

INNOVATIVE ACTIVITIES

On 30 March 2021, the Company's Board of Directors designated innovative development along with the supervisory follow-up of the existing Innovative Development Programme as the priority area of the Company's activities¹.

Key areas of the current Innovative Development Programme for 2020–2024 with an outlook to 2030²:



Transition to smart 35–110 (220) kV substations



Transition to smart grids with a distributed intellectual automation and control system



Transition to integrated business process efficiency and automation of control systems

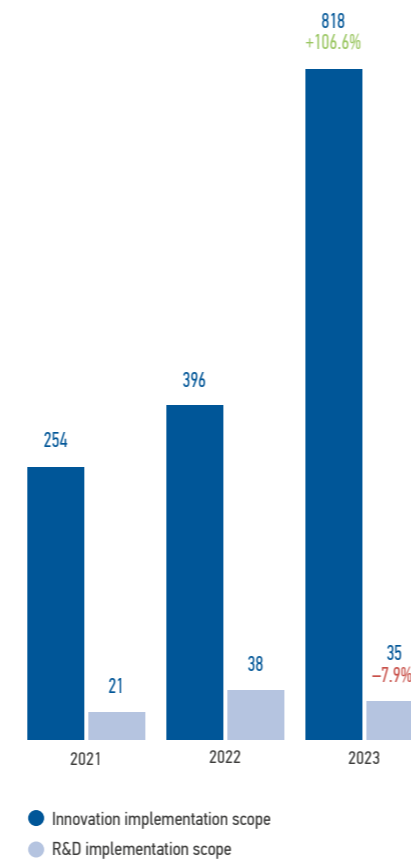


Application of advanced technology solutions and materials in power engineering



Promotion of an innovative development management system and shaping of an innovative infrastructure

Key indicators for innovation activities over 2021–2023 (RUB mln)



Company's main innovative projects implemented in 2023

Project	Project implementation
Creation of a smart metering system in the branches of Rosseti Kuban	<p>Implementation timeframe: 2020–2030 In the reporting year, innovative smart electricity meters were installed in all branches of the Company.</p> <p>Smart meters are introduced across the Company within the framework of the Rosseti Kuban's Investment Programme to create a metering system as required by Federal Law No. 522-FZ dated 27 December 2018 "On Amendments to Certain Legislative Acts of the Russian Federation in Connection with the Development of Electricity (Capacity) Metering Systems in the Russian Federation". In the reporting year, smart meters also were installed during the grid connection of new consumers of a capacity of up to 15 kW.</p> <p>The project aims to create a smart metering system and integrate it into the innovative systems being established: supervisory control and data acquisition system (SCADA), distribution management systems (DMS), and outage management systems (OMS).</p> <p>The expected effect:</p> <ul style="list-style-type: none"> • Reduced operating costs by remotely taking readings and parameters of electricity supply to electricity consumers • Possibility of remote restriction and restoration of power supply to electricity consumers



Development of Rosseti Kuban's production asset management system (PAMS)	<p>Implementation timeframe: 2022–2024 The PAMS development plan for 2023 envisages the implementation of six activities related to the fine tuning of the PAMS in terms of process automation.</p> <p>Five activities were completed:</p> <ul style="list-style-type: none"> • Automated planning of multi-year and annual schedules and reporting forms for diagnostic works subject to the requirements of the Company's centralised executive documents regulating the Diagnostics processes • Automated rate setting of the Company's emergency reserve, its acquisition, rotation, utilisation and replenishment in PAMS • Automated process of recording and analysing emergency outages at 35 kV and above substations and power lines in the PAMS • Creation of automated vehicle management systems • Automation of control action selection (maintenance and repair / retrofitting and renovation) <p>Work was started to automate the maintenance of the equipment repair schedule, taking into account the integration of the equipment repair schedule with the automated power equipment repair management system. Late implementation of this activity is due to the finalisation of the terms of reference related to the use of domestic software, including databases (Postgres Pro).</p> <p>In addition, the features of PAMS for maintenance and repair, retrofitting and renovation were finalised.</p> <p>The achieved effect from the PAMS Development Plan:</p> <ul style="list-style-type: none"> • Increased efficiency of staff time utilisation in real time • Improvement of operational processes, integrated processing of available data in different automated systems in the process of production asset management, expansion of the functionality of the systems • Upgraded control over the creation of production programmes by making baseline data available, on the basis of which the type of technical intervention (maintenance and repair/maintenance and renovation) is chosen • Higher transparency of the Company's activities, access to information at all management levels of power grid facilities
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¹ Minutes No. 426/2021 dated 2 April 2021.

² Approved by the decision of the Board of Directors of Rosseti Kuban, PJSC dated 13 October 2021 (Minutes No. 450/2021 dated 15 October 2021).