

RESULTS OF THE PROGRAMME IN 2022, METERING POINTS:

Indicator	Actual 2021	Plan 2022	Actual 2022
Scope of completion (introduction, implementation) of measures including:	49,385	58,109	4,524
Installation/replacement of technical electricity meters	2,646	1,950	1,950
Installation/replacement of commercial electricity meters within the grid connection framework, under the Investment Programme	20,389	24,263	27,890
Installation/replacement of commercial electricity meters in case of absence or breakdown, or expiry of the calibration interval/service life of meters, under the Investment Programme	6,221	23,273	8,386
Installation/replacement of commercial electricity meters in case of absence or breakdown, or expiry of the calibration interval / service life of meters, under the Repair Programme	6,848	8,623	7,298
Installation/replacement of electricity meters under energy service agreements	13,281	0	0

Programme costs, including payments under energy service agreements of previous years, amounted to

**2,387.066 RUB mn**  
excl. VAT

Net of payments under energy service agreements of previous years, the programme costs amounted to

**1,346.518 RUB mn**  
excl. VAT

Introduction of electricity meters with remote data collection

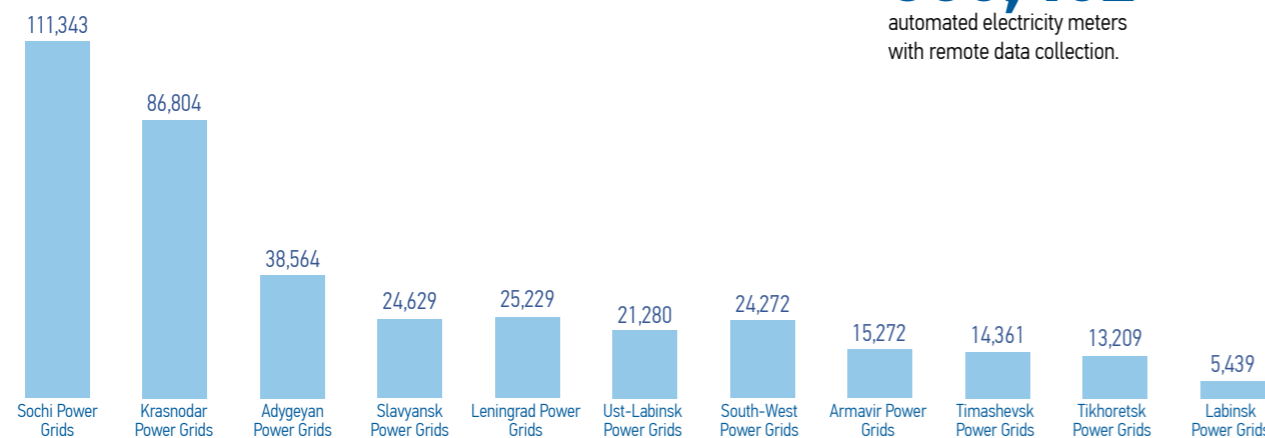
In the reporting year, 1,950 technical electricity meters and 29,900 commercial electricity meters were installed and automated. A total of 31,850 electricity meters installed/replaced and automated in 2022.

In 2023, it is planned to continue the installation/replacement and automation

of commercial electricity meters in the absence, breakdown, expiry of the calibration interval / service life of electricity meters, as well as during grid connection, in order to create a smart electricity metering system to meet the requirements of the Federal Law "On Amending Certain Legislative Acts of

the Russian Federation in Connection with the Development of Electricity (Power) Metering Systems in the Russian Federation" No. 522-FZ dated 27 December 2018.

TOTAL NUMBER OF AUTOMATED ELECTRICITY METERS WITH REMOTE DATA COLLECTION, AS OF 31 DECEMBER 2022 ACROSS ROSSETI KUBAN, PJSC



As of 31 December 2022, there were

**380,402**  
automated electricity meters with remote data collection.

# GRID CONNECTION SERVICES

Rendering high-quality services for applicants, ensuring the availability of the electric power infrastructure in terms of grid connection of consumers, developing the power grid complex, and eliminating power grid restrictions for grid connection of new consumers and providing high-quality and reliable power supply to existing electricity consumers are the near-term grid connection goals of Rosseti Kuban.

Based on the 2022 results, the approved grid connection targets were over-achieved over the year.

The demand for grid connections has continued to be quite strong. There are around 38,000 applications per year.

The volume of completed grid connection agreements in 2022 grew:

- compared to 2020 – by 63% in terms of the number of agreements and by 22% in terms of connected capacity (145 MW)
- compared to 2021 – by 9% in terms of the number of agreements and by 0.9% (7 MW) in terms of connected capacity

Growth drivers:

- Removal of covid restrictions and realisation of deferred demand
- Shift in developers' focus from multi-family to low-rise and single-family housing projects
- Changes to the laws regulating grid connections for members of gardeners' non-commercial partnerships and dacha farming non-commercial partnerships, allowing applications to be filed to the grid organisation on a case-by-case basis
- De facto abolition of the subsidised grid connection from 1 July 2022, which triggered an avalanche-like increase in the number of applications received in the first half of the year

The Company supervises the execution of the grid connection procedure at all its stages and levels and implements organisational and technical corrective actions in order to ensure quick processing of applications and completion of grid connection agreements.

In 2022, the average delivery period of grid connection services was shorter than the statutory limit:

- Processing of an application, formulation of technical requirements and an agreement offer take an average of seven working days, with a standard value of 10 to 20 working days
- If technical measures have to be taken by the grid organisation, it takes an average of 139 days to complete the grid connection agreement, whereas the legislation specifies a period of six months to two years

Given the well-established cooperation between utility providers and regional and local authorities, the Company will continue to work on continuous improvement of its grid connection performance going forward, thus strengthening its image as a customer-oriented company.



**ALEXANDER CHEPUSOV**  
Deputy General Director for Development and Power Grid Connection

**38,000**  
average number of applications for grid connection per year

**+9%**  
increase in the number of agreements completed in 2022 compared to 2021



The key documents, which regulate the Company's activities related to grid connection of consumer terminals (power installations) of legal entities and individuals to Rosseti Kuban's power grids:

- Federal Law No. 35-FZ dated 26 March 2003 On the Electric Power Industry
- Rules for Grid Connection of Consumer Terminals of Electricity Consumers, Generating Facilities and Grid Facilities Owned by Grid Organisations and Other Entities to Power Grids

approved by Decree No. 861 of the Government of the Russian Federation dated 27 December 2004

- Decree of the Government of the Russian Federation On Pricing in the Field of Regulated Prices (Tariffs) in the Electric Power Industry No. 1178 dated 29 December 2011
- Order of the FAS of Russia On Approval of the Guidelines for Determining the Grid Connection Fee No. 490/22 dated 30 June 2022

A complete list of regulatory legal documents, detailed information on the grid connection procedure in Rosseti Kuban is publicly available on the Company's website [www.rosseti-kuban.ru](http://www.rosseti-kuban.ru) in the To Consumers / Grid Connection section.

For dynamic indicators on grid connection of consumers in 2020–2022, please see **Appendix No. 9**.

## COMPLETION OF GRID CONNECTION AGREEMENTS

In the reporting year, the Company competed 36,912 grid connection agreements. The total capacity of the completed grid connection

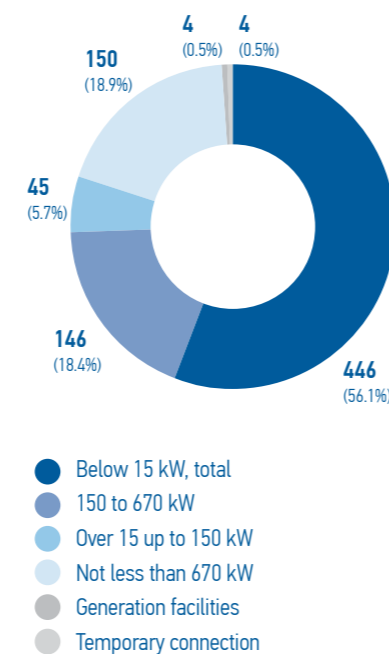
agreements was 795 MW, which is 153% higher than planned. The volume of connected capacity increased by 0.9% (7 MW) year-on-year.

**36,912** agreements  
capacity connected in 2022 by consumer category

### CAPACITY CONNECTED IN 2022 BY CONSUMER CATEGORY (MW)

Connection categories	Number of completed grid connection agreements	
	–	Total power (MW)
Up to 15 kW, incl., total	34,234	446
including individuals	29,254	381
15 to 150 kW, incl.	2,272	146
150 to 670 kW	197	45
670 kW minimum	106	150
Power generation facilities	21	4
<b>Total, excluding temporary grid connection</b>	<b>36,830</b>	<b>791</b>
Temporary connection	82	4
<b>Total, including temporary grid connection</b>	<b>36,912</b>	<b>795</b>

### STRUCTURE OF COMPLETED AGREEMENTS OF ROSSETI KUBAN, BY CAPACITY CONNECTED (MW AND %)



### BELOW IS THE LIST OF APPLICANTS WITH THE LARGEST AND MOST SIGNIFICANT POWER FACILITIES CONNECTED TO THE COMPANY'S POWER GRIDS IN 2022

Applicant	Capacity connected (MW)
Talent and Success Educational Foundation	10.0
Novorossiysk Grain Processing Plant, PJSC	9.8
Yugstroy-Electroset, LLC	9.8
NESK Elektroseti, JSC	9.3
Specialised Developer Dogma, LLC	6.4
Gazprom Social Initiatives Support Fund	4.5
Semya, LLC	4.0

In 2022, electric service was provided to more than 70 healthcare facilities, including hospitals, medical assistant and obstetric stations, and outpatient clinics, with a total capacity of more than 5 MW. Among the largest and most significant are:

- Outpatient haemodialysis centre of outpatient polyclinic of Vyselkovskaya Central Regional Hospital (0.25 MW)
- Farmservice, LLC, an enterprise to produce medical personal protective supplies in Vasyurinskaya village, Dinskiy District, with a requested capacity of 1 MW
- SpetsPharmProizvodstvo, LLC, a pharmaceutical enterprise in Pavlovskaya village (500 kW)
- Kuban Medical Centre, LLC in Krasnodar (250 kW)
- Medical assistant and obstetric stations in Gorodskoy homestead and Krasnoye village, the Teuchezhsky District, the Republic of Adygeya of the Adygeya Interdistrict Hospital named after K.M. Batmen (30 kW)

Russia's southern regions has historically played a significant role in the nation's food

supply. During 2022, the Company completed the grid connection of more than 1,000 agricultural and food manufacturing plants for a total capacity of 54 MW. The most notable facilities:

- Novorossiysk Grain Processing Plant, PJSC (9.8 MW)
- Selkhoz-Galan, LLC, an agricultural production facility in Konstantinovskaya village, Kurganinsky District (1.13 MW)
- Kubanproduct, LLC, a high-tech greenhouse complex for growing vegetable crops in Novodmitriyevskaya village, Seversky District (450 kW)
- Agro-Yug, LLC, an agricultural production facility in Krasnensky village, Teuchezhsky District, Republic of Adygeya (300 kW)
- Dondukovsky Elevator, JSC, consumer terminals of the land plot for placing a farm in Dondukovskaya village, Giaginsky District, Republic of Adygeya (150 kW)
- Olenarii, LLC, a deer breeding farm in Dakhovskaya village, Maikop District, Republic of Adygeya (150 kW)

**>1,000** facilities  
of agricultural and food sectors  
connected to the power grid in 2022

**66** socially significant  
facilities

were also connected to the power grid in 2022

Additionally, the Republic of Adygeya and the Krasnodar Territory have been popular destinations for migration in recent years, which has raised housing demand. In order to accommodate this demand, the Company allotted 155 MW of power capacity to more than 2,500 housing projects. A total of 66 socially significant facilities (schools, kindergartens, cultural organisations and sports facilities) with a combined capacity of over 13 MW were also connected to the power grid.

**>70** healthcare  
facilities  
provided with electric service in 2022

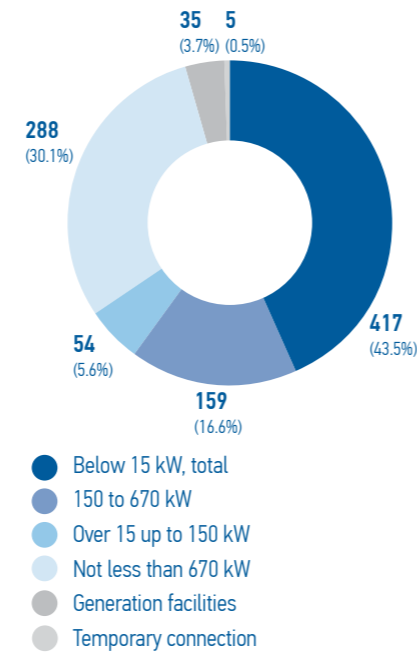
## CONSUMER DEMAND FOR GRID CONNECTION IN 2022

In 2022, Rosseti Kuban signed 35,349 grid connection agreements for a total capacity of 958 MW with a total value of RUB 13.2 billion, excl. VAT. Grid connection demand has been

steadily increasing after 2020. On average, at least 33,000 agreements are signed and about 38,000 applications are submitted every year.

Connection categories	Number of signed grid connection agreements	
		Total power (MW)
Up to 15 kW, incl., total	32,526	417
incl. individuals up to and including 15 kW	27,969	359
15 to 150 kW, incl.	2,350	159
150 to 670 kW	222	54
670 kW minimum	115	288
Power generation facilities	30	35
<b>Total, excluding temporary grid connection</b>	<b>35,243</b>	<b>953</b>
Temporary connection	106	5
<b>Total, including temporary grid connection</b>	<b>35,349</b>	<b>958</b>

### STRUCTURE OF ROSSETI KUBAN AGREEMENTS SIGNED IN 2022, BY CONNECTED CAPACITY (MW AND %)



## AMOUNTS OF REVENUE GENERATED AND MONEY COLLECTED

Revenue for grid connection services for the reporting year amounted to RUB 1,282 million (excluding VAT), which is 120% of the planned and 45% below the revenue for 2021 (RUB 2,348 million). The variance results from Stage 1 of the agreement with CPC-R, JSC (revenue of RUB 729 million) and the agreement with Novoroslesexport, JSC (revenue of RUB 361 million) being completed in 2021. There were no ongoing agreements for 2022 that would have generated a similar level of revenue. Alongside with that, the Company completed the 2nd stage of the grid connection agreement with CPC-R, JSC for RUB 420 million.

Proceeds for grid connection services amounted to RUB 4,865 million including VAT in 2022, which is 3.8 times higher than planned and 107% higher than in 2021 (RUB 2,354 million including VAT). The advance payments made under with the grid connection agreements are what cause the proceeds indicator to perform better than expected. Revenues of at least RUB 2,282 million are anticipated in 2023.

**1,282 RUB mn**  
(excl. VAT)  
volume of revenues for grid connection services in 2022

**107%**  
year-on-year increase in payments for grid connection services received in 2022



However, the second stage of grid connection under the agreement with CPC-R, JSC was completed in 2022 (amount of revenue — RUB 420 million).

## GRID CONNECTION OF GENERATING FACILITIES

S. No.	Applicant	Generation facility to be connected	Required capacity for grid connection of generating units for power output into the mains, voltage rating	Grid connection agreement date and price (excl. VAT)	Progress on grid connection of a facility as at the end of 2022
1	Rosneft, PJSC	Tuapse Refinery	24 MW, 110 kV	01.04.2010 RUB 56.37 mn	The agreement is being implemented. Timeframe for grid connection activities until 30.05.2025
2	ART-TECH, LLC	Electric facilities of the land plot for a logistics centre	6.0 MW, 10 kV	29.05.2020, RUB 4.14 mn	The agreement is being implemented. Rosseti Kuban received a request from the applicant to change the technical conditions. The applicant was forwarded a draught supplementary agreement that will extend the grid connection deadline until 31 December 2023
3	Verkhnebakansky Cement Plant, OJSC	Power plant of Verkhnebakansky Cement Plant, OJSC	52.75 MW, 6 kV	03.09.2015, RUB 0.09 mn	The agreement is being implemented. On 18 February 2019, Rosseti Kuban notified the Applicant of the readiness to the actual connection of the Facility according to the applicable legislation. Completion of activities by the Applicant is expected
4	Novoroscement, OJSC	Gas piston unit (GPU)-based energy centre with a capacity of 17.600 kW	17.60 MW, 110 kV	04.03.2019, RUB 11.40 mn	The agreement is being implemented. On 4 March 2019, Rosseti Kuban notified the applicant of the readiness to the actual connection of the Facility according to the applicable legislation. Completion of activities by the Applicant is expected
5	ENERGO-VOLT, LLC	GPU-based energy centre with a capacity of 24.8 MW	24.8 MW, 110 kV	17.09.2018, RUB 16.9 mn	The agreement is being implemented. Deadline for grid connection is until 31 December 2026
6	KNAUF GIPS KUBAN, LLC	GPU-based energy centre with a capacity of 4 MW	4 MW, 10 kV	10.12.2018 RUB 2.48 mn	The agreement is being implemented. On 26 December 2022, Rosseti Kuban received a request from the applicant to extend the grid connection deadline until 10 December 2024
7	EuroSibEnergo-Kuban, LLC	Consumer terminals of the land plot (construction of a mini-CHP)	4.44 MW, 10 kV	22.05.2018, RUB 2.75 mn	The agreement is being implemented. To complete the grid connection process, copies of the grid connection certificate and the certificate of technical specification fulfilment signed by Rosseti Kuban was sent to the applicant on 23 December 2022
8	Renewable Energy Sources, LLC	Solar power plants	13.5 MW, 10 kV	01.10.2021, RUB 314.25 mn	A total of three agreements were concluded. The grid connection deadline is 1 October 2023



S. No.	Applicant	Generation facility to be connected	Required capacity for grid connection of generating units for power output into the mains, voltage rating	Grid connection agreement date and price (excl. VAT)	Progress on grid connection of a facility as at the end of 2022
9	<b>Renewable Energy Sources, LLC</b>	Solar power plants	27 MW, 10 kV	11.11.2021, RUB 0.54 mn	A total of six agreements were concluded. The grid connection deadline is 11 November 2023
10	<b>ART-TECH, LLC</b>	Electric facilities of the land plot for a production base	4.9 MW, 10 kV	07.04.2022, RUB 0.4 mn	The agreement is being implemented. The grid connection deadline is 7 April 2024
11	<b>Adler Trout Breeding Farm, JSC</b>	Electric facilities of the land plot for a trout farm	1.28 MW, 10 kV	28.07.2022, RUB 0.4 mn	The agreement is being implemented. The grid connection deadline is 28 July 2024
12	<b>Armavir Cardboard Factory, LLC</b>	Electrical installations in the cardboard production building	3 MW, 6 kV	25.08.2022, RUB 0.01 mn	The agreement is being implemented. The grid connection deadline is 25 August 2023
13	<b>LUKOIL-Ecoenergo, LLC</b>	HPP building – above-water part	3.3 MW, 10 kV	14.09.2022, RUB 0.01 mn	The agreement is being implemented. The grid connection deadline is 14 September 2024
14	<b>KAVKAZ, LLC</b>	Electric facilities of the land plot for a solar power plant	1.02 MW, 10 kV	07.10.2022, RUB 1.96 mn	The agreement is being implemented. The grid connection deadline is 7 October 2024
15	<b>Novorosmetall, LLC</b>	Auxiliary power plant	23.4 MW, 110 kV	23.11.2022, RUB 0.01 mn	The agreement is being implemented. The grid connection deadline is 23 November 2024
16	<b>Microgeneration facilities of individuals and legal entities</b>		0.06 MW, 0.22–0.4 kV		There are a total of eight agreements in execution. The grid connection deadline is 2023–2024

## DEVELOPMENT OF THE POWER GRID COMPLEX

The primary goal of the long-term development of the Company's power grid is to determine the optimal course for grid modernisation and expansion in order to fill up any gaps in generating capacity and meet any anticipated long-term demand for generating capacity.

