in the Leningrad Oblast, is operating as a part of TGC-1. And the first GOELRO thermal power plant, the Krasny Oktyabr TPP, also part of the company's structure, was decommissioned in 2010, having served for nearly 90 years. It was replaced by a new plant — Pravoberezhnaya CHPP, which produced the first kilowatts and gigacalories in 2006. The first plants of GOELRO in Karelia (Kondopozhskaya HPP) and the Arctic Circle (Nizhne-Tulomskaya HPP and Niva HPP-2) also continue to work as part of the production complex of TGC-1.

During the World War II, Leningrad power engineers carried out a unique operation, which went down in history as a breakthrough of the energy blockade of Leningrad. Almost all the thermal power plants of the besieged city in the first months of the war were stopped due to lack of fuel. In 1942, an underwater cable was laid across Lake Ladoga to provide electricity to the city, and the Volkhovskaya HPP became the main source of energy supply for the besieged Leningrad.

At the beginning of the war, enemy forces repeatedly attacked the strategically important facilities of the Arctic Circle: Murmanskaya CHPP, Nizhne-Tulomskaya HPP, Niva HPP-2.

In the postwar years, the energy sector of the north-west of the country continued to develop actively. New plants were built in Leningrad, Petrozavodsk, Murmansk. At the end of the twentieth century, they were organized into independent societies.

In 2005, as part of the reform of the Russian energy sector on the basis of the generating assets of JSC Lenenergo, JSC Kolenergo, and JSC Karelenenergo, TGC-1 was formed. The company's generating assets comprise 52 power plants of various types in four constituent entities of the Russian Federation: St. Petersburg, the Republic of Karelia, Leningrad and Murmansk Oblasts.

Generated electricity is delivered to the domestic wholesale market of electricity and capacity as well as exported to Finland and Norway. TGC-1 is a strategic supplier of heat in St. Petersburg, Petrozavodsk, Murmansk, and Apatity and Kirovsk in Murmansk Oblast.

## 3.3. Competitive environment

### 3.3.1. Electricity market

The main sector of competitive activities in the wholesale electricity and capacity market for TGC-1 is the day-ahead market (DAM). To improve the competitiveness in the electricity market, TGC-1 carries out activities aimed at solving blocked capacities issues, optimizing the structure of electricity generation by CHPPs and HPPs, introduction of new technologies, and production retrofitting.

The main competitive advantages of TGC-1 are the following ones:

- the cost advantage of CHPPs in terms of combined-cycle generation compared to GRES;

- large share of output by HPPs in the total production of electricity and the cost advantage of HPPs compared to heat power plants;
- high manoeuvrability of the hydro power plant and the ability to supply electricity under the conditions set by the “System Operator”;
- geographical locations of the Company’s plants, enabling electricity exports.

Apart from TGC-1, electricity and power generation in St. Petersburg, the Republic of Karelia, Leningrad Oblast and Murmansk Oblast is performed by JSC Rosenergoatom Concern (represented by the Leningradskaya and Kolskaya Nuclear Power Plants), PJSC OGK-2 (represented by Kirishskaya GRES), JSC Yugo-Zapadnaya CHPP, JSC Inter RAO — Electric Power Plants (Branch of Severo-Zapadnaya CHPP), which supplies electricity for export, and other producers.

## Leningradskaya NPP

Leningradskaya NPP (LNPP) is a branch of JSC Rosenergoatom Concern, located 42 km from the administrative border of St. Petersburg on the southern shore of the Gulf of Finland of the Baltic Sea in the city of Sosnovy Bor.

It is the largest producer of electric energy in the North-West of Russia. The plant covers 50% of energy consumption by St. Petersburg and Leningrad Oblast. Currently JSC Rosenergoatom Concern is actively engaged in the construction of replacement capacities – LNPP-2.

As of the end of 2019, there are four power units (three units RBMK-1000 LNPP-1 and power unit No.1 VVER-1200 LNPP-2) and 7 condensing steam turbines. The installed electric capacity of LNPP is 4,200 MW, heat capacity – 375 Gcal/h. Total in 2019, LNPP produced 830 thousand Gcal of heat and 28.5 billion kWh of electricity.

The launch of the second unit of 3+ generation with VVER-1200 reactors and, accordingly, the withdrawal of RBMK-1000 No. 2 is planned for 2020. The capacity of all operating LNPP units at the time of commissioning will increase to 5400 MW. This is a record figure in Russia in the entire history of the nuclear industry.

## Kolskaya NPP

Kolskaya NPP, a branch of JSC Rosenergoatom Concern, is located 170 km south of Murmansk and 11 km away from Polyarniye Zori settlement on the bank of Imandra Lake. Kolskaya NPP is the main electricity supplier for the Murmansk Oblast (about 60%) and the Republic of Karelia. Currently, there are 4 power units in operation with VVER-440 reactors and K-220 steam turbines with total electric capacity of 1,760 MW, which is about 50% of installed capacity of the region, and a heat capacity of 125 Gcal/h.

The potential annual production of Kolskaya NPP is up to 14 billion kWh of electricity. Today the capacity of Kolskaya NPP is not fully used, which is a prerequisite for development of the region’s industry. Electricity output for 2019 was 10.1 billion kWh.

In 2018-2019, large-scale repair campaigns were carried out, as a result of which the lifetime of Unit 1 and Unit 2 were extended to 2033 and 2034 accordingly. Currently, Kolskaya NPP is among the best NPPs of Russia for its safety, stable and reliable operation and production efficiency.

## Kirishskaya GRES

Kirishskaya GRES, located in the city of Kirishi of Leningrad Oblast, on the river Volkhov, 150 km south-east of St. Petersburg, is the largest heat power plant of the North-West and the closest, from the point of view of production and technological cycles, to the competitor of TGC-1.

Kirishskaya GRES comprises three power units – a heating unit (CHPP – combined heat and power plant), a condensation unit (condensation power plant), and combined-cycle gas unit (CCGT-800). As of the end of 2018, the total installed capacity of GRES amounted to electric – 2,595 MW, heat – 1,234 Gcal/h, including steam turbine selection – 826 Gcal/h.

Kirishskaya GRES supplies a wide range of voltages from 0.4 to 330 kV to the wholesale market and its own consumers, is a supplier of heat (technical steam of various parameters and hot water), and provides

services for the supply of desalinated, chemically treated and industrial water, and oxygen. In 2019, Kirishskaya GRES produced in total 7.7 billion kWh of electric power.

Amid the advantages of Kirishskaya GRES is an ability to regulate frequency and capacity of the power system. In fact, Kirishskaya GRES, being the main regulator of the central part of the unified power system, ensures its reliable and stable operation.

### Severo-Zapadnaya CHPP

Severo-Zapadnaya CHPP of JSC Inter RAO — Electric Power Plants, located in the Primorsky District of St. Petersburg on the coast of the Gulf of Finland, is the first power plant in the Russian Federation with the CCGT binary cycle. The first power unit of the PGU-450 station was put into trial operation in December 2000, and the second power unit was launched in November 2006.

The total electric capacity of Severo-Zapadnaya CHPP is 900 MW and the heat capacity is 700 Gcal/hour. The plant provides heat supply to the Primorsky District of St. Petersburg and works not only in the power system of Russia, but as well as TGC-1 also in the power system of Finland. In 2019, electricity generation amounted to 5.5 billion kWh, and heat – 1,568 thousand Gcal.

### Yugo-Zapadnaya CHPP

Yugo-Zapadnaya CHPP is the base source of heat and electricity supplied to new districts of the South-Western part of the Primorsky District of St. Petersburg and a multifunctional housing complex Baltiyskaya Zhemchuzhina (Baltic Pearl). The sole shareholder is: Constituent Entity of the Russian Federation – the federal city of St. Petersburg, represented by the Property Relations Committee.

The first stage of the power plant (an electric capacity of 200 MW, a heat capacity of 255 Gcal/h) was put into operation in Q4 2011. The second stage of the construction with a heat capacity of 215 Gcal/h and an electric capacity of 300 MW was put into operation on 4 October 2016. At the end of 2019, the installed electrical capacity of the plant is 500 MW, the heat capacity is 470 Gcal/h. In 2019, electricity output was 2.7 mln kWh and heat output was 874 thousand Gcal.

### 3.3.2. Heat market

TGC-1 supplies heat in the territory of St. Petersburg, Leningrad Oblast (Nevsky Branch), Murmansk Oblast (Kolsky Branch, Murmanskaya CHPP), and the Republic of Karelia (Karelsky Branch).

### Saint Petersburg

Today, the main producers of heat in St. Petersburg are:

- TGC-1;
- SUE TEC of St. Petersburg;
- Peterburgteploenergo LLC;
- Severo-Zapadnaya CHPP, Branch of JSC Inter RAO — Electric Power Plants.

**Table 3.** Structure of the St. Petersburg heat market as of 31 December 2019

Heat supplier	Installed heat capacity, Gcal/h	Connected heat load, Gcal/h	Heat supply to consumers, thousand Gcal	Market share, %
TGC-1	11,253	10,095	19,380.8	45.9
SUE TEC of St. Petersburg	8,987	9,836	18,431.0	43.6
Peterburgteploenergo LLC	2,286	1,665	2,852.4	6.8
Severo-Zapadnaya CHPP, Branch of JSC Inter RAO — Electric Power Plants	700	294	1,557.6	3.7

In addition, there are a number of heat producers in Saint Petersburg with an annual output of less than 1,000 thousand GCal per year, the total share of which does not exceed 5 % of useful output.

### Leningrad Oblast

In Leningrad Oblast, TGC-1 supplies heat in the Vsevolozhsk and Lodeynoe Pole Districts.

In the Lodeynoe Pole District, all heat produced by TGC-1’s electric boiler is sold to a wholesale purchaser-reseller JSC Leningrad Regional Heat and Power company for heat supply to consumers of the Svirstroy settlement.

The Severnaya CHPP of the Nevsky Branch of TGC-1 is the main source of heat for heat supply to consumers of the Murinskoe settlement and the Novoe Devyatkinno settlement of Vsevolozhsk municipal district of Leningrad Oblast.

The Pravoberezhnaya CHPP of the Nevsky Branch of TGC-1 is the main source of heat for heat supply to consumers of the Kudrovo settlement.

### Murmansk Oblast

The Apatitskaya CHPP of TGC-1’s Kolsky Branch is the single source of heat for heat supply to Apatity and Kirovsk.

**Table 4.** Structure of heat market of Apatity and Kirovsk of Murmansk Oblast as of 31 December 2019

Heat supplier	Annual average installed heat capacity, Gcal/h	Connected heat load, Gcal/h	Heat output to consumers, thousand Gcal	Market share, %
TGC-1	535	517	1,401	100%

Apart from the Apatitskaya CHPP in Murmansk Oblast heat is supplied by the subsidiary of TGC-1 – PJSC Murmanskaya CHPP, which is a strategic supplier of heat in Murmansk; the share of heat sales is 75%. JSC Murmanskenergosbyt is the only competitor of PJSC Murmanskaya CHPP.

### The Republic of Karelia

The Karelsky Branch carries out heat sales operations, including the sales of heat produced by the Petrozavodskaya CHPP to Petrozavodsk, and Prionezhsky and Pryazhinsky districts.

**Table 5.** Structure of the heat energy market of Petrozavodsk as of 31 December 2019

Heat supplier	Annual average installed heat capacity, Gcal/h	Connected heat load, Gcal/h	Heat output to consumers, thousand Gcal	Market share, %
TGC-1	733	733	1,997 (incl. WAN)	100%

In order to increase the efficiency of activities in the heat supply market, the Company is constantly working to connect new consumers, maintain quality parameters of the services provided, and reduce accounts receivable. As part of measures to ensure a sufficient level of collection of accrued payments, both disciplinary and incentive measures are applied (pre-trial claims, claims for debt payment, for the public - shares of fines forgiveness provided that the debt is repaid within the time stipulated by the promotion), and compulsory collection through the court. In addition, debt restructuring agreements, assignment agreements, debt settlement agreements are concluded.

One of the priority areas in the fight against non-payments is the transition to direct payments with consumers. Such a system can significantly reduce debt growth.

### 3.4. Key development areas of TGC-1

The key strategic goal of TGC-1 is to ensure stable profit growth while maintaining the level of reliability of energy supply to consumers.

The development strategy takes into account the challenges posed by all participants in the energy market and is aimed at ensuring stable financial and economic performance of the Company in the medium and long term.

As part of the implementation of the Development Strategy, measures are envisaged in the following areas that meet the main goals of the Gazprom Group in the electric power industry:

- Implementation of modernization and new construction projects – updating and increasing production assets, optimization of transaction costs;
- The development of the thermal business is a functional change in the structure of the business, aimed at increasing customer focus, increasing sales and expanding the presence area, increasing the payment discipline of consumers;
- Import substitution and the priority of using Russian equipment is to eliminate the vulnerability of critical technological systems and reduce technological dependence;
- Achieving sustainable profitability of PJSC Murmanskaya CHPP – development of solutions to compensate for the cost of heating oil and avoiding oil dependence;
- Improving production efficiency – optimizing the use of resources, implementing technical and technological potential;
- Innovation – continuous improvement of technological processes and minimization of operating costs through the introduction of innovative solutions;
- Diversification of activities – access to related segments that have synergies with the current business, in order to obtain new sources of income.

As part of the implementation of the Development Strategy, in 2019 the modernization of the Verkhne-Tulomskaya HPP and Avtovskaya CHPP continued, construction and installation were carried out to reconstruct the spillway of the Nizhne-Tulomskaya HPP, modernize the hydraulic structures of the Vuoksa HPPs Cascade and the Ladoga HPPs Cascade. The modernization of the software and hardware complex (SHC) of the automated process control system for power units of the Pravoberezhnaya and Vasileostrovskaya CHPPs using domestic SHC was completed, the modernization of the control system of the Severnaya CHPP power unit was completed.

In the field of heat supply, attention was paid to improving the comfort of customers when interacting with the Company, equipping consumers with metering devices for consumed heat energy, and optimizing the heat load. By interacting with the Government of St. Petersburg, it was possible to additionally reconstruct the heating networks of JSC St. Petersburg Heating Grid due to budget investments.

### **Capacity increase as a result of implementing major investment projects**

TGC-1 completed a large-scale program to increase new capacities and fulfilled its investment obligations in full regarding the implementation of projects provided for under capacity delivery agreements (CDA). During the program, modern power units with a total capacity of 1.7 GW were commissioned, including 1.3 GW of highly efficient combined cycle plants, as well as inefficient generation in the amount of 0.7 GW was launched. In December 2016, the last facility was commissioned – a gas turbine thermal power plant at PP-1 of the Centralnaya CHPP with an installed electric capacity of 100 MW. This facility was built by Mezhtregionenergostroy LLC to ensure fulfillment of TGC-1 obligations as part of the CDA program and leased to TGC-1.

At present, in the framework of competitive capacity outtake for modernization program (CCOMP), the turbines of the second stage (plant No. 7 and No. 6) of the Avtovskaya CHPP are being modernized as part of a project for the comprehensive reconstruction of the CHPP, which also includes the reconstruction of the outdoor switchgear, the construction of a recycling technical water supply system, the construction of a new hot-water boiler house, the reconstruction of public plant systems and other activities.

Renovation of PP-2 at the Centralnaya CHPP with the construction of a new hot-water boiler house and technical re-equipment of fuel oil facilities is underway. It is planned to withdraw the equipment of the old part.

In addition to thermal generation, TGC-1 is working on renovation and retrofitting of main equipment at HPPs in the Republic of Karelia, Leningrad Oblast, and Murmansk Oblast, and commissioning of up-to-date process control systems, telemechanics and communication systems. Currently, a project is underway

to replace four hydraulic units at the Verkhne-Tulomskaya HPP of the Tuloma HPPs and Serebryanskiye HPPs Cascades with an increase in their capacity.

Thus, the main planned changes in capacity are:

- PP-2 of the Centralnaya CHPP: decommissioning of equipment of the old part (-23 MW, -756 Gcal/h); commissioning of a boiler house (+730 Gcal/h) in 2023.
- Avtovskaya CHPP: decommissioning of equipment of the old part (-124 MW, -489 Gcal/h), modernization of turbines at plant No. 6, 7 with an increase in capacity (+39.4 MW, +32 Gcal/h), commissioning of a boiler house (+360 Gcal/h), completion in 2024.
- Verkhne-Tulomskaya HPP: modernization of four hydraulic units with an increase in capacity (+32 MW), completion in 2023.

## **Network infrastructure upgrade**

In 2011, the equity structure of JSC St. Petersburg Heating Grid was changed: SUE TEK of St. Petersburg became a part of this structure along with TGC-1. In 2019, the city of St. Petersburg also entered the authorized capital of JSC St. Petersburg Heating Grid.

The main activity of JSC St. Petersburg Heating Grid is heat transfer to TGC-1's consumers in St. Petersburg and Leningrad Oblast. The aim of the company is to improve the reliability of the heating system, to update the company's production assets by increasing the rates of upgrading heat networks that have exhausted their resource. Another area of activity is customer-oriented work with existing and potential customers within the range of efficient heat supply of CHPPs, as well as expansion of the areas of activity of TGC-1 for the cost of construction of heating networks for connection of new residential areas and transfer of consumers of other inefficient sources of heat energy.

In 2013, the heating grids from the Apatitskaya CHPP up to the Central heating station of Kirovsk of Murmansk Oblast were commissioned. The project was implemented by JSC HHC, belonging in equal shares to TGC-1 and JSC Apatit. The annual heat output of the Apatistkaya CHPP to the city of Kirovsk is about 500 thousand Gcal.

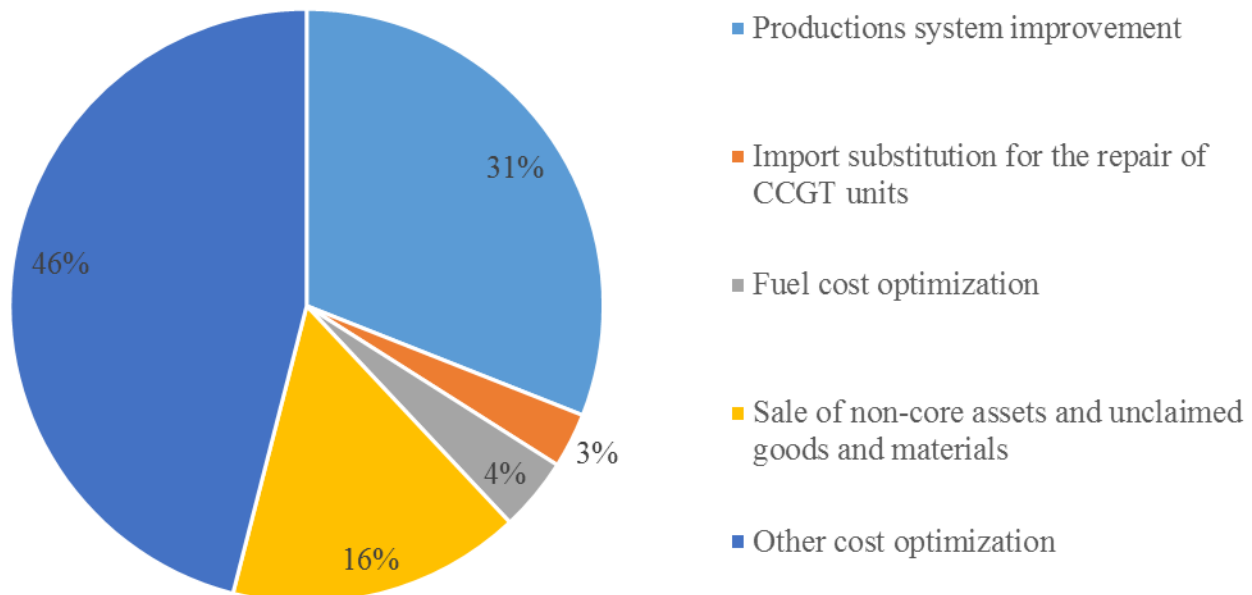
In 2017, JSC HHC leased heat supply grids of JSC Apatit until 2020.

A prospective expansion of JSC HHC's activities for heat transfer is to connect new consumers located at the Kirov mine to the heat grid from the Apatitskaya CHPP to the Central heating station in Kirovsk.

## **Operating efficiency improvement**

In 2019, the Company implemented the following measures to improve the efficiency of operating activities:

- organizational and technical measures to advance the manufacturing system, aimed at increasing the efficiency of fuel and water utilization, and reducing costs of power plants own needs;
- fuel costs were optimized due to TGC-1's participation in tenders held by the Saint-Petersburg International Mercantile Exchange (JSC SPIMEX);
- measures were taken to optimize storage facilities: unclaimed material production assets, as well as scrap metal received after dismantling decommissioned equipment was sold;
- non-core assets were sold;
- costs for the purchase of power were optimized, etc.



**Fig. 4.** Implementation of TGC-1 Action Plan for Operating Performance Improvement in 2019

The total savings from TGC-1's operating performance improvement program for 2019 equaled RUB 455.6 million, including savings from measures contained in PJSC Gazprom Program for operating performance improvement and cost reduction of 2019 in amount of RUB 435.6 million.

In 2020, further implementation of measures to increase operating performance and optimize costs of TGC-1 is planned. The planned effect of the measures for 2020 is RUB 373.8 million.

### 3.5. Risk management and internal control

TGC-1 has a risk management system (RMS) and an internal control system (ICS) covering key business processes, and all levels of management and divisions of the Company.

Risk management system (RMS) and internal control system (ICS) are interconnected, ensuring stability of the Company's financial situation, and achievement of the Company's established goals.

The Company uses risk assessment in its corporate governance system and key decision-making, as well as provides for the implementation of control procedures in regulating its business processes.

#### 3.5.1. Risk Management System

In accordance with clause 1 of article 87.1 of Federal Law No. 208-FZ On Joint Stock Companies dated 26 December 1995 and the recommendations of the Corporate Governance Code approved by the Board of Directors of the Bank of Russia on 21 March 2014, a risk management and internal control system (hereinafter referred to as RMICS) was organized in the Company.

By the decision of the Board of Directors of the Company dated 15 August 2019 (Minutes No. 6 dated 19 August 2019), the Risk Management and Internal Control Policy was approved, which defines common principles and approaches to the arrangement of the RMICS, establishes the components of the RMICS, its goals and objectives, and defines the main tasks and the distribution of powers of the RMICS participants.

The risk management and internal control policy defines the goals and objectives of RMICS:

The objectives of RMICS are:

- ensuring sufficient confidence in achieving the goals set by the Company;
- ensuring proper control of the financial and economic activities of the Company.

The main tasks of RMICS are:

- supporting systematic and ongoing processes for identifying and assessing risks;
- effective risk management, improving decision-making processes for responding to risks;
- development of risk response methods, risk monitoring and implementation of risk management measures;
- setting maximum permissible and threshold risk levels;
- development of internal control procedures;
- timely identification of deficiencies, deviations and violations of internal control procedures in the activities of the Company;
- distribution of powers for risk management and internal control;
- formation of a methodological base for the functioning of RMICS;
- formation of regular and unified reporting of the Company;
- increasing the stability and efficiency of the financial and economic activities of the Company, ensuring the safety of assets;
- raising the level of risk management in the Company;
- ensuring compliance with legislation and local regulatory acts of the Company.

The organization and functioning of the RMICS is carried out in compliance with the following principles: consistency (integrity), comprehensiveness, compliance to the set goals, reasonable assurance, adaptability and development, provision of required resources, continuity (of functioning), interaction and collegiality, responsibility, evaluation of results, structuredness and efficiency, uniform regulatory environment, economic feasibility and the principle of three lines of defense.

TGC-1’s risk management and internal control policy consists of an effective combination of measures to limit the risks that TGC-1 takes upon itself and measures to respond to key risks in such a way as to minimize negative impact of threats and maximize the opportunities available to achieve the goals set.

### 3.5.2. Participants in the risk management and internal control system

The key functions of participants in the RMICS of TGC-1 in accordance with the approved Risk Management and Internal Control Policy are:

Board of Directors	Approves the internal documents of the Company that determine the risk management and internal control policy, sets the maximum permissible and threshold risk levels for the Company, considers issues of organization, functioning and effectiveness of RMICS.
Audit Commission of the Board of Directors	Monitors the reliability and efficiency of the RMICS
Executive Body	Considers the information generated by the Responsibility Centre of RMIC on key risks and measures for risk management, ensures the functioning of an effective RMICS, approves limits for individual risks, approves the methods for responding to risks and approaches to risk management developed by the Risk Owners (Co-owners), Ensures the functioning of RMICS and the implementation of decisions of the Board of Directors in the field of organization of RMICS, approves local regulatory documents in the field of RMICS
Responsibility Center of Risk Management and Internal Control (RC RMIC)	Implements the formation and methodological support for the implementation of the unified Company Policy in the field of RMICS, coordinates the activities of structural divisions for RMICS, generates consolidated reports on risks and internal control, defines methodological approaches to risk management processes and internal control procedures
Structural Divisions	Ensure the arrangement and functioning of the RMICS as part of the implementation of their tasks and functions
Business Process Owners	Ensure the functioning of RMICS within the framework of the business process, including coordination of activities as part of the implementation of risk management measures and internal control procedures
Risk Owners (Co-owners)	Structural divisions of the Company responsible for the development that carry out the implementation of the stages of the risk management process (identification, assessment and monitoring of risk, development, implementation and monitoring of risk management and internal control measures, preparation and reporting). Risk Co-owners share risk management authority with the Risk Owner
Owners (Co-owners) of Internal Control Procedures	Ensure the introduction, implementation and continuous monitoring of the effectiveness of internal control procedures
Persons responsible for the implementation of risk management measures	Carry out risk management measures

The Risk Management and Internal Control Policy of TGC-1 assigns the functions of general arrangement and coordination of RMICS to the competence of the relevant structural division of the Company (the specialized employee of the Company, group or other staff of the Company), which, in accordance with the local acts of the Company, have the responsibility to resolve tasks and perform the functions in the process of risk management and internal control, as well as have the necessary labor and material resources to carry out assigned tasks. Prior to the creation of a separate structural division, in order to coordinate the Company's activities in the field of risk management, the Risk Management Project Manager of the Corporate Governance Department was entrusted with the functions of general arrangement and coordination of RMICS.

In order to ensure independence and objectivity, the activities of the Risk Management Project Manager are functionally separated from activities related to the internal audit function of the control and audit divisions, and divisions performing functions to ensure economic security.

### 3.5.3. Development of the risk management and internal control system

The Company is constantly working to improve RMICS using modern methods of threat and opportunity management. Maintaining the effectiveness of RMICS allows making the risk management process more transparent and manageable, which, in turn, will have a beneficial effect on the Company's operations and the reliability of securities.

As part of the improvement of the RMICS, the Board of Directors of the Company approved the Risk Management and Internal Control Policy, which defines common principles and approaches to the arrangement of RMICS. Until 2019, TGC-1 had two systems - a risk management system and an internal control system, which were closely interconnected with each other, and ensured the stability of the financial situation and the achievement of established goals by the Company. In November 2019, by a decision of the Board of Directors of TGC-1, the organizational structure of the Department was changed: a separate division was created to be responsible for the RMS and IC - the Risk Management and Internal Control Division.

The Company uses risk assessment in its corporate governance system and management decision-making, as well as provides for the implementation of control procedures in regulating its business processes.

Evaluation and monitoring of the effectiveness of RMICS are aimed at the following tasks:

- identification of deficiencies in the functioning of the RMICS, their causes, as well as actual and/or possible consequences;
- informing the Company's Management Bodies of the shortcomings of the RMICS;
- arrangement of control over timeliness and completeness of elimination of revealed violations, deviations and shortcomings in the functioning of the RMICS.

RMICS of TGC-1 is being improved and complies with the principles of corporate governance enshrined in the Corporate Governance Code.

In 2019, as part of the development of the RMICS of TGC-1, the following activities were carried out:

- the Risk Management and Internal Control Policy of the Company has been updated, taking into account changes and redistribution of functions of RMICS participants.
- Financial Risk Management Regulations were updated:
  - Regulation on Liquidity Risk Management;
  - Regulation on FX Risk Management;
  - Regulation on Management of Interest-Bearing Risks.
- the Regulation on the Operational Risks Management System was updated;

- to provide methodological support to the risk management process in the structural divisions of the Company there were developed guidelines:
  - for risk management using qualitative assessments;
  - for assessment of estimated credit losses of the TGC-1 Group;
  - for identification of key risk indicators.
- the registers and profiles of the Company's risks were updated;
- an action plan for the development of a risk management system for 2020 was drawn up;
- self-evaluation of the effectiveness of the risk management system was conducted;
- the regulatory, methodological and information base for the Company's risk management was formed.

### 3.5.4. Risks related to the Company's operations

Effective functioning of the risk management system is an essential condition for achieving TGC-1's strategic goals. The Company continues to improve its RMICS, which allows timely identification of external and internal risks, analysis and development of effective measures to minimize risks.

The Company, recognizing that the implementation of activities is subject to uncertainties in the form of risks, takes risk management measures in order to provide sufficient guarantees for achieving the goals set for the Company by its management bodies. RMICS applies to all activities of the Company, includes all levels of management and types of activities, all risks of the Company.

#### List of key<sup>2</sup> risks that may affect the activities of TGC-1 and risk management actions

NAME OF RISK	RISK DESCRIPTION	RISK RESPONSE MEASURES
<b>RISKS OF PRODUCTION ACTIVITY</b>		
Risk of failure of the main production equipment	<p>The failure of the main production equipment is an emergency shutdown of the main production equipment, which entails an unscheduled termination of generation by the power plant. Damage from the termination of energy generation - lack of electricity and heat is estimated not only by the amount of products that may be underproduced as a result of insufficient energy supply, but also by a decrease in production capacity for electricity and capacity supply in the wholesale market as a result of shutdown of the generating equipment.</p> <p>A break in the supply of energy can cause irreparable losses, disorganizing the normal mode of operation of industrial and agricultural enterprises, the normal life of settlements for a long time.</p> <p>The main reason for the failure of the main production equipment is its wear, less often - personnel errors.</p>	<ul style="list-style-type: none"> <li>• timely repair and modernization, reconstruction and technical re-equipment;</li> <li>• briefing, training and professional development of staff (including special training using simulators);</li> <li>• regular scheduled maintenance inspections of equipment, identification of equipment to be replaced (repaired) as a matter of priority;</li> <li>• identification of equipment having design flaws, elimination of deficiencies or replacement of equipment;</li> <li>• implementation of the investment program with the replacement of obsolete facilities with new ones;</li> <li>• conducting exercises (trainings) in order to develop skills for action in non-standard situations;</li> <li>• briefing of personnel and contractors</li> </ul>
Risks associated with accidents due to erroneous or incorrect actions of personnel investigated by the commission of the Federal Environmental, Industrial and Nuclear Supervision Service of Russia (Rostekhnadzor)	<p>Dependence of the risk of a technological failure or accident on the actions of personnel - imperfection and insufficient level of detail of the emergency instructions and procedures, insufficient knowledge of emergency processes on the equipment in use, not always optimal and efficient use of the technical capabilities of the equipment, and management of emergency processes.</p>	<ul style="list-style-type: none"> <li>• annually review production instructions, programs of complex equipment switching;</li> <li>• briefing, training and professional development of staff (including special training using simulators);</li> <li>• conducting exercises (trainings) in order to develop skills for action in non-standard situations</li> </ul>

<sup>2</sup> Key risks are risks that combine critical and material risks.

NAME OF RISK	RISK DESCRIPTION	RISK RESPONSE MEASURES
Risk of sanctions by regulatory authorities for violation of environmental laws.	Violation of environmental legislation that is not resolved and identified by supervisory authorities may entail economic consequences for the organization in the form of fines or accrued damage to the environment	<ul style="list-style-type: none"> <li>• measures to reduce environmental impact;</li> <li>• education and training of managers and personnel of the Company on environmental safety programs;</li> <li>• conducting joint exercises with the participation of the EMERCOM of Russia to work out actions in case of emergencies, elimination of possible oil spills;</li> <li>• modernization of the treatment plant complex</li> </ul>
<b>RISKS RELATED TO THE OPERATION OF THE INDUSTRIAL ELECTRICITY AND POWER MARKET AND THE STATE-REGULATED HEAT ENERGY MARKET</b>		
Credit risk under contracts for the provision of heat supply services (risk of growth in receivables)	The presence of receivables leads to additional lending and expenses not provided for by the tariffs, as well as to an increase in the share of bad debts in the total amount of receivables. The main reason for the growth of receivables is the presence of intermediaries in the chain of payments for consumed resources.	<ul style="list-style-type: none"> <li>• transition to direct payment from end consumers of energy resources, exclusion of intermediaries when making payments from consumers of heat energy to the accounts of TGC-1;</li> <li>• intensification of work on debt collection in the courts, initiation of bankruptcy of debtor intermediaries</li> </ul>
The risk of deterioration in the performance of the company as a result of the adoption/amendment of regulatory legal acts governing the activities of electric power industry entities, including the rules of the wholesale electricity and capacity market, and regulatory acts in the field of heat supply	<p>Changes in legislation in the field of electricity and heat supply and other related energy sectors have a significant effect on the company's activities as:</p> <ul style="list-style-type: none"> <li>• the Company as an economic entity on the territory of the Russian Federation must carry out its activities within the framework of the current legal field and comply with federal, regional and municipal requirements;</li> <li>• the branches of the Company's activities are recognized as socially significant and therefore are under the control and regulation of the state, thereby affecting the state in the framework of the current legislation on the activities of business entities.</li> </ul> <p>Thus, the role of monitoring and adequate timely response to changes in legislation to meet the interests of the Company or not to infringe the current situation is growing.</p>	<ul style="list-style-type: none"> <li>• carrying out model calculations;</li> <li>• preparing the position of the company and posting on specialized Internet resources;</li> <li>• Participation in various deliberative events to discuss draft legal acts carried out by the federal executive authorities, regional executive authorities, State Duma, and industry communities;</li> <li>• interaction with the federal executive authorities, regional executive authorities for clarification on the interpretation of draft legal acts</li> </ul>
<b>RISKS RELATED TO CONTRACTORS (PROCUREMENT)</b>		
Violation of the terms of supply of Material Assets and equipment (by quantity, quality, terms)	Failure to supply Material Assets and equipment may lead to failure of scheduled repairs or inability to operate the equipment	<ul style="list-style-type: none"> <li>• improving the system of preliminary analysis of counterparty risks before deciding on the possibility of concluding agreements with them (before recognizing them as winners in procurement procedures);</li> <li>• improvement of control over fulfillment of obligations</li> </ul>

### **3.5.5. Description of risks which have lesser impact on the activities of the Company**

When carrying out its production activities, the Company identified risks that, to a lesser extent than the key risks, affect its activities.

These include risks associated with occupational safety and labor protection. In order to minimize these risks, the Company implements measures taking into account the natural and climatic features, conducts trainings for labour protection, assessment of working conditions and inspections, medical examinations of personell, timely repair work and monitoring the implementation of established requirements.

The Company takes into account the existing sanctions against the Russian Federation in its activities and monitors them on an ongoing basis to minimize negative effects, and consistently implements an import substitution program that allows the Company to reduce its dependence on the growth of foreign currencies against the ruble.

In 2019, investment projects were implemented and planned for 2020 aimed at replacing worn-out equipment, fulfilling mandatory requirements for environmental, industrial and fire safety, the safety of hydraulic structures, as well as connecting the heat load of new consumers. Also, TGC-1 plans to implement priority projects of the Company, projects on technical re-equipment and reconstruction of generation facilities related to ensuring the reliability of power facilities and increasing anti-terrorism (physical and information) security. The procedures for preparing and making decisions that determine the strategy for the activities and development of the Company (strategic management) that are in place at the Company are multi-level in nature, each of which develops various scenarios of events that could affect the achievement by the Company of its goals. These measures undertaken by the Company reduce the possible risks of strategic decisions that affect the long-term development of the Company, as well as the risk of failure to fulfill the investment program.

TGC-1 created a Committee for Budget Planning and Investments of the Board of Directors, at the meetings of which issues of long-term planning of production indicators, financial and economic policies are considered. A long-term planning tool is a financial model with a planning horizon of 25 years, within the framework of which various scenarios are considered that model changes in exogenous and endogenous factors. As a result of considering the set of scenarios, the Committee recommends that the Board of Directors of the Company implement the optimal scenario associated with a minimum level of strategic risk.

The Company evaluates the level of financial risks (liquidity risk, interest rate risk, currency risk) on a regular basis and takes the following measures to manage these risks:

- monitoring the maintenance of liquidity ratios at a level that ensures the implementation of key performance indicators of the business plan and the covenant of the credit policy of the Company;
- timely raising of borrowed resources within the framework of open credit facilities and concluded credit/ loan agreements in order to maintain liquidity (to cover temporary cash gaps);
- work with counterparties on timely payment of receivables, monitoring receivables, analysis of overdue receivables, claims work to recover overdue debts;
- regular analysis of the sensitivity of the Company to changes in the level of interest rates;
- management of open currency position.

In relation to business processes, internal control procedures and interest and currency risk management of the Company, TGC-1 performs in accordance with the agreement on the transfer of powers of the Sole Executive Body of the Company with the Management Organization Gazprom Energoholding LLC dated 30 September 2019 and an agreement on treasury operations with GEH Finance LLC dated 1 February 2018.

In order to manage the risk of a shortage of qualified personnel, it pays great attention to the development of a system of social benefits and guarantees, the popularization of professions in the energy industry, and the improvement of working conditions.

In order to ensure the efficiency of production activities, the Company uses information systems, the malfunction of which can lead to financial losses. In order to reduce the level of information security risks, the Company uses backup systems, access control and management systems, and ensures their modernization.

TGC-1 carries out its activities in accordance with applicable law, monitors and timely responds to its changes, and also seeks a constructive dialogue with regulatory authorities in matters of interpretation of the legislation. However, the Company, like any other company, is not able to fully predict future changes in legislation. In order to assess the risks of changes in legislation, the Company carries out a systematic analysis of changes to the current legislation of the Russian Federation and controls the timely response to changes that have entered into force.

### **3.6. Anticorruption Policy of TGC-1**

Pursuant to the requirements of Article 13.3 of Federal Law No. 273-FZ dated 25 December 2008 On Combating Corruption, the Company has developed and deployed the following range of measures for corruption prevention (mitigating the corruption risks):

- On 17 September 2019, the Board of Directors of TGC-1 approved the Code of Corporate Ethics (Minutes No. 9 dated 18 September 2019), monitors the compliance therewith and implementation of measures to combat corruption and fraud, and settlement of conflicts of interest.

- The management of TGC-1 took measures to implement the new requirements of the Code of Corporate Ethics (the Corporate Ethics Commission was created, e-mail: kodeks-info@tgc1.ru and a hot line at phone number (812) 688-33-68 are to obtain information on the actions of employees of the Company, in which there are signs of corruption and other violations of corporate ethics principles), training of employees of the Company was organized in order to familiarize them with the Code of Corporate Ethics.

- The Company's Corporate Security Unit carries out ongoing prevention of corruption and other offenses among the employees of the Company.

The Company requires legal entities participating in procurement procedures to disclose information on the chain of owners, including beneficiaries (including final ones), as well as on the composition of their executive bodies. This allows identifying and resolving potential conflicts of interest, including the elimination of correlations related to corruption risk between the beneficiaries (heads) of the legal entity - potential counterparty and employees of the Company. Employees of the Company shall avoid a conflict of interest (a situation in which the personal direct or indirect interest of an employee of the Company affects or may affect the proper (objective and impartial) performance of his/her duties and observance of the interests of the Company as a whole). The procedure for preparing and deciding on the possibility of concluding an employment contract with an individual also provides for verification of the absence of possible conflicts of interest.

- The Company's Internal Audit Service is entrusted with the task of conducting verification of compliance by employees of the Company with the provisions of the legislation and internal policies of the Company related to anti-corruption, as well as conducting independent audits of the effectiveness of the anti-corruption system.

- The current interaction of the Company with law enforcement agencies is carried out by divisions of the Corporate Security Unit created in the Company's Head Office, in the Karelsky and Kolsky Branches, as well as in TGC-1's subsidiaries.

## 4. PRODUCTION OPERATIONS OVERVIEW

### 4.1. Production capacities

At the end of 2019, an installed electric capacity of the Company's power plants, including PJSC Murmanskaya CHPP, was 6,917.6 MW and 13,484.84 Gcal/h of heat capacity.

The basis of TGC-1's production capacities is comprised of 52 power plants, including: 40 hydro power plants, and 12 combined heat and power plants, including the subsidiary PJSC Murmanskaya CHPP. Most HPPs, located consequently down the water course and interconnected by the common water regime, are unified into cascades.

The major part of TGC-1's production capacities is concentrated in the Nevsky Branch, which includes 9 CHPPs with an installed electric capacity of 3,539.5 MW and heat capacity of 11,089.0 Gcal/h, as well as 7 HPPs with a total installed electric capacity of 707.8 MW. The Karelsky Branch is represented by the Petrozavodskaya CHPP and boiler facilities with an installed capacity of 280 MW and 689 Gcal/h, and 16 HPPs arranged in three cascades with a total installed capacity of 553.7 MW. The Apatitskaya CHPP with a capacity of 230 MW and 535 Gcal/h and 17 HPPs unified into three cascades with a total installed capacity of 1,594.6 MW operate in the Kolsky Branch. In addition to that, PJSC Murmanskaya CHPP in Murmansk Oblast generates electricity and heat with an installed capacity of the CHPP amounting to 12 MW of electric capacity and heat capacity of 1,129.5 Gcal/h.

#### Reasons for change in the installed capacity of power plants during 2019

Installed electric capacity in 2019 decreased by 32 MW, including:

- at the Centralnaya CHPP by 30 MW in connection with the decommissioning of the turbine unit No. 5 of PP-2 from 1 July 2019;
- at the Volkhovskaya HPP by 2 MW in connection with the decommissioning of auxiliary hydraulic units VG-1, VG-2 from 1 December 2019.

Installed heat capacity in 2019 decreased by 260.63 Gcal/h:

- at the Centralnaya CHPP by 48 Gcal/h in connection with the decommissioning of the turbine unit No. 5 of PP-2 from 1 July 2019;
- at the Avtovskaya CHPP by 111 Gcal/h in connection with the decommissioning of the boiler unit No. 1 from 1 September 2019;
- at the Vyborgskaya CHPP by 100 Gcal/h in connection with the decommissioning of PVK-5 from 1 September 2019;
- at the boiler houses of the Karelsky Branch by 1.63 Gcal/h in connection with the decommissioning of the boiler Pryazha-3.

**Table 6.** TGC-1's production capacities as of 31 December 2019

	Installed electric capacity, MW	Δ, 2018/2019	Installed heat capacity, Gcal/hr	Δ, 2018/2019	Available capacity, MW	Δ, 2018/2019	CUF (by electricity) , %	Δ, 2018/2019	Fuel (main/ reserve)
<b>Nevsky Branch</b>									
Centralnaya CHPP	123.0	-30	1,410.0	-48.0	123.0	-30	-43.7	+3.9	gas/fuel oil
Pravoberezhnaya CHPP	643.0		1,303.0		638.0		52.6	-0.7	gas/fuel oil
Vasileostrovskaya CHPP	135.0		1,113.0		135.0		61.1	-2.9	gas/fuel oil
Pervomayskaya CHPP	360.0		928.0		360.0		54.5	-6.5	gas/fuel oil/ diesel**
Avtovskaya CHPP	321.0		1,738.0	-111.0	321.0		41.6	+2.5	gas/fuel oil
Vyborgskaya CHPP	250.5		1,056.0	-100.0	250.5		49.9	+10.5	gas/fuel oil
Severnaya CHPP	500.0		1,188.0		500.0		45.0	-1.5	gas/fuel oil
Yuzhnaya CHPP	1207		2,353.0		1,207.0		44.5	+0.9	gas/fuel oil
Ladoga HPPs Cascade	343.0	-2	—		260.4		46.6	-5.9	—
Narvskaya HPP	124.8		—		124.8		50.3	-15.0	—
Vuoksa HPPs Cascade	240.0		—		240.0		54.5	-13.8	—
<b>Total for Nevsky Branch</b>	<b>4,247.3</b>	<b>-32</b>	<b>11,089.0</b>	<b>-259.0</b>	<b>4,159.7</b>	<b>-30.0</b>	<b>48.1</b>	<b>-1.4</b>	<b>—</b>
<b>Karelsky Branch</b>									
Petrozavodskaya CHPP	280.0		689.0		254.0		51.0	+1.0	gas/fuel oil
Boiler facilities	—		42.3	-1.6	-				coal, firewood
Vyg HPPs Cascade	160.0		—		118.2	+15.0	65.4	-4.4	—
Kem HPPs Cascade	330.0		—		163.2	+33.4	43.8	+1.6	—
Suna HPPs Cascade	63.7		—		39.2	+3.8	47.0	-4.8	—
<b>Total for Karelsky Branch</b>	<b>833.7</b>		<b>731.3</b>	<b>-1.6</b>	<b>574.6</b>	<b>+52.2</b>	<b>50.6</b>	<b>-0.3</b>	<b>—</b>
<b>Kolsky Branch</b>									
Apatitskaya CHPP	230.0		535.0		167.0		22.9	+1.1	coal/fuel oil***
Niva HPPs Cascade	569.5		—		564.3		56.0	-3.3	—
Paz HPPs Cascade	187.6		—		187.6		60.5	-7.1	—
Tuloma HPPs and Serebryanskiye HPPs Cascades	837.5		—		837.5	+45.6	31.8	-2.7	—
<b>Total for Kolsky Branch</b>	<b>1,824.6</b>		<b>535.0</b>		<b>1,756.4</b>	<b>+45.6</b>	<b>41.2</b>	<b>-2.8</b>	<b>—</b>
<b>Total, TGC-1</b>	<b>6,905.6</b>	<b>-32</b>	<b>12,355.3</b>	<b>-260.6</b>	<b>6,490.7</b>	<b>+67.8</b>	<b>46.6</b>	<b>-1.6</b>	<b>—</b>
PJSC Murmanskaya CHPP	12.0		1,129.5		12.0		16.3	+0.3	fuel oil
<b>Total, TGC-1 including PJSC Murmanskaya CHPP</b>	<b>6,917.6</b>	<b>-32</b>	<b>13,484.8</b>	<b>-260.6</b>	<b>6,502.7</b>	<b>+67.8</b>	<b>46.6</b>	<b>-1.7</b>	<b>—</b>

\* CUF – capacity utilization factor.

\*\* Diesel fuel – emergency fuel at the Pervomayskaya CHPP.

\*\*\* Fuel oil is the auxiliary fuel at the Apatitskaya CHPP.

## 4.2. Electricity generation

At the end of 2019, the volume of electricity production by TGC-1, including PJSC Murmanskaya CHPP, amounted to 28,275.1 million kWh, showing a decrease of 3.6% compared to 2018.

Comparable electricity generation at thermal power plants of TGC-1 increased by 0.6%. Electricity generation by hydro power plants decreased by 8.9% due to low water availability in the regions where the company operates throughout the reporting period.

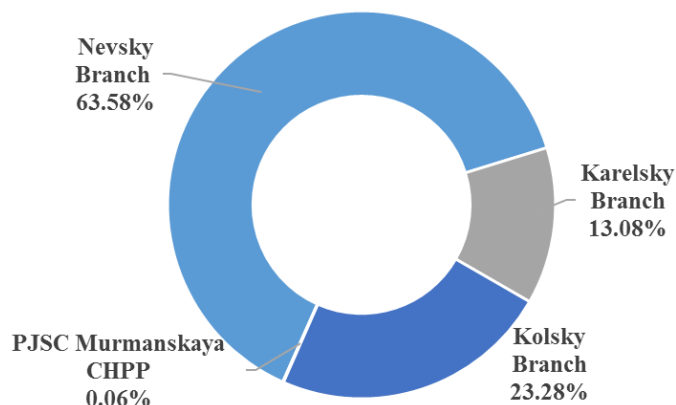


Fig. 5. Electricity output by TGC-1's branches and PJSC Murmanskaya CHPP in 2019

Table 7. Electricity generation by TGC-1's power plants for 2018-2019, million kWh

	2018	2019
<b>Nevsky Branch</b>		
Centralnaya CHPP	533.10	527.83
Pravoberezhnaya CHPP	3,001.46	2,963.52
Vasileostrovskaya CHPP	756.45	722.26
Pervomayskaya CHPP	1,922.30	1,717.94
Avtovskaya CHPP	1,098.10	1,170.40
Vyborgskaya CHPP	864.79	1,094.78
Severnaya CHPP	2,035.48	1,971.10
Yuzhnaya CHPP	4,613.37	4,703.38
Narvskaya HPP	713.63	549.96
Vuoksa HPPs Cascade	1,435.40	1,146.51
Ladoga HPPs Cascade	1,585.58	1,408.61
<b>Total for Nevsky Branch</b>	<b>18,559.66</b>	<b>17,976.29</b>
<b>Karelsky Branch</b>		
Petrozavodskaya CHPP	1,227.08	1,251.37
Vyg HPPs Cascade	978.74	917.26
Kem HPPs Cascade	1,221.03	1,267.17
Suna HPPs Cascade	289.27	262.05
<b>Total for Karelsky Branch</b>	<b>3,716.12</b>	<b>3,697.85</b>
<b>Kolsky Branch</b>		
Apatitskaya CHPP	439.42	461.71
Niva HPPs Cascade	2,957.42	2,791.43
Paz HPPs Cascade	1,110.48	994.08
Tuloma and Serebryanskiye HPPs Cascades	2,527.44	2,336.58
<b>Total for Kolsky Branch</b>	<b>7,034.76</b>	<b>6,583.81</b>
PJSC Murmanskaya CHPP	16.78	17.14
<b>Total, TGC-1 excluding PJSC Murmanskaya CHPP</b>	<b>29,310.55</b>	<b>28,257.95</b>
<b>Total, TGC-1 including PJSC Murmanskaya CHPP</b>	<b>29,327.33</b>	<b>28,275.09</b>

	2018	2019
Total, CHPPs	16,508.31	16,601.43
Total, HPPs	12,819.01	11,673.66

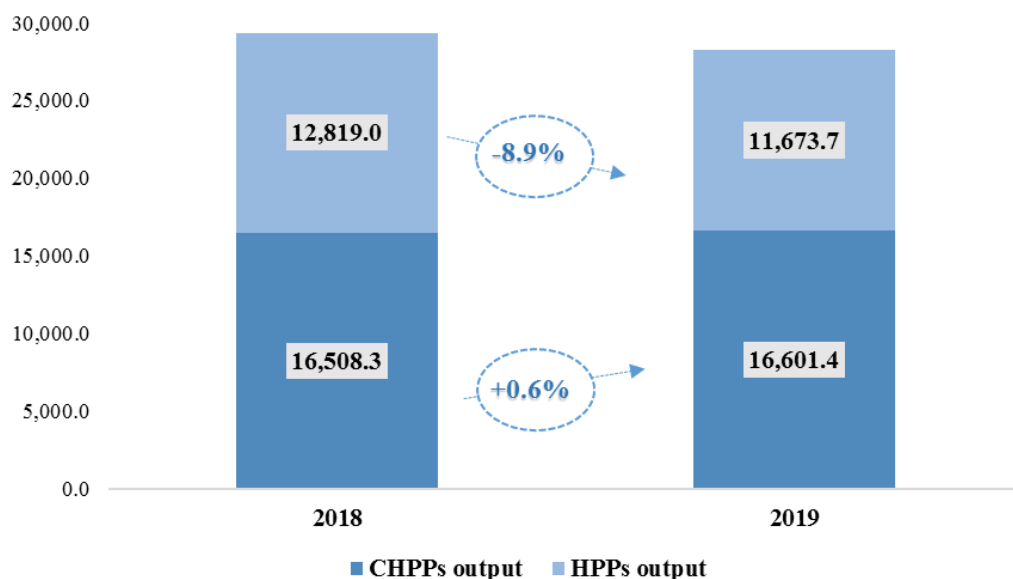


Fig. 6. Electricity output by CHPPs and HPPs of TGC-1 in 2018 – 2019, mln kWh

### 4.3. Heat generation

The volume of heat output from the collectors of TGC-1, including PJSC Murmanskaya CHPP, amounted to 24,173.6 thousand Gcal, showing a decrease of 2.9% compared to the indicator of 2018 due to high outdoor temperatures in the heating period.

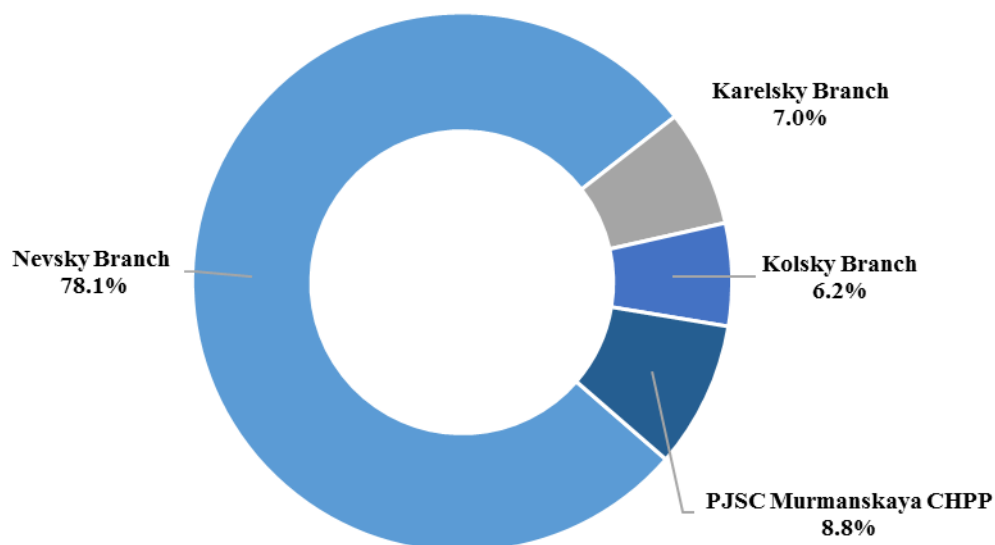


Fig. 7. Heat output by TGC-1's branches and PJSC Murmanskaya CHPP in 2019

Table 8. Heat output of TGC-1's power plants in 2018 – 2019, thous. Gcal

	2018	2019
<b>Nevsky Branch</b>		
Centralnaya CHPP	2,377.65	2,276.94
Pravoberezhnaya CHPP	2,312.66	2,296.86
Vasileostrovskaya CHPP	1,804.07	1,778.39
Pervomayskaya CHPP	1,658.79	1,605.30
Avtovskaya CHPP	3,188.31	3,029.28
Vyborgskaya CHPP	1,222.92	1,166.76
Severnaya CHPP	3,191.11	2,979.14

	2018	2019
Yuzhnaya CHPP	3,880.78	3,737.73
Boiler facilities	3.42	3.09
<b>Total for Nevsky Branch</b>	<b>19,639.70</b>	<b>18,873.50</b>
<b>Karelsky Branch</b>		
Petrozavodskaya CHPP	1,750.77	1,653.08
Boiler facilities	34.76	37.66
Electric boilers	0.60	0.62
<b>Total for Karelsky Branch</b>	<b>1,786.13</b>	<b>1,691.35</b>
<b>Kolsky Branch</b>		
Apatitskaya CHPP	1,403.79	1,485.00
Electric boilers	3.26	3.25
<b>Total for Kolsky Branch</b>	<b>1,407.04</b>	<b>1,488.25</b>
PJSC Murmanskaya CHPP	2,061.96	2,120.50
<b>Total, TGC-1 excluding PJSC Murmanskaya CHPP</b>	<b>22,832.88</b>	<b>22,053.11</b>
<b>Total, TGC-1 including PJSC Murmanskaya CHPP</b>	<b>24,894.84</b>	<b>24,173.61</b>

**Table 9.** Outdoor air temperature, °C

	Outdoor air temperature, average annual		Var.	Outdoor air temperature, average for the heating season		Var.
	2018	2019		2018	2019	
St. Petersburg	+7.1	+7.3	+0.2	-0.3	+2.3	+2.6
Petrozavodsk	+5.2	+5.4	+0.2	-1.5	+0.5	+2.0
Apatity	+2.5	+1.3	-1.2	-3.8	-3.9	-0.1
Murmansk	+7.1	+7.3	+0.2	-2.6	-2.4	+0.2

#### 4.4. Fuel utilization analysis at TGC-1's CHPPs

The main evaluation indicator of the fuel utilization level by the Company's CHPPs is the specific fuel consumption.

**Table 10.** Specific fuel consumption of CHPPs for heat and electricity output of TGC-1 in 2018 – 2019\*

	2018		2019	
	for electricity, g/kWh	for heat, kg/Gcal	for electricity, g/kWh	for heat, kg/Gcal
<b>Average for Nevsky Branch</b>	<b>212.7</b>	<b>167.4</b>	<b>218.7</b>	<b>168.0</b>
<b>Average for Karelsky Branch</b>	<b>232.5</b>	<b>165.8</b>	<b>230.1</b>	<b>165.8</b>
<b>Average for Kolsky Branch</b>	<b>187.6</b>	<b>177.9</b>	<b>187.6</b>	<b>178.5</b>
<b>Average for TGC-1</b>	<b>213.6</b>	<b>167.9</b>	<b>218.8</b>	<b>168.6</b>
PJSC Murmanskaya CHPP**		174.0		174.0

\* The specific fuel consumption is calculated using a "physical" method of heat and electricity cost distribution

\*\* The total amount of electricity generated in 2018-2019 was used for own needs; the specific fuel consumption is calculated taking into account the Yuzhnaya and Vostochnaya boiler facilities of PJSC Murmanskaya CHPP

Following the results for 2019, total specific fuel consumption by TGC-1 for supplied electricity amounted to 218.8 g/kWh, which was 5.2 g/kWh higher than in 2018. Specific fuel consumption per unit of heat sold increased by 0.7 kg/Gcal and amounted to 168.6 kg/Gcal against 2018.

The factors that caused the change in specific fuel consumption per unit of electricity and heat sold are as follows:

- reduction of output in the heat cycle by 2.16% compared to 2018, by 6.61% compared with the planned;
- an increase in electricity generation by 0.56%, with a parallel decrease in heat supply by 3.43%;
- an increase in the cost of electricity for production by 0.24%, caused by an increase in the cost of electricity for the operation of circulation pumps as a result of the increase in condensation production, and an increase in electricity for the operation of the pumps of the heating plant due to an increase in the temperature of the heating system water to drive a larger flow rate of direct heating system water;

- reduction of electrical loads of equipment.

#### 4.5. Energy saving and energy efficiency

When developing new focus areas and setting targets in order to increase output, it is necessary to consider that main production activity of TGC-1 is combined-heat-and-power generation and centralized heat supply.

The energy saving and energy efficiency improvement program of TGC-1 for 2019-2023, taking into account the requirements of Gazprom Energoholding LLC, was approved by the TGC-1 Management Board (Minutes No. 261 as of 11 June 2019).

The energy saving and energy efficiency improvement programs of TGC-1 and the PJSC Murmanskaya CHPP for 2019 (hereinafter referred to as the Programs) include measures:

- to reduce leaked-in air in the gas-air path of boiler units, traction and blast costs and temperature head in turbine condensers and heat exchangers as part of the repair program of the Companies;
- for the reconstruction of 110 kV outdoor switchgear with replacement of oil and air circuit breakers with SF6 circuit breakers;
- to replace lighting with LED;
- implementation of frequency control systems on CHDS pumps;
- maintenance of frequency control systems at CHDS;
- other measures aimed at improving the efficiency of the use of fuel and energy resources.

The program of JSC St. Petersburg Heating Grid includes the replacement of heating networks using energy-efficient equipment, the use of effective technologies for thermal insulation of newly built heating networks when restoring damaged thermal insulation.

As a result of the implementation of the Program activities in 2019, the estimated value of the fuel and energy resources savings amounted to:

- 22,383 TFOE, 13,029 thousand kWh and 191 Gcal for TGC-1;
- 60 Gcal and 28 thousand kWh for PJSC Murmanskaya CHPP;
- 75 thousand kWh and 29,050 Gcal for JSC St. Petersburg Heating Grid

#### 4.6. Repair and Maintenance Program

TGC-1's Repair and Maintenance Program for 2019 was developed for the maintenance of fixed production assets in working order at optimal costs on technical maintenance and repairs.

TGC-1's Repair and Maintenance Program for 2019 was developed on the basis of:

- advance schedule of main equipment repairs at power plants;
- annual repair schedule of main and auxiliary equipment, as well as buildings and structures of power plants;
- the results of 2018 technical diagnostic and repair programs;
- forecast values of consumer price and industrial product manufacturing price indices;
- expert assessment of repair costs with consideration of repair costs on the similar fixed assets in the previous periods.

**Table 11.** Implementation of the fixed assets major and medium repair plan in 2019

Equipment	Nevsky Branch	Karelsky Branch	Kolsky Branch	TGC-1
Power boilers (pcs/t/h)	7/2646	1/420	1/220	9/3286

Turbine units (pcs/MW)	6/640	1/110	1/28	8/778
Hydroelectric generating units (pcs/MW)	2/51.5	3/57.5	1/40	6/149
Turbine generators (pcs/MW)	5/700	—	—	5/700

Including CCGT:

Inspections	Nevsky Branch	Karelsky Branch	Kolsky Branch	TGC-1
Hot gas path inspections (pcs/MW)	—	—	—	—
Main inspections (pcs/MW)	2/130	—	—	2/130

**Table 12.** The number of performed ongoing repairs of main equipment in 2019

Number of repairs	Nevsky Branch	Karelsky Branch	Kolsky Branch	TGC-1
Ongoing repairs, pcs/days	194/1636	198/821	228/701	620/3158
of them small inspections of CCGT, pcs/days	5/57	—	—	5/57

### Repair campaign targets for 2020:

- the implementation of the repair program according to the list of fixed assets and on time;
- restoration of technical and economic characteristics of equipment;
- increasing the reliability of power plant equipment;
- implementation of measures for the preparation of power facilities of TGC-1 for work during the autumn and winter period of 2020/2021;
- improving the quality of repairs and the wider use of new materials and technologies.

In accordance with the annual repair schedule for the main equipment, 32 major and 6 medium repairs of process units must be provided in 2020.

**Table 13.** Main equipment repairs plan for 2020

Unit	Major repairs	Medium repairs
Turbine units (pcs/MW)	6/645	—
Hydroelectric generating units (pcs/MW)	14/278.8	—
Boiler units (pcs/MW)	11/2652	2/440
Turbine generators (pcs/MW)	—	4/543
Peak hot water boilers (pcs/Gcal/h)	1/100	—

Including CCGT:

Inspections	Nevsky Branch	Karelsky Branch	Kolsky Branch	TGC-1
Main inspections (pcs/MW)	2/312	—	—	2/312
Minor inspections, (pcs/MW)	7/514	—	—	7/514

## 5. SALES OVERVIEW

The target of the Company's sales function is to obtain maximum marginal proceeds from operation of power plants on the electricity and capacity markets and in the course of heat sales.

The Company's sales policy principles:

- monitoring of technical and conceptual changes in the wholesale market, the Company's assessment of regulatory risks and activities to minimize them, control of execution by all of the Company's structural divisions of the provisions of the Contract on accession to the trading system of the wholesale market, and regulations and Rules of the wholesale electricity and capacity market (approved by Decree of the Government of the Russian Federation No. 1172 as of 27 December 2010);
- payback of electricity and capacity, heat production in all market sectors;
- development of electricity export sales;
- elaborating proposals for the increase of marginal proceeds from electricity, heat and capacity sales on the basis of the sales results analysis;
- measures aimed at the reduction of accounts receivable.

### 5.1. Electricity and capacity sales

#### 5.1.1. Analysis of the Company's operation on the wholesale electricity and capacity market

Hydroelectric generation of the Company is still in demand, CHPPs equipment is loaded in accordance with the price parameters submitted in price quotes on the day-ahead market of the wholesale market.

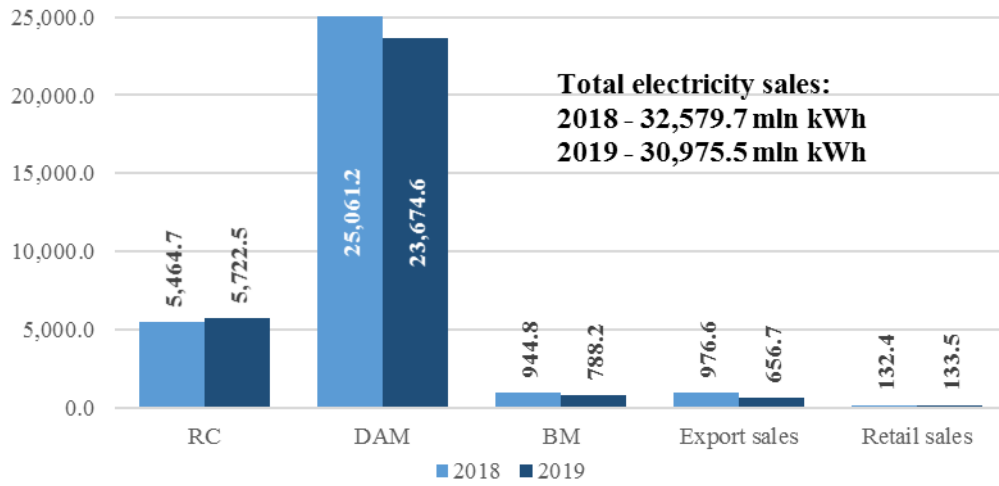
TGC-1's electricity sales in 2019 amounted to 30,975.5 mln kWh. PJSC Murmanskaya CHPP is not a participant on the wholesale electricity and capacity market, the entire amount of electricity generated in 2018 – 2019 was used for operational needs.

The largest amount of electricity of the Company is sold on the Day-Ahead Market (DAM). In 2019, the DAM accounted for 76.43% of total sales and 52.42% of total revenue from electricity sales. Under the regulated contracts (RC), the amount of sales was 18.47%, and the revenue of electricity was 8.72%. In 2019, export sales of electricity brought significant proceeds – the amount of sales and the revenue of electricity amounted to 2.12% and 3.24%, respectively.

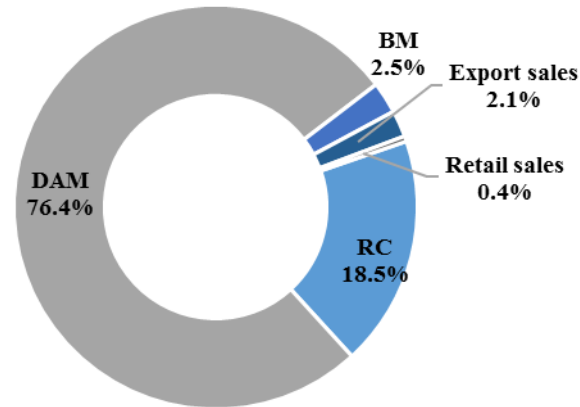
The Company's capacity sales were registered at the level of 5,386.6 MW/month, which was 2.1% higher than in 2018. In 2019, the capacity sales after competitive capacity outtake (CCO) comprised 23.0% of the sales, the capacity sales under RC comprised 25.1%, the capacity sales under CDA comprised 23.6%, capacity sold in forced mode (FM) comprised 13%, the share of the non-regulated contracts (NRECC) comprised 15.3%. In this way, the major part of revenue from capacity sales was formed by sales under CDA, amounting to 70.7%, the contribution into the revenue structure from CCO sales amounted to 9.0%, the share of RC amounted to 9.6%, sales in FM were 4.5%, the share of non-regulated contracts was 6.2%.

**Table 14.** Electricity sales by branches in 2019, mln kWh

	TGC-1	Nevsky Branch	Karelsky Branch	Kolsky Branch
RC	5,722.5	3,655.9	654.5	1,412.1
DAM	23,674.6	15,442.8	2,903.7	5,328.1
BM	788.2	535.8	72.4	180.0
Export sales	656.7	307.4	0.0	349.3
Retail sales	133.5	0.0	132.0	1.5
<b>TOTAL</b>	<b>30,975.5</b>	<b>19,941.9</b>	<b>3,762.6</b>	<b>7,271.0</b>



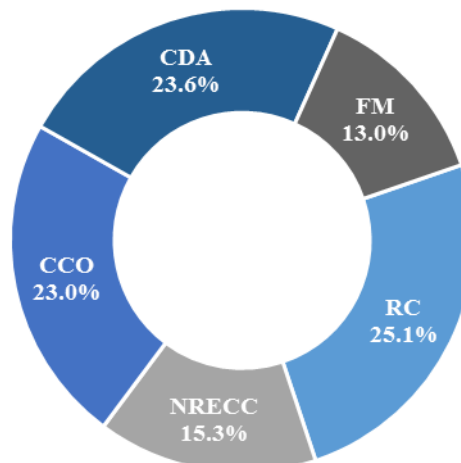
**Fig. 8.** Electricity sales by market sectors, mln kWh



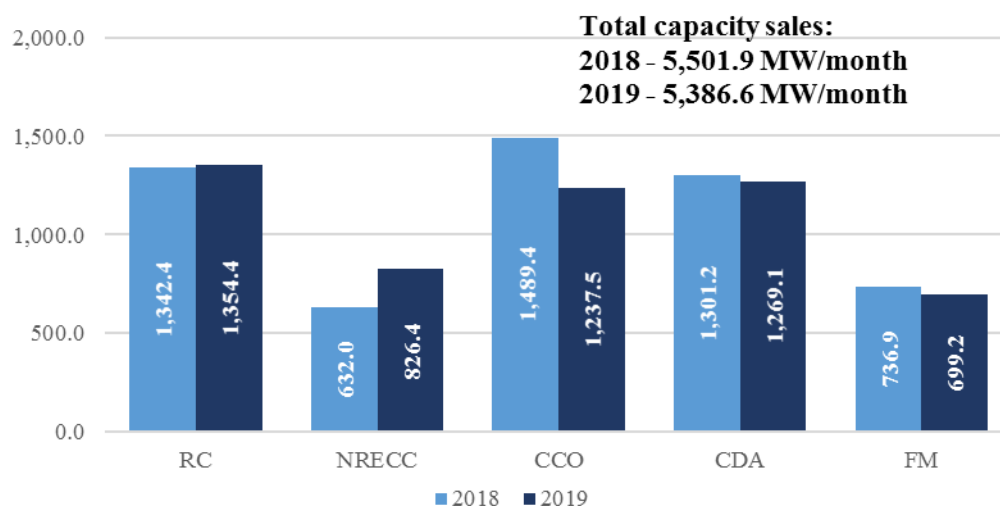
**Fig. 9.** Electricity sales structure by market sectors in 2019

**Table 15.** Capacity sales by branches in 2019, MW/month

	TGC-1	Nevsky Branch	Karelsky Branch	Kolsky Branch
RC	1,354.4	690.7	155.3	508.4
NRECC	826.4	438.0	0.0	388.4
CCO	1,237.5	488.8	188.3	560.5
CDA	1,269.1	1,269.1	0.0	0.0
FM	699.2	505.6	136.3	57.3
<b>TOTAL</b>	<b>5,386.6</b>	<b>3,392.1</b>	<b>479.9</b>	<b>1,514.6</b>



**Fig. 10.** Capacity sales structure by market sectors in 2019



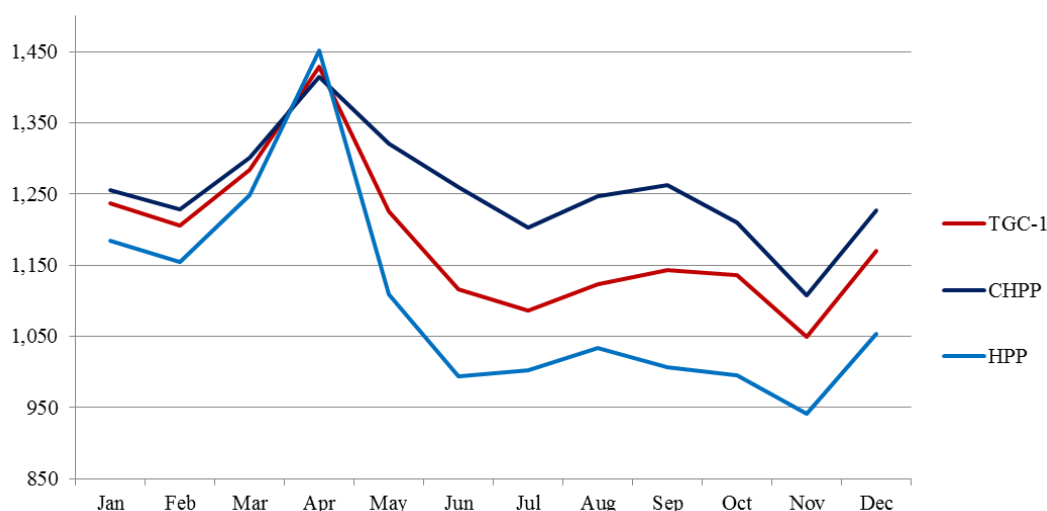
**Fig. 11.** Capacity sales structure by market sectors in 2018 – 2019, MW (monthly average)

### 5.1.2. Tariff regulation

Electricity and capacity tariffs for TGC-1 as a participant of the wholesale market are approved by FAS of the Russian Federation. Pursuant to clause 62 of the Wholesale Electricity and Capacity Market Rules approved by Decree of the Russian Government No. 1172 as of 27 December 2010, electricity and capacity supplies at regulated prices (tariffs) may be carried out only for delivery of electricity and capacity to the public and equivalent consumer categories. Pursuant to clause 65 of the Wholesale Electricity and Capacity Market Rules, the total volume of electricity and the total volume of capacity to be supplied under RC in one calendar year may not exceed 35% of the generated electricity and capacity as defined in the forecast balance for regulatory period for the specified provider.

In 2019, payments for electricity and capacity under RC were made as per electricity and capacity tariffs set by FAS of the Russian Federation individually for each power plant of the Company. Settlements for electricity supplied to the DAM and the BM were made at prices set on the basis of competitive bids.

Settlements for capacity supplied to the market under regulated contracts and by power plants operating in the “overriding status” were made as per tariffs approved by FAS of the Russian Federation. Settlements for capacity supplied under CCO were based on the prices set through competitive processes for 2019. Settlements under CDA were based on the prices calculated by NP Market Council.



**Fig. 12.** Electricity sales price dynamics on DAM in 2019, RUB/MWh

**Table 16.** Dynamics of revenue from electricity sales in 2018 – 2019 by market sectors and branches, RUB mln

	TGC-1	Nevsky Branch	Karelsky Branch	Kolsky Branch
2018				
RC	2,389.3	2,083.5	223.1	82.7
DAM	27,672.4	19,257.0	3,105.3	5,310.1
BM	647.6	474.6	41.9	131.1
Export	2,805.4	1,191.9	0.0	1,613.5
Retail	174.7	0.0	169.2	5.5
<b>TOTAL</b>	<b>33,689.4</b>	<b>23,007.0</b>	<b>3,539.5</b>	<b>7,142.9</b>
2019				
RC	2,756.5	2,463.4	208.5	84.6
DAM	28,205.4	19,461.1	3,335.0	5,409.4
BM	775.1	589.7	75.6	109.8
Export	1,744.5	889.5	0.0	854.9
Retail	139.5	0.0	133.3	6.1
<b>TOTAL</b>	<b>33,621.0</b>	<b>23,403.7</b>	<b>3,752.4</b>	<b>6,464.8</b>

**Table 17.** Dynamics of revenue from capacity sales in 2018 – 2019 by market sectors and branches of the Company, RUB mln.

	TGC-1	Nevsky Branch	Karelsky Branch	Kolsky Branch
2018				
RC	1,902.9	1,035.7	299.0	568.2
NRECC	930.1	701.8	0.0	228.3
CCO	2,114.5	640.4	264.4	1,209.7
CDA	13,889.0	13,889.0	0.0	0.0
FM	1,030.7	732.8	197.5	100.4
<b>TOTAL</b>	<b>19,867.2</b>	<b>16,999.7</b>	<b>760.9</b>	<b>2,106.6</b>
2019				
RC	1,934.5	1,019.0	308.8	606.5
NRECC	1,258.1	678.3	0.0	579.8
CCO	1,813.4	706.2	277.6	829.6
CDA	14,277.3	14,277.3	0.0	0.0
FM	903.8	611.1	201.2	91.4
<b>TOTAL</b>	<b>20,187.1</b>	<b>17,291.9</b>	<b>787.6</b>	<b>2,107.5</b>

### 5.1.3. Electricity and capacity purchase

The main reasons of electricity purchase in 2019 were as follows:

- purchase to ensure export sales;
- purchase for operational needs.

The main reasons of capacity purchase in 2019 were as follows:

- purchase for operational needs at maximum consumption in excess of the standard (including, in order to ensure export sales);
- purchase to secure obligations under RC.

Electricity purchase in 2019 amounted to 4,705.1 million kWh, which was 10.2% lower than 2018. Capacity purchase amounted to 148.0 MW per month, which was 20.6% lower than in 2018.

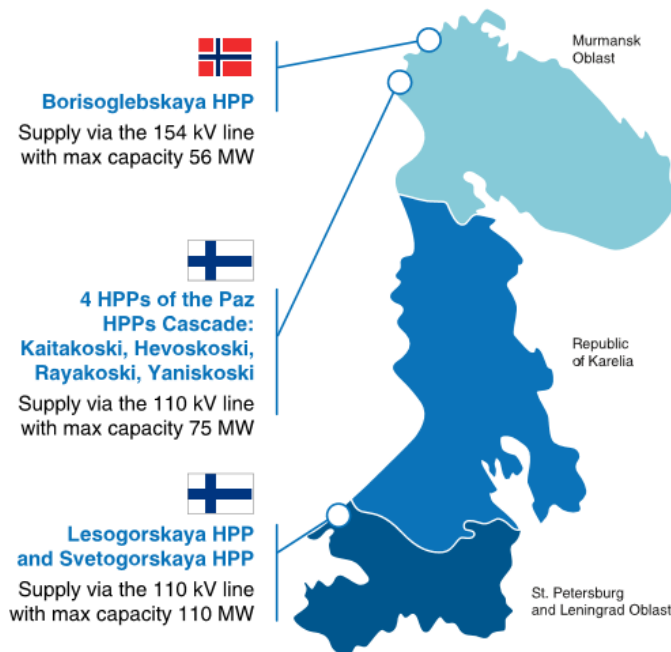
**Table 18.** Electricity and capacity purchases in 2018 – 2019

	2018		2019	
<b>Electricity purchase</b>				
	mln kWh	RUB mln	mln kWh	RUB mln
Nevsky Branch	3,593.8	4,098.4	3,544.0	4,303.0
Karelsky Branch	285.5	302.2	284.5	329.7
Kolsky Branch	1,378.0	1,188.0	897.2	839.4
<b>TOTAL</b>	<b>5,257.3</b>	<b>5,588.6</b>	<b>4,725.7</b>	<b>5,472.1</b>
<b>Capacity purchase</b>				
	MW/month	RUB mln	MW/month	RUB mln
Nevsky Branch	81.9	411.2	85.7	438.3

Karelsky Branch	4.5	21.9	2.6	15.7
Kolsky Branch	100.1	517.2	59.7	368.9
<b>TOTAL</b>	<b>186.4</b>	<b>950.3</b>	<b>148.0</b>	<b>822.9</b>

#### 5.1.4. Electricity exports

Due to the unique geographical location of some power plants, TGC-1 has the possibilities to export part of the generated electricity. Export sales are made to Finland and Norway.



**Fig. 13.** Geography of electricity exports of TGC-1

Electricity is supplied to Finland:

- from the Svetogorskaya HPP of the Vuoxsa HPPs Cascade in Leningrad Oblast by the line Imatra-1 with the voltage of 110 kV. Maximum supply capacity amounts to 110 MW.
- from the Kaytakoski HPP of the Paz HPPs Cascade in Murmansk Oblast by line L-82 with the voltage of 110 kV. Maximum supply capacity amounts to 70-75 MW in the flood season.

Electricity is supplied to Norway:

- from the Borisoglebskaya HPP of the Paz HPPs Cascade in Murmansk Oblast by line L-225 with the voltage of 154 kV. Maximum supply capacity can reach 56 MW, but in a standard operating mode, the capacity amounts to 28 MW.

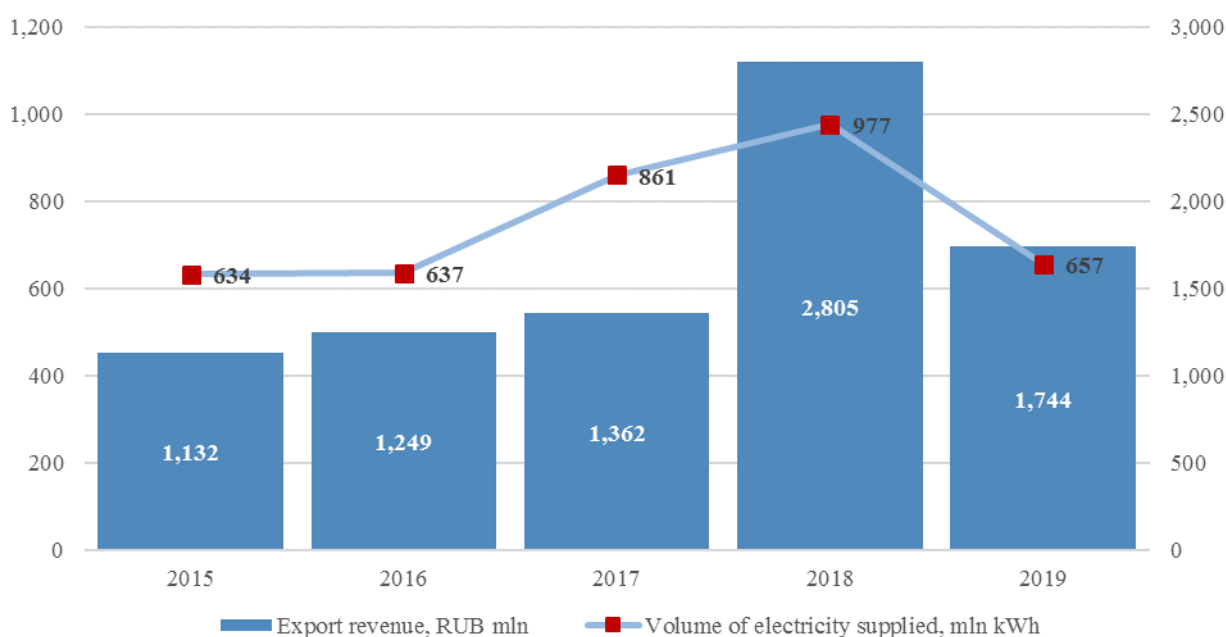
Actual export sales of TGC-1 in 2019 amounted to 656.7 million kWh, demonstrating a decrease of 32.7% compared to 2018.

Pricing in export contracts depends on electricity spot market prices at the NordPool Exchange. The prevailing NordPool market conditions served as the main reason for the decline in the Company's export supplies.

**Table 19.** List of export contracts

Contact	Contractor	Country	Effective Date
Effective	Fortum Power and Heat	Finland	as of 27 December, 2016
Effective	RAO Nordic Oy *	Norway	as of 31 October, 2012
Effective	RAO Nordic Oy *	Finland	as of 31 October, 2012

\* contracts with RAO Nordic Oy were concluded with the involvement of an agent company — PJSC Inter RAO — acting on its own behalf, but at the expense of TGC-1 (the principal)



**Fig. 14.** Dynamics of export volumes for 2015 – 2019

The effectiveness of export deliveries depends, among other things, on factors determining the potential of export trade. These factors include:

- limited network bandwidth;
- plants loading modes determined by the System Operator of the UES;
- increase in tariffs for services of network companies;
- purchase of capacity at the wholesale electricity and capacity market to ensure export across all sectors of the capacity market;
- gaps in the legal regulation of export activities within the framework of the wholesale electricity and capacity market.

## 5.2. Heat sales

### 5.2.1. Heat useful output

TGC-1 is unified heat supply company in St. Petersburg, some municipal entities of Leningrad Oblast, Murmansk Oblast and the Republic of Karelia (Petrozavodsk and settlements of Pryazhinsky and Prionezhsky districts).

**Table 20.** Heat useful output of TGC-1 by branches of the Company in terms of useful output i.e. to consumers and heat loss during transmission i.e. for 2018 – 2019, thousand Gcal

	Indicator	2018	2019
Nevsky Branch	<b>Heat useful output</b>	<b>20,082</b>	<b>19,065</b>
	- to consumers	18,226	17,189
	- sale of losses to JSC St. Petersburg Heating Grid	1,856	1,876
Kolsky Branch	<b>Heat useful output</b>	<b>1,374</b>	<b>1,403</b>
	- to consumers	1,166	1,186
	- sale of losses to JSC Apatityenergo	129	136
	- sale of losses to JSC HHC	79	81
Karelsky Branch	<b>Heat useful output</b>	<b>1,840</b>	<b>1,997</b>
	- to consumers	1,637	1,791
	- sale of losses to JSC PKS - Heating Grids	203	206

<b>TGC-1</b>	<b>Heat useful output</b>	<b>23,296</b>	<b>22,465</b>
	- to consumers	<b>21,029</b>	<b>20,166</b>
	- sale of losses	<b>2,267</b>	<b>2,299</b>
PJSC Murmanskaya CHPP	Heat useful output	2,016	2,011
	- to consumers	1,908	1,897
	- sale of losses	108	114
<b>TGC-1 Group</b>	<b>Heat useful output</b>	<b>25,312</b>	<b>24,476</b>
	- to consumers	<b>22,937</b>	<b>22,063</b>
	- sale of losses	<b>2,375</b>	<b>2,413</b>

### 5.2.2. Current scheme of heat sales

#### Nevsky Branch

Heat Sales Department of the Nevsky Branch of TGC-1 performs sales of heat generated by TGC-1 CHPPs in St. Petersburg and Leningrad Oblast.

Besides, JSC St. Petersburg Heating Grid provides heat energy transfer services to TGC-1 from TGC-1 CHPPs to end consumers and buys from TGC-1 heat for loss compensation in heat supply grids.

#### Kolsky Branch

Heat sold from the Apatitskaya CHPP by the Kolsky branch of TGC-1 is supplied to consumers under the heat supply contracts through heat supply grids of JSC Apatitenergo and JSC HHC.

In order to ensure the implementation of heat supply contracts, TGC-1 signed heat energy transfer contracts with JSC Apatitenergo and JSC HHC, according to which TGC-1 pays for the transmission of heat energy, and JSC Apatitenergo and JSC HHC buy heat for loss compensation in heat supply grids.

#### Karelsky Branch

The Karelsky Branch sells heat produced by the Petrozavodskaya CHPP.

In order to meet responsibilities to consumers, the heat transmission contract and heat loss purchase contract were concluded between TGC-1 and JSC Petrozavodsk Communal Systems as lessee of the city heating grids.

The Karelsky Branch purchases a part of the heat from JSC PKS - Heating Grids, BIOTOP LLC, KARTEK LLC, JSC SLAVMO, and SUE RK KarelKommunEnergo.

### 5.2.3. Heat tariffs

Heat tariffs are approved by the regional regulating bodies of St. Petersburg, Leningrad Oblast, the Republic of Karelia and Murmansk Oblast by consumer groups.

**Table 21.** Average annual heat tariffs set in 2016 – 2020, RUB/Gcal

	2016	2017	2018	2019	2020
Nevsky Branch	1,294.21	1,370.74	1,408.93	1,654.26	1,678.75
St. Petersburg	1,295.40	1,373.38	1,415.21	1,665.84	1,691.23
Leningrad Oblast*	1,208.60	1,244.63	1,272.40	1,292.02	1,308.84
Karelsky Branch	1,628.76	1,732.06	1,777.03	1,757.33	1,775.63
Kolsky Branch	1,078.09	1,129.98	1,155.86	1,195.00	1,210.00
<b>TGC-1</b>	<b>1,306.54</b>	<b>1,384.94</b>	<b>1,423.84</b>	<b>1,634.54</b>	<b>1,658.24</b>
PJSC Murmanskaya CHPP*	2,707.06	2,717.96	2,707.06	2,924.12	2,816.32

\* Taking into account the heat transfer through JSC Murmanenergosbyt grid

**Table 22.** Proceeds from heat sales and provision of the reserve heat capacity maintenance services, RUB thousand excluding VAT

	2018	2019	Δ (%)
Nevsky Branch (including the reserve heat capacity maintenance services)*	27,201,508	29,915,642	10.0%
Kolsky Branch (including subsidies for compensation of lost proceeds)	2,478,782	3,054,085	23.2%
Karelsky Branch	3,356,794	3,346,618	-0.3%
<b>TGC-1</b>	<b>33,037,084</b>	<b>36,316,345</b>	<b>9.9%</b>
PJSC Murmanskaya CHPP (including subsidies for compensation of lost proceeds)	6,200,442	7,888,597	27.2%
<b>TGC-1, including PJSC Murmanskaya CHPP</b>	<b>39,237,526</b>	<b>44,204,942</b>	<b>12.7%</b>

\* Contracts for reserve heat capacity maintenance services at the Nevsky Branch of TGC-1 were signed with the consumers, who do not consume heat but have not disconnected their heat consumption facilities from the heat supply grid in order to reserve the possibility to restart heat consumption when needed. Revenue for capacity reservation services for the Nevsky Branch in 2018 amounted to 33,913 RUB thousand excluding VAT, for 2019 - 24,585 RUB thousand excluding VAT

## 6. FUEL SUPPLY AND PROCUREMENT

### 6.1. Fuel supply

Main types of fuel used by the power plants of TGC-1 are:

- dry stripped natural gas at CHPPs of the Nevsky Branch;
- natural gas at the Petrozavodskaya CHPP of the Karelsky Branch;
- power station coal of the grades D and DG at the Apatitskaya CHPP of the Kolsky Branch.

Reserve types of fuel are:

- furnace fuel oil of grade M-100 at CHPPs of the Nevsky Branch;
- furnace fuel oil of grade M-100 at the Petrozavodskaya CHPP of the Karelsky Branch.

Emergency type of fuel is:

- diesel fuel at the Pervomayskaya CHPP of the Nevsky Branch.

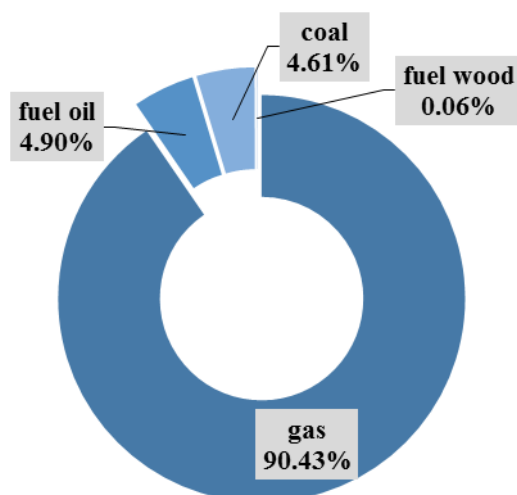
Auxiliary (start-up) types of fuel are:

- furnace fuel oil of grade M-100 at the Apatitskaya CHPP of the Kolsky Branch.

Main fuel used by PJSC Murmanskaya CHPP is furnace fuel oil.

To provide reliable fuel supply of TGC-1 power stations, uninterrupted supplies of gas, fuel oil and coal were provided in 2019. Objectives to provide standard fuel reserves were achieved. Payment for fuel supplies was made in time and without violation of the contractual conditions.

In 2019, TGC-1 power plants and leased boiler facilities, including PJSC Murmanskaya CHPP, consumed 5,765.2 million m<sup>3</sup> of gas, 265.1 thousand tonnes of fuel oil, 482.4 thousand tonnes of coal, and 15.4 thousand solid m<sup>3</sup> of fuel wood to deliver electricity and heat. Gas share in fuel balance amounted to 90.43%, fuel oil – 4.90%, coal – 4.61%, and fuel wood – 0.06%.



**Fig. 15.** Fuel balance structure  
(including PJSC Murmanskaya CHPP)

**Table 23.** Fuel balance structure in 2019, %

	gas	fuel oil	coal	fuel wood
Nevsky Branch	99.97	0.03	—	—
Karelsky Branch	97.74	0.02	1.48	0.77
Kolsky Branch	—	0.21	99.79	-
<b>Total for TGC-1</b>	<b>95.06</b>	<b>0.04</b>	<b>4.84</b>	<b>0.06</b>
PJSC Murmanskaya CHPP	—	100	—	—
<b>TGC-1, including PJSC Murmanskaya CHPP</b>	<b>90.43</b>	<b>4.90</b>	<b>4.61</b>	<b>0.06</b>

Key fuel suppliers to TGC-1 power stations in 2019 were:

- gas suppliers – Gazprom Mezhregiongaz St. Petersburg LLC, Gazprom Mezhregiongaz LLC;
- fuel oil – JSC GC EKS, Aftiag-Oil LLC;
- coal suppliers – JSC Russian Coal, Razrez Zadubrovsky Novy LLC.

The main supplier of fuel oil at PJSC Murmanskaya CHPP was Rosneft Oil Company.

**Table 24.** Inventories, supply and fuel consumption in 2019

Type of fuel	Initial reserves	Supply in 2019	Consumption in 2019	Final reserves
<b>Nevsky Branch</b>				
Fuel oil (thous. tnf)	163.2	4.9	1.7*	166.4
Diesel fuel (thous. tnf)	5.0	0.15	0.07	5.1
Gas (mln m <sup>3</sup> )	—	5,310.3	5,310.3	—
<b>Petrozavodskaya CHPP of the Karelsky Branch</b>				
Fuel oil (thous. tnf)	19.1	0	0.1	19.0
Gas (mln m <sup>3</sup> )	—	457.4	457.4	—
<b>Leased boiler facilities of the Karelsky Branch</b>				
Coal (thous. tnf)	3.2	9.4	10.4	2.2
Fuel wood (solid. m <sup>3</sup> )	6.8	12.5	15.5	3.8
<b>Kolsky Branch</b>				
Coal (thous. tnf)	139.64	438.4	472.36	105.68
Fuel oil (thous. tnf)	1.8	0.6	0.5	1.9
<b>PJSC Murmanskaya CHPP</b>				
Fuel oil (thous. tnf)	48.0	261.1	264.1**	45.0

\* Fuel oil consumption includes the burning of fuel oil at the CHPP in the amount of 1.2 thousand tons, the write-off of oil products in the amount of 0.5 thousand tonnes

\*\* Fuel oil consumption of PJSC Murmanskaya CHPP includes the sale of oil to a third-party organization in the amount of 0.4 thousand tonnes

**Table 25.** Actual amounts of fuel procurement in 2019

Type of fuel	Amount, (mln m <sup>3</sup> /thousand tnf)	Procurement cost, RUB mln (including VAT)	Procurement cost (average), RUB/1,000 m <sup>3</sup> , RUB/tnf (including VAT)
<b>Nevsky Branch</b>			
Gas	5,310.3	33,508.4	6,310.13
Furnace fuel oil	4.8	121.7	25,279.02
Diesel fuel	0.15	7.7	51,883.34
<b>Karelsky Branch</b>			
Gas	457.4	2,743.8	5,998.01
Coal	9.4	52.9	5,635.54
Fuel wood	12.5	30.6	2,445.46
<b>Kolsky Branch</b>			
Krasnoyarsk coal	120.8	723.8	5,992.89
Khakass coal	107.3	499.0	4,651.87
Kuznetsk coal	210.3	949.1	4,512.00
Coal	438.4	2,171.9	4,954.21
Furnace fuel oil	0.6	15.7	24,447.84
<b>PJSC Murmanskaya CHPP</b>			
Furnace fuel oil	261.1	4,591.1	17,585.31
<b>TOTAL:</b>		<b>43,243.8</b>	

**Table 26.** Information on the amount of each used energy resource type, in physical and monetary terms for 2019\*

Energy resource type	Consumed amount in physical terms	Unit of measurement	Consumed amount, RUB thousand
Car petrol	696.29	thous. liters	21,711.02
Diesel fuel	706.84	thous. liters	17,947,517

Furnace fuel oil, diesel fuel (process)	2,370.52	tonnes	26,997.4
Natural gas	5,767,701.14	thous. m <sup>3</sup>	30,210,121.8
Coal	482,748.60	tonnes	1,967,693.4
Fuel wood	15,502.90	solid m <sup>3</sup>	30,259.7

\* Other types of energy resources, in addition to those indicated in the table, were not consumed or used in the reporting year

## 6.2. Procurement

In 2019, TGC-1's procurement was regulated by the following documents:

- Federal Law No. 223-FZ, “On Procurement of Goods, Works, Services by Certain Types of Legal Entities” as of 18 July, 2011;
- Federal Law No. 135-FZ, “On Protection of Competition” dated 26 July, 2006;
- Resolution of the Government No. 616 as of 21 June, 2012 “On Approval of the List of Goods, Works and Services, Procurement of Which is Performed in Electronic Format”;
- Resolution of the Government No. 908 as of 10 September, 2012 “On Approval of the Regulations on the Placement of the Procurement Information in the Unified Information System”;
- Resolution of the Government No. 1352 as of 11 December, 2014 “On Special Conditions of Participation of Small and Medium-Sized Enterprises in Procurement of Goods, Works, Services by Certain Types of Legal Entities”;
- Resolution of the Government No. 1169 as of 29 December, 2015 “On the Procedure of Performing Monitoring of Compliance of the Procurement Plans for Goods, Works, Services, Procurement Plans for Innovative Products, High Technology Products, Pharmaceutical Products, Changes Introduced into Such Plans; Evaluation of Compliance of the Drafts of Such Plans, Drafts of Changes to Be Introduced into Such Plans with the Requirements of the Russian Federation Legislation, Stipulating Participation of the Small and Medium-Sized Enterprises in Procurement, Procedures and Terms of Suspension of the Indicated Plans Upon the Results of Such Monitoring and Evaluation”;
- Resolution of the Government No. 925 as of 16 September, 2016 “On Priority of Russian Goods, Works, Services Performed and Provided by Russian Persons in Comparison with Foreign Goods, Works, and Services Performed and Provided by Foreign Persons”;
- Code of Administrative Offences of the Russian Federation No. 195-FZ as of 30 December 2001;
- Town-Planning Code of the Russian Federation as of 29 December, 2004 No. 190-FZ;
- Regulations on purchasing goods, work, and services of the Company, approved by the resolution of TGC-1 Board of Directors (as of 27 December, 2017; 18 September, 2019; and 16 December, 2019);
- Regulation of formation of criteria and methods of evaluation of applications for participation in competitive procurement of power generating companies of Gazprom Energoholding LLC, as well as AD Gazprom Energoremont and its subsidiaries (affiliates) approved by Order No. 147 dated 19 September, 2018 of the General Director (as amended by TGC-1 order No. 159 as of 1 October, 2018), No. 43 as of 28 February, 2019 and No. 235 as of 19 November, 2019;
- Regulation “On the Procedure of Preparation and Conclusion of Contracts on Behalf of TGC-1 and Control Over Their Execution” approved by Order No. 104 dated 19 June, 2018 of the General Director, No. 126 as of 26 June, 2019);
- Regulations on TGC-1 Procurement Committee, approved by the Company's Board of Directors as of 27 October, 2011 (Minutes No. 6);
- Regulation on development, endorsement, approval, adjustment, performance and performance control of TGC-1 Annual Comprehensive Procurement Program, approved by Procurement Committee (as amended dated 28 April, 2017 and 23 March, 2018);

– Annual Comprehensive Procurement Program (ACPP) for 2019 (primary procurement and stage 2), approved by the Resolutions of the Company’s Board of Directors as of 18 October, 2018 (Minutes No. 4) and 29 March, 2019 (Minutes No. 9).

The main purpose of TGC-1’s activity in the area of procurement is timely and complete satisfying of the Company’s demand in goods, works, services enhancement of the procedure and improvement of the order placement efficiency.

Key principles of TGC-1 in terms of procurement policy in 2019 are:

- providing conditions for timely and complete satisfying of the Company’s demand in goods, works, services and identification of a supplier (contractor) that is able to timely and efficiently meet the needs of the Customer with the required indicators of price, quality and reliability;
- ensuring safe operation of the power generating engineering facilities;
- ensuring information transparency of procurement;
- ensuring equal rights, equity, absence of discrimination and unjustified restrictions of competition towards the bidding participants;
- ensuring targeted and economically efficient expenditure of the Company’s cash funds for the procurement of goods, works, services (taking into account the cost of the life cycle of purchased products, if necessary) and implementation of the measures aimed at reduction of the Customer’s costs, minimization of tax risks;
- ensuring the absence of restrictions on access to participation in the procurement by establishing immeasurable requirements for procurement participants;
- creating conditions for competition between business entities during the procurement process in order to obtain better conditions for meeting the needs in terms of price, quality and timing in the relevant product market;
- ensuring a balance of costs for the organization and conduct of competitive procurement procedures and the expected economic benefits from their results.

The total planned volume of procurement in the ACPP for 2019 in the areas of production and economic activity amounted to RUB 54,581,558.57 thousand excluding VAT (subject to adjustments).

The actual implementation of the ACPP of the Company for 12 months of 2019 amounted to 97% in relation to the planned volume of procurement.

Of the 1,338 regulated competitive procurements planned for 2019, 1,257 took place, which is 94%.

The initial value of the lots amounted to RUB 15,168.08 mln. However, the implementation of competitive procurement procedures allowed to significantly reduce prices for the purchase of material and technical assets, works and services for the Company.

The economic effect of competitive procurement in 2019 amounted to RUB 585.71 mln (3.86%).

In accordance with Resolution of the Government No. 1352 dated 11 December, 2014 “On Special Conditions of Participation of Small and Medium-Sized Enterprises in Procurement of Goods, Works, Services by Certain Types of Legal Entities”, the annual volume of procurements from the small and medium-sized enterprises (SME) in 2019 was set in the amount of at least 18% of the consolidated annual value of the contracts signed based on results of procurement. At the same time, the consolidated annual value of the contracts signed with SME based on results of procurement, where only SME participated, shall comprise at least 15% of the consolidated annual value of the contracts signed based on results of procurement.

The share of the TGC-1 purchases from SME in 2019 comprised of 27.18% of the total value of the annual procurement of the Company.

Based on the results of procurement, where only SME participated, the annual procurement value of the Company amounted to 15.8% of the total annual procurement value in the reporting year.

In 2019, when conducting procurements, the Company complied with the requirements of the legislation on procurement, namely:

- all information on the planned procurements (Procurement Plan) was placed on the official website <http://zakupki.gov.ru> in the established form;
- all open competitive bidding was conducted on the official website <http://zakupki.gov.ru>.

In accordance with Resolution No. 616 of the Government of the Russian Federation as of 21 June, 2012, “On Approval of the List of Goods, Works and Services, Procurement of Which is Performed in Electronic Format” and Annual Comprehensive Procurement Program for 2019, 100% of open competitive procedures were carried out on the website of the Trade System Gazpromneftetorg.ru <http://www.gazneftetorg.ru/>, JSC Electronic Trading Systems <http://www.etp-ets.ru>, CJSC Sberbank-AST <http://www.sberbank-ast.ru> in electronic form.

Copies of all publications on performed procurements were placed on the TGC-1 official website [www.tgc1.ru](http://www.tgc1.ru) in the Procurements section.

## 7. TGC-1 INVESTMENT ACTIVITY

### 7.1. Prospective Investment Plans

#### 7.1.1. Investment Priorities

The main areas of development of TGC-1 in the framework of investment activities are:

- implementation of priority investment projects;
- modernization of outdated generating capacities and the use of more advanced equipment with a high level of reliability, consistent with accepted international standards;
- maintaining the balance of the connected load and the installed capacity of CHPPs after decommissioning of equipment that has exhausted its resource;
- expanding the areas of activity of TGC-1 through connecting new residential areas and switching consumers of other inefficient heat sources;
- implementation of projects with minimal environmental impact, improving the environmental safety of energy facilities;
- implementation of the program of energy saving and energy efficiency;
- building IT infrastructure and introducing new technologies;
- compliance with regulatory requirements.

In 2019, the volume of capital investments of the Company amounted to RUB 8,954 million, excluding VAT, financing – RUB 10,446 million, VAT included.

In 2019, work continued on the following priority projects:

- Renovation of Power Plant No. 2 (PP-2) of the Centralnaya CHPP;
- Renovation of the Avtovskaya CHPP;
- Upgrade of the Verkhne-Tulomskaya HPP.

#### Centralnaya CHPP

##### Renovation of PP-2 of the Centralnaya CHPP

The renovation of PP-2 of the Centralnaya CHPP was caused to achieve the utmost technical condition of the main generating equipment of PP-2, and provides for construction of a hot water boiler house (six hot water boilers with capacity of 120 Gcal/h). This decision will ensure reliable and high-quality provision of existing and prospective heat loads of the housing and utility sector and industry in the existing heat supply zones of PP-2 of the Centralnaya CHPP, as well as increase the efficiency of heat production due to modern equipment technologies and schemes. The planned completion date of the project is 2023.

As part of the implementation of the priority investment project “Renovation of PP-2 of the Centralnaya CHPP, Nevsky Branch of TGC-1” for 2019:

- field work was completed at the construction site of the new hot water boiler house of PP-2 of the Centralnaya CHPP and the order of the Committee for State Control, Use and Protection of Historical and Cultural Monuments was received, which allows to remove the restriction from the land plot in the future. Work was also carried out on the development of measures to preserve the object of cultural heritage;
- examination of design documentation, engineering surveys and developed design documentation has begun.

#### Avtovskaya CHPP

##### Renovation of the Avtovskaya CHPP

The aim of the project is to ensure reliable and high-quality provision of existing and prospective heat loads of the housing and utility sector and industry in the heat supply zones of the Avtovskaya

CHPP, to reduce water use fees and negative impact on water bodies, as well as to reduce the limitations of the station's installed capacity.

According to Order No. 1713-r of the Government of the Russian Federation dated 02 August 2019, the project "Renovation of the Avtovskaya CHPP (CHPP-15)" is included in the list of generating facilities, the capacity of which is provided under purchase and sale (supply) agreements for the capacity of upgraded generating facilities with the beginning of delivery in the period from 1 January 2022 to 31 December 2024.

As part of the implementation of the priority investment project "Renovation of the Avtovskaya CHPP", measures are envisaged to upgrade the turbine generators of No. 6, 7 (TG), reconstruction of 110 kV outdoor switchgear, construction of a hot water boiler house, construction of a reverse water supply system, renovation of the heating system, replacement of auxiliary equipment. The planned completion date of the project is 2024.

Actually, the main works performed within the framework of the project "Renovation of the Avtovskaya CHPP" for 2019 are as follows:

- development of design and detailed documentation for the technical re-equipment of turbine units TG-6 and TG-7 was completed;
- replacement of T-5 and BB-2 circuit breakers was completed when performing a package of works on the renovation of 110 kV, 35 kV outdoor switchgear;
- an agreement was signed for the supply of equipment for the construction of a recycled technical water supply system at the Avtovskaya CHPP;
- an agreement was signed for the supply of a T-5 transformer to the Avtovskaya CHPP;
- partial acceptance of equipment was carried out under a contract for the supply of components for upgrading the turbine unit T 97/117-130 st. No. 7 of Avtovskaya CHPP in Q4 2019.

## **Tuloma HPPs and Serebryanskiye HPPs Cascades of the Kolsky Branch**

### **Upgrade of the Verkhne-Tulomskaya HPP**

As part of the upgrade of the Verkhne-Tulomskaya HPP, a step-by-step replacement of hydraulic units is provided for. The objectives of the investment project "Upgrade of the Verkhne-Tulomskaya HPP" are:

- replacement of the worn out main and auxiliary equipment of HPP;
- improving the operational reliability of equipment, as well as the reliability of energy supply to consumers;
- increasing the economic efficiency of HPP operation and environmental safety through the use of modern equipment and control systems.

As a result of the upgrade, the capacity of each hydraulic unit will be increased to 75 MW that will lead to an increase in the installed capacity of the plant up to 300 MW and will provide the opportunity to develop energy-intensive industries in the Murmansk Region.

Expected commissioning dates for the upgraded hydraulic units are: HU-4 – 2020, HU-1 – 2021, HU-3 – 2022, HU-2 – 2023.

As part of the implementation of the priority investment project "Upgrade of the Verkhne-Tulomskaya HPP", the following works were performed in 2019:

- development of detailed documentation for upgrading the Verkhne-Tulomskaya HPP was completed;
- installation of the generator of HU-4 was completed; installation of equipment for auxiliary systems of the HU-4 was completed, individual tests of equipment and systems were carried out;

- HU-1 were delivered; the impeller, the leakage pump and the oil-pressure unit of hydraulic unit No. 1 were accepted;
- an agreement was signed for the supply of equipment to replace the remaining HU-2 and HU-3.

In 2019, the implementation of projects aimed at the refurbishment and renovation of power plants continued in order to ensure the target level of reliability and increase the efficiency of equipment.

In addition, as part of the implementation of the Company's Investment Program in 2019, work was carried out to develop a heat supply scheme for the city of St. Petersburg for the period up to 2033 and to introduce integrated systems of engineering and technical security measures and information security control systems, to protect facilities with anti-terrorism protection means at TGC-1 power plants.

### **7.1.2. Main planned changes in the investment plans of the Company**

The current CDA has been replaced by a mechanism for supporting projects for the modernization of generating facilities of CHPPs on a competitive basis, defined by Decree of the Government of the Russian Federation No. 43 dated 25 January 2019. The introduced payment mechanism for CHPP modernized capacities opens a new window of investment opportunities.

In May 2019, within the framework of modernization projects of generating facilities, the first major selection of projects was completed with the beginning of the supply of power in 2022-2024. Decree No. 1713-r of the Government dated 2 August 2019 approved the list of modernization projects for 2022–2024, which included modernization projects for two turbine units of the Avtovskaya CHPP of TGC-1 with a total installed capacity of 236.4 MW.

Currently, within the framework of the investment program of TGC-1, priority projects are underway to reconstruct PP-2 of the Centralnaya CHPP, modernize the Verkhne-Tulomskaya HPP of the Tuloma and Serebryanskiye HPPs Cascade of the Kolsky Branch with a phased replacement of hydraulic units, and reconstruct the Avtovskaya CHPP.

### **7.1.3. Long-term investment program: goals, principles, main directions**

The long-term investment program of the Company shall contribute to the achievement of key strategic goals and respond to challenges from regional authorities, regulators and market participants.

The investment program provides for the modernization of generating capacities and the construction of new ones in the presence of economic incentives, the withdrawal of facilities whose operation is not economically feasible. Priority is given to the use of domestic equipment, special attention is paid to technological development, business diversification. Participation in the selection of projects for the modernization of generating facilities of thermal power plants, as well as the modernization of hydrogen generating capacities is supposed.

A large-scale renewable energy support program is being implemented in Russia, including with the use of the CDA mechanism. Projects for the construction of power plants are selected on a competitive basis, they are guaranteed a return on investment for 15 years with a base yield of 12% per annum, adjusted for the yield of federal loan bonds (FLBs). A decision was made to extend the renewable energy support program until 2035, details are being discussed in the Government of the Russian Federation. TGC-1 is considering the possibility of participating in competitive selections for the construction of small hydropower plants and wind farms as part of the CDA Renewables program.

## 8. OVERVIEW OF FINANCIAL PERFORMANCE

### 8.1. Main factors impacting the Company's business results

The results of the Company's activities are subject to a number of factors: the presence of state influence on the regulation of tariffs for the production of heat and electricity, the cost of the main type of fuel (gas), the seasonal nature of the production of electricity and heat, and the tax system. The following factors provide significant impact on the Company's business results: reduction of demand for the products, excess of available electricity at the electricity and capacity market, as well as the water content in the regions.

#### Fuel costs

The main type of fuel for the Company accounting for 93.7% of the fuel costs, is gas. The main gas supplier for the Company is Gazprom Mezhregiongaz St. Petersburg LLC.

The Company uses both the limit (gas within the preliminary determined limits set for the regions at regulated prices approved by FAS of the Russian Federation) and additional gas (gas supplied in addition to volumes registered in the basic gas supply contract). Besides, commercial gas is purchased at the SPIMEX exchange. Average weighted gas prices increased by 2.6% as compared to 2018.

Following the results for 2019 fuel costs accounted for 40.9% of the Company's total operating costs. In general, fuel costs in 2019 increased by RUB 1,161 mln (+3.7%) as compared to 2018 and amounted to RUB 32,231 mln. The increase in expenses under this item is due to the growing generation of electricity and heat at the CHPP and growing purchase prices for fuel.

#### Seasonal Fluctuation

Electricity generation by the Company's power plants depends on demand for electricity which changes depending on the season, time of the day, weather conditions, outdoor temperature, daylight hours, day of the week (weekend or working week).

Demand for proposals of certain power plants depends both on demand for electricity and the structure of generation capacities in its coverage zone (including requirements for system reliability).

#### Water content

This factor provides effect on electricity generation at HPPs located on the territory of the Republic of Karelia, Leningrad Oblast and Murmansk Oblast and determines the business results of the Kolsky Branch and the Karelsky Branch of the Company. Electricity generation by the Company's branch HPPs was observed to decrease by 8.9% in 2019 as compared to 2018.

#### Taxation

TGC-1 is one of the largest taxpayers in four constituent entities of the Russian Federation: St. Petersburg, Leningrad Oblast, the Republic of Karelia, and Murmansk Oblast. The Company is classified as one of the largest by the amounts of taxes and duties subject for transfer to the budget and has been under tax administration by Interregional Inspectorate of the Russian Federal Tax Service for Major Taxpayers No. 4 (Moscow) since 2006.

In 2019, TGC-1 received net profit in the amount of RUB 9,495 mln. Taxes and duties accrued by the Company for the same period amounted to RUB 8,127 million, including RUB 5,670 million to the Federal Budget and off-budget funds and RUB 2,457 million to the regional and local budgets.

## 8.2. Accounting Policies

The accounting policy approved by TGC-1 as a summary of principles, organization rules and implementation technology of accounting methods was developed in order to form complete, unbiased and objective financial and managerial information in accounting and reporting with consideration of organizational and industrial specifics.

Accounting and tax reporting procedures selected by TGC-1 have been approved by the order of the General Director and consistently applied since the Company's registration date.

The Company's accounting policy was approved by Order of TGC-1 No. 216 as of 29 December, 2018.

TGC-1 arranges and maintains accounting records in accordance with Federal Law No. 402-FZ as of 6 December, 2011 On Accounting, Order of FTS of Russia No. 91 as of 12 April, 2013, the Statute on Accounting and Reporting in the Russian Federation enacted by Order No. 34n of the Russian Ministry of Finance and as of 29 July, 1998 and the operational Chart of Accounts developed on the basis of the Chart of Accounts for Purposes of Financial Accounting and Instructions for its implementation enacted by order No. 94n of the Ministry of Finance of the Russian Federation dated 31 October, 2000 with consideration of industrial and organizational specifics.

The Company's documentation rules for accounting and tax reporting, as well as preparation of statements are regulated by the documentation schedule. The documentation schedule sets the terms, procedure and scope for submission of primary accounting and other documents to the Central Accounting Service by other departments and services of the Company, its branches, representative offices and structural divisions. Terms and scope of the Company's accounting and tax reporting statements to be submitted to the respective state regulatory agencies are not set by the documentation schedule and are guided by the respective legislation.

The main accounting and documentation rules for business activities comply with the Statute on Accounting and Statutory Financial Statements in the Russian Federation with consideration of certain industrial specifics approved and reflected in the regulatory documents of the Company.

Annual statutory financial statements of the Company are considered and approved by the General Shareholders Meeting and submitted within the terms set by Article 13 of Federal Law No. 402-FZ On Accounting as of 6 December, 2011.

Documents on business activities envisaging cash flow (on bank accounts and in the Company's cash department) are signed by the Company's General Director and Chief Accountant, as well as persons authorized by them in accordance with powers of attorney.

Accounting of property, liabilities and business activities is maintained in rubles with kopecks.

Property and liabilities stock-taking is performed in accordance with Article 11 of Federal Law "On Accounting" No. 402-FZ as of 6 December, 2011 and the Methodological Guidelines on the Inventory of Property and Financial Liabilities approved by Order No. 49 of the Ministry of Finance of the Russian Federation dated 13 June, 1995.

Property inventories including the property transferred under the lease agreements are kept on-site by the branches, structural divisions operating the respective facilities.

The procedure and terms of the annual asset and liability inventories are established by the order of the Company's General Director.

### Fixed assets

Accounting of fixed assets in the Company is maintained in accordance with Accounting Statute 6/01 enacted by order of the Russian Ministry of Finance No. 26n as of 30 March, 2001. Depreciation of fixed assets is made using a straight-line method on the basis of the period of use of these facilities.

On the basis of the Director's Order the Company can once a year reevaluate the groups of homogeneous fixed assets at the current (restored) value by direct revaluation at documented market prices.

### **Intangible Assets**

Intangible assets accounting is maintained in accordance with Accounting Statute 14/2007 enacted by order No. 153n of the Russian Ministry of Finance as of 27 December, 2007.

Depreciation of intangible assets is made using a straight-line method on the basis of the period of use of intangible assets.

Intangible assets depreciation is reflected in the accounting statements by accumulation of the respective amounts on the balance account 05 "Intangible assets depreciation".

### **Financial Investments**

Financial investments accounting is maintained in accordance with Accounting Statute 19/02 enacted by order No. 126n of the Russian Ministry of Finance dated 10 December 2002 (as amended and supplemented).

In case of retiring of financial investments, which market value is not defined, the initial cost of each accounting unit of financial investments applies.

All costs directly related to purchasing of assets as financial investments, irrespective of their size are included into the initial cost of financial investments.

### **Material and Industrial Inventories**

Material inventories accounting is maintained in accordance with Accounting Statute 5/01 enacted by order No. 44n of the Russian Ministry of Finance dated 9 June, 2001.

Analytical accounting of materials is maintained by the real-time accounting (balance) method. Contractual prices are taken as accounting prices.

### **Future Costs**

Future costs related to periods starting from the end of the year following the reporting year are shown in the balance sheet as long-term assets under the balance sheet item "Other non-current assets". Future costs related to the current year are shown in the balance sheet under the item "Other current assets".

### **Settlements, Other Assets and Liabilities**

Purchaser receivables are accounted in the number of commercial invoices submitted for payment at reasonable prices and tariffs. Settlements with other debtors and under the claims are reflected in the accounting and statements on the basis of prices stated in the contracts.

Receivables are shown as short-term accounts receivable if their maturity does not exceed 12 months after the reporting date. The remaining receivables are shown as non-current.

Receivables are reflected in the statutory financial statements by deducting the reserve for bad debts. The reserve for bad debts is created once a year on the basis of the regulatory document after the annual inventory prior to preparation of the Company's annual statement. The size of the reserve is determined on the basis of each case based on objective information on the debtor's solvency.

Other assets of the Company, its branches and business units are evaluated by actual costs as of the moment of their acceptance for accounting purposes.

Accounts payable for received borrowings and bank loans are accounted and reflected in the statement with consideration of the interest due as of the end of the reporting period.

Accounts payable to suppliers and other creditors are reflected in the number of invoices accepted for payment and the amount of accrued liabilities.

### **Deferred Taxes**

The amounts of deferred tax assets and liabilities are reflected in the balance sheet in detail as part of non-current assets in the line “Deferred tax assets” and non-current liabilities in the line “Deferred tax liabilities” of the balance sheet, respectively.

### **Financial Results**

Accounting of revenue from sales of products and goods, returns related to performance of works, provision of services is maintained by types of operations.

Proceeds from ordinary activities are the revenue from sales of electricity and heat, other kinds of activity. Other kinds of activity, which proceeds are accounted under item 90 “Sales” can be represented by activities stipulated in the Articles of Association, proceeds from which are received on a regular basis.

Accounting of costs of ordinary activities is maintained in accordance with Accounting Statute 10/99 “Company expenses” in consideration of the industrial specifics of accounting of costs for production and sales of products (goods, works, services) in accordance with the main principles of accounting and cost distribution, preparation of statements on kinds of activity developed by the Company.

### **Research and Development and Engineering Projects Expenses**

Accounting of costs incurred in R&D and engineering projects is maintained in accordance with Accounting Statute 17/02 enacted by order No. 115n of the Russian Ministry of Finance as of 19 November, 2002.

### **Events after the reporting date**

Events after the reporting date which provided or can provide effect on the financial standing of the Company are reflected in the statutory financial statements by disclosure of the respective information in the explanatory note.

### **Tax Accounting**

The Company calculates and pays taxes and duties in accordance with the legislation of the Russian Federation on taxes and duties, legislation of the constituent entities of the Russian Federation on taxes and duties, regulatory legal acts of the local self-governing bodies on taxes and duties.

### **Amendments to the Accounting Policy**

Amendments to the accounting policy can be made under the following conditions:

- changes in requirements set by the legislation of the Russian Federation on accounting, federal and (or) industrial standards;
  - development or selection of the new accounting method, which application results in higher information quality on the accounting item;
  - material changes in the business conditions of the economic entity.
- amendments to the accounting policy have to be reasonable and shall be prepared in the form of the respective administrative and regulatory document (order) of the Company.

### 8.3. Analysis of financial performance under the Russian Accounting Standards

Table 27. P&L Statement for 2018–2019

P&L Statement, RUB thousand	2019	2018
<b>Proceeds and expenses of ordinary activities</b>		
<b>Revenue</b> (net) earned on the sale of goods, products, works, and services:		
	90,836,923	87,079,851
electricity and power to domestic consumers	52,063,638	50,751,221
electricity and power exported	1,744,464	2,805,412
heat	36,316,345	33,037,084
other goods, products, works and services	712,476	486,134
<b>Production cost</b>	(78,988,281)	(76,300,384)
electricity and power to domestic consumers	(39,170,401)	(38,787,146)
electricity and power exported	(570,728)	(447,797)
heat	(39,015,231)	(36,953,572)
other goods, products, works and services	(231,921)	(111,869)
<b>Gross profit</b>	11,848,642	10,779,467
<b>Profit (loss) from sales</b>	11,848,642	10,779,467
<b>Other proceeds and expenses</b>		
Interest receivable	413,994	298,980
Interest payable	(530,307)	(723,443)
Income earned from equity participation in other companies	0	0
Other proceeds	2,836,390	5,274,477
Other costs	(2,963,812)	(7,087,328)
<b>Profit (loss) before taxation</b>	11,604,897	8,542,153
Current income tax	(2,292,192)	(2,221,908)
including permanent tax liabilities (assets)	133,636	112,112
Changes in deferred tax liabilities	199,184	418,853
Change in deferred tax assets	(42,350)	221,913
Other	(1,631)	26,185
<b>Net profit</b>	<b>9,494,581</b>	<b>7,098,654</b>

#### Revenue

In 2019, Company's revenue was formed due to sales of heat, electricity and capacity in the wholesale and retail markets, export supplies, as well as through the sale of other products, works and services, and amounted to RUB 90,837 million, which exceeded the same indicator of 2018 by RUB 3,757 million.

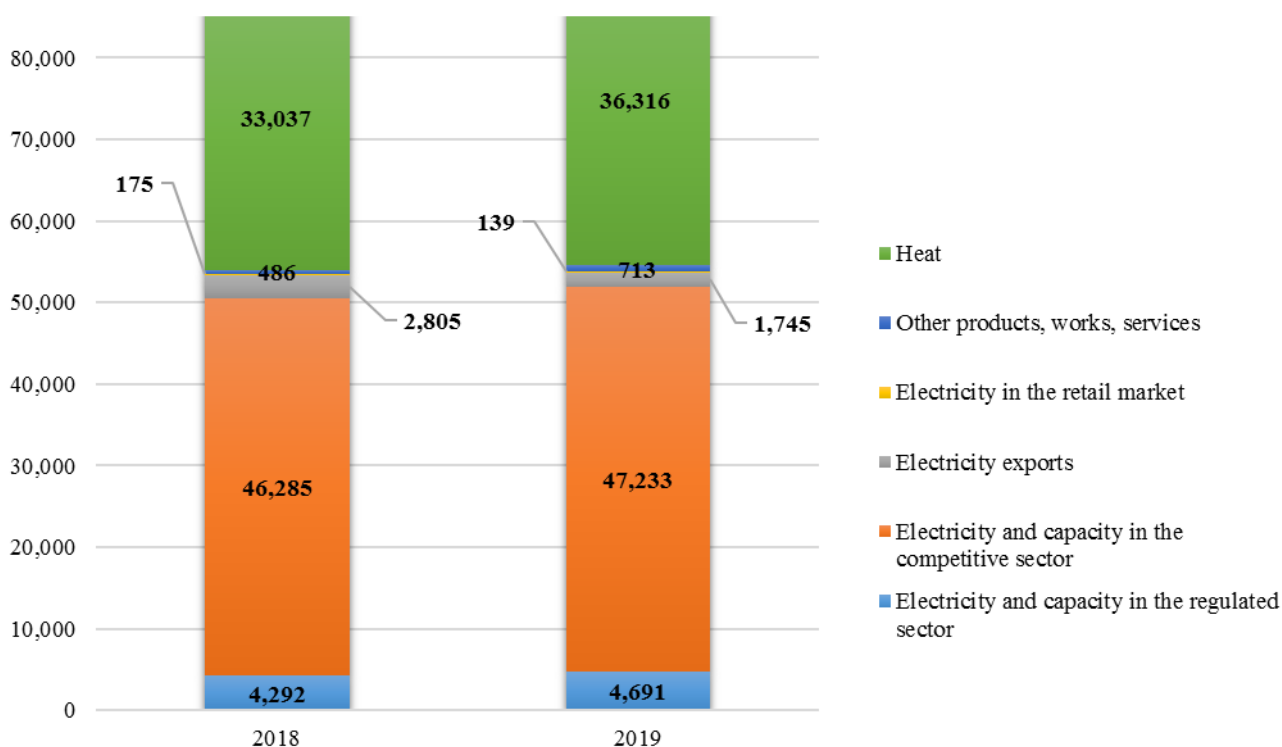


Fig. 16. Revenue structure in 2018 – 2019, RUB mln

Table 28. Revenue structure in 2018–2019

	2018		2019		Δ (%)
	RUB mln	share, %	RUB mln	share, %	
Electricity and capacity, including	53,557	61.5	53,808	59.2	100.5
electricity and capacity in the regulated sector	4,292	4.9	4,691	5.2	109.3
electricity and capacity in the competitive sector	46,285	53.2	47,233	52.0	102.0
electricity exports	2,805	3.2	1,745	1.9	62.2
electricity in the retail market	175	0.2	139	0.2	79.4
Heat	33,037	37.9	36,316	40.0	109.9
Other products, works, services	486	0.6	713	0.8	146.5
<b>Total revenue</b>	<b>87,080</b>	<b>100.0</b>	<b>90,837</b>	<b>100.0</b>	<b>104.3</b>

### Revenue from sales of electricity and capacity

Based on the results of 2019, revenue from sales of electricity and capacity increased by 0.5% against 2018 and amounted to RUB 53,808 million compared to RUB 53,557 million in the previous year.

Percentage of revenue from sales of electricity and capacity in the regulated sector of the wholesale market in the total revenue of the Company increased by 0.3 p.p. against 2018 (from 4.9% to 5.2%). At the same time, increase in revenue from electricity and capacity sales at the regulated sector of the wholesale market against 2018 amounted to RUB 399 million (+9.3%) in absolute terms due to increase in binding volumes under regulated contracts approved by FAS of Russia and growth of electricity and capacity tariffs approved for 2019 by FAS of Russia.

Percentage of revenue from sales at the competitive sector decreased by 1.2 p.p., to 52.0% against 53.2% in the previous year. Revenue from sales at the competitive sector amounted to RUB 47,233 million in absolute terms, thus exceeding the indicator for the previous year by 2.1% (+ RUB 949

million). This increase in revenue is mainly due to the increase in revenue from the sale of electrical energy on DAM (+1.9%) and CDA capacity (+2.8%).

Revenue from export sales of electricity amounted to RUB 1,745 million, accounting for 1.9% of the Company's overall revenues. The decrease in export by 37.8% compared with 2018 is due to the current unfavorable price environment on the NordPool Scandinavian electricity market.

Revenue from sales of electricity in the retail market amounted to RUB 139 million, accounting for 0.2% of the Company's overall revenues.

### **Revenue from heat sales**

In 2019, proceeds from the sale of heat increased by 9.9% against 2018 and amounted to RUB 36,316 million against RUB 33,037 million in the previous year. Increase in proceeds from the sale of heat was caused by rise in average heat tariffs by 14.0% against 2018 (including subsidies for compensation of shortfalls in income associated with the application of preferential heat tariffs).

### **Revenue from sales of other products, works and services**

The main source of revenue from sales of other products, works, services are services for connection of consumers to heat supply grids, railway and other transport services.

In 2019, revenue from sales of other products, work and services increased by 46.5% against 2018 and amounted to RUB 712 million against RUB 486 million in the previous year. This increase is due to an increase in revenue from the service on accession of consumers to heat supply grids due to an increase in the volume of services provided. Revenue from sales of other products, goods and services accounted for 0.8% of the Company's overall revenues in 2019 having increased by 0.2 p.p. against 2018.

### **Return on sales**

According to the results of 2019, the Company's return on sales increased to 13.04% against 12.38% in 2018 due to the outpacing growth rate of gross profit (9.9%) compared with the growth rate of revenue (4.3%).

### **Production cost**

Cost of production and sales of products, works and services in 2019 amounted to RUB 78,988 million, including RUB 78,756 million from core operations and RUB 232 million from non-core operations.

The main share of the production cost is the cost of electricity (RUB 39,741 million) and heat (RUB 39,015 million) generation.

The main reasons of changes in the 2019 production cost are:

- increase in fuel costs due to higher production volumes of electricity on CHPP (+0.6%), as well as growth in prices for purchase of power resources;
- increase in water costs for technological purposes due to rising tariffs;
- increase in the payroll due to indexation by 4.0% and bringing the salary of TGC-1 employees to the market level to prevent the development of a crisis situation and restore competitive advantages in the labor market, using the average accrued wages separately as targets by categories of personnel (workers, specialists, employees, managers);
- increase in heat transmission costs is associated with a substantial increase in tariffs in St. Petersburg by 27%.

### **Profit**

In 2019, profit from sales increased by RUB 1,069.1 million and totaled RUB 11,848.6 million. Profit before taxation amounted to RUB 11,604.9 million. The Company's net profit in 2019 increased by RUB 2,395.9 million against 2018 and amounted to RUB 9,494.6 million.

**Table 29.** Dynamics of TGC-1's profit in 2018 – 2019, RUB mln

	2018	2019	Δ (%)
<b>Revenue</b>	87,079.9	9,836.9	104.3
<b>Operating profit</b>	10,779.5	11,848.6	109.9
<b>Net profit</b>	7,098.7	9,494.6	133.8

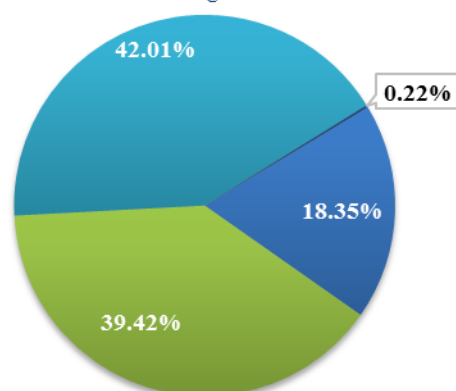
## EBITDA

EBITDA increased by 11.7% and amounted to RUB 19,475.6 million.

## Loan portfolio

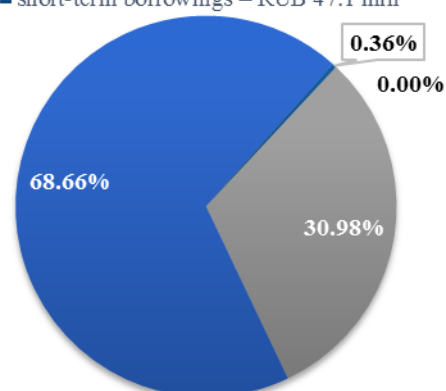
### Loan portfolio in 2018 RUB 14,713.8 mln

- long-term loans = RUB 2,700.0 mln
- long-term borrowings = RUB 5,800.0 mln
- short-term loans = RUB 6,181.8 mln
- short-term borrowings = RUB 32.0 mln



### Loan portfolio in 2019 RUB 12,911.6 mln

- long-term loans = RUB 0,0 mln
- long-term borrowings = RUB 4,000.0 mln
- short-term loans = RUB 8,864.5 mln
- short-term borrowings = RUB 47.1 mln



**Fig. 17.** Structure of TGC-1's loan portfolio

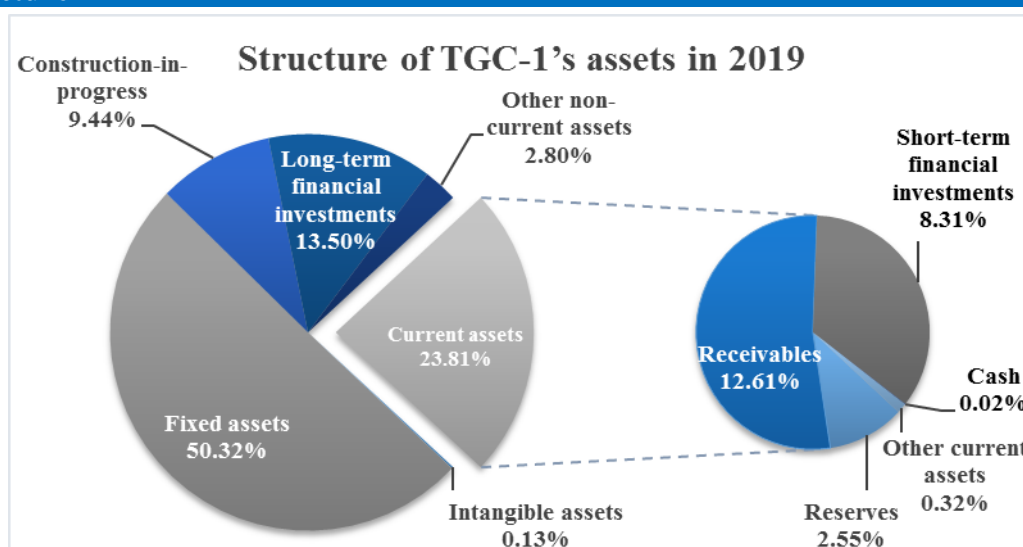
The loan portfolio, taking into account the interest debt as of 31 December 2019, decreased by 12.25% and amounted to RUB 12,911,594 thousand. In 2019, the Company repaid loans and borrowings in accordance with the terms of concluded agreements or ahead of schedule for a total amount of RUB 10,632,875 thousand, including a foreign currency loan from NIB. In the loan capital structure as of the reporting date, most of the loan portfolio falls on long-term loans and borrowings (68.66%). There are no overdue borrowings and loans. The Company fully meets the covenants under the loan agreements.

For 12 months of 2019, the weighted average rate for borrowings and bank loans was 6.68% and 3% for foreign currency loans; for 12 months of 2018, the weighted average rates for ruble and foreign currency borrowed resources were 6.93% and 3%, respectively.

**Table 30.** Analysis of the Company's financial and economic activities

Indicator		2018		2019		Δ (%)
		RUB thousand	Share in the balance sheet, %	RUB thousand	Share in the balance sheet, %	
Assets	Non-current assets	98,972,242	78.52	100,091,164	76.19	1.13
	Current assets	27,080,202	21.48	31,278,572	23.81	15.50
	<b>Total</b>	<b>126,052,444</b>	<b>100.00</b>	<b>131,369,736</b>	<b>100.00</b>	<b>4.22</b>
Liabilities	Equity and reserves	97,825,646	77.61	104,835,697	79.80	7.17
	Non-current liabilities	11,704,193	9.29	7,068,447	5.38	-39.61
	Current liabilities	16,522,605	13.10	19,465,592	14.82	17.81
	<b>Total</b>	<b>126,052,444</b>	<b>100.00</b>	<b>131,369,736</b>	<b>100.00</b>	<b>4.22</b>

### Asset structure

**Fig. 18.** Structure of TGC-1's assets in 2019

As of 31 December, 2019, non-current assets in monetary terms totaled RUB 100,091,164 thousand, the major part of which in the amount of 50.32% of the balance sheet currency accounted for the fixed assets. As of 31 December, 2019, fixed assets (including construction in progress) increased by 1.48% compared to the previous year.

Long-term financial investments accounted for 13.50% of the balance sheet currency, including shares of subsidiaries and affiliates of JSC St. Petersburg Heating Grid, PJSC Murmanskaya CHPP, JSC HHC, and TGC-Service LLC.

The Company's other non-current assets (including deferred tax assets) account for 2.80%, and intangible assets account for 0.12%.

Total share of current assets in the total assets was 23.81% (RUB 31,278,527 thousand) at the reporting date. At the end of 2019, the Company's current assets increased by 15.50% against 2018, which was mainly the result of growth of long-term receivables and short-term financial investments.

At the end of 2019, receivables increased, mainly due to long-term debt of buyers and customers and advances paid. Advances paid to contractors will be set off in accordance with the terms of the contracts. The Company performs continuous management of accounts receivable.

**Table 31.** Dynamics of TGC-1's accounts receivable, RUB thousand

Receivables		2018		2019		Δ (%)
		RUB thousand	Share, %	RUB thousand	Share, %	
purchasers and customers	long-term	354,621	83.95	1,362,414	80.50	284.19
	short-term	12,569,370		11,972,236		-4.75
advances awarded	long-term	0	13.95	602,753	17.01	-
	short-term	2,147,506		2,215,116		3.15

Receivables		2018		2019		Δ (%)
		RUB thousand	Share, %	RUB thousand	Share, %	
other receivables	long-term	559	2.10	28,545	2.49	5,006,44
	short-term	322,138		384,120		19,24
<b>Total</b>		<b>15,394,194</b>	<b>100.00</b>	<b>16,565,184</b>	<b>100.00</b>	<b>7.61</b>

Short-term financial investments as of 31 December, 2019 amounted to RUB 10,918,972 thousand (as of 31 December 2018, short-term financial investments amounted to RUB 38,083 thousand). The main reasons for the growth of this balance sheet item are the reclassification of long-term loans issued by the Company in favor of PJSC Murmanskaya CHPP and the merger of TGC-1 into the cash pool of Gazprom.

The value of the company's net assets as of 31 December, 2019 is RUB 104,835,697 thousand. The value of net assets is the valuation of the property of the organization after formal or actual satisfaction of all requirements of third parties. The authorized capital of the Company as of 31 December 2019 is less than the net assets of the company, which meets the requirements of Art. 35 of the Federal Law "On Joint Stock Companies".

### Liabilities structure

As of 31 December 2019, the liabilities of TGC-1 amounted to RUB 131,369,736 thousand. The Company's equity in 2019 increased by 7.2%, mainly due to the growth of retained earnings.

**Table 32.** Structure of TGC-1's liabilities

LIABILITIES		as of 31 Dec 2018		as of 31 Dec 2019		Δ (%)
		RUB thousand	Share in the balance sheet, %	RUB thousand	Share in the balance sheet, %	
<b>Equity and reserves</b>	Authorized capital	38,543,414	77.61	38,543,414	79.80	7.2
	Additional capital	32,895,186		32,873,144		
	Legal reserve	1,771,995		1,927,171		
	Retained profit (uncovered loss)	24,615,051		31,491,968		
<b>Non-current liabilities</b>	borrowings and loans	8,500,000	9.29	4,000,000	5.38	-39.6
	deferred tax liabilities	3,064,440		2,865,256		
	others	139,753		203,191		
<b>Current liabilities</b>	borrowings and loans	6,213,762	13.10	8,911,594	14.82	17.8
	accounts payable	10,062,702		10,275,754		
	estimated liabilities	246,141		278,244		
	others	0		0		
<b>Total liabilities</b>		<b>126,052,444</b>	<b>100.00</b>	<b>131,369,736</b>	<b>100.00</b>	<b>4.22</b>

As of 31 December 2019, short-term payables to suppliers and contractors amounted to RUB 8,862,637 thousand. The largest creditors at the reporting date are JSC St. Petersburg Heating Grid, TSC Metrology LLC, TGC-Service LLC, TEK Inform LLC, TER LLC, SUE "Vodokanal of St. Petersburg", CFR JSC, Gazprom Mezhrefiongaz St. Petersburg LLC, which account for 66.29% of the debt of suppliers and contractors. All debts are current, based on the contract payment terms. The accounts payable also include arrears of advances received (5.38%), arrears of taxes and duties (3.78%), arrears of wages to staff (2.27%), arrears to state and extra-budgetary funds (1.30%) and debt of other creditors (1.02%).

**Table 33.** Dynamics of TGC-1's accounts payable, RUB thousand

	31 Dec 2018	31 Dec 2019	Δ (%)
<b>Accounts payable</b>	<b>10,062,702</b>	<b>10,275,754</b>	<b>2.12</b>
including:			

	31 Dec 2018	31 Dec 2019	Δ (%)
<b>Suppliers and contractors</b>	<b>7,280,000</b>	<b>8,862,637</b>	<b>21.74</b>
including:			
electricity and heat suppliers	734,864	496,480	-32.44
fuel suppliers	1,576,743	435,985	-72.35
building contractors	1,635,778	2,691,398	64.53
repair companies	516,687	815,695	57.87
other suppliers and contractors	2,815,927	4,423,080	57.07
<b>Bills payable</b>	<b>0</b>	<b>0</b>	<b>-</b>
<b>Payables to staff</b>	<b>210,406</b>	<b>233,098</b>	<b>10.78</b>
<b>Payables to state and off-budget funds</b>	<b>127,060</b>	<b>133,773</b>	<b>5.28</b>
<b>Tax and duties payable</b>	<b>1,234,458</b>	<b>388,618</b>	<b>-68.52</b>
<b>Advance payments received</b>	<b>419,430</b>	<b>552,667</b>	<b>31.77</b>
<b>Other lenders</b>	<b>791,348</b>	<b>104,961</b>	<b>-86.74</b>

## Liquidity analysis

**Table 34.** Analysis of TGC-1's liquidity

Liquidity indicators	2018	2019
Absolute liquidity ratio	0.42	0.57
Quick liquidity ratio	1.43	1.35
Current liquidity ratio	1.64	1.53
Equity ratio	0.78	0.80

The liquidity indicators at the reporting date indicate the preservation of the level of financial stability of TGC-1 and reflect the sufficiency of financial resources of the Company for conducting business activities and for timely repayment of its liabilities. The actual values of liquidity indicators in 2019 were achieved due to the high level of the most liquid assets as a result of increase in the company's revenue from the sale of capacity by 1.61% and heat by 9.93%. The level of total liabilities of TGC-1 decreased and amounts to 20.00%. The Company complies with all limits established in accordance with the internal regulatory documents.

## Profitability analysis

**Table 35.** Analysis of TGC-1's profitability

Profitability indicators	2018	2019
Return on sales of products	12.38%	13.04%
Return on core activities	14.13%	15.00%
Return on total capital	6.78%	8.83%
Return on equity	7.37%	9.24%
Profitability under EBITDA	20.03%	21.44%

Profitability indicators based on the results of 2019 show positive dynamics. The main factors influencing the increase in profitability were the increase in electricity prices in the wholesale market, the increase in the average price of capacity sales under the CDA and NRECC, and increase in tariffs for heat. The profitability ratios of total capital and return on equity in 2019 were also positively affected by the increase in interest receivable and the savings in interest payable.

## Analysis of business activity

**Table 36.** Analysis of TGC-1's business activity

Business activity indicators	2018	2019
Labor efficiency (RUB thousand / person)	13,720.28	14,032.99
Return on assets	1.29	1.37
Capital to labor ratio (RUB thousand)	10,610.36	10,211.29
Accounts receivable turnover (rotations)	6.02	6.34
Period of accounts receivable turnover (days)	59.83	56.74
Inventories turnover (times)	25.24	24.43
Inventories turnover period (days)	14.26	14.74
Accounts payable turnover (in turnover)	10.52	10.70
Payables turnover period (in days)	34.23	33.65
Duration of the operating cycle (days)	74.09	71.48

Duration of the financial cycle (days)	39.86	37.83
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According to the results of 2019, indicators of business activity indicate an increase in the level of labor productivity and capital productivity. Such dynamics of indicators is a consequence of revenue growth. The positive dynamics of the Company's turnover indicators and, as a result, the reduction in the operational and financial cycles reflects a decrease in the period of time when financial resources are diverted from circulation, which ensures stable financing of the Company's operations.

## 8.4. Analysis of financial performance under IFRS

**Table 37.** Key performance indicators of TGC-1 and its subsidiaries, RUB million

	2018	2019	Δ (%)
Revenue	92,455.2	97,255.6	5.2%
Operating expenses	(77,429.0)	(85,599.0)	10.6%
Operating profit	12,909.3	12,148.5	-5.9%
EBITDA**	20,886.9	22,499.7	7.7%
Profit before taxation	12,315.7	10,338.6	-16.1%
Profit	10,421.4	7,990.2	-23.3%
Total assets	167,911.8	182,504.2	8.7%

\* The results of 2018 have been adjusted due to the transfer of the items "State subsidies", "Income from leased property" from other operating income to revenue

\*\* EBITDA = operating profit + depreciation

The Group consists of TGC-1 and its subsidiaries: PJSC Murmanskaya CHPP and JSC St. Petersburg Heating Grid, as well as St. Petersburg Heating Grid LLC, which is a 100% subsidiary of St. Petersburg Heating Grid JSC (hereinafter referred to as the Group).

According to the results of 2019, the consolidated revenue of the companies included in the TGC-1 Group amounted to RUB 97,255.6 million, which is 5.2% higher than in 2018. This is due to an increase in revenue from the sale of electricity and capacity, and from the sale of heat (given the reclassification of subsidies to compensate for lost revenue from other income to revenue).

**Table 38.** Revenue structure, RUB mln

	2018	2019	Δ (%)
Electricity	30,884.0	31,876.5	3.2%
Capacity	19,867.3	20,187.1	1.6%
Heat	36,810.5	41,864.3	13.7%
Export	2,805.4	1,744.5	-37.8%
Other sales	2,088.0	1,583.2	-24.2%
<b>Total revenue</b>	<b>92,455.2</b>	<b>97,255.6</b>	<b>5.2%</b>

The Group's operating expenses increased by 10.6%, amounting to RUB 85,599.0 million, due to the accrual of impairment losses on fixed assets (including assets in the form of right of use), growth in depreciation and fuel costs.

**Table 39.** Structure of operating expenses, RUB thousand

	2018	2019	Δ (%)
Operating expenses:	(77,428,990)	(85,599,003)	10.6%
Fixed costs	(21,544,646)	(25,728,699)	19.4%
Variable costs	(47,906,774)	(49,519,193)	3.4%
Depreciation of fixed assets, intangible assets and investment property	(7,977,570)	(10,351,111)	29.8%

The Group's operating profit decreased by 5.9% to RUB 12,148.5 million. EBITDA increased by 7.7% and reached RUB 22,499.7 million. Profit for the period decreased by 23.3% and amounted to RUB 7,990.2 million.

## 9. SECURITIES AND CORPORATE GOVERNANCE

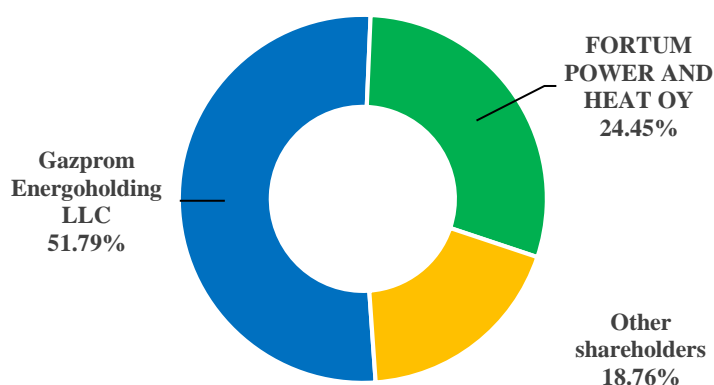
### 9.1. Equity structure

TGC-1's authorized capital totals RUB 38,543,414,165.71 and is divided into 3,854,341,416,571 3/7 of ordinary registered shares with an equal face value of RUB 0.01. Preferred shares were not placed by the Company. The Company is entitled to place 674,494,100 ordinary registered shares (declared shares) in addition to previously placed ones. There was no additional placement of shares in 2019.

As of 31 December, 2019, a total of 291,246 persons (most of them were individuals) were registered in TGC-1's Shareholders Register.

**Table 40.** Structure of TGC-1's shareholders as of 31 December 2019

Shareholder	Number of shares, pcs	Share fraction, %
Gazprom Energoholding LLC	1,996,046,978,490	51.79
FORTUM POWER AND HEAT OY	1,135,074,850,193	29.45
National Settlement Depository (nominal holder)	618,557,997,800	16.05
Individuals	96,821,545,116 +3/7	2.51
Other legal entities	7,347,243,077	0.19
Other nominal holders	492,801,895	0.01
Total:	3,854,341,416,571 +3/7	100



**Fig. 19.** Structure of TGC-1's shareholders as of 31 December 2019

During 2019, there were no changes in the composition of persons entitled to directly or indirectly dispose of not less than 5% of votes attributable to the voting shares of the Company; the Company did not place additional shares.

TGC-1 and the legal entities controlled by it do not own and cannot dispose of any shares of the Company.

TGC-1's Shareholders Register is maintained by JSC DRAGA (licence No. 10-000-1-00291). Information on the registrar is given in Appendix 1 hereto.

### 9.2. Transactions with securities

#### 9.2.1. Shares

State registration number of the issue of TGC-1's shares is 1-01-03388-D; the issue was registered on 17 May 2005, ISIN (international identification code) No. RU000A0JNUD0.

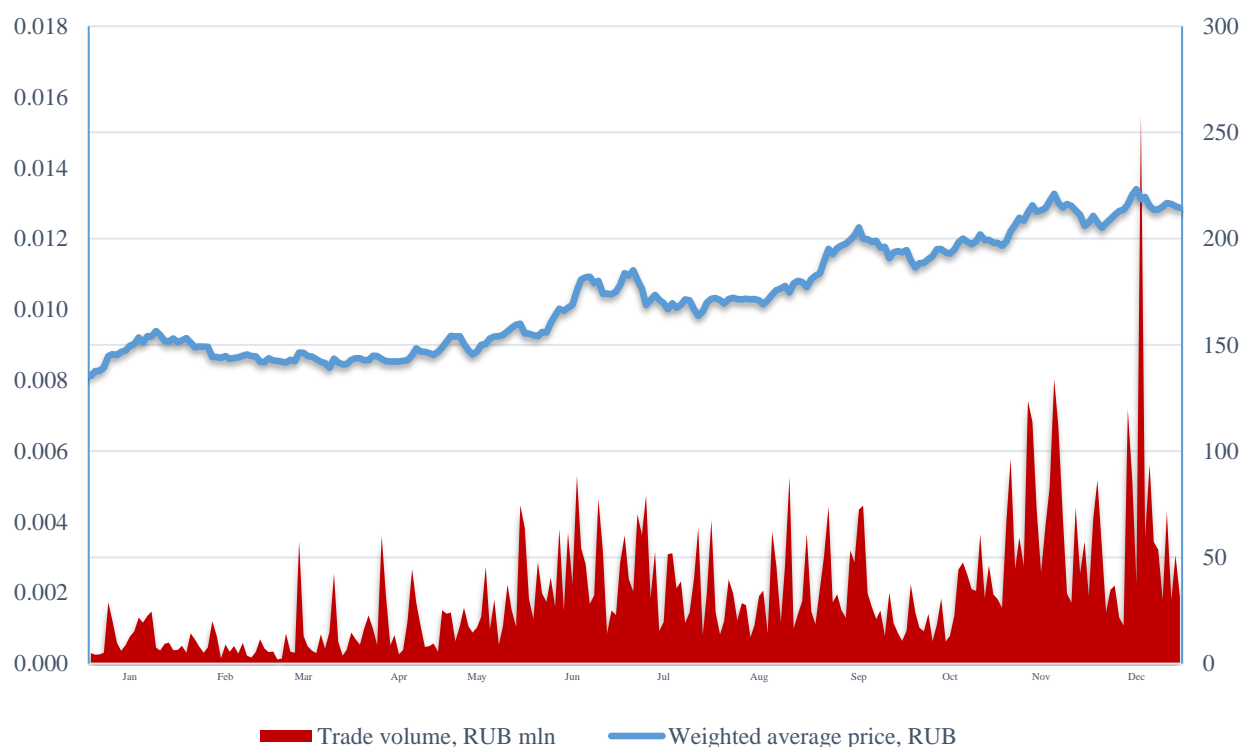
Shares and depository receipts for TGC-1's shares are traded on the stock market. Ordinary shares are traded on the Russian market, and global depository receipts (GDRs) are traded on foreign markets.

Since 26 March 2007, shares of TGC-1 are traded on the Moscow Stock Exchange (TGKA), the main trading floor of the Russian stock market; the shares were included on the First Level quotation list. Transactions with securities are executed on the stock market of the Moscow Exchange in the Main trading mode: T+shares and DR.

In 2019, trading volumes of TGC-1's shares on the Moscow Exchange in the Main trading mode totaled RUB 8.2 billion, which was 83.6 % higher than in the respective period of 2018. The daily median volume of transactions for each calendar quarter of 2019 exceeds the required amount to be maintained on the First Level quotation list.

For 12 months of 2019, the ruble index of the Moscow Exchange increased by 28.55%, the dollar RTS index increased by 44.93%, and the industry MICEX PWR index increased by 25.00%. The dynamics of TGC-1's stock prices was closely correlated with the dynamics of the Russian share trading as a whole. As of 30 December 2019, the Company's capitalization amounted to RUB 49.6 billion.

In accordance with Russian and international law and the principles of informational openness and transparency, TGC-1 attaches priority to protecting the rights of shareholders and potential investors.



**Fig. 20.** Dynamics of transactions with TGC-1's shares on the Moscow Exchange in 2019 (the Main trading mode)

### 9.2.2. Depository Receipts Program

Global depository receipts (GDRs) of TGC-1 are traded on foreign markets. In May 2008, TGC-1 received permission from the Federal Financial Markets Service of the Russian Federation for placement and trading of ordinary registered non-certificated shares outside the Russian Federation in an amount up to 20% of the total number of shares.

The Depository Receipts Program of TGC-1 was launched on 9 June, 2008. It was aimed at ensuring the rights of holders of depository receipts of RAO UES of Russia after its liquidation. The holders of depository receipts received shares of the spin-off companies in proportion to their share in the holding.

As a result of the open request for proposals, The Bank of New York Mellon was chosen as the depository bank. The Bank of New York Mellon is the world leader in this segment of the financial market, in addition, it was the holder of the depository receipts program of RAO UES of Russia.

Depository receipts were issued in accordance with Regulation S and Rule 144A. One GDR certifies the rights with respect to 5,000 ordinary registered shares of TGC-1. These securities are traded on the over-the-counter market.

As of 31 December 2019, the stake of GDRs in TGC-1's authorized capital was 0.0290%, while the number of GDRs in accordance with Rule 144A was 16,100, and the number of GDRs in accordance with Regulation S was 209,598. As of 31 December, 2019, the value of one depository receipt amounted to \$ 1.04.

**Table 41.** Description of TGC-1's GDR Program

Type of GDR	Rule 144-A	Regulation S
Coefficient	1:5,000 shares	1:5,000 shares
Brief description	Receipts are intended for private placement among a limited circle of institutional investors, first of all, in the USA	Receipts are intended for a broader circle (when compared to 144A) of private professional investors outside the USA
Issue date	2008	2008
CUSIP	88145T107	88145T206
ISIN	US88145T1079	US88145T2069
Depository bank	The Bank of New York Mellon	

### 9.2.3. Dividends and the Dividend Policy

The main objective of TGC-1's Dividend Policy is to ensure observance of shareholders' rights to receive dividends while maintaining the balance between both their and the Company's interests.

The revised Regulations on the Company's Dividend Policy was approved by TGC-1 Board of Directors on 14 December, 2017. According to the Regulations, the source of payment of dividends is the Company's profit after tax (the Company's net profit) formed in compliance with the Russian Accounting Standards.

The Company has the right to make a decision (announce) on payment of dividends on shares and make payments taking into account the restrictions established by Art. 43 of the Federal Law "On Joint Stock Companies".

The following principles are observed when calculating the amount of dividends:

- transparency of the mechanism for calculating the amount of dividends;
- optimal balance between short-term (income generation) and long-term (development of the Company) interests of shareholders;
- aspiration to increase the appeal for investors and capitalization of the Company.

The amount of dividends is calculated in the following sequence:

1. Net profit is partially used to form the reserve fund in accordance with the Company's Articles of Association. Net profit distribution in order to form the reserve fund is completed when the fund reaches the size stipulated by the Company's Articles of Association.
2. Part of the net profit in the amount recommended by a resolution of the Board of Directors is used for payment of dividends.
3. Part of the net profit preserved after withholdings stipulated by clauses 1–2 remains at the Company's disposal.

The amount of the net profit representing the basis for dividends calculation according to clause 1 may be adjusted (reduced) for revaluation surplus of financial investments and facts of the Company's business activities, which are similar in terms of economic essence. The part of the profit formed by such adjustment is proposed to be left at the Company's disposal. In case of retirement of revalued assets, reduction of their value, as well as similar facts of the Company's business activities in terms of economic essence, the respective parts of profit remaining at the Company's disposal may be taken into account when calculating the amount of dividends according to the procedure stipulated in clause 1.

Decisions on payment of dividends are made at the General Shareholders Meeting, for which purpose the Company's Board of Directors submits its recommendations regarding the amount of

dividends. Dividends are paid in accordance with the decision taken by the General Shareholders Meeting.

### Report on payment of announced (accrued) dividends on TGC-1's shares

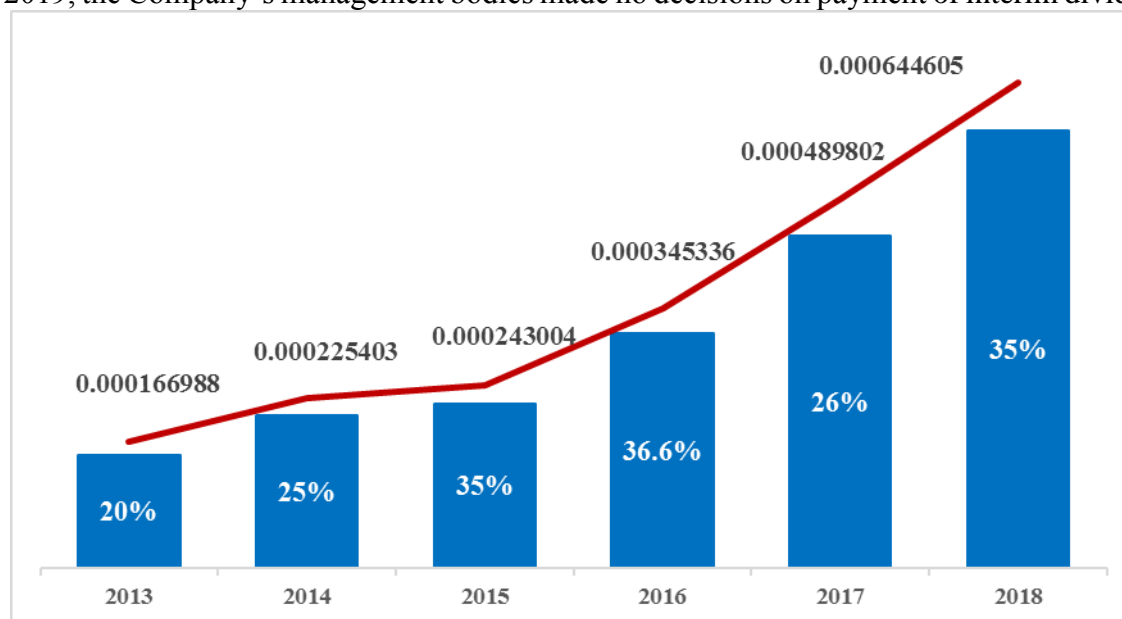
According to the decision made by the Annual General Shareholders Meeting of TGC-1 on 10 June 2019, the amount of dividends to be paid per Company's ordinary share following the results of 2018 amounted to RUB 0.000644605 in cash. On 26 June 2019, the list of persons entitled to receive dividends was drawn up.

According to the results of 2018, TGC-1's declared dividends totaled RUB 2,484,529 thousand or 35% of the net profit. As of 31 December 2019, dividends were paid in the total amount of RUB 2,463,140,527.40 or 99.14% according to the results of 2018.

**Table 42.** The amount of dividends accrued and paid by the Company in 2015–2019

Dividends	2015 (for 2014)	2016 (for 2015)	2017 (for 2016)	2018 (for 2017)	2019 (for 2018)
Total amount of dividends, RUB mln	868.8	936.6	1,331.0	1,887.9	2,448.5
Dividends per one share, RUB	0.000225403	0.000243004	0.000345336	0.000489802	0.000644605
Dividends, % of the net profit	25	35	36.6	26	35
Declaration date	22 June 2015	20 June 2016	19 June 2017	06 June 2018	10 June 2019
Date of payment of the declared dividends	13 August 2015	11 August 2016	11 August 2017	30 July 2018	31 July 2019
Total amount of dividends paid as of 31 December, 2019, RUB mln	859.8	927.3	1,317.5	1,872.0	2,463,1
Share of dividends paid in the total amount of the declared dividends, %	98.97	99.00	98.99	99.16	99.14
Accounting standard for determining the net profit	RAS	RAS	RAS	RAS	RAS
Form of payment for the declared dividends	Cash	Cash	Cash	Cash	Cash

In 2019, the Company's management bodies made no decisions on payment of interim dividends.



**Fig. 21.** Dynamics of the amount of dividends per one share, RUB

#### 9.2.4. Bonds

The bonds of TGC-1 in circulation are traded on the Moscow Exchange and are included in the Third level of the quotation list. In the 2019 reporting year, the coupon payments on TGC-1's bonds were made in full and exactly in accordance with the payment schedule.

**Table 43.** Information on TGC-1's circulating bonds

	Issue 3		Issue 4	
Type of securities	Corporate bonds of series 03		Corporate bonds of series 04	
Registration number	4-03-03388-D		4-04-03388-D	
Registration date	8 December 2011		8 December 2011	
ISIN Code	RU000A0JS1W0		RU000A0JS470	
Number of securities issued	2,000,000 pieces		2,000,000 pieces	
Face value, RUB	1,000		1,000	
Coupon rate, % p.a.	1 coupon	10.3%	1-2 coupons	7.6%
	2-3 coupons	7.6%	3-4 coupons	8.1%
	4-5 coupons	8.1%	5-6 coupons	8.0%
	6-7 coupons	8.0%	7-8 coupons	12.9%
	8-9 coupons	12.9%	9-10 coupons	14.4%
	10-11 coupons	14.4%	11-12 coupons	6.9%
	12-13 coupons	6.9%	13-14 coupons	4.0%
	14-15 coupons	4.0%	15-16 coupons	5.8%
	16-17 coupons	5.8%	17-20 coupons	to be determined by the Issuer
18-20 coupons	to be determined by the Issuer			
Periodicity of coupon payment	Twice a year		Twice a year	
Placement date	27 December 2011		27 February 2012	
Circulation term	10 years		10 years	
Redemption date	14 December 2021		14 February 2022	
Early redemption	N/A		N/A	
Placement organizer	CJSC Investment company Leader		CJSC Investment company Leader	
Trading site	Moscow Exchange		Moscow Exchange	
Quotation list	Third level		Third level	

### 9.2.5. Credit ratings

An integral part of work to increase investment attractiveness is interaction with rating agencies.

**Table 44.** Credit ratings of TGC-1

Date	Type of rating	Rating score
<b>Credit rating assigned by S&amp;P Global Ratings</b>		
20 September 2019	Long-term rating in accordance with the international scale	BBB-, outlook Stable
20 September 2019	Short-term rating in accordance with the international scale	A-3, outlook Stable
<b>Credit rating assigned by Fitch Ratings</b>		
12 September 2019	Long-term IDR in foreign currency	BBB, outlook Stable
12 September 2019	Long-term IDR in national currency	BBB, outlook Stable
12 September 2019	Short-term IDR in foreign currency	F3
12 September 2019	Short-term IDR in national currency	F3
12 September 2019	Priority unsecured rating in national currency	BBB
<b>Credit rating assigned by ACRA*</b>		
15 January 2019	Credit rating in accordance with the national scale	AA(RU), outlook Stable

\* 13 January 2020, ACRA affirmed the rating of AA (RU), outlook Stable

### Standard & Poor's Global Ratings

On 20 September 2019, Standard & Poor's Global Ratings affirmed the BBB- credit rating assigned to TGC-1, with a Stable outlook.

The affirmation of the ratings reflects high financial results against the background of stable performance indicators of the company in 2018 and the first half of 2019, as well as the agency's expectations that TGC-1 will maintain strong creditworthiness in 2020 – 2022.

S&P Global Ratings did not add additional steps to the assessment of the characteristics of TGC-1's own creditworthiness (BBB-), since it is at the same level as the SACP rating of the ultimate parent company, PJSC Gazprom.

### Fitch ratings

On 12 September, 2019, Fitch Ratings raised long-term issuer's default ratings of TGC-1 in foreign and national currencies to BBB, with a stable outlook. Short-term issuer default ratings in foreign

and national currencies were affirmed at F3. Priority unsecured rating in national currency was increased to BBB.

The Agency noted the leading position of the company in the electricity and heat energy sales market in St. Petersburg and neighboring regions due to the implementation of CDA projects, the presence of a significant share of hydro generation in the company's production assets, which is characterized by low-cost electricity production.

Fitch predicts that TGC-1 will maintain strong credit ratings in 2019 – 2023.

## ACRA

On 15 January 2019, the Analytical Credit Rating Agency (ACRA) affirmed TGC-1's credit rating at AA on the national scale for the Russian Federation with a "stable" outlook.

The credit rating of TGC-1 is due to the high profitability of the business due to the new thermal power plants and the operation of hydro power plants, low debt burden and strong liquidity due to the completion of key investment projects of the company.

The average size of a business, the quality of fixed assets, as well as regulatory risks have a restraining effect on the rating. The positive effect is exerted by the high probability of support from the main shareholder, PJSC Gazprom.

A "stable" outlook assumes, with the highest probability, that the rating will remain constant over the horizon of 12–18 months.

### 9.2.6. Interaction with the investment community

Interaction with the investment community is performed in TGC-1 by the Equity and Investor Relations Division forming part of the Corporate Governance Department.

The Company constantly increases the level of publicity and effectiveness of interaction with investors striving to comply with the world's best practices in the field of information disclosure. Currently, the Company provides data on the financial, operational and other aspects of its activities to the extent and in terms comparable to other public companies. While interacting with the investment community, TGC-1 always provides verifiable, reliable and consistent information about its activities, as well as observes current information disclosure standards and strives for maximum transparency. Essential information on the Company's activities is disclosed in a timely manner in the form of press releases, and relevant facts are disclosed through authorized information disclosure services in full compliance with the Russian legislation. The Company regularly discloses its financial statements under RAS and IFRS, and publishes presentations for investors.

The following are mechanisms of interaction between TGC-1 and the investment community:

- conference calls involving investors and the Company's management team;
- periodical meetings with investors and shareholders;
- participation in major conferences for investment brokerages;
- meetings at the Company's production facilities.

In 2019, TGC-1's interactive Annual Report for 2018 developed in cooperation with 2PR Agency received a number of awards:

- Platinum Award at MarCom Awards-2019, a prestigious international competition of design projects in marketing, corporate communications and PR;
- Winner in the nomination "Best Annual Report" of Silver Threads 2019, the National Contest of Corporate Media Resources.

In February 2020, the interactive annual report of TGC-1 for 2018 was named the winner in the Digital-Media & Tools / Annual Report nomination of the annual Digital Communications Awards.

In compiling the annual reports of TGC-1, in particular based on the results of 2019, the Company is guided by Regulations No. 454-P of the Central Bank of the Russian Federation on Information Disclosure by Issuers of Equity Securities of the Russian Federation dated 30 December 2014; Federal Laws No. 208-FZ dated 26 December, 1995 "On Joint Stock Companies" and No. 39-FZ dated 22 April, 1996 "On Securities Market".

### 9.3. Corporate Governance Principles and Practices

The Board of Directors and the management team manage the Company in compliance with the recommendations and principles stated in the Corporate Governance Code approved by the Bank of Russia, which main principles include protection of the rights of shareholders and investors, as well as transparency and disclosure. Documents regulating the corporate governance system are posted on the Company's website.

In 2019, the Company's management kept performing activities aimed at protecting the rights of shareholders and investors, same as before.

The following Committees of the Board of Directors proceeded with activities aimed at ensuring the effectiveness of resolutions made by the Board of Directors of TGC-1:

- Audit Commission;
- Committee for Budget Planning and Investments (until 13 December, 2019 — Business Strategy and Investments Committee);
- HR and Remuneration Committee;
- Reliability and Efficiency Committee (until 13 December 2019 — Reliability Committee).

Following the resolution of the Board of Directors, in order to improve operational efficiency, the provisions have been approved for the Committees, which become effective due to changes in legislation and recommendations of the Corporate Governance Code.

Committees of the Board of Directors are comprised of the members of the Board of Directors, representatives of major shareholders and the Committee on Energy and Engineering Support of the Government of St. Petersburg. In 2019, the Committees of TGC-1 Board of Directors discussed agenda items related to organizational, financial and economic activities of TGC-1, which were submitted for consideration of the Board of Directors and proposed for discussion by members of the Board of Directors' Committees.

TGC-1 continuously works on development, improvement and bringing of the corporate governance system in compliance with the requirements of Russian legislation, recommendations of the Corporate Governance Code (recommended for use by the Board of Directors of the Bank of Russia and approved on 21 March, 2014), Listing Rules of the Moscow Exchange, as well as the best Russian and international practices.

The most important of the activities performed as part of improving the Company's corporate governance practices is compliance with the recommendation of the Corporate Governance Code to ensure presence of the non-executive directors on the Board of Directors and in the Committees of the Board of Directors starting from 2016. In 2019, the Board of Directors of TGC-1 conducted a regular analysis of the directors' compliance with the independence criteria established by the Moscow Exchange Listing Rules.

On 14 December 2017, The Board of Directors approved the revised Regulations on TGC-1's Dividend Policy. Amendments were made in order to bring the Regulations in line with Federal Law No. 208-FZ dated 26 December, 1995 "On Joint Stock Companies" and recommendations of the Corporate Governance Code.

On 15 August, 2019, the Board of Directors of TGC-1 approved the Risk Management and Internal Control Policy, which defines the principles and approaches to the organization of the risk management system in the Company, in accordance with the recommendations of the Corporate Governance Code. The Risk Management and Internal Control Policy helps to improve the financial results of the Company by reducing losses resulting from the implementation of risks (by types of risks that can be managed). In 2019, the Company took a number of measures aimed at improving the risk management system (Section 3.4 of this Annual Report).

#### **9.4. Memorandum of Intent of PJSC Gazprom regarding the controlled companies TGC-1, PJSC Mosenergo, PJSC MIPC, JSC OGK-2**

Electric power industry is the business area of strategic importance for Gazprom Group. Over the past 10 years, the largest vertically integrated electric power holding in Russia was established as part of PJSC Gazprom's structure, which unified assets in the fields of electricity and heat generation, transfer and sales, as well as assets in related segments.

Electric power generating assets have been consolidated in Gazprom Energoholding LLC, a wholly owned subsidiary, which holds controlling stakes in PJSC Mosenergo, TGC-1 and PJSC MIPC being the single heat supplier of Moscow. PJSC Centrenergoholding – a subsidiary of Gazprom Energoholding LLC – holds the controlling stake in PJSC OGK-2.

PJSC Mosenergo, TGC-1, PJSC OGK-2 and PJSC MIPC form an integral part of the Gazprom Group's business. Alienation of the indicated assets is not under consideration.

PJSC Gazprom considers progressive development of companies, securing stable growth of their financial indicators, while maintaining reliable power supply of consumers as the priority task of its electric power business.

PJSC Gazprom operates the companies based on unified corporate standards, understands the importance of improving corporate governance of controlled business entities and strives to ensure disclosure and transparency of their operations.

## 9.5. Management and Control Bodies

### 9.5.1. General Shareholders Meeting

General Shareholders Meeting is the Company's senior management body. The competencies of the General Shareholders Meeting are determined by Article 15 of TGC-1's Articles of Association.

The procedure for calling, preparing, holding, and summing up the results of the General Shareholders Meeting is defined by the Provisions on the General Shareholders Meeting of TGC-1 approved by the General Shareholders Meeting on 10 June 2019 (Minutes No. 1 as of 11 June, 2019).

Extraordinary General Shareholders Meeting is held by the resolution of the Board of Directors of TGC-1 based on its own initiative, request of the Company's Audit Commission, the Company's external auditor, as well as of the Company's shareholder(s), holding no less than 10% of voting shares of the Company as of the date of the request. The issues of agenda of Extraordinary General Shareholders Meeting are suggested by the initiating party.

On 10 June 2019, the Annual General Shareholders Meeting of TGC-1 was held, at which there were approved: annual report of the Company for 2018, annual accounting (financial) statements for 2018. Decisions were made on the distribution of profit for 2018, on the payment of dividends, members of the Board of Directors and the Audit Commission were elected, the auditor of the Company was approved. A decision was made to approve the revised Articles of Association of the Company and internal documents regulating the activities of the bodies of the Company. A decision was made to approve interested-party transactions and the participation of TGC-1 in financial and industrial groups, associations and other unions of commercial organizations.

Also in 2019, two extraordinary General Shareholders Meetings were held:

1. On 19 September 2019, decisions were made on the issues of early termination of powers of members of the Board of Directors, on the election of members of the Board of Directors and on the participation of the Company in the association.
2. On 27 September 2019, a decision was made to transfer the powers of the sole executive body of the Company to a managing organization – Gazprom Energoholding LLC.

### 9.5.2. Board of Directors

The competencies of the Board of Directors are determined by Clause 20.1. Art. 20 of TGC-1 Articles of Association. The procedure for the activities and meetings of the Board of Directors is governed by the Regulations on the Board of Directors of TGC-1 that were approved by the Annual General Shareholders Meeting as of 10 June, 2019 (Minutes No. 1 dated 11 June, 2019).

According to the Regulations, TGC-1 Board of Directors is responsible for the overall management of the Company's activities, controls the implementation of decisions of the General Shareholders Meeting, and observance of the rights and legitimate interests of the Company's shareholders in accordance with Russian legislation.

The Board of Directors consists of eleven people, four of them were nominated by the shareholder Fortum Power and Heat Oy, seven were nominated by Gazprom Energoholding LLC.

In 2019, TGC-1 Board of Directors held 19 meetings, including 18 meetings in absentia and one meeting in the form of joint presence.

#### Memberships of TGC-1 Board of Directors in 2019

**The Board of Directors approved by the Extraordinary General Shareholders Meeting on 19 September, 2019** (4 meetings were held by this Board in 2019)

Full name	Position*
<b>Chairman of the Board of Directors</b>	
Vitaly Markelov	Deputy Chairman of the Management Board, PJSC Gazprom ( <i>non-executive director</i> )
<b>Members of the Board of Directors</b>	

Parviz Abdushukurov	Vice President, Deputy General Director for Operations – Chief Engineer of PJSC Fortum ( <i>non-executive director</i> )
Dmitry Borovikov	Vice President, Strategy, Production Portfolio Management and Trading, PJSC Fortum ( <i>independent director</i> )
Alexander Ivannikov	Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Pavel Shatsky	First Deputy General Director of Gazprom Energoholding LLC ( <i>non-executive director</i> )
Andrey Khorev	Advisor to the Chairman of the Management Board of GPB (JSC) ( <i>non-executive director</i> )
Andrey Dmitriev	First Deputy Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Gennady Sukhov	Member of the Management Board, Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Denis Fedorov	Head of Directorate of PJSC Gazprom ( <i>non-executive director</i> )
Mario Ditmar Mazidowski	Vice-President for Finance, PJSC Fortum ( <i>independent director</i> )
Alexander Chuvaev	Executive Vice President, Management Board Member of Fortum Corporation, General Director of PJSC Fortum ( <i>non-executive director</i> )

\* Positions specified as of the election date.

**The Board of Directors elected by the Annual General Shareholders Meeting on 10 June 2019** (in 2019, 9 meetings were held by this Board)

Full name	Position*
<b>Chairman of the Board of Directors</b>	
Denis Fedorov	Head of Directorate of PJSC Gazprom, General Director of Gazprom Energoholding LLC, General Director of PJSC Centrenergoholding ( <i>non-executive director</i> )
<b>Members of the Board of Directors</b>	
Parviz Abdushukurov	Vice President, Deputy General Director for Operations – Chief Engineer of PJSC Fortum ( <i>non-executive director</i> )
Alexey Barvinok	General Director of TGC-1 ( <i>non-executive director</i> )
Andrey Dmitriev	First Deputy Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Dmitry Borovikov	Vice President, Strategy, Production Portfolio Management and Trading, PJSC Fortum ( <i>independent director</i> )
Alexander Ivannikov	Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Kirill Seleznev	Head of Department of PJSC Gazprom, Member of the Management Board of PJSC Gazprom ( <i>non-executive director</i> )
Alexander Chuvaev	Member of the Management Board, Executive Vice President of Fortum Corporation (Fortum Oyj), President of Fortum Russia, General Director of PJSC Fortum ( <i>non-executive director</i> )
Irina Korobkina	Deputy Head of Directorate at PJSC Gazprom ( <i>non-executive director</i> )
Pavel Shatsky	First Deputy General Director of Gazprom Energoholding LLC ( <i>non-executive director</i> )

Andrey Khorev	Advisor to General Director of TPS Group LLC ( <i>independent director</i> )
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\* Positions specified as of the election date.

**The Board of Directors elected by the Annual General Shareholders Meeting on 06 June 2018** (in 2019, 6 meetings were held by this Board)

Full name	Position*
<b>Chairman of the Board of Directors</b>	
Kirill Seleznev	Member of the Management Board, Head of Department at PJSC Gazprom, General Director of Gazprom Mezhrefiongaz LLC ( <i>non-executive director</i> )
<b>Deputy Chairman of the Board of Directors</b>	
Denis Fedorov	Head of Directorate of PJSC Gazprom, General Director of Gazprom Energoholding LLC, General Director of PJSC Centrenergoholding ( <i>non-executive director</i> )
<b>Members of the Board of Directors</b>	
Alexey Barvinok	General Director of TGC-1 ( <i>non-executive director</i> )
Parviz Abdushukurov	Vice President, Deputy General Director for Operations – Chief Engineer of PJSC Fortum ( <i>independent director</i> )
Andrey Dmitriev	First Deputy Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Yuri Eroshin	Vice President for Production and Trading Portfolio at PJSC Fortum ( <i>non-executive director</i> )
Valery Pyatnitsev	Director of Strategy of JSC FINAM ( <i>independent director</i> )
Alexander Chuvaev	Member of the Management Board, Executive Vice President of Fortum Corporation (Fortum Oyj), General Director of PJSC Fortum ( <i>non-executive director</i> )
Igor Shatalov	First Deputy Head of Department of PJSC Gazprom ( <i>non-executive director</i> )
Pavel Shatsky	First Deputy General Director of Gazprom Energoholding LLC ( <i>non-executive director</i> )
Andrey Khorev	Chairman of the Board of Directors of CJSC Monolit CapitalStroy ( <i>independent director</i> )

\* Positions specified as of the election date

### Participation in the meetings of the Board of Directors and its Committees in 2019

Full name	Board of Directors*		Audit Commission	Committee for Budget Planning and Investments (Business Strategy and Investments Committee)	HR and Remuneration Committee	Reliability and Efficiency Committee (Reliability Committee)
<b>Persons who served on the Board of Directors throughout 2019</b>						
Parviz Abdushukurov	18/19	95%	100%		100%	100%
Andrey Dmitriev	19/19	100%				
Denis Fedorov	18/19	95%				
Alexander Chuvaev	15/19	79%				
Andrey Khorev	13/13	100%	100%		83%	
Pavel Shatsky	19/19	100%	100%		100%	
<b>Persons excluded from the Board of Directors on 10 June 2019</b>						
Valery Pyatnitsev	6/6	100%	100%	100%	100%	
Yuri Eroshin	4/6	67%				
Igor Shatalov	0/6	0%				

Full name	Board of Directors*	Audit Commission	Committee for Budget Planning and Investments (Business Strategy and Investments Committee)	HR and Remuneration Committee	Reliability and Efficiency Committee (Reliability Committee)
<b>Persons who joined the Board of Directors on 10 June 2019</b>					
Dmitry Borovikov	12/13	92%	100%	100%	
Alexander Ivannikov	8/13	62%		100%	
<b>Persons who served on the Board of Directors from 10 June 2019 to 19 September 2019</b>					
Irina Korobkina	9/9	100%	100%	100%	
<b>Persons excluded from the Board of Directors on 19 September 2019</b>					
Alexey Barvinok	13/15	87%			
Kirill Seleznev	14/15	93%			
<b>Persons who joined the Board of Directors on 19 September 2019</b>					
Vitaly Markelov	4/4	100%			
Mario Mazidowski	4/4	100%	100%	100%	
Gennady Sukhov	4/4	100%			

\* A/B — A is the number of meetings in which the director participated; B is the number of meetings held during the period during which the director was a member of the Board of Directors/Committee

## Brief biographical information on the members of the Board of Directors as of 31 December 2019

### Vitaly Markelov, Chairman of the Board of Directors

Year of birth: 1963

Education: Higher. Candidate of Technical Sciences

Kuibyshev Aviation Institute

Positions held for the last 5 years:

2014 – present Deputy Chairman of the Management Board, Member of the Management Board, PJSC Gazprom

2014 – present President of the Pipe Manufacturers Association

2019 – present Non-Executive Director of Sakhalin Energy Investment Company Ltd.

Holds no shares of TGC-1.

### Denis Fedorov, member of the Board of Directors

Year of birth: 1978

Education: Higher. Ph.D. in Economics

2001 Bauman Moscow State Technical University, degree in Economics and Management

2003 Moscow Power Engineering Institute (Technical University), degree in Economics and Industrial Energy

Positions held for the last 5 years:

2014 – present Head of Directorate of PJSC Gazprom

2014 – present General Director, Centrenergoholding JSC.

2014 – present General Director of Gazprom Energoholding LLC

2017 – 2017 General Director of Adlerskaya CHPP LLC

Holds no shares of TGC-1.

### Parviz Abdushukurov, member of the Board of Directors

Year of birth: 1964

Education: Higher.

1991 Tajik State University, degree in Physics

2003	Moscow Power Engineering Institute, degree in CHP Plants
Positions held for the last 5 years:	
2014 – present	Vice President, Deputy General Director for Operations – Chief Engineer of PJSC Fortum
2014 – present	Deputy General Director for Operations – Chief Engineer of JSC UTSK
2014 – present	Deputy General Director for Operations, JSC CHER
Holds no shares of TGC-1.	

#### **Dmitry Borovikov, independent member of the Board of Directors**

Year of birth: 1988

Education: Higher.

2011	HSE – Higher School of Economics
Positions held for the last 5 years:	
2014 – 2016	Head of Strategic Projects, Center for Market and Strategic Opportunities Analysis, Business Analysis and Market Development Department, OJSC Fortum
2016 – 2018	Deputy Head of the Center for Development and Growth for Strategic Development of PJSC Fortum
2018 – 2018	Director of the Center for Development and Growth, PJSC Fortum
2019 – present	Vice President, Strategy, Production Portfolio Management and Trading, PJSC Fortum
Holds no shares of TGC-1.	

#### **Andrey Dmitriev, member of the Board of Directors**

Year of birth: 1974

Education: Higher.

1995	Volga State Academy of Water Transport
2016	Stockholm School of Economics (EMBA)
Positions held for the last 5 years:	
2014 – 2016	General Director of JSC Gazprom Gazenergoset (currently - LLC Gazprom Gazenergoset)
2016 – 2019	First Deputy Head of Department at PJSC Gazprom
2019 – present	General Director of Gazprom Gas-Engine Fuel LLC
Holds no shares of TGC-1.	

#### **Alexander Ivannikov, member of the Board of Directors**

Year of birth: 1966

Education: Higher.

1988	Higher Naval College of Radio Electronics named after A.S. Popova
1993	Saint Petersburg State University
1999	St. Petersburg State Technical University
Positions held for the last 5 years:	
2014 – present	First Deputy Head of the Department of Finance and Economics, Head of Department, PJSC Gazprom
Holds no shares of TGC-1.	

#### **Mario Ditmar Mazidowski, independent member of the Board of Directors**

Year of birth: 1963

Education: Higher.

1989	Moscow State Institute of International Relations
Positions held for the last 5 years:	

2014 – present	Vice President for Finance, PJSC Fortum
Holds no shares of TGC-1.	

### **Gennady Sukhov, member of the Board of Directors**

Year of birth: 1961

Education: Higher.

	Saratov Polytechnic Institute
	Academy of National Economy under the Government of the Russian Federation

Positions held for the last 5 years:

2014 – 2019	Deputy Head of Department, PJSC Gazprom
2019 – present	Head of Department, PJSC Gazprom
Holds no shares of TGC-1.	

### **Andrey Khorev, member of the Board of Directors**

Year of birth: 1972

Education: Higher. Ph.D. in Economics

1993	Kiev Higher Naval School
1996	Russian-American University
2002	Ph.D. in Economics

Positions held for the last 5 years:

2018 – present	Advisor to the General Director of TPS Group LLC
2019 – present	Advisor to the Chairman of the Management Board of Bank GPB (JSC)
2019 – present	Deputy General Director of RusChemAlliance
Holds no shares of TGC-1.	

### **Alexander Chuvaev, member of the Board of Directors**

Year of birth: 1960

Education: Higher.

1983	Bauman Moscow State Technical University, degree in Welding Equipment and Technology
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Positions held for the last 5 years:

2014 – present	Member of the Management Board, Executive Vice President of Fortum Corporation (Fortum Oyj)
2014 – present	General Director of PJSC Fortum
2014 – 2017	General Director of Fortum Energy LLC
2014 – present	General Director of JSC CHER
2014 – present	General Director of UTSK JSC
2014 – 2014	General Director of Tobolskaya CHPP LLC
2014 – present	Chairman of H&U commission, Chairman of the Coordinating Council of the RSPP branches in the Ural Federal District
2014 – present	General Director of Vetroenergetics LLC
2017 – 2019	General Director of FNG LLC
Holds no shares of TGC-1.	

### **Pavel Shatsky, member of the Board of Directors**

Year of birth: 1972

Education: Higher.

1997	Russian State Agrarian Extramural University
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2002	State Educational Institution of Higher Professional Education State University of Management
Positions held for the last 5 years:	
2014 – present	First Deputy General Director of Gazprom Energoholding LLC
Holds no shares of TGC-1.	

There is no information on conflict of interests among the members of TGC-1 Board of Directors, including those related to the participation of the members of TGC-1 Board of Directors in competitive management bodies of TGC-1.

TGC-1 did not issue loans (credits) to the members of the Company's Board of Directors.

No transactions with shares of TGC-1 were made by the members of the Board of Directors in 2019.

In accordance with TGC-1's Articles of Association and the approved by the Annual General Shareholders Meeting Regulations on the Procedure for Determining the Amount of Remuneration and Compensation to the Members of the Board of Directors of TGC-1 dated 10 June 2019 (Minutes No. 1 dated 11 June 2019), the members of the Board of Directors may be paid remuneration and compensation of consumptions related to the performance of their functions. Remuneration to the members of the Board of Directors consists of fixed and additional parts.

The fixed part is paid to the members of the Company's Board of Directors for participation in meetings of the Board of Directors. For participation in a meeting of the Board of Directors, a member of the Company's Board of Directors is paid remuneration in the amount equivalent to 4 (four) minimum monthly base salaries for a first-class worker specified in the sectoral tariff agreement in the electric power complex of the Russian Federation. Payment is made quarterly based on the results of meetings of the Board of Directors held during the quarter, not later than 1 (One) month after its end.

The amount of remuneration paid in accordance with the Regulations to the Chairman of the Board of Directors (Deputy Chairman of the Board of Directors or other person presiding at a meeting of the Board of Directors) is increased by 50% for each meeting at which the functions of Chairman of the Board of Directors are performed.

The additional part is paid to the members of the Company's Board of Directors in the end of financial year if the Company's net profit is available. The resolution to pay additional part of remuneration to the members of the Board of Directors is made by the General Shareholders Meeting of the Company. The General Shareholders Meeting of the Company also decides on the total amount of additional part of remuneration paid to the members of the Board of Directors. The total amount of additional part of remuneration based on results of the Company's activity may not exceed 5 (Five) percent of the Company's net profit received by all financial year-end in which this composition of the Board of Directors of the Company has been elected.

The additional part of remuneration is paid within a month after the date of the Company's General Shareholders Meeting specified in the Regulations.

The total amount of additional part of remuneration based on results of the Company's business is distributed among the members of the Board of Directors in equal shares, with the exception of cases specified in the Regulations.

The additional part of remuneration based on results of the Company's activities is not paid to the members of the Board of Directors who have participated in less than half of the Board of Directors' meetings (from the moment of their election to termination of powers).

If the Company does not have a net profit, the additional part of remuneration paid to the members of the Company's Board of Directors is not determined.

The members of the Board of Directors are paid, as compensation for expenses, for exercising their powers. Compensation of expenses is paid to the members of the Board of Directors if they provide documents confirming the expenses incurred. Documents confirming the expenses incurred shall be submitted to the Company's accounting department.

The members of the Company's Board of Directors are not entitled to receive other remunerations and (or) compensation of expenses for exercising their powers, with the exception of those specified in the Regulations.

Payment of remuneration and (or) compensation of expenses is made by the Company by transfer of cash funds to personal accounts of the member of the Board of Directors or through the Company's cash department.

Information on remuneration and (or) compensation of expenses paid to the members of the Board of Directors is disclosed by the Company in cases provided for by the legislation of the Russian Federation.

Members of the Board of Directors recognized as persons with respect to whom the legislation of the Russian Federation prohibits receiving payments from commercial organizations are not remunerated.

**Table 45.** Information on the amount of remuneration to members of the Board of Directors, RUB thousand

Indicator	2019
Remuneration for involvement in activities of the management body	21,974.36
Wages	0
Bonuses	0
Commission fees	0
Other remunerations	0
TOTAL	21,974.36

TGC-1 has a corporate secretary.

### Brief biographical information of the Corporate Secretary as of 31 December, 2019

#### Antonina Maksimova

Year of birth: 1973

Education: Higher. Candidate of Technical Sciences

1996	St. Petersburg Polytechnic University, degree in Mechanical Engineering
2000	St. Petersburg Polytechnic University, defense of a thesis
2002	St. Petersburg State University of Economics, degree in Financial Management
2013	St. Petersburg University of Management Technologies and Economics, Master's degree in Jurisprudence

Positions held for the last 5 years:

2014 – present	Head of the Corporate Management Department of TGC-1
2016 – present	Corporate Secretary of TGC-1

Holds no shares of TGC-1.

### 9.5.3. Committees of the Board of Directors

The Committees are aimed at ensuring the effective work of the Board of Directors in resolving issues within its competence. Currently, there are 4 Committees under TGC-1 Board of Directors:

- Audit Commission;
- Committee for Budget Planning and Investments (until 13 December, 2019 — Business Strategy and Investments Committee);
- HR and Remuneration Committee;
- Reliability and Efficiency Committee (until 13 December, 2019 — Reliability Committee).

#### Audit Commission of the Board of Directors

The task of the Committee is to develop and submit recommendations (conclusions) to the Board of Directors and the executive body of the Company in the field of audit and reporting of the Company.

## Composition of the Audit Commission elected by the Board of Directors of the Company on 13 December, 2019

Full name	Position*
<b>Chairman of the Committee</b>	
Andrey Khorev	Advisor to the General Director of TPS Group LLC
<b>Members of the Committee</b>	
Dmitry Borovikov	Vice President, Strategy, Production Portfolio Management and Trading, PJSC Fortum, <i>Independent Director</i>
Alexander Ivannikov	Head of Department, PJSC Gazprom
Mario Ditmar Mazidowski	Vice-President for Finance, PJSC Fortum, <i>Independent Director</i>
Pavel Shatsky	First Deputy General Director of Gazprom Energoholding LLC

\* Positions specified as of the election date to the Committee.

Until 13 June, 2019, the committee consisted of members elected by the Board of Directors of TGC-1 on 28 June, 2018. After the annual General Shareholders Meeting, a new composition of the Audit Commission was elected, which served from 5 July, 2019 till 15 October, 2019. Three meetings were held by the Audit Commission in 2019.

### Committee for Budget Planning and Investments of the Board of Directors

The task of the Committee is to develop and submit recommendations (conclusions) to the Board of Directors of the Company and the executive body of the Company in the following key areas of activity of the Board of Directors:

The task of the Committee is to develop and submit recommendations (conclusions) to the Board of Directors of the Company and the executive body of the Company in the following areas of activity of the Board of Directors:

- determination of priority directions, strategic goals, and main principles of the Company's strategic development, assessment of the Company's performance in the medium and long term, coordination of the Company's strategy;
- consideration and approval of scenario conditions for creating medium and long-term perspective for the Company's business activities;
- analysis of the implementation of adopted programs and projects of the Company's strategic development;
- adjustment of the Company's development strategy;
- establishment of key performance indicators (KPI) for approval by the Board of Directors;
- consideration of quarterly reports of the Company's General Director on implementation of the Company's strategy;
- control over achievement of the Company's strategic goals and KPI, approved by the Board of Directors;
- determination and improvement of the policy in the field of business planning and budgeting of the Company;
- financial planning, determination of the Credit and Dividend Policy of the Company;
- consideration of issues related to raising loan financing, including the issue of bonds and other securities;
- monitoring implementation of the approved business plan and budget of the Company;
- assessment of the Company's performance;
- increasing the appeal for investors of the Company, improving investment activities and making sound investment decisions;
- assistance in the management of the Company, and assessment of proposals for attracting investors to the industry and developing recommendations on compliance with the balance

of interests of the Company and investors when implementing investment processes in the Company and its branches;

- organization of timely and qualitative examination of investment projects and programs submitted for consideration by the Board of Directors of the Company;
- consideration of essential conditions for implementation of investment projects;
- development and submission of recommendations to the Board of Directors of the Company on issues considered by it in accordance with the competence of the Committee.

### **Composition of the Committee for Budget Planning and Investments, elected by the Board of Directors of the Company on 13 December, 2019**

Full name	Position*
<b>Chairman of the Committee</b>	
Alexander Rogov	Deputy Head of Directorate – Head of Division of PJSC Gazprom
<b>Members of the Committee</b>	
Eduard Lisitsky	Deputy General Director for Development of TGC-1
Mario Mazidowski	Vice President for Finance, PJSC Fortum
Andrey Kalashnikov	Deputy Production Director, Head of Technical Department, Gazprom Energoholding LLC
Vladimir Predein	Head of Division, PJSC Gazprom
Evgeny Zemlyanoy	Deputy General Director for Economy and Finance, Gazprom Energoholding LLC
Yaroslav Rykov	Director for Business Analysis, PJSC Fortum
Valentin Gryaznov	Advisor to the Head of Department, PJSC Gazprom
Dmitry Borovikov	Vice President, Strategy, Production Portfolio Management and Trading, PJSC Fortum, <i>Independent Director</i>
Alexander Yuzifovich	Deputy Head of Treasury Directorate of Gazprom Energoholding LLC

\* Positions specified as of the election date to the Committee

Until 13 June, 2019, the committee consisted of members elected by the Board of Directors of TGC-1 on 28 June, 2018. During 2019, 4 meetings of the Committee for Budget Planning and Investments (on business strategy and investments) were held.

### **HR and Remuneration Committee of the Board of Directors**

The task of the Committee is to develop and submit recommendations (conclusions) to the Board of Directors of the Company and the executive body of the Company in the areas of activity of the Board of Directors in the field of personnel and social labor policy of the Company.

### **Composition of the HR and Remuneration Committee elected by the Board of Directors of the Company on 13 December 2019**

Full name	Position*
<b>Chairman of the Committee</b>	
Pavel Shatsky	First Deputy General Director of Gazprom Energoholding LLC
<b>Members of the Committee</b>	
Dmitry Borovikov	Vice President, Strategy, Production Portfolio Management and Trading, PJSC Fortum, <i>Independent Director</i>
Mario Ditmar Mazidowski	Vice-President for Finance, PJSC Fortum, <i>Independent Director</i>
Andrey Khorev	Chairman of the Board of Directors of CJSC Monolit CapitalStroy, <i>Independent Director</i>

\* Positions specified as of the election date to the Committee

Until 13 June, 2019, the committee consisted of members elected by the Board of Directors of TGC-1 on 28 June, 2018. After the annual General Shareholders Meeting, a new composition of the HR and Remuneration Committee was elected, which served from 5 July, 2019 till 15 October, 2019. During 2019, 6 meetings of the HR and Remuneration Committee were held.

### Reliability and Efficiency Committee of the Board of Directors

The task of the Committee is to develop and submit recommendations (conclusions) to the Board of Directors of the Company and the executive body of the Company in the following areas of activity of the Board of Directors:

- considering objectives, priority areas and basic principles of the Company’s strategic development (development strategy of the Company) in terms of improving technical reliability, safety and efficiency of production;
- considering (performing expertise of) the programs for refurbishment and renovation, maintenance and repair, energy saving and improvement of power efficiency, improvement of technical reliability and other production programs in terms of observing the requirements for comprehensive technical reliability, safety and efficiency of production;
- assessment of the completeness and adequacy of measures developed as a result of investigating the causes of incidents (technological violations, including accidents, fires, technological emergencies, fuel supply disruptions), as well as monitoring their implementation;
- considering the Company’s technical and environmental policy;
- assessment of the management of the Company in terms of ensuring the requirements of integrated technological reliability, safety and production efficiency;
- improving the system of key performance indicators of production safety and reliability, developing recommendations on approval of target values, reviewing reports on their implementation;
- developing the Company’s standards related to planning, implementation, reporting on production operations;
- consideration of proposals for reorganization of the Company’s management system;
- other issues related to the above issues (except for those related to the competence of other Committees of the Company’s Board of Directors).

### Composition of the Committee for Reliability and Efficiency, elected by the Board of Directors of the Company on 13 December 2019

Full name	Position*
<b>Chairman of the Committee</b>	
Mikhail Fedorov	Director for Production at Gazprom Energoholding LLC
<b>Members of the Committee</b>	
Andrey Kalashnikov	Deputy Production Director, Head of Technical Department, Gazprom Energoholding LLC
Mikhail Sorokin	Head of Division, PJSC Gazprom
Alexey Vorobyev	Deputy General Director — Chief Engineer of TGC-1
Sergey Sverchkov	Deputy Chief Engineer of TGC-1
Parviz Abdushukurov	Vice President, Deputy General Director for Operations – Chief Engineer of PJSC Fortum, <i>Independent Director</i>
Vladimir Tsvetkov	Head of Capital Construction Project Implementation Department, TGC-1.

\* Positions specified as of the election date to the Committee

Until 13 June, 2019, the committee consisted of members elected by the Board of Directors of TGC-1 on 28 June, 2018. During 2019, 2 meetings of the Committee on Reliability and Efficiency (on Reliability) were held.

#### 9.5.4. Management Board, General Director and Managing Director

The General Director is the Company's sole executive body entitled to resolve issues related to current operations in accordance with Art. 26 of TGC-1's Articles of Association. In accordance with paragraph 19 Clause 15.1. Article 15 of the Articles of Association and Clause 1 Article 69 of the Federal Law "On Joint-Stock Companies" the powers of the sole executive body can be transferred by agreement to the managing organization.

By the decision of the extraordinary General Shareholders Meeting of TGC-1 on 27 September 2019, the powers of the General Director of TGC-1 from 30 September, 2019 were transferred to the managing organization Gazprom Energoholding Limited Liability Company (OGRN 1037739465004, located at 16 Dobrolyubova prospect, 2A building, lit. A, room 11, St. Petersburg, Russian Federation, 197198).

Gazprom Energoholding, Limited Liability Company, 100% (one hundred percent) of the authorized capital of which is owned by PJSC Gazprom, is a company combining electric and heat energy assets of the Gazprom Group.

Gazprom Energoholding LLC website: [energoholding.gazprom.ru](http://energoholding.gazprom.ru)

**Table 46.** Information on the amount of remuneration to the Management Organization, RUB thousand

Indicator	2019
Remuneration for involvement in activities of the management body	1,760.87
Wages*	—
Bonuses	—
Commission fees	—
Privileges	—
Other remunerations	—
<b>TOTAL</b>	<b>1,760.87</b>

#### Managing Director

##### Vadim Vederchik

Year of birth: 1979

Education: Higher.

2002 | St. Petersburg State Polytechnical University

Positions held for the last 5 years:

2013 — 2014 | Director for Capital Construction of TGC-1

2014 — 2019 | Deputy General Director for Capital Construction of TGC-1

2019 — present | Managing Director of TGC-1

Holds no shares of TGC-1.

#### Management Board of the Company

##### Composition of the Management Board until 17 September, 2019

Full name	Position
Alexey Barvinok	General Director of TGC-1 (Chairman of the Management Board)
Vadim Vederchik	Deputy General Director for Capital Construction
Alexey Vorobyev	Deputy General Director — Chief Engineer of TGC-1— Director of Nevsky Branch

Full name	Position
Andrey Goncharov	Deputy General Director for Economy and Finance
Igor Kartsev	Deputy General Director — Director of the Karelsky Branch
Igor Kurbatov	Deputy General Director for Corporate Protection
Eduard Lisitsky	Deputy General Director for Development
Stanislav Nazarov	Deputy General Director — Director of the Kolsky Branch
Gennady Semenov	Deputy General Director for Marketing and Sales
Andrey Sokolov	Deputy General Director
Raisa Stanishevskaya	Chief Accountant

By the decision of the Board of Directors of TGC-1 dated 17 September, 2019 (Minutes No. 9 dated 18 September, 2019) the powers of the current members of the Management Board were terminated on 29 September, 2019.

The new composition of the Board is currently not formed.

There is no information on existence of a conflict of interests between members of the Management Board of TGC-1.

TGC-1 did not issue loans (credits) to the members of the Company's Management Board.

Transactions by members of the Management Board on the acquisition or disposal of shares in TGC-1- were not completed.

In accordance with clause 4.8. of the Regulations on the Management Board of TGC-1:

“The members of the Company's Management Board in the period when they perform their duties are paid remuneration in accordance with the contracts concluded by each of them with the Company.

According to the resolution of the Company's Board of Directors, additional remuneration may be paid to the members of the Management Board, depending on results of the Company's activities.”

**Table 47.** Information on the amount of remuneration paid to the members of the Management Board, RUB thousand

Indicator	2019
Remuneration for involvement in activities of the management body	—
Wages*	58,328.57
Bonuses	18,982.17
Commission fees	—
Privileges	—
Other remunerations	—
<b>TOTAL</b>	<b>77,310.74</b>

\* The members of the Company's Management Board in the period when they perform their duties are paid remuneration in accordance with the employment contracts concluded by each of them with the Company.

### 9.5.5. Audit Commission

In accordance with Art. 29 of the Articles of Association, in order to control financial and economic activities of the Company, the Annual General Shareholders Meeting elects 5 (Five) members to the Audit Commission for the period until the next Annual General Shareholders Meeting.

Activities of TGC-1's Audit Commission are governed by the Regulations on the Audit Commission approved by the Annual General Shareholders Meeting on 10 June 2019 (Minutes No. 1 as of 11 June 2019).

In accordance with the Regulations, the main tasks of the Audit Commission are:

- to control over financial and economic activities of the Company;
- to control over compliance with the legislation and internal regulatory acts of the accounting procedures and the formation of the accounting (financial) statements and the Annual Report of the Company;
- to assist in increasing the efficiency of asset management and other financial and economic activities of the Company, reducing financial and operational risks, and improving the internal control system.

In accordance with Cl. 29.2., Art. 29 of the Articles of Association, the competence of the Company's Audit Commission, except for issues stipulated by the Federal Law "On Joint Stock Companies", include:

- verification and analysis of the financial standing of the Company, its solvency, functioning of the internal control system and the financial and operational risk management system, liquidity of assets, the ratio of own and borrowed funds;
- verification of timeliness and correctness of conducting settlement transactions with counterparties, the budget, as well as on labor remuneration, social insurance, accrual and payment of dividends and other settlement operations;
- verification of compliance with the approved norms and standards, approved estimates and other documents regulating activities of the Company, as well as implementation of resolutions made by the General Shareholders Meeting of the Company when using physical, labor and financial resources in production and financial and economic activities;
- verification of the legality of the Company's business activities performed under the contracts and transactions executed on behalf of the Company;
- verification of the cash and property of the Company, the efficiency of using the Company's assets and other resources, identifying causes of unproductive losses and expenses;
- verification of implementation of resolutions made by the General Shareholders Meeting and the Board of Directors of the Company to eliminate violations and deficiencies previously identified by the Audit Commission;
- verification of compliance of resolutions made on financial and economic activities by the Company's Board of Directors with the Company's Articles of Association and resolutions made by the General Shareholders Meeting of the Company;
- confirmation of credibility of data contained in the report on related-party transactions made by the Company in the reporting year.

**The composition of the Audit Commission, elected by the Annual General Shareholders Meeting on 10 June 2019**

Full name	Position*
<b>Members of the Audit Commission</b>	
Marat Salekhov	Deputy Head of Department, Head of Directorate of PJSC Gazprom
Anatoly Kotlyar	Head of Directorate of PJSC Gazprom
Yuri Linovitsky	Head of Internal Audit Office at Gazprom Energoholding LLC, Internal Audit Project at Gazprom Personnel LLC
Igor Komarov	Head of the Payment Management Department for Heat Supply Companies, GEH Finance LLC
Denis Korshnyakov	Head of Long-Term Financial Investments Department at Gazprom Energoholding LLC

\* Positions specified as of the election date to the Commission

Payment of compensations and remunerations to the members of the Audit Commission is carried out in accordance with the Regulations on Payment of Remunerations and Compensations to the Members of the Audit Commission of TGC-1, approved by the General Shareholders Meeting on 10 June 2019 (Minutes No. 1 as of 11 June 2019). In accordance with the Regulations, the following amounts and procedure for payment of remuneration and compensation for the members of the Audit Commission are determined:

- remuneration and compensations are paid by the Company in monetary form;
- the members of the Audit Commission are entitled for compensation of expenses related to the Audit Commission's meeting and audit inspections performance according to the Company's procedure for reimbursement of travel expenses effective on the date of the meeting or inspection;

- for participation in the audit (revision) of financial and economic activities, a member of the Audit Commission is paid a one-time fee in the amount equivalent to twenty five minimum monthly base salaries of the first-class worker established by the sectoral tariff agreement in the electric power complex of the Russian Federation (hereinafter — Agreement) for the period of audit (revision), taking into account indexation, established by the Agreement. Payment of the remuneration specified in this clause is made within a week after drawing up an opinion on the results of the audit. The amount of remuneration specified in this clause, which is paid to the Chairman of the Audit Commission is increased by 50%;
- payment of remuneration and compensation to specialists (experts) involved by the Audit Commission who are not members of the Audit Commission of the Company is made by the Company on the basis of agreements concluded by them with the Company. The terms of such agreements are approved by the Board of Directors of the Company;
- for certain categories of persons, including civil servants who are members of the Audit Commission of the Company, the Regulation shall apply subject to the restrictions and requirements established by applicable law for such categories of persons.

**Table 48.** Information on the amount of remuneration to the members of the Audit Commission, RUB thousand

Indicator	2019
Remuneration for participation in the work of the body supervising financial and economic activities of the issuer	768.5
Wages	—
Bonuses	—
Commission fees	—
Other remunerations	—
<b>TOTAL</b>	<b>768.5</b>

### 9.5.6. Internal audit

An independent and objective assessment of the reliability and efficiency of the internal control system, risk management system and corporate governance in TGC-1 is carried out by the Internal Audit Service (hereinafter, IAS), which reports to TGC-1 Board of Directors (through the Board of Directors' Audit Commission) and is administratively subordinated to the Company's General Director.

As part of its activities, the IAS is guided by the Internal Audit Policy (approved by the resolution of the Board of Directors dated 30 September, 2016, Minutes No. 3 as of 3 October, 2016) and the Regulations on the Internal Audit Service (approved by the resolution of the Board of Directors dated 30 September, 2016, Minutes No. 3 as of 3 October, 2016), as well as the requirements and recommendations of the Russian legislation.

Activities of the IAS are carried out in accordance with the annual action plan, approved by the Board of Directors of TGC-1 after its preliminary consideration by the Audit Commission.

According to the results of the IAS' inspections, recommendations are being developed and submitted to the management of TGC-1 for the elimination of violations and deficiencies identified. The General Director decides on the development of corrective action plans aimed at improving TGC-1's activities. Monitoring of the implementation of action plans is carried out by the IAS.

## 9.6. TGC-1's subsidiaries and affiliates

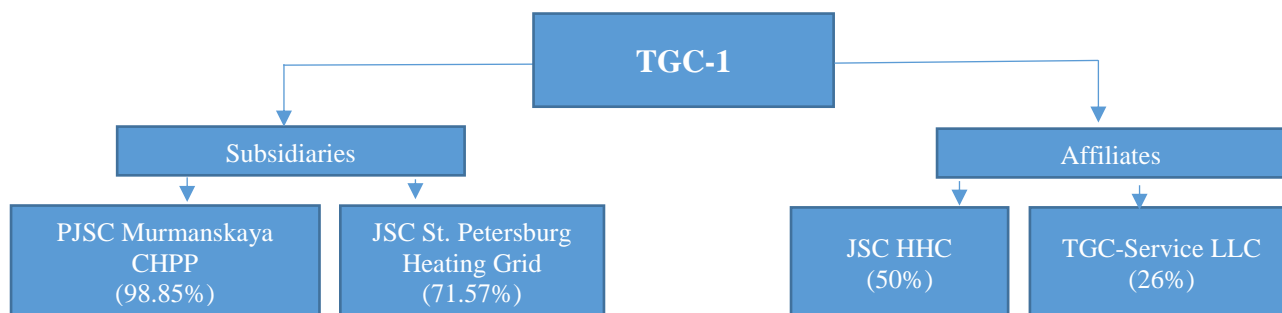


Fig. 22. TGC-1's subsidiaries and affiliates

### 9.6.1. Principles of management of subsidiaries and affiliates

The Company's corporate management of subsidiaries and affiliates (SA) is carried out in accordance with the following principles:

- compliance with the requirements of current Russian legislation, provisions of the Articles of Association and internal documents of the Company and its subsidiaries and affiliates in the process of corporate management of such subsidiaries and affiliates;
- compliance of the corporate management of SA with the development strategy of the Company and such SA;
- corporate management of SA according to the due, complete and reliable information;
- observation of resolutions of the Company's management bodies when performing corporate management of SA;
- provision of participation of the Company's shareholders in determining the position on key issues within the competence of management and control bodies of SA (determining the position by the Company's Board of Directors);
- publicity and transparency of corporate management of SA.

### 9.6.2. Subsidiaries and affiliates

#### PJSC Murmanskaya CHPP

**Registered:** 1 May 2005

**OGRN:** 1055100064524

In 2015, OJSC Murmanskaya CHPP was renamed PJSC Murmanskaya CHPP.

Since 05 March 2020, PJSC Murmanskaya CHPP was renamed to JSC Murmanskaya CHPP and from that moment, it is not a public joint stock company.

**Registration address:** 14 Shmidta St., Murmansk, 183038, Russia.

**Main shareholders:**

TGC-1 – 98.85% of authorized capital, portion of ordinary shares – 99.59%

**The goal of establishment:** heat supply of Murmansk and settlements of the Kola District of Murmansk Oblast.

**The main activity** of PJSC Murmanskaya CHPP is production, transmission and distribution of steam and hot water. PJSC Murmanskaya CHPP is a monopolist on the heat sales market in its area of operation and one of the main sources of heat supply (about 75% of the heat load) in Murmansk.

About 90% of heat consumed by utilities (management companies, associations of homeowners, housing construction co-operatives) under heat supply contracts with PJSC Murmanskaya CHPP is paid according to direct settlements. The scheme with direct settlement is supported by the Government of Murmansk Oblast and the Administration of Murmansk.

Total installed heat and electric capacity amounts to 1,129.5 Gcal/h and 12 MW respectively. Equipment of PJSC Murmanskaya CHPP includes 13 steam and 11 hot water boilers, 2 turbine generators, and 53.5 km of main heating grids in Murmansk.

## JSC HHC

**Registered:** 26 April 2007

**OGRN:** 1075101000215

On 18 June 2015, OJSC HHC was renamed to JSC HHC.

**Registration address:** 28a Hibinogorskaya St., Kirovsk, Murmansk Oblast, 184250

OJSC HHC was established as part of the implementation of the agreement on the main principles of implementation and the mechanism for cooperation in the reform of the heat supply system in the Apatitsk-Kirov region, concluded on 26 May 2006 between the government of Murmansk Oblast, JSC RAO UES of Russia, JSC TGC-1, the Apatitskaya CHPP, JSC PhosAgro, and JSC Apatit.

**Main shareholders:**

TGC-1 - 50%

JSC Apatit - 50%

**The goal of establishment** is the implementation of the investment project for refurbishment of the Apatitskaya CHPP and construction of the heating mains from the city of Kirovsk with installation of the central heating station, commissioning and operation of the heating mains.

**The main activity** is the production, transmission and distribution of steam and hot water (heat energy).

Prospective expansion of the scope of activities of JSC HHC for the heat transfer is the connection of new consumers located at the Kirov mine JSC Apatite to the heat grid from the Apatitskaya CHPP to the central heating station in Kirovsk.

## JSC St. Petersburg Heating Grid

**Registered:** 1 February 2010

**OGRN:** 1107847010941

On 29 July 2016, OJSC St. Petersburg Heating Grid was renamed JSC St. Petersburg Heating Grid.

**Registration address:** 73 A Basseynaya St., bld. 2, lit. A, St. Petersburg, 196211, Russian Federation.

**Main shareholders:**

TGC-1 - 71.57%

SUE TEC of St. Petersburg – 23.86%

City of St. Petersburg – 4.57%

**The goal of establishment** is increase of reliability and quality assurance of providing residents of St. Petersburg with heat and hot water due to of a single control heat supply grids in thermal zones of JSC TGC-1.

**The main activity** – transfer of steam and hot water (heat energy) in the heat supply zones of CHPPs of TGC-1.

The Company's heat grid complex covers 11 administrative districts of St. Petersburg and Vsevolozhsky District of Leningrad Oblast and provides transmission of more than 45% of the city's heat energy. Today, JSC St. Petersburg Heating Grid is the only specialized heat network organization of the Northern capital. Over 2.5 million citizens live in the Company's area of responsibility.

## TGC-Service LLC

**Registered:** 10 August 2010

**OGRN:** 1107847259740

On 3 June 2013, TGC-1-Service LLC changed its name to TGC-Service LLC.

**Registration address:** 66 A Peterburgskoye shosse, build. 2, lit. A, Shushary, St. Petersburg, 196140.

**Main shareholders:**

TGC-1 - 26%

JSC Gazprom Energoremont - 73%

**The goal of establishment** is optimization and improvement the quality of repair work at the power plants.

**The main activity** - operational activities to repair the main and auxiliary equipment of CHPPs and HPPs of TGC-1 and other power companies of the North-West region, as well as providing services in equipment adjustment and diagnostics, modernization and refurbishment of power engineering facilities.

## 9.7. Company's transactions

The Company complies with the requirements established by the legislation of the Russian Federation to the procedure for carrying out major and interested party transactions.

### Information on major transactions

Transactions recognized in accordance with the Federal Law "On Joint Stock Companies" as major transactions, as well as other transactions for which the procedure for approval of major transactions is applied in accordance with TGC-1's Articles of Association, were not performed by the Company in 2019.

## 10. SUSTAINABLE DEVELOPMENT

### 10.1. Main principles and goals of the HR Policy

TGC-1's Human Resources Policy is based on the system of principles and conceptual approaches to HR management ensuring successful development of the Company and balance of interests of employees, shareholders, consumers, and the state:

- "Transparency and Openness" - this principle implies building a career planning system with professionalism, sustainable high performance, and commitment to the Company's values as prerequisite and guarantees of career development.
- "Industry Leadership" - this principle implies the Company's understanding that achievement of HR management goals requires significant investment in human resources and development of HR divisions and improvement of IT support to managers.
- "Investment Efficiency" - this principle implies building an employee incentive system based on achievement of the business strategy goals with transparent performance assessment and rewards.
- "Continuous Improvement" - this principle implies continuous planning of HR management process based on regular HR and management quality assessment.
- "Organizational order" - this principle implies common approaches to HR management taking into account the regional specifics.

The goal of the HR policy of TGC-1 is to create an organizationally effective company with a transparent corporate governance system that provides opportunities to maximize the potential of employees.

The main objective of the HR Policy is to build a management system in which the company has a stable status of a "preferred employer" in the eyes of people who are ready and able to bring maximum benefit to it.

All organizational and administrative documents used by the company in order to implement the Human Resources Policy are developed and implemented in strict accordance with applicable law.

### 10.2. Headcount and the HR structure

Headcount of TGC-1 as of 31 December 2019 is 6,589 employees. Over the past year, the overall number of the Company's employees grew by 97 people (1.5%). The increase in the number of employees is mainly due to the recruitment of personnel for vacancies, including with a view to fulfilling the quota for the creation (allocation) of jobs for the employment of persons with disabilities in accordance with regional legislation (Law of St. Petersburg No. 55-12 as of 21 February, 2018 "On Amendments to the Law of St. Petersburg "On Quoting Jobs for the Employment of Persons with Disabilities in St. Petersburg"; Law of the Republic of Karelia No. 841-ZRK dated 27 December, 2004 "On the Regulation of Certain Issues of Ensuring Employment of Persons with Disabilities in the Republic of Karelia"), as well as employment to jobs created in the Directorate for the sale of heat of the Nevsky Branch in connection with the conclusion of agreements on the transition to direct settlements with consumers of public utilities in accordance with Federal Law No. 59-FZ "On Amendments to the Housing Code of the Russian Federation" as of 03 April, 2018. (24 full-time equivalents).

**Table 48.** TGC-1's headcount dynamics in 2019

	Headcount, people		Variance	
	as of 31 December 2018	as of 31 December 2019	abs., people	rel., %
TGC-1 Administration	379	354	- 25	- 6.6%
Nevsky Branch	3,690	3,787	+ 97	+ 2.6%
<b>Karelsky Branch</b>	<b>983</b>	<b>1,018</b>	<b>+ 35</b>	<b>+ 3.6%</b>

Kolsky Branch	1,440	1,430	- 10	- 0.7%
<b>TGC-1</b>	<b>6,492</b>	<b>6,589</b>	<b>+ 97</b>	<b>+ 1.5%</b>

### 10.2.1. TGC-1's HR age structure as of 31 December 2019

The Company's staff consists of 14.3% of employees under the age of 30 years, 49.5% — employees aged 30 to 50 years and 36.2% are employees aged 50 years and older. The average age of the Company's employees is 45 years.

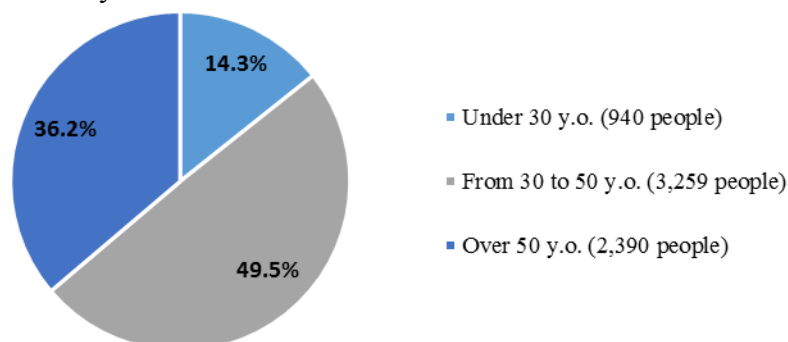


Fig. 23. TGC-1's HR age structure

### 10.2.2. Information about employees dismissed without valid excuse

The staff turnover rate of TGC-1 in 2019 amounted to 5.9% (calculated as the proportion of those dismissed for valid reasons in % of the total number). Dismissal without valid excuse is considered to be dismissal at the initiative of the employee in connection with his/her dissatisfaction with the salary, position, conditions and nature of work, remoteness of the place of work from the place of residence, etc. According to these reasons, 383 people were dismissed during 2019.

### 10.2.3. TGC-1's HR educational level

55.5% of TGC-1 employees have a university degree (+1.1% compared to 2018), 21.8% have secondary vocational education (+0.1% compared to 2018), 22.7% — secondary education (-1.2% compared to 2018). The increase in proportion of the higher professional education attests an increase in general qualification level of the Company's employees.

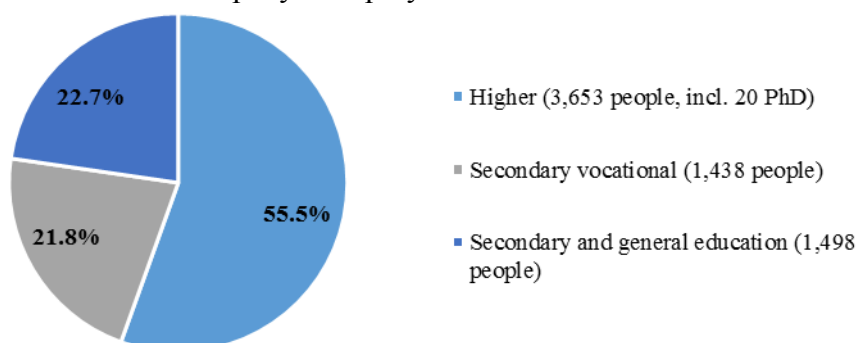


Fig. 24. TGC-1's HR educational level as of 31 December 2019

### 10.2.4. Use of professional standards in TGC-1

In the framework of the Integrated Plan for Application of Professional Standards in TGC-1 and its subsidiaries in 2019, TGC-1 performed a number of activities for application of professional standards:

- TGC-1 participated in financing of projects for the development of two professional standards: “Water Treatment Worker at a Thermal Power Plant” and “Chemical Analysis Worker at a Thermal Power Plant”.
- Changes were made to the approved List of professions for workers and positions of managers, specialists and employees of TGC-1 and its subsidiaries, for which the use of professional standards is mandatory. As of 31 December, 2019, TGC-1 applied 14 mandatory professional standards and covered 487 positions accounting for 7% of the Company’s headcount (the headcount is 6,932 employees).
- Employees, whose positions or professions were included into the approved list, signed additional agreements to their labor contracts stating their job functions, professional standard code, number and date of the order related to the respective professional standard.
- If a position (profession) is in the approved list of TGC-1, the job description must be modified in accordance with the professional standards.
- TGC-1 took part in the development of three professional standards. 1. “Worker on the operation of measuring instruments and information-measuring systems of a power plant”; 2. “Water treatment worker at a thermal power plant”; 3. “Chemical analysis worker at a thermal power plant”.
- Draft professional standards have been approved by the Council on Vocational Qualifications in the Energy Sector and submitted for further approval to the Ministry of Labor of Russia.
- During 2019, 9 employees, with voluntary consent, were sent for an independent assessment of qualifications. As a result of an independent assessment, all employees successfully confirmed their qualifications.
- In order to ensure compliance with professional standards for 2019, 16 training programs have been updated in the training center.

### 10.3. HR development system

#### 10.3.1. Average wage dynamics for 2018-2019

Average monthly wage of employees in 2019 amounted to RUB 70,667 in 2019.

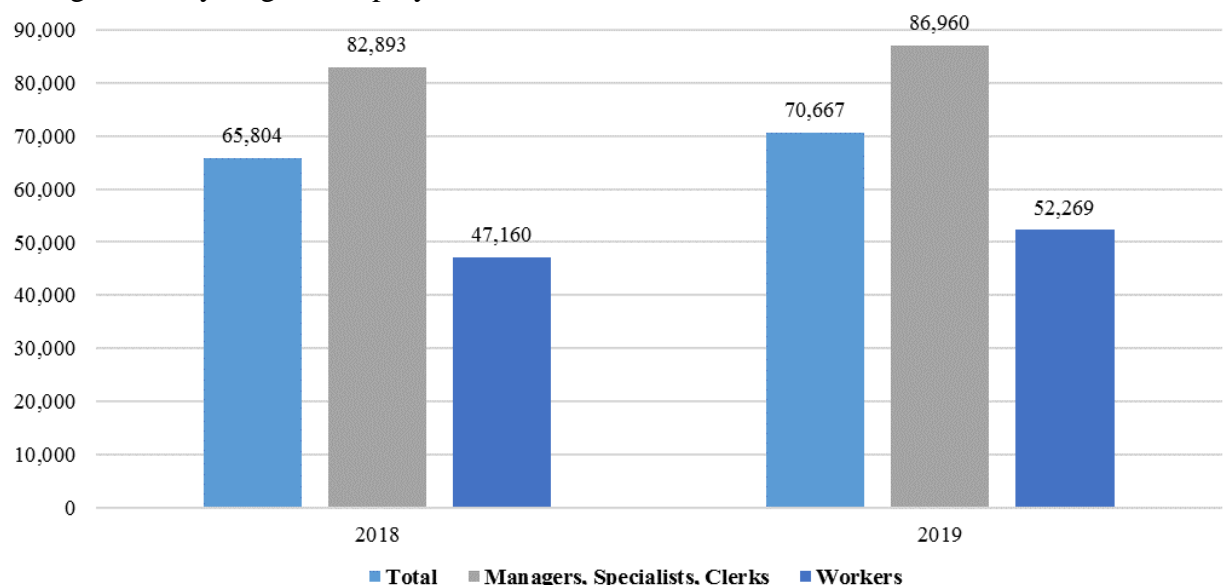


Fig. 25. Dynamics of the average wage of employees of TGC-1

Compared to 2018, the average wage of employees of TGC-1 for 2019 increased by 7.4%. This increase was due to the indexation of tariff rates (official salaries) of employees on the basis of the Collective Agreement and the increase in wages for workers employed in production in order to prevent the development of a crisis situation and restore competitive advantages in the labor market.

### **10.3.2. Information on remuneration, social benefits and guarantees**

In 2019, the Collective Agreement concluded in 2018 was in force. The amount of welfare payments to the employees and retirees of TGC-1, expenses for cultural and sports events, provisions for trade union for social needs and bonus payments to retired chairmen of Union committees in 2019 totaled RUB 181,190.0 thousand.

A significant benefit to the employees and retirees is reimbursement of household electricity and heat expenses.

Apart from that, the employees of TGC-1 receive a non-recurring stimulating payment in addition to average salary in the amount of the official salary, established as of the day of vacation leave, but no more than RUB 35,000 rubles.

TGC-1 employees are entitled to receive support when in need (suffered from a disaster, fire, theft, illness, etc).

One of the most important tasks of the social policy of TGC-1 is the social protection of veteran retirees who are keenly aware of their “isolation” and financial insecurity when they retire. An employee who has worked at least twenty years in the power sector and at least ten years for TGC-1 or its predecessors and has retired from TGC-1 will enjoy support and aid from the Company. The Company takes care of 2,661 retired veterans, all of them receive material aid and holiday payments in accordance with the Provisions on material aid payment. The amount of payments is defined by joint decision of TGC-1 administration of the committee of primary trade unions chairmen.

Also, in 2019, TGC-1 had an Agreement on privileges and guarantees for members of the primary trade union organizations of the All-Russian Electro-Trade Union Public Organization, which operate in structural divisions of TGC-1 (hereinafter referred to as the Agreement).

In accordance with the Agreement, the administration of TGC-1 transfers funds to the accounts of primary trade union organizations of structural divisions for providing material assistance in excess of statutory amounts to employee members of the trade union: for the birth of a child, during the registration of a marriage, for the funeral of close relatives.

In addition, for workers who are members of the union, there are benefits for keeping children in a kindergarten in families with three or more minor children; financial assistance is paid to persons having 5 or more children or a disabled child, employees caring for members of their families who live together (disabled people requiring constant care) in accordance with a medical report.

### **10.3.3. HR development and incentive system**

Creating an effective, customer-oriented and result-oriented team is impossible without the constant development of employees. TGC-1 supports and encourages their desire for professional development and self-improvement. Training and staff development is an indispensable condition for the success of the Company and the key to achieving its goals.

The integrated system of employee development has two main areas: first of all, it ensures that the qualifications of the personnel comply with the requirements for solving the current problems facing the Company; another key area is the training of personnel for the implementation of the strategic plans of the Company, which implies the development of skills and competencies that will be in demand in the future.

One of the long-term priority areas of the Human Resources Management Policy of TGC-1 is the continuous professional education of personnel.

The training center of TGC-1 is part of the PJSC Gazprom's Continuous Signature Vocational Training of Employees (hereinafter referred to as CSVTE) and its goal is to increase the efficiency and quality of work of employees on the basis of guaranteed provision of the level of professional competencies corresponding to a certain position (profession).

### Employee training

In accordance with CSVTE, TGC-1 provides training for employees in the following areas:

- mandatory training - training to fulfill the requirements of state and local regulations governing the provision of access to work at hazardous production facilities of TGC-1;
- target (advanced) training - professional training, retraining of managers and specialists and advanced training of workers in accordance with increasing requirements of production, improving business processes, commissioning new production facilities, introducing new equipment and technologies, as well as in connection with the upcoming appointment to another position, a change in the profile of activities;
- periodic training - staff training carried out in order to maintain the professional qualifications of employees, to obtain additional professional knowledge and skills.

The Training Centre of TGC-1 has the education license and provides advanced training courses, pre-certification courses, certification exams and competency assessment, in compliance with the rules and regulations applicable in the energy industry and the rules and regulations developed by the state supervisory authorities controlling the energy industry.

The Training Center of TGC-1 provides:

- Licensed training in occupations;
- Training with a minimum separation from production;
- Training of operational personnel;
- Pre-examination testing, using modern software and hardware systems;
- Pre-certification training of managers and specialists in the areas of certification controlled by the Federal Service for Ecological, Technological and Nuclear Supervision;
- Training in Fire Safety Basics;
- Vocational training and advanced training of workers in basic professions;
- Continuing education of managers and specialists;
- Work with students of Gazprom Class;
- Work with young professionals;
- Thematic seminars and trainings;
- Intra-corporate training aimed at developing managerial competencies;
- Training promising employees in higher and secondary professional educational institutions at the expense of the Company;
- Interaction with leading educational institutions of the North-West Federal District;
- Work with the personnel reserve of the Company.

In 2019, 10,367 employees were trained.

**Table 49.** Personnel of TGC-1 trained in 2019

Employee category	Number of people trained in 2019*	Training costs	HR consulting costs	The amount of training costs, RUB thousand
Managers	4,209	5,574	1,055	12,040.3
Specialists and employees	2,034	5,269	1,025	4,952.7
Workers	4,124	7,807	2,457	6,194.0
<b>TOTAL:</b>	<b>10,367</b>	<b>18,650</b>	<b>4,537</b>	<b>23,187.0</b>

\* The number of trainings was taken into account (one employee could be trained several times)

**Table 50.** Information on employee training of TGC-1 for 2019

Type of training	Number of people trained in 2019	The amount of training costs, RUB thousand
Mandatory training	5,656	6,541.0
Targeted (advanced) training	519	6,194.0
Periodic training	4,192	10,264.0
<b>Total</b>	<b>10,367</b>	<b>23,187.0</b>

### Training at the Training Centre

In 2019, 7,635 people underwent training at the Training Centre, including: 2,688 managers, 1,374 specialists, 3,573 workers.

### Development of the educational and methodological base, forms and methods of training

In 2019, normative and methodological documents were developed that regulate the functioning of CSVTE:

- Instruction “Preparation of teaching materials for distance learning courses in the Training Center”;
- The procedure for organizing practical training in the framework of vocational training and advanced training programs.

In order to improve the educational process for 2019:

- 17 new training programs, 19 lists of control questions for training programs, 4 training programs for simulator training, 6 educational-methodical complexes, 1 educational-methodical manual were developed.
- 14 current training programs, 6 lists of control questions for training programs, 6 scientific and methodological complexes were updated.
- The regulatory framework in the knowledge testing programs of the Automated Personnel Evaluation System (APES) was constantly updated.
- Work was done to update the material and technical base of the Training Center of TGC-1, in terms of acquiring computers to equip a computer class.

To improve the efficiency of training and personnel development during the year, the following training forms were introduced at TGC-1:

- independent pre-certification training of employees using an automated system of training, knowledge testing and briefing of employees of the organization in the field of labor protection and safety at the OLIMPOKS plant for certification at the Central Certification Commission (CCC) of TGC-1;
- distance learning using video conferencing systems.

### Training exercises

To develop the training base of the Training Center in 2019:

- Scheduled and emergency trainings with electrical circuits of the Petrozavodsk TPP of the Karelsky Branch and the Apatitskaya TPP of the Kolsky Branch in the TWR-12 computer simulator for training the personnel of the electric workshop were developed;
- New simulator modules were purchased from the developer of the training complex of the Thermal Automation and Measurement Shop (TAMS) (troubleshooting faults of the “Lowering or raising the level in the boiler drum” PTK (for CCGT (KU) boilers and for energy boilers) for the training of the TAMS personnel.

## HR reserve development

Training and development of the talent pool is one of the key targets of the Training Centre. In 2019, in accordance with the corporate model of competencies, the training of a personnel reserve for the position of Deputy Chief Engineer, workshop head, department head for the Integrated Modular Program was organized.

The program includes a series of trainings with the aim of developing managerial and personal and business competencies of reservists for appointment to senior positions. All program modules are logically interconnected, where each training at the previous stage is the basis for obtaining knowledge at the next stage, which allows participants to gradually develop the necessary competencies.

The preparation of the reserve is made in accordance with its level according to the results of the assessment. In 2019, 41 people from the reserve for the position of “shop manager” passed an assessment of managerial competencies. For reservists, workshops were held on the development of personal effectiveness skills “Key success factors in the work of a leader”.

At the training “Personnel management through goal setting, motivation and delegation of authority”, tools for setting goals and their achievement were considered; as well as staff motivation management; delegation of authority and employee work planning.

Attention to the preparation and development was paid not only to the personnel reserve for the “shop manager”, but also to the current shop managers and departments. Participants of the training “Planning and organization of work of subordinates” mastered practical techniques and methods that contribute to improving the efficiency of planning work on tasks, analyzed the current situation, planned resources to achieve it.

In 2019, 113 people took part in trainings for the development of the personnel reserve of the Company.

Together with conducting face-to-face training of personnel, distance learning of the personnel reserve with the study of electronic courses aimed at developing competencies that enhance the personal effectiveness of the leader helps to consolidate the material covered: effective communication, result orientation, people management, and a commercial approach.

## Scientific potential development

TGC-1 has always been a platform for the self-fulfilment of young specialists, their professional development and the presentation of scientific and technological achievements in the energy sector, youth innovative work.

On 26 July, 2019, the Vasileostrovskaya CHPP hosted the annual scientific and practical conference of TGC-1, which became a platform for presenting scientific and technical achievements in the field of energy, sharing knowledge and best practices between young specialists and experienced employees, discussing current issues and prospects of development of the Company and the industry as a whole.

Every year, with the assistance of the Training Center, the Company holds a Contest of work of young specialists and rationalizers of Gazprom Energoholding LLC, where each employee has a chance to talk about his/her idea not only within his/her structural division, but also throughout the Holding. The winners of the Contest present their projects at the international competition of scientific, technical and innovative developments aimed at the development of the fuel and energy and mining industries.

In 2019, in “Management and Automation” section, the diploma for third place was awarded to the project “Forecasting emergency conditions of heating networks using artificial intelligence technologies to optimize diagnostic, repair and reconstruction programs” by Zhanna Postnykh, a leading specialist in the strategic planning division of the Investment Department.

In the technical section, the third place was taken by the team of authors of the Verkhne-Teriberskaya HPP of the Tuloma and Serebryanskiye HPPs Cascades of the Kolsky Branch of TGC-1: Vitaly Dvoretzky — electrician for repairing electrical equipment of power plants of the electric machine shop, and Sergey Voevodin — mechanic for repairing hydraulic turbine equipment of the electric machine shop with the project: “Replacing the hydraulic drive with an electric drive”.

## Competitions of professional skills of operational personnel

In order to maintain a high level of professional skills of operational personnel, reduce the number of accidents and equipment failures as a result of erroneous personnel actions, exchange best practices in organizing and conducting operational management of TPP equipment, improve forms and methods of work, annual operational skills competitions are held.

In 2019, employees of the Company took part in:

- Competitions of professional skills of operational personnel of unit TPPs and TPPs with cross-connections of TGC-1, from May 20 to 24, 2019 in St. Petersburg at the Training Center. The competitions were attended by 81 people (9 teams).
- Competitions of professional skill of operational personnel of hydropower plants of TGC-1, from August 26 to 30, 2019 in the village of Murmashi of the Kolsky Branch. The competitions were attended by 27 people (9 teams).
- The professional skills competition of the operational personnel of TPPs with cross-connections, on the basis of the Center for Preparation of Energy Personnel of Gazprom Energoholding LLC in Moscow from June 03 to 07, 2019. Teams of the Avtovskaya CHPP of the Nevsky Branch and the Petrozavodskaya CHPP of the Karelsky Branch took part in the competitions. The team of TGC-1 — the Petrozavodskaya CHPP took 1<sup>st</sup> place according to the results of the Competition;
- Competitions of the repair personnel of Gazprom Energoholding LLC on the basis of the Center for Preparation of Energy Personnel in Moscow from December 7 to December 11, 2019. TGC-1 was represented by the team of the Apatitskaya CHPP of the Kolsky Branch, which took 3<sup>rd</sup> place.

## Cooperation with universities and vocational colleges

Modern energy requires highly qualified professionals who are educated and have a wide range of competencies, who can navigate the flow of incoming information, and are able in a competent and mobile way solve complex production problems under constantly changing conditions. The Training Center of TGC-1 pays special attention to the development of young specialists who are potential employees of the Company already from school.

In 2019, at the initiative of the Training Center, a set of career guidance measures was conducted for students of the Gazprom class, created on the basis of Gymnasium No. 426 of Lomonosov in the Petrodvorets District. The main objectives of the Gazprom classes are to form schoolchildren's notions of the value of engineering work, early vocational orientation in engineering professions, familiarization with the history, corporate culture and development prospects of TGC-1.

The practice system developed by the Training Center at TGC-1 allows students to actually test the acquired knowledge, immerse themselves in the business processes of a large Company, receive expert advice on their development, and demonstrate their presentation and communication skills.

In 2019, 540 students completed internships on the basis of the structural divisions of the Company, including production and pre-graduation internships — 182 students.

Effective cooperation between the Training Center and specialized educational institutions allows students and teachers to be aware of all innovations in the energy sector and best business practices. Every year, TGC-1 takes part in Youth Career Forums, innovation weeks, round tables, lectures, business games with the participation of leading specialists of the Company, in the Days of PJSC Gazprom.

## Contest of TGC-1 for the best graduation project among graduates of higher educational institutions of the North-West Federal District

Every year, TGC-1 holds a contest for the best graduation project in higher education institutions of the North-West Federal District. It is possible to become the best in one of the nominations:

- thermal power plants and heat grids,
- electrical systems and networks,

- economics and enterprise management in the energy sector.
- sales activities in the wholesale electricity and capacity market and the heat market.
- automation and information technology in the energy sector.
- reduction of the negative effect on the environment and ecology in the energy sector.
- construction, operation and management of renewable energy facilities.

In 2019, the 15<sup>th</sup> Contest of TGC-1 for graduation projects among students of higher educational institutions of the North-West Federal District took place.

33 projects of students from leading energy universities of the Northwest Region were submitted to the contest:

- Peter the Great St. Petersburg Polytechnic University;
- Higher School of Technology and Energy, Saint Petersburg State University of Industrial Technologies and Design;
- Saint Petersburg Mining University;
- Petrozavodsk State University;
- Murmansk State Technical University.

#### 10.4. Social program of TGC-1

A priority of the social program is arrangement of summer vacations for employees and their families.

In 2019, in the framework of the program for financing recreation, 530 employees and members of their families rested on the Black Sea coast of Russia (Health Complex “Molniya Yamal”, Tuapse District, Nebug Village, SPA Hotel Vesna, Sochi). In Georgia (Kobuleti Beach club). In the Krasnodar Territory (Tulip Inn Rosa Khutor hotel, resort of Rosa Khutor). The total cost was RUB 19,287,620.00.

Distribution of vouchers between structural divisions is carried out taking into account the observance of the principles of proportionality, the actual number of employees and taking into account the needs of workers in health-improving vacations. The company’s management takes care of family vacations for its employees. For this purpose, the employee is provided with two vouchers, including one for a member of his/her family with a partial payment of this voucher.

Another important area of the social program is compensation for the recreation of children of employees of TGC-1. In 2019, employees were reimbursed for 96 children’s trips. The amount of compensation amounted to RUB 2,086,782.10.

TGC-1 has a program on private occupational pension, comprising of two pension schemes: Corporate and Parity. In 2019, RUB 2,351,703.58 were allocated to finance the parity program of non-state pension provision, as of 31 December 2019, 256 employees were participating in the parity program.

Taking care of physical health of employees is one of major objectives of the Company. This goal is implemented by means of conclusion of contracts on compulsory and voluntary medical insurance of employees. In 2019, as in 2018, the implementation of medical voluntary medical insurance programs for employees of TGC-1 was carried out by SOGAZ JSC, with which a single contract was concluded. The medical programs of the VHI contracts allowed the Company’s employees to receive highly qualified medical care in a timely manner.

	TGC-1	Nevsky Branch	Karelsky Branch	Kolsky Branch
The amount of expenses for VHI in 2019 (RUB)	122,912,079.00	78,356,904.04	18,352,930.25	26,202,244.71

In 2019, in order to ensure insurance protection for the financial interests of employees related to injury to life and health as a result of an accident, a unified accident insurance contract was in effect. Payments were made for insured events that occurred in 2019 in the amount of RUB 800,000; for some

insured events in 2019, insurance payments will be made in 2020, after providing the necessary documentation.

Also, much attention in the social policy of the company is paid to sports and sports events. In 2019, the following tournaments and competitions were held as part of the adapted internal Regulations of TGC-1 with the Regulations of PJSC Gazprom and Gazprom Energoholding LLC:

— winter sport festival — “NICE FEST”, skiing competitions in various age categories in accordance with the standards adopted in the Regulation of Gazprom on Winter Spartakiads, alternately in all branches of the Company, the final stage was held in the Kolsky Branch with the participation of the winners of their branches. The event was attended by about 900 employees;

- football tournament for the cup of TGC-1 – 290 employees;
- volleyball tournament for the cup of TGC-1 – 320 employees.

Both representative teams of the branches and the Company’s combined team took part in different external regional and cross-industry sport tournaments: Winter Spartakiade of PJSC Gazprom; football, volleyball, basketball tournaments, chess and athletics competitions (throughout the year) among energy companies under the auspices of the Ministry of Energy of the Russian Federation; Summer Spartakiade of Gazprom Energoholding LLC; Football tournament among the executive offices of the group of companies of Gazprom Energoholding LLC; 3<sup>rd</sup> place in the football tournament of partner companies SIEMENS CUP; regional interbranch winter and summer sports and athletics meetings in the Murmansk Oblast among energy companies. As part of the improvement of sports training, the team of the Nevsky Branch took part and won the 3<sup>rd</sup> place in the strongest amateur football league in St. Petersburg — Sporting League.

## 10.5. Sponsorship and Charity

TGC-1, realizing its social responsibility and observing the principles of sustainable development, systematically provides charitable and sponsorship assistance in the region of its presence.

In 2019, financial support totaling RUB 14.4 million was provided in 8 main areas of charitable activities - to more than 60 organizations and individuals located in St. Petersburg, the Republic of Karelia, the Leningrad and Murmansk Oblasts.

**Table 51.** Charity and sponsorship projects in 2019

Project	Amount, RUB	%
Targeted medical assistance	1,059,715.06	7.3
Support to disabled children, orphans, and children from low-income families	587,574.00	4
Support to non-governmental and religious organizations, ex-soldiers and veterans	1,909,790.94	15
Cultural projects	5,819,855.00	40.1
Support to children’s and youth initiatives	432,811.00	3
Support to science and educational institutions	1,460,000.00	9.7
Support to sport	130,254.00	0.9
Public authorities and local self-governing bodies	3,000,000.00	20
<b>Total</b>	<b>14,400,000.00</b>	<b>100.00</b>

### Cultural Projects:

For five years, TGC-1 has been cooperating with the State Hermitage in financing the modernization of museum lighting systems for permanent exhibitions and the premises of restoration laboratories, as well as the energy conservation program.

In addition, in 2019, charitable assistance was provided to pay for the supply of lighting and wiring equipment for the modernization of lighting of the White Hall in the educational Museum of Applied Arts of the St. Petersburg State Art and Industry Academy named after A.L. Stieglitz.

### Support to science and educational institutions:

TGC-1 pays great attention to supporting professional education in its charitable activities, paying scholarships to distinguished students and teachers of specialized universities — the Higher

School of Technology and Energy of the Federal State Budget Educational Establishment of Higher Education “St. Petersburg State University of Industrial Technologies and Design”, Federal State Autonomous Educational Institution of Higher Education Peter the Great St. Petersburg Polytechnic University.

Comprehensive support – from financing educational trips to energy facilities to thematic lectures by company specialists – is provided by TGC-1 to the sponsored specialized Gazprom class of gymnasium No. 426 of the Petrodvorets District (St. Petersburg).

#### **Targeted medical assistance:**

Every year, TGC-1 provides targeted medical assistance to seriously ill children who need expensive treatment and who live in the region where the company operates. Cash is allocated to:

- purchase of medicines and medical equipment;
- conducting surgeries and rehabilitation courses.

In 2019, TGC-1 allocated funds for the treatment of 14 children.

#### **Support to disabled children, orphans, and children from low-income families:**

TGC-1 pays attention to supporting children’s inclusive projects and initiatives. So, in 2019, the company provided charitable assistance in organizing and conducting the XIX charity “Northern Ball” for orphans and children with disabilities from orphanages in St. Petersburg and the Leningrad Oblast at the Academy named after A.L. Stieglitz. In addition, the Company financed the organization of catering, travel and visits to theater performances by children with severe disabilities as part of the XVI All-Russian Festival of Theater Arts for Children “Harlequin”.

Also in 2019, the charitable program of TGC-1 was aimed at:

- support of public and religious organizations:
  - construction and reconstruction of Orthodox churches in the regions of its presence;
  - assistance in the purchase of medicines, food, clothing, and repair of the buildings of the “House of Mercy” for the elderly and the crisis center for women and children “The Warm House” (Volkhov, Leningrad Oblast);
  - support for the Silver Age pensioners club in the city of Kondopoga, Republic of Karelia;
    - child football support;
    - the organization of the annual Christmas fair of ceramic products for pupils of the Day Center for the Rehabilitation of Street Children in St. Petersburg;
    - support for youth and social initiatives – ice resurfacing in the Governor’s Park in Petrozavodsk, the Republic of Karelia and equipping a fountain in the city square in honor of the 75<sup>th</sup> anniversary of the liberation of Podporozhye, Leningrad Oblast;

In 2020, TGC-1 will continue its charitable and sponsorship activities in the regions of its presence.

In the framework of the Protocol of Intent dated 28 February, 2018 on the terms and conditions for the preparation and implementation of a three-year cooperation program for the preservation of cultural heritage and the development of the State Hermitage, TGC-1 intends to finance a program to modernize museum lighting systems for permanent exhibits and premises of restoration laboratories, and also energy saving programs in 2020.

In addition, the Company intends to continue supporting professional education in its charitable activities, paying scholarships to distinguished students and teachers of specialized universities - the Higher School of Technology and Energy of the Federal State Budget Educational Establishment of Higher Education “St. Petersburg State University of Industrial Technologies and Design”, Federal State

Autonomous Educational Institution of Higher Education Peter the Great St. Petersburg Polytechnic University. Cooperation with the sponsored specialized Gazprom class will continue.

Recognizing its high social responsibility and significant role in creating a favorable social environment, TGC-1 will continue to provide charitable assistance in the implementation of public and youth initiatives in the regions of its presence. As before, special attention will be paid to inclusive projects, as well as targeted assistance to children in need of treatment and medical rehabilitation.

## 10.6. Environmental protection

In 2019, TGC-1 branches implemented environmental activities, in particular design and survey work on the reconstruction and modernization of sewage networks and the construction of treatment facilities at a number of facilities:

- Measures to ensure environmental safety during storage of fuel oil and its discharge from railway tanks (discharge/filling of vehicles) of the Avtovskaya CHPP;
- Reconstruction of sewage networks with the separation of flows and the construction of treatment facilities at the discharge into the reservoir and city collector of the Avtovskaya CHPP;
- Sound attenuation device for station gas pipelines and equipment at the Avtovskaya CHPP;
- Arrangement of a system of operational environmental monitoring of the content of petroleum products in the wastewater of the Vyborgskaya CHPP discharged into a water body;
- Modernization of the internal and external communications system to stop the discharge of the Pervomayskaya CHPP into an open water body;
- Reconstruction of sewage networks, installation of dewatering of liquid technical waste sludge, construction of local treatment facilities at the discharge to the right collector of the Pravoberezhnaya CHPP;
- Modernization of the complex of treatment facilities of the Severnaya CHPP;
- Modernization of the sewage system with the installation of commercial metering stations and the construction of sewage treatment plants of PP-1 of the Centralnaya CHPP;
- Reconstruction of the sewage system with the installation of commercial metering stations and the construction of sewage treatment plants of PP-2.

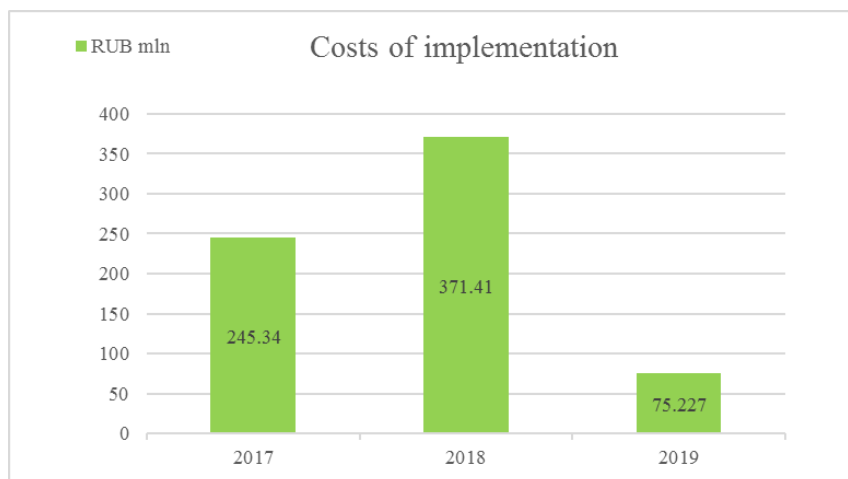


Fig. 26. Total amount of investments aimed at protecting the environment for 2017-2019

The reduction in the cost of implementing investment projects in the Ecology direction in 2019 compared with the previous two years is explained by the fact that the main work on large projects, such as the reconstruction of sewage networks with the construction of local treatment facilities at the Pravoberezhnaya CHPP, the construction of treatment facilities at the Centralnaya CHPP were completed in 2017 – 2018.

### 10.6.1. Emissions

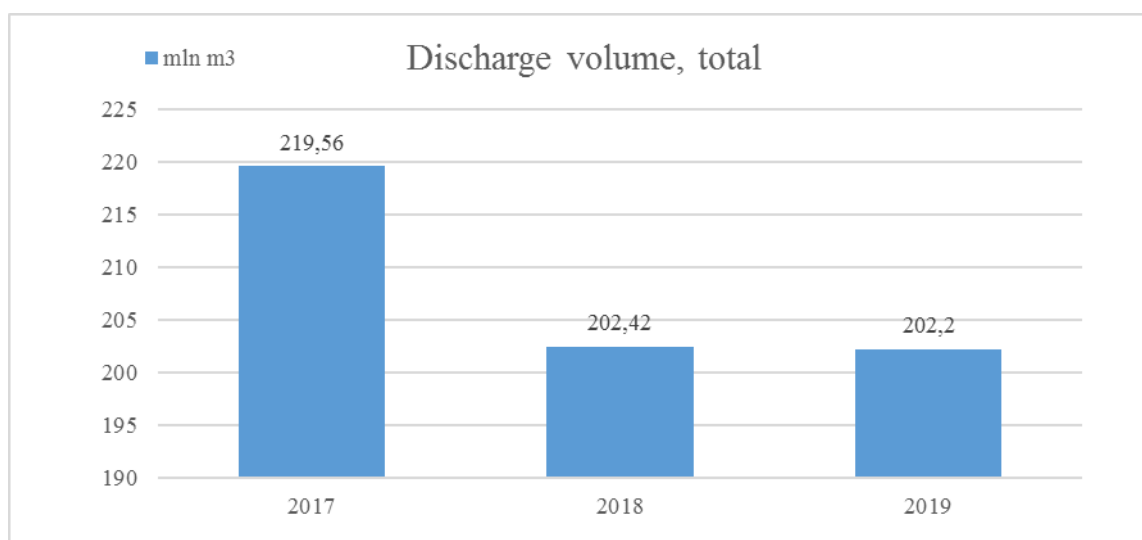
#### Wastewater discharge into surface water bodies in 2017-2019

In 2018, compared with 2017, the total volume of water disposal decreased by 12.21%. This was partly due to increased water use efficiency: at the Yuzhnaya CHPP of the Nevsky Branch, part of the discharges was transferred to storm sewers and then returned to the cycle. There is a slight increase in wastewater discharges of the category “polluted (insufficiently treated)”, which is due to an increase in the volume of water disposal in the river Okhta at the Severnaya CHPP of the Nevsky Branch compared to the previous reporting year. The volumes of wastewater of the quality category “regulatory treated” increased, which is associated with the accounting for wastewater volumes of the Niva HPPs Cascade of the Kolsky Branch.

**Table 52.** Volumes of wastewater discharges to surface water bodies in 2017 – 2019

Item No.	Indicator	Unit of measurement	2017	2018	2019
1	Water disposal in surface water bodies in total, including:	thousand m <sup>3</sup>	219,560.06	202,421.97	202,196.130
1.1.	polluted (without treatment)	thousand m <sup>3</sup>	57,532.79	53,884.60	54,304.69
1.2.	polluted (insufficiently treated)	thousand m <sup>3</sup>	1,221.32	2,273.48	2,323.50
1.3.	regulatory clean (without treatment)	thousand m <sup>3</sup>	160,803.81	146,260.89	145,566.34
1.4.	regulatory treated	thousand m <sup>3</sup>	2.14	3.00	1.60

In 2019, discharge volumes remained at the level of the previous year. Within this volume, the volume of wastewater of the quality category “regulatory treated” decreased almost two times due to the reduction in repair work with the stay of contractor personnel at the Kolsky Branch HPP, which in physical terms against the general background does not make a significant difference.



**Fig. 27.** Wastewater discharge into surface water bodies in 2017 – 2019

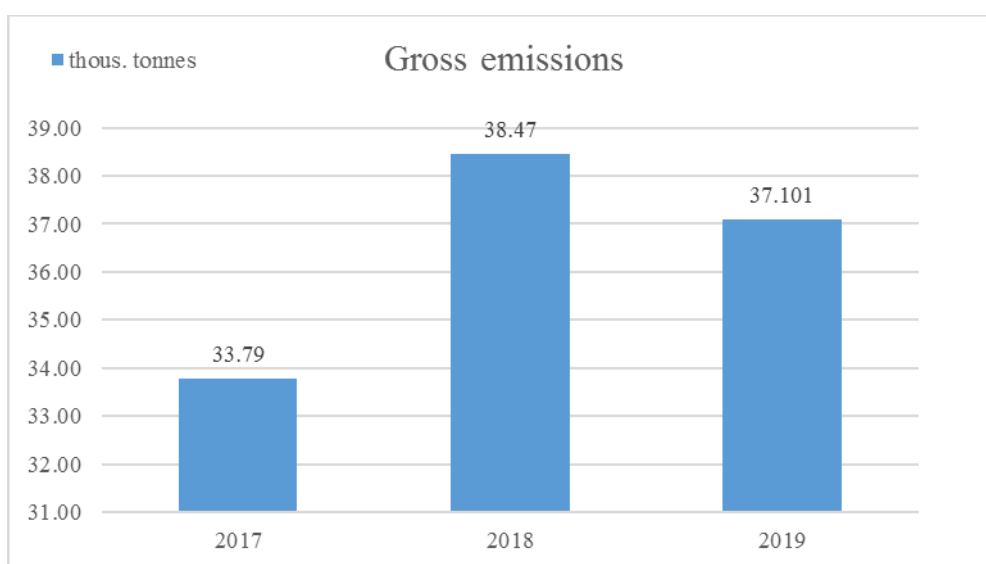
## Air pollutants: emissions of solids, emissions of gaseous and liquid substances for 2017 – 2019

**Table 53.** Emissions of pollutants into the atmosphere in 2017 – 2019

Item No.	Indicator	Unit of measurement	2017	2018	2019
1	Total gross emissions of harmful substances, including:	t	33,786.91	38,466.65	37,101.949
1.1.	within maximum permissible limits	t	30,477.15	36,427.80	36,880.391
1.2.	in excess of maximum permissible limits	t	3,309.76	2,038.80	221.558
1.3.	Total solid waste emissions, including:	t	4,453.69	3,246.60	2,740.369
1.4.	within maximum permissible limits	t	4,210.13	3,172.77	2,724.154
1.5.	in excess of maximum permissible limits	t	243.56	73.86	16.215
1.6.	Gas and liquid emissions, including:	t	29,333.22	35,220.00	34,361.58
1.7.	within maximum permissible limits	t	26,267.02	33,255.00	34,156.237
1.8.	in excess of maximum permissible limits	t	3,066.20	1,964.98	205.343

In the reporting year of 2019, compared with the previous year, the total gross pollutant emissions of TGC-1 decreased due to a decrease in production. Compared to the previous year, such measures as the development of maximum permissible limits projects and obtaining emission permits for the Yuzhnaya, Severnaya, Avtovskaya CHPPs of the Nevsky Branch, Apatitskaya CHPP of the Kolsky Branch affected the atmospheric emissions indicators compared to the previous year.

In 2019, an inventory of emission sources of the Vyborgskaya CHPP of the Nevsky Branch was carried out as part of the development of the Negative Environmental Impact declaration. When developing documentation at Avtovskaya CHPP, new methods for calculating emissions were applied, as a result of which the dynamics of emissions of pollutants into the atmosphere changed. Consequently, after obtaining new permits, the volumes of excess emissions of pollutants in 2019 significantly decreased in relation to 2018.



**Fig. 28.** The amount of pollutant emissions into the atmosphere in 2017 – 2019

The total cost of environmental protection measures in 2019 carried out in the structural divisions of the Nevsky, Karelsky and Kolsky Branches of TGC-1 amounted to more than RUB 300 million.

## APPENDIX 1. REFERENCE INFORMATION FOR SHAREHOLDERS AND INVESTORS

### Banking details of TGC-1

Tax reference number (INN)/KPP	7841312071 / 997650001
Settlement account:	4070 2810 3090 0000 0005 in JSC AB ROSSIYA, St. Petersburg
Correspondent account	3010 1810 8000 0000 0861
BIC	044030861
OGRN	1057810153400
OKPO	76201586

### Information on the Registrar of TGC-1

#### **Specialised Registrar – Holder of the Register of Gas Industry Shareholders Joint Stock Company (JSC DRAGA)**

Location / Mailing address	71/32 Novocheremushinskaya Street, 117420 Moscow
Tax reference number (INN)	7704011964
Telephone	+7 (495) 719-40-44
Fax:	+7 (495) 719-45-85
Website	<a href="http://draga.ru/">http://draga.ru/</a>
E-mail:	<a href="mailto:info@draga.ru">info@draga.ru</a>

#### **Branch of JSC DRAGA (St. Petersburg)**

Location in St. Petersburg	8/2 Bolshaya Zelenina St., 197110, St. Petersburg
Telephone	+7 (812) 775-00-81
Fax:	+7 (812) 775-00-82
E-mail:	<a href="mailto:spb@draga.ru">spb@draga.ru</a>

Date of appointment of this registrar for the maintenance of the register of the issuer's registered securities: 23 December 2010.

### Information on the Auditor of TGC-1

#### **BDO Unicon Joint Stock Company (BDO Unicon AO)**

Place of business	Section 11, 125 Bdlg. 1 Varshavskoye Shosse, 117587 Moscow
Mailing address	Business centre “Preo-8”, Preobrazhenskaya Sq. 8, 107061 Moscow
Tax reference number (INN)	7716021332
Telephone	+7 (495) 797-56-65
Fax:	+7 (495) 797-56-60
Website	<a href="http://www.bdo.ru/">http://www.bdo.ru/</a>
E-mail:	<a href="mailto:reception@bdo.ru">reception@bdo.ru</a>

#### **Branch of BDO Unicon AO (St. Petersburg)**

Location in St. Petersburg	18A Petrogradskaya Embankment, 197046 St. Petersburg, office 206, 211
Telephone	+7 (812) 332-0892
Fax:	+7 (812) 332-0892
E-mail:	<a href="mailto:spb@bdo.ru">spb@bdo.ru</a>

#### **Details of the Auditor's membership in self-regulatory organization of auditors**

Full name: Self-regulatory organization of auditors Association “Sodruzhestvo” (SRO AAS)

Location: 21/4 Michurinsky prospect, 119192 Moscow, Russia

Primary registration number of entry in the SRO Register: 12006020340.

### **Procedure for the Auditor Selection by the Issuer**

A tender procedure related to the selection of an auditor in 2019 was held in the form of an open bidding for the right to conclude agreements for organising a necessary annual audit of financial (accounting) statements of TGC-1 and its subsidiary in accordance with RAS and financial statements in accordance with IFRS for 2019.

Requirements for terms of services:

Audit of TGC-1's accounting statements prepared in accordance with RAS:

- An auditor's report shall be presented until 28 February 2020;
- Provision of services under the Agreement shall be completed until 30 April 2020.

Audit of TGC-1 Group's consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS):

- An auditor's report shall be presented until 6 March 2020;
- An auditor's report on results of the review of interim condensed consolidated financial statements shall be presented until 2 August 2020;
- Provision of services under the agreement shall be completed until 30 April 2020.

Terms of reference for performance of services (provision of services):

- for organising a necessary annual audit of TGC-1's accounting statements and its subsidiary PJSC Murmanskaya CHPP, prepared in accordance with RAS;
- for organising a necessary annual audit of TGC-1 Group's consolidated financial statements and financial statements of PJSC Murmanskaya CHPP, prepared in accordance with International Financial Reporting Standards (IFRS).

Assessment criteria for bids:

- Value criterion: agreement price.
- Non-value criteria:
  - Quality characteristics of purchased property.
  - Qualification of participants, including their experience in auditing accounting (financial) statements, summary accounting statements, and consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS), as well as availability of labour resources with necessary competency and skills to participants.

The importance of criteria is determined in percentage terms. For evaluation purposes, criteria were rated as follows:

Item No.	Request assessment criterion	Importance
<b>1.</b>	<b>Value criterion</b>	<b>40%</b>
1.1.	Agreement price:	40%
<b>2.</b>	<b>Non-value criteria, including:</b>	<b>60%</b>
2.1.	Company Goodwill	20%
2.2.	Financial standing	20
2.2.	Qualification of a participant	60%
	Sum of criteria importance	100%

The final rating of bids is calculated as the sum of ratings under the assessment criteria Contract Price, Company Goodwill, Financial standing, and Qualification of the Participant. Criterion rating is the score received on results of bid assessment under the respective criterion adjusted by the assessment criterion significance value. When calculating the fractional value of the rating, it is rounded up to the second decimal place in accordance with the mathematical rounding rules. A 100-point scale is used for assessment of bid by each criterion.

Indicators and indicator values, as well as score calculation formulas are provided for non-value criteria.

The Commission assigns a sequence number to each Bid based on evaluation results in the

descending order of benefits of Contract conditions. The Bid with the best Contract conditions is rated the first. If several Bids contain similar Contract conditions, a Bid received earlier will be assigned a lesser numerical than the other Bid with the same conditions.

The procedure for appointment of an auditor candidate for approval by the Shareholders Meeting (participants), including the management body making the respective resolution:

In accordance with sub-cl. 9, cl. 20.1., art. 20 of the Issuer's Articles of Association, the Board of Directors is authorised to "provide recommendations to the General Shareholders Meeting regarding agenda items involving the approval of the Company's auditor."

In accordance with sub-cl. 9, cl. 15.1., art. 15 of the Issuer's Articles of Association, the General Shareholders Meeting of the Issuer is authorised to: approve the Company's Auditor.

### **Factors that can influence the independence of the Company's Auditor**

There are no factors that can influence the independence of the Auditor (an auditing company) from the Issuer or material interests binding the Auditor (persons holding positions in the management and control bodies of the auditing company's financial and economic activities) with the Issuer (persons holding positions in the management and control bodies of the Issuer's financial and economic activities).

With regards to maintaining the Auditor's independent status, Auditors are guided by art. 8 of the Federal Law No. 307-FZ of 30 December 2008 On Auditing, as well as by Russian and international professional ethics codes of auditors.

### **Period of the last external auditor selection procedure**

Based on the resolution of the Audit Committee of TGC-1's Board of Directors, an open bidding for the right to submit a winner candidate for consideration and approval by the General Shareholders Meeting followed by signing of an agreement with TGC-1 for auditing of accounting financial statements for 2019.

Bids were opened witnessed by representatives of auditing companies. Submitted bidding materials were assessed according to the following criteria: service fee, participants' goodwill, financial standing, bidders' qualification, summary rating.

Following the decision of TGC-1 Tender Committee, the results of the open request for proposals were summed up. The Tender Committee decided to recommend BDO Unicon AO as the Auditor of TGC-1.

### **Material conditions of the agreement with the Company's external auditor**

The subject of the agreement is organising a necessary annual audit of consolidated financial (statutory financial) statements of TGC-1 and its subsidiary for compliance with the Russian Accounting Standards and consolidated financial results for compliance with IFRS for 2019.

Period of services:

- Audit of TGC-1's accounting statements prepared in accordance with RAS:
  - An auditor's report shall be presented until 28 February 2020;
  - Provision of services under the Agreement shall be completed until 30 April 2020.
- Audit of TGC-1 Group's consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS):
  - An auditor's report shall be presented until 6 March 2020;
  - An auditor's report on results of the review of interim condensed consolidated financial statements shall be presented until 2 August 2020;
  - Provision of services under the agreement shall be completed until 30 April 2020.

Fee for services: In accordance with sub-cl. 10, cl. 20.1., art. 20 of the Issuer's Articles of Association, determination of the fee for the Auditor's services is in the competence of the Board of Directors.

On 30 April 2019, TGC-1's Board of Directors adopted the decision to take into account the results of the open electronic competitive selection for the right to include a winner to the procedure of consideration and approval by the General Shareholders Meeting and further conclusion of an audit services agreement with TGC-1 in accordance with RAS and IFRS for 2019. Recommend the Company's General Shareholders Meeting to approve BDO Unicon AO as the Auditor of the Company. In case the General Shareholders Meeting approves BDO Unicon AO as the Company's Auditor, determine a service fee in the amount of not exceeding RUB 6,000,000, including 20% VAT - RUB 1,000,000.

By the results of TGC-1's Annual General Shareholders Meeting held on 10 June 2019, it was decided to approve BDO Unicon AO as the Company's Auditor conducting audit of financial statements under RAS and consolidated financial statements under IFRS for 2019.

There are no deferred or overdue payments for the services rendered by the auditor.

With regards to maintaining the Auditor's independent status, Auditors are guided by art. 8 of the Federal Law No. 307-FZ of 30 December 2008 On Auditing, as well as by Russian and international professional ethics codes of auditors.

**Contact information:**

**TGC-1**

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E-mail: [Vaschenko.SA@tgc1.ru](mailto:Vaschenko.SA@tgc1.ru)

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IR contacts  
[ir@tgc1.ru](mailto:ir@tgc1.ru)

**The Bank of New York Mellon (GDR Depository Bank of TGC-1)**

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The Bank of New York Mellon, Depository Receipts  
ADR Division/EEMEA  
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Fax: +1 (732) 667 9098  
[mira.daskal@bnymellon.com](mailto:mira.daskal@bnymellon.com)

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Tel.: +7 (495) 967-31-10  
Fax: +7 (495) 967-31-06  
[Yury.mandzhiev@bnymellon.com](mailto:Yury.mandzhiev@bnymellon.com)

**APPENDIX 2. ABRIDGED FINANCIAL STATEMENTS OF TGC-1 FOR 2019 UNDER THE RUSSIAN ACCOUNTING STANDARDS (RAS)**

**BALANCE SHEET as at 31 December 2019, RUB thous.**

	31 December 2018	31 December 2019
<b>I. FIXED ASSETS</b>		
Intangible assets	93,245	78,893
Results of research and development	7,467	83,922
Fixed assets	77,364,255	78,506,238
Income-bearing investments into tangible assets	-	-
Long-term financial investments	19,499,723	17,739,739
Deferred tax assets	301,769	259,419
Other non-current assets	1,705,783	3,422,953
<b>Total Section I</b>	<b>98,972,242</b>	<b>100,091,164</b>
<b>II. CURRENT ASSETS</b>		
Inventories	3,333,971	3,348,427
Value added tax on goods purchased	97,616	91,837
Accounts receivable	15,394,194	16,565,184
Short-term financial investments (excluding cash equivalents)	38,083	10,918,972
Cash and cash equivalents	6,837,801	29,157
Other current assets	1,378,537	324,995
<b>Total Section II</b>	<b>27,080,202</b>	<b>31,278,572</b>
<b>TOTAL SECTION I AND II</b>	<b>126,052,444</b>	<b>131,369,736</b>
<b>III. EQUITY AND RESERVES</b>		
Authorized capital	38,543,414	38,543,414
Own shares buy-back	-	-
Revaluation of non-current assets	9,609,586	9,587,544
Additional capital (without revaluation)	23,285,600	23,285,600
Reserve capital	1,771,995	1,927,171
Retained earnings (loss)	24,615,051	31,491,968
<b>Total Section III</b>	<b>97,825,646</b>	<b>104,835,697</b>
<b>IV. NON-CURRENT LIABILITIES</b>		
Borrowings and bank loans	8,500,000	4,000,000
Deferred tax liabilities	3,064,440	2,865,256
Other non-current liabilities	139,753	203,191
<b>Total Section IV</b>	<b>11,704,193</b>	<b>7,068,447</b>
<b>V. CURRENT LIABILITIES</b>		
Borrowings and bank loans	6,213,762	8,911,594
Accounts payable	10,062,702	10,275,754
Income of future periods	-	-
Estimated liabilities	246,141	278,244
Other current liabilities	-	-
<b>Total Section V</b>	<b>16,522,605</b>	<b>19,465,592</b>
<b>TOTAL SECTION III, IV, V</b>	<b>126,052,444</b>	<b>131,369,736</b>

**Statement of financial performance for 2019, RUB thous.**

<b>P&amp;L Statement, RUB thousand</b>	<b>2018</b>	<b>2019</b>
<b>Proceeds and expenses of ordinary activities</b>		
<b>Revenue</b> (net) revenues earned on the sale of goods, products, works, and services	<b>87,079,851</b>	<b>90,836,923</b>
heat	33,037,084	36,316,345
electricity	33,689,386	33,620,989
capacity	19,867,247	20,187,113
other goods, products, works and services	486,134	712,476
<b>Production cost</b>	<b>(76,300,384)</b>	<b>(78,988,281)</b>
heat	(36,953,572)	(39,015,231)
electricity	(20,921,959)	(20,897,629)
capacity	(18,312,984)	(18,843,500)
other goods, products, works and services	(111,869)	(231,921)
<b>Gross profit</b>	<b>10,779,467</b>	<b>11,848,642</b>
<b>Profit (loss) from sales</b>	<b>10,779,467</b>	<b>11,848,642</b>
<b>Other proceeds and expenses</b>		
Interest receivable	298,980	413,984
Interests Payable	(723,443)	(530,307)
Income earned from equity participation in other companies	0	0
Other proceeds	5,274,477	2,836,390
Other costs	(7,087,328)	(2,963,812)
<b>Profit (loss) before taxation</b>	<b>8,542,153</b>	<b>11,604,897</b>
Income tax, incl.	(2,110,450)	(2,265,519)
current income tax	(2,221,908)	(2,292,192)
income tax of past years	111,458	26,673
including permanent tax liabilities (assets)	112,112	133,636
Changes in deferred tax liabilities	418,853	199,184
Changes in deferred tax assets	221,913	(42,350)
Other	26,185	(1,631)
<b>Net profit</b>	<b>7,098,654</b>	<b>9,494,581</b>
<b>REFERENCE</b>		
Result of revaluation of non-current assets not included to the net profit (loss) for the reporting year	–	–
Results of other transactions not included to the net profit (loss) for the reporting year	–	–
Cumulative financial result for the year	7,098,654	9,484,581
Basic earnings (loss) per share, <i>RUB</i>	0.00184	0.00246
Diluted earnings (loss) per share	–	–

Complete accounting statements of TGC-1 for 2019 under the Russian accounting standards are presented on the corporate website of TGC-1 <http://www.tgc1.ru/ir/reports/> and in the Internet used by TGC-1 for information disclosure: <http://www.e-disclosure.ru/portal/files.aspx?id=7263&type=3>

**APPENDIX 3. ABRIDGED CONSOLIDATED FINANCIAL STATEMENTS OF TGC-1 FOR 2019 UNDER INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)**

**Consolidated statement of financial position as at 31 December 2019, RUB thousand**

	<b>31 December 2018</b>	<b>31 December 2019</b>
<b>Non-current assets</b>		
Property, plant and equipment	138,343,333	148,606,618
Investment property	174,440	164,166
Intangible assets	2,258,148	3,107,630
Investments in associates	410,718	421,325
Deferred income tax assets	499,538	315,755
Other non-current assets	255,568	1,445,199
<b>Total non-current assets</b>	<b>141,941,745</b>	<b>154,060,693</b>
<b>Current assets</b>		
Cash and cash equivalents	6,866,953	880,717
Short-term investments	4,370	10,009,551
Trade and other receivables	14,950,000	13,715,453
Current income tax prepayments	17,643	156,503
Inventories	4,013,641	3,613,153
<b>Total current assets</b>	<b>25,852,607</b>	<b>28,375,377</b>
Non-current assets held for sale	117,440	68,139
<b>TOTAL ASSETS</b>	<b>167,911,792</b>	<b>182,504,209</b>
<b>EQUITY AND LIABILITIES</b>		
<b>Equity</b>		
Share capital	38,543,414	38,543,414
Share premium	22,913,678	22,913,678
Merger reserve	(6,086,949)	(6,086,949)
Other reserves	(1,209,011)	(1,209,011)
Effect of remeasurements of post-employment benefits obligations	110,689	(57,726)
Retained earnings	61,638,117	68,649,133
<b>Equity attributable to the Company's owners</b>	<b>115,909,938</b>	<b>122,752,539</b>
Non-controlling interest	8,932,605	8,920,732
<b>TOTAL EQUITY</b>	<b>124,842,543</b>	<b>131,673,271</b>
<b>LIABILITIES</b>		
<b>Non-current liabilities</b>		
Long-term borrowings	11,598,000	4,000,000
Deferred income tax liabilities	10,777,059	10,328,460
Post-employment benefits obligations	895,250	1,158,573
Other non-current liabilities	130,231	7,553,591
<b>Total non-current liabilities</b>	<b>23,400,540</b>	<b>23,040,624</b>
Short-term borrowings	7,461,589	13,257,860
Trade and other payables	10,518,874	13,514,383
Current income tax payable	626,612	32,454
Other taxes payable	1,061,634	985,617
<b>Total current liabilities</b>	<b>19,668,709</b>	<b>27,790,314</b>
<b>TOTAL LIABILITIES</b>	<b>43,069,249</b>	<b>50,830,938</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>167,911,792</b>	<b>182,504,209</b>

**Consolidated statement of profit or loss and other comprehensive income for 2019, RUB thousand**

	<b>Year ended 31 December 2018</b>	<b>Year ended 31 December 2019</b>
<b>Revenue</b>	<b>92,455,180</b>	<b>97,255,648</b>
Operating expenses	(77,428,990)	(85,599,003)
Impairment gain / (loss) on financial assets	(2,116,843)	491,902
<b>Operating profit</b>	<b>12,909,347</b>	<b>12,148,547</b>
Finance income	1,702,601	538,965
Finance costs	(2,335,020)	(2,359,508)
<b>Finance costs, net</b>	<b>(632,419)</b>	<b>(1,820,543)</b>
<b>Profit before income tax</b>	<b>12,315,719</b>	<b>10,338,611</b>
Income tax expense	(1,894,317)	(2,348,385)
<b>Profit for the year</b>	<b>10,421,402</b>	<b>7,990,226</b>
<b>Other comprehensive (expense) / income</b>		
<i>Items that will not be reclassified to profit or loss:</i>		
Remeasurements of post-employment benefits obligations	225,343	(211,475)
Income tax on remeasurement of post-employment benefit obligations	(41,051)	36,505
<b>Other comprehensive (expense) / income for the year including tax</b>	<b>184,292</b>	<b>(174,970)</b>
<b>Total comprehensive income for the year</b>	<b>10,605,694</b>	<b>7,815,256</b>
<b>Profit / (loss) is attributable to:</b>		
Owners of the TGC-1	10,118,216	8,927,941
Non-controlling interests	303,186	(937,715)
<b>Profit for the year</b>	<b>10,421,402</b>	<b>7,990,226</b>
<b>Total comprehensive income / (expense) is attributable to:</b>		
Owners of the TGC-1	10,300,665	8,759,526
Non-controlling interests	305,029	(944,270)
<b>Total comprehensive income for the year</b>	<b>10,605,694</b>	<b>7,815,256</b>
Earnings per ordinary share for profit attributable to owners of the TGC-1, basic and diluted ( <i>in Russian Roubles</i> )	0.0026	0.0023

The full consolidated financial statements of TGC-1 under the International Financial Reporting Standards for 2019 are presented on the corporate website of TGC-1 <http://www.tgc1.ru/en/ir/reports/> and in the Internet used by TGC-1 for information disclosure: <http://www.e-disclosure.ru/portal/files.aspx?id=7263&type=4>