

# Operating Results

## Analysis of operating results

The Rosseti Group's core business involves the provision of electricity transmission and distribution services, as well as grid connection services

### Power transmission

Indicator	2021	2022	2023 plan	2023 actual	Change 2023/2022	2024 plan
Electricity delivery to the grid <sup>1</sup> , mln kWh	866,031	864,856	860,144	874,808	1.15%	883,119
Electricity delivery from the grid, mln kWh	791,533	789,743	784,967	799,120	1.19%	807,512
Electricity losses in the grid, mln kWh	74,498	75,113	75,177	75,689	0.77%	75,607
Level of electric power losses, %	8.60	8.69	8.74	8.65	-0.04 p.p.	8.56

### Indicators of energy transmission services

Subsidiary	Volume of electricity supply to the grid, mln kWh					Volume of electricity delivery from the grid to consumers, mln kWh					Level of electric power losses, %				
	2021	2022	2023 plan	2023 actual	2024 plan	2021	2022	2023 plan	2023 actual	2024 plan	2021	2022	2023 plan	2023 actual	2024 plan
PJSC Rosseti Centre	60,161	60,082	59,073	59,721	59,334	54,120	53,804	52,778	53,474	53,032	10.04	10.45	10.66	10.46	10.62
PJSC Rosseti Centre and Volga Region	53,797	53,884	53,196	54,469	54,006	49,863	50,007	49,266	50,481	50,018	7.31	7.19	7.39	7.32	7.38
PJSC Rosseti Volga	52,785	52,089	51,827	52,417	52,687	49,719	49,067	48,715	49,524	49,640	5.81	5.80	6.00	5.52	5.78
PJSC Rosseti North-West	33,673	33,399	33,518	33,341	33,354	31,555	31,431	31,495	31,399	31,320	6.29	5.89	6.03	5.83	6.10
PJSC Rosseti Siberia	60,926	61,035	60,222	62,136	61,849	56,349	56,383	55,524	57,329	57,001	7.51	7.62	7.80	7.74	7.84
JSC RES	-	-	-	-	14,774	-	-	-	-	13,284	-	-	-	-	10.08
PJSC Rosseti Tomsk	4,999	5,223	5,171	5,138	5,007	4,525	4,755	4,707	4,679	4,556	9.48	8.96	8.97	8.93	9.01
PJSC Rosseti Lenenergo	71,143	72,958	72,757	73,683	71,416	66,388	68,235	67,998	68,971	66,836	6.68	6.47	6.54	6.40	6.41
PJSC Rosseti South	28,922	28,747	28,891	29,197	29,434	26,092	25,983	26,117	26,450	26,612	9.78	9.61	9.60	9.41	9.59
PJSC Rosseti Northern Caucasus	20,299	21,398	21,882	21,958	22,597	15,356	15,978	16,730	16,006	17,006	24.35	25.33	23.54	27.11	24.74
JSC Chechenenergo	3,155	3,207	3,311	3,330	3,448	2,019	2,165	2,296	2,156	2,304	35.99	32.49	30.65	35.26	33.18
PJSC Rosseti Kuban	25,222	26,062	26,300	26,860	27,162	22,720	23,583	23,702	24,312	24,485	9.92	9.51	9.88	9.49	9.86
PJSC Rosseti Moscow Region	97,649	98,771	99,406	99,736	98,966	89,988	91,131	91,819	92,169	91,421	7.85	7.73	7.63	7.59	7.62
PJSC Rosseti Lenenergo	42,163	41,680	36,578	37,351	37,200	38,022	37,495	32,457	33,143	33,007	9.82	10.04	11.27	11.27	11.27
JSC Rosseti Tyumen	53,667	56,194	55,831	55,029	55,038	52,204	54,712	54,338	53,561	53,613	2.73	2.64	2.67	2.67	2.59
JSC Rosseti Yantar	4,403	4,397	4,423	4,454	4,470	3,982	3,986	4,011	4,040	4,054	9.56	9.35	9.31	9.31	9.32
<b>Total for the distribution grid complex</b>	<b>612,962</b>	<b>619,126</b>	<b>612,385</b>	<b>618,820</b>	<b>630,740</b>	<b>562,902</b>	<b>568,715</b>	<b>561,951</b>	<b>567,693</b>	<b>578,187</b>	<b>8.17</b>	<b>8.14</b>	<b>8.24</b>	<b>8.26</b>	<b>8.33</b>
Transmission grid complex	597,974	594,080	596,470	605,333	609,306	573,536	569,378	571,727	580,771	586,252	4.26	4.34	4.33	4.23	3.93
<b>Total for the Rosseti Group of companies</b>	<b>866,031</b>	<b>864,856</b>	<b>860,144</b>	<b>874,808</b>	<b>883,119</b>	<b>791,533</b>	<b>789,743</b>	<b>784,967</b>	<b>799,120</b>	<b>807,512</b>	<b>8.60</b>	<b>8.69</b>	<b>8.74</b>	<b>8.65</b>	<b>8.56</b>

<sup>1</sup> Indicators given include mathematical rounding of values to integers.

In 2023, the volume of electricity supplied to the grid by the Rosseti Group increased by 1.15% compared to 2022, totalling 874.8 billion kWh. The main reason behind the growth is an increase in electricity consumption by consumers.

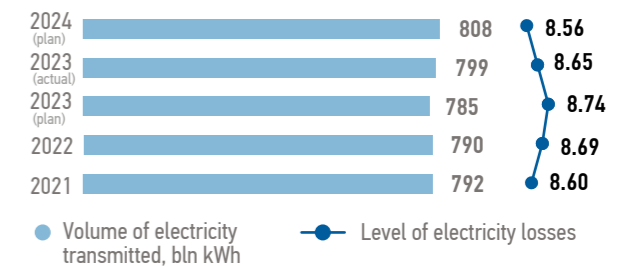
The volume of electricity transmitted in 2023 increased by 1.19% compared to 2022, amounting to 799.1 billion kWh. The main reason behind the growth is an increase in electricity consumption by consumers. In 2024, electricity transmission is projected to increase on account of the projects implemented by the Rosseti Group to consolidate power grid assets.

The relative level of electricity losses in 2023 was 8.65% of electricity delivery to the grid, which is 0.09 p.p. below the planned level and 0.04 p.p. below the 2022 level. At the same time, losses exceeded the previous year's figure by 576 million kWh, which is associated with the consolidation of power grid assets implemented by the Rosseti Group.

### Electricity supply to the grid, mln kWh



### Indicators of energy transmission services, %



Reducing electricity losses is a top priority for the Rosseti Group. Every power grid company of the Rosseti Group takes steps to lower losses.

The key areas of loss reduction measures are as follows:

- Preventing off-the-meter electricity consumption
- Improving the efficiency of grids and power facilities by renovating and reconfiguring grids, as well as reducing power consumption for own needs

To prevent off-the-meter consumption, the Rosseti Group's companies have been installing modern electricity consumption metering devices in recent years.



— Rosseti is working hard to create an intelligent electricity metering system. How many smart meters have already been installed? What impact do these efforts have on customers and the grid sector?

— The Rosseti Group is in charge of more than 20 million points of fiscal and technical electricity metering. About a third of them (6.8 million points) are equipped with modern metering devices. In 2023 alone, about 1.3 million devices were installed and verified, including almost 1.2 million metering points equipped with smart meters.

The expansion of the smart metering system is aligned with the adopted amendments to the Federal law “On Electricity”, according to which, since 1 July 2020, consumers do not have to buy meters and pay for their installation. This is now covered by energy companies — guaranteeing suppliers and grid operators. From 1 January 2022, the metering system is based on smart meters only. The equipment meets the requirements of the Rules for Providing Access to the Minimum Set of Functions of Electric Power (Capacity) Smart Metering Systems approved<sup>1</sup> by the Russian Government.

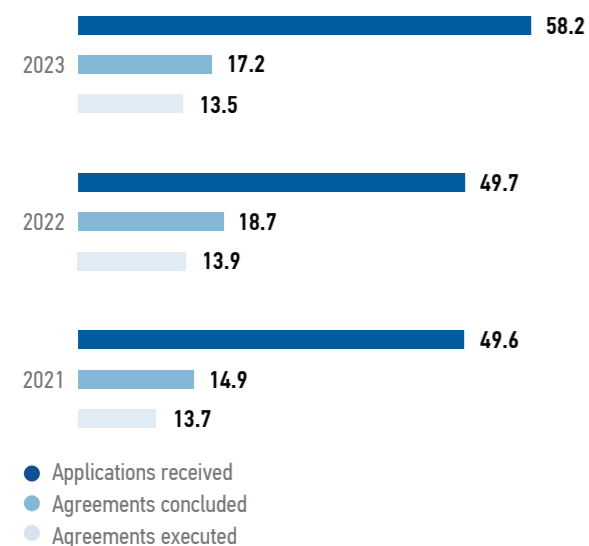
‘Smart’ metering allows us to reduce electricity losses and operating costs, as well as to improve payment discipline, while giving our customers accurate information about their electricity consumption and, consequently, an instrument to manage it.

**Elena Andreeva,**  
Deputy General Director for Sales of Services and Electricity Transmission

## Grid Connection

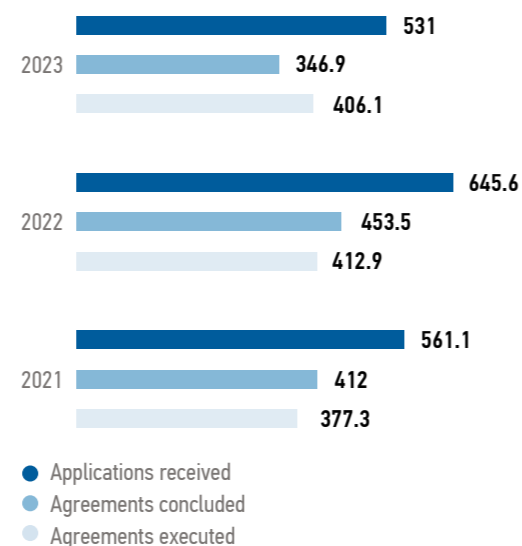
In general, the Rosseti Group shows a slight year-on-year decrease in the main grid connection indicators for 2023, which is explained by a lower demand driven down

### Capacity of received applications, concluded and executed grid connection agreements, GW



as the amendments to the laws of the Russian Federation came into force on 1 July 2022, regarding the amount of payment for grid connections for applicants of the up to 150 kW category.

### Number of accepted applications, concluded and executed grid connection agreements, thsd



## Structure of executed grid connection agreements in 2023

Indicator	Number of executed agreements	Executed agreements, kW
up to 15 kW inclusive, total	368,693	4,237,634
including individuals, up to 15 kW inclusive	332,864	3,939,613
over 15 and up to 150 kW inclusive	32,363	2,179,387
over 150 kW and less than 670 kW	3,428	1,017,660
not less than 670 kW	1,538	5,431,762
power generation facilities	120	612,002
<b>Total</b>	<b>406,142</b>	<b>13,478,445</b>

## Main indicators of grid connection in 2023 and plan for 2024

Indicators	applications received	applications received	agreements concluded	agreements concluded	agreements executed	agreements executed	agreements executed	agreements executed
	number	kW	number	kW	number	kW	number	kW
	2023				Plan 2024			
PJSC Rosseti Centre	54,927	3,916,421	38,470	972,306	50,745	1,103,740	31,253	758,365
PJSC Rosseti Lenenergo	41,652	2,849,605	26,410	1,010,294	33,959	1,128,221	23,272	972,586
PJSC Rosseti Moscow Region	85,287	9,142,792	58,144	3,090,326	77,259	2,241,474	56,527	2,743,741
PJSC Rosseti Volga	28,205	2,287,254	16,253	622,391	16,877	513,203	13,135	449,801
JSC Rosseti Yantar	10,223	471,988	5,348	184,419	5,483	138,089	4,576	142,038
PJSC Rosseti South	22,035	1,770,906	13,698	605,354	14,904	457,865	13,747	449,281
PJSC Rosseti Kuban	45,776	2,072,396	32,233	853,861	34,992	838,626	28,202	661,724
PJSC Rosseti Northern Caucasus	21,187	1,744,427	15,096	936,225	13,518	427,172	10,794	406,462
JSC Rosseti Tyumen	12,444	1,156,956	6,747	355,839	6,316	240,343	5,761	411,172
PJSC Rosseti Siberia	43,338	4,214,434	28,505	1,341,291	21,160	536,661	22,004	1,110,651
PJSC Rosseti Tomsk	2,131	69,431	1,617	53,565	1,635	43,711	1,492	31,847
PJSC Rosseti North-West	25,950	1,881,320	17,389	680,091	19,536	470,063	7,635	410,132
PJSC Rosseti Lenenergo	48,248	3,862,322	27,516	939,553	31,269	740,711	19,630	887,554
PJSC Rosseti Centre and Volga Region	63,671	3,434,084	43,210	1,004,450	61,494	1,294,476	40,488	895,580
Other	25,596	3,465,607	16,018	913,074	16,816	666,572	15,070	698,493
Distribution complex	530,670	42,339,943	346,654	13,563,038	405,963	10,840,924	293,586	11,029,428
Transmission complex (PJSC Rosseti)	379	15,874,669	214	3,635,754	179	2,637,148	153	4,946,275
<b>Total for the Rosseti Group of companies</b>	<b>531,049</b>	<b>58,214,612</b>	<b>346,868</b>	<b>17,198,792</b>	<b>406,142</b>	<b>13,478,072</b>	<b>293,739</b>	<b>15,975,704</b>

<sup>1</sup> Resolution of the Government of the Russian Federation No. 890 dated 19 June 2020.

### Improving the quality of grid connection services

Effective and successful customer relations are a priority for the Rosseti Group's companies. To this end, the Company applied a customer-centric approach to its business processes, supported by the Uniform Quality Standards for Customer Service of the Rosseti Group's companies<sup>1</sup> approved the Management Board of PJSC Rosseti.

For the convenience of consumers, the Group has the following channels of interaction:

- Face-to-face service offices
- Power engineers' hotline called Bright Line 220 with federal number 8-800-220-0-220
- Digital services of PJSC Rosseti's power grid portal (grid connection (GC) portal)
- Mobile application Rosseti — My Account
- Light Country portal

Based on customer needs and high demand for digital technologies, the Group transforms processes and introduces digital services, e.g., more than 50 services and facilities for consumers, grid operators and sales organisations were digitised on the GC Portal. In 2023, electronic services were upgraded and the functionality of the GC Portal was expanded as it comes to grid connections and additional services, as well as smart metering services.

To improve the accessibility of energy infrastructure and ensure uniform standards of electronic interaction, the Unified Portal of State and Municipal Services (Functions) offers the service on Rosseti grid connection of power receivers, which covers all regions where the Rosseti Group operates. PJSC Rosseti helped to connect third-party LGOs to the Unified Portal via the GC Portal. As of the end of 2023, the Rosseti Group received 448,000 grid connection applications through the digital services of the GC and the Unified Portal of State and Municipal Services (Functions).

Submit a grid connection application on the website [portal-tp.rf](https://portal-tp.rf)



#### Main values and principles of the Uniform Customer Service Quality Standards



##### Availability of infrastructure, services and facilities

- Non-discriminatory access to energy infrastructure in accordance with the laws of the Russian Federation
- Accessibility of services and facilities for all consumers, taking into account their specific characteristics, and elimination of barriers
- Focus on the needs of consumers in building customer services and facilities



##### Quality of services and facilities

- Achievement of the established indicators of reliability and quality of services
- Improvement of the quality of services and facilities
- Proactive service delivery based on feedback and analytics
- Integration of digital technologies and digitalisation of services and facilities



##### Openness and transparency

- Regular feedback from consumers
- Open dialogue with all categories of consumers, consideration of feedback and consumer needs
- Transparency of business processes and objective consideration of consumer complaints

#### Level of customer satisfaction with grid connection services, points (out of 10 possible)



## Investment activities

### Rosseti Group's Investment Programme for 2024–2028 approved in 2023:

- Financing of the Investment Programme — RUB 1,239.8 bln, VAT included
- Commissioning of fixed assets — RUB 1,236.9 bln, VAT excluded
- Commissioning of transformer capacity — 31.5 GVA
- Commissioning of power transmission lines — 78,900 km

The Rosseti Group has an extensive investment programme.

The goals of the Rosseti Group's investment programme are as follows:

- To develop main and interregional power grids as part of the electric power complex of the Russian Federation
- To ensure reliable and uninterrupted transmission of electric power to consumers
- To ensure functioning of the wholesale market
- To facilitate joint operation of the Russian electric power system and electric power systems of foreign countries
- To ensure the economically sustainable and profitable operation of the Rosseti Group
- To improve the quality and reliability of electricity supply for end consumers
- To maintain tariff-based sources of investment in grid renewal and expansion



- To grow the Company, while creating of added value both in the electric power industry and in new markets
- To bolster interaction with consumers, the Rosseti Group and investors

#### Main areas of the investment programme

Renewal of equipment required for sufficient, reliable and uninterrupted power supply to consumers	Introduction of new capacities if necessary to cover load deficits or create a capacity margin
Reduction of production costs, in part by improving equipment efficiency, using more cost-effective technical solutions and reducing losses	Higher safety of equipment operation, including environmental safety
Upgrade and renewal of fixed assets	Provision for grid connections
Consolidation of power grid assets	

Rosseti Group's investment programme is reviewed annually to align it with industry development plans and customer needs.

The investment programme is financed primarily from the Rosseti Group's own funds. The share of borrowed funds in the investment programme budgeting is 14%.

<sup>1</sup> Minutes of the Management Board of PJSC Rosseti No. 25 dated 23 May 2023.