OPERATIONAL RESULTS

## **ELECTRICITY DELIVERY**

44

Rosseti Kuban's core business is associated with the delivery and distribution of electricity to customers via 110 kV or lower voltage grids. The Company's share in the regional electricity transmission market in 2022 was 77.1% (of the regional required gross revenue).

In 2022, the Company achieved its key targets for electricity loss in transmission, which totalled 9.51%, or 0.64 p.p. below the plan.

In 2022, the loss reduction efforts had an effect of 66 million kWh.



**OLEG NISHCHUK**Deputy General Director for Service Sales



#### **KEY INDICATORS**

#### THE COMPANY'S PRODUCTION RESULTS FOR 2020-2022

Indicators	2020	2021	2022	Change in 2022 indicators compared to 2021 (%)
Delivery to the grid (mn kWh)	23,008.0	25,221.7	26,062.3	+3.3
Electricity delivered from the grid to customers and related territorial grid organisations within the area of balance and operational responsibility (mn kWh)	20,697.2	22,719.6	23,582.8	+3.8
Losses of electricity in transmission:				
mn kWh	2,310.8	2,502.1	2,479.5	-0.9
%	10.04	9.92	9.51	-0.41 p.p.
Volume of electricity transmission services provided:				
mn kWh	19,108.1	21,004.5	21,947.8	+4.5
RUB mn	48,101.9	54,526.3	61,452.9	+12.7

In the reporting year, actual electricity losses in the power grids of Rosseti Kuban amounted to 2,480 million kWh, or 9.51% of the delivery to the grid. In 2022, the relative level of losses to 2021 was reduced by -0.41 p.p. The year-end loss allowance is met.

The Company's operations in 2022 resulted in total volume of electricity transmission services of 21,948 million kWh, which is 943 million kWh, or 4.5%, more than in 2021.



ANNUAL REPORT — 2022 52 / 53

#### **ELECTRICITY LOSS REDUCTION MEASURES**

Reducing electricity losses is one of the Company's primary activities.

By the end of 2022, the effect of steps taken to reduce electricity transmission losses totalled 66 million kWh (RUB 248 million), including from:

- Organisational measures 58 million kWh (RUB 219 million)
- Technical measures 8 million kWh (RUB 29 million)

In the future, the efforts in this area will be continued.



mn kWh

(RUB 248 mn)

**EFFECT OF THE MEASURES TO REDUCE** 

**ELECTRICITY LOSSES** 

58 mn kWh



The electricity loss reduction programme was **implemented**, and the programme's target – the level of electricity losses – **was achieved**.

Organisational measuresTechnical measures

#### **ELECTRICITY METERING**

As at 31 December 2022, there was in the Company's operational area.

1,225,864
delivery points



delivery points for legal entities



1,074,233 delivery points to domestic consumer



delivery points to apartment buildings



30,452 delivery points with technical record-keeping function Pursuant to Federal Law No. 522-FZ dated 27 December 2018 "On Amending Certain Legislative Acts of the Russian Federation in Connection with the Development of Electricity (Capacity) Metering Systems in the Russian Federation", the Concept of Smart Metering Development of Rosseti, PJSC in Retail Markets approved by the decision of the Management Board of Rosseti, PJSC (Minutes No. 885pr/1 dated 26 June 2019), the Company's Board of Directors approved the Smart Metering Development Programme for 2020–2030 (Minutes No. 374/2020), hereinafter referred to as the Programme, on 21 January 2020.



OPERATIONAL RESULTS ANNUAL REPORT — 2022 54/55

#### **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

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

1,346.518 RUB mn

#### Introduction of electricity meters with remote data collection

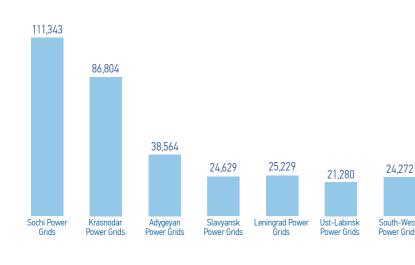
In the reporting year, 1,950 technical electricity meters and 29,900 commercial electricity meters were installed and automated. A total of 31,850 electricity meters installed/replaced and automated in 2022.

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.

15,272

14,361 13,209

Timashevsk Tikhoretsk Power Grids Power Grids Power Grids

# 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 customeroriented company.



ALEXANDER
CHEPUSOV
Deputy General Director for Development and Power Grid Connection

38,000 averave number of applications for grid connection per year

increase in the number of agreements completed in 2022 compared to 2021

77