

INVESTMENTS

Investing parameters

The OAO IDGC of Urals' investment program for 2021 was adopted by the Ministry of Energy Decree²⁹.

The Company's 2019–2021 cost and physical parameters

Parameter	2019	2020	2021	2021/ 2020, %
Funding, RUB million plus VAT	8,226	9,991	13,481	40%
Capex, RUB million net of VAT	7,599	11,568	12,144	31%
New fixed assets, RUB million net of VAT	7,492	10,942	11,342	22%
Commissioning of transformer capacity, MVA	457	459	319	-21%
Commissioning of power lines, km	2,896	2,563	1,812	-12%

Implementation of the investment program includes handling of the following problems:

- maintenance of operability of equipment that provides reliable, no-break and high-quality power supply;
- execution of liabilities under connection contracts;
- enforcement of security of equipment and personnel performance;
- provision of the transmitting capacitance of the networks for sustainable performance and connection of consumers;
- increase of anti-diversionary protection and counter-terrorist security of energy facilities.

Investment funding structure in 2019–2021, RUB million incl. VAT

Type of funding	2019	2020	2021	2021/ 2020, %
Total	9,991	9,633	13,481	40%
Connection	5,220	5,440	6,667	23%
Reconstruction, upgrade and retrofitting	2,943	2,690	5,080	89%
Investment projects, implemented under energy sector perspective development schemes and programs	395	66	321	386%
Other greenfield construction of energy facilities	163	59	75	27%
Purchase of land plots for investment projects	1	0	0	0%
Other investment projects	1,269	1,377	1,339	-3%

The bulk of the 2021 funding (49.5%) was channeled to connection. Investments spent on reconstruction, upgrade and retrofitting totaled 37.7%. Greenfield construction has the smallest share in the structure (0.6%). A 9.9% share of the total funding was spent on other investment projects (ready-to-operate devices, IT projects, etc.). Funding of the investment projects, implemented under the energy sector perspective development schemes and programs totaled 2.4%. As for the sources of financing, the Company's internal funds contributed the most to the total funding (87% or RUB 11,723 million). Raised funds totaled 13% or RUB 1,758 million. We have no state-funded projects.

Outcomes of the activities enlisted in the 2021 investment program

- transformer substation load targets are 100% completed;
- evaluation of changes in the share of net supply, measured by meters integrated into the data collection and transmission system:

Investment project	ID code	Actual values
Installation of meters, voltage class 0.2(0.4) kV, in compliance with Federal Law ³⁰ , after breakdown of a consumer's meter (2020–2025), 3,432 devices	I_PE856	0.005
Installation of meters, voltage class 0.22(0.4) kV, in compliance with Federal Law ³⁰ after the expiry of calibration period or service life or if a consumer lacks a meter (Perm region, 2020–2025), 72,802 devices	I_PE857	0.033
Roll-out of metering systems on the retail electricity market (0.4 kV). Upgrade/build-up of MIS from non-tariff funding (PD OES, ChaES) (10,116 devices)	K_PE2485	0.228
Roll-out of metering systems on the retail electricity market (0.4 kV). Upgrade/build-up of MIS from non-tariff funding (PD TsES, SES, ChuES) (12,183 devices)	K_PE2486	0.279
Roll-out of metering systems on the retail electricity market (0.4 kV). Upgrade/build-up of MIS from non-tariff funding (PD BES, KuES, TsES) (9,450 devices)	K_PE2487	0.218
Roll-out of metering systems on the retail electricity market (0.4 kV). Upgrade/build-up of MIS from non-tariff funding (PD TsES) (9,909 devices)	K_PE2488	0.231
Roll-out of metering systems on the retail electricity market (0.4 kV). Upgrade/build-up of MIS from non-tariff funding (PD PGES, TsES) (9,464 devices)	K_PE2489	0.228
Roll-out of remote metering systems (PD SES, TsES, TES of Sverdlovenenergo branch) from non-tariff funding (17,584 devices)	K_SE2638	0.003
Installation of meters, voltage class 0.22(0.4) kV, in compliance with Federal Law ³⁰ after breakdown of a consumer's meter (2020–2025), 6,415 devices	H_ChE1382	0.030

Roll-out of metering systems on the retail electricity market (0.4 кВ). Upgrade/build-up of MIS from non-tariff funding (PD ChGES, 2021) (11,190 devices)	K_ChE2567	0.310
Roll-out of metering systems on the retail electricity market (0.4 кВ). Upgrade/build-up of MIS from non-tariff funding (PD TsES, 2021) (15,227 devices)	K_ChE3043	0.400
Roll-out of metering systems on the retail electricity market (0.4 кВ). Upgrade/build-up of MIS from non-tariff funding (PD TES, 2021) (5,303 devices)	K_ChE3047	0.279

- level of SAIDI completion: 104%;
- level of SAIFI completion: 108%;
- total connection liabilities executed under the investment program reached 27,918 connections;
- maximum capacity of connected consumers, generating facilities, grid facilities owned by other grid companies or persons totaled 555.47 MW.

The largest investment programs completed in 2021

Perm region: Reconstruction of 110 kV power line “Gornaya — Metanol” (circuit I), “Kizelovskaya GRES-3 — Gornaya” (circuit II) (Stage 2) (8.423 km). Goal: Enhancement of reliability of electricity supply to facilities of PAO Metafraks and reduction of operating costs. Commissioning in 2021: RUB 61.16 million

Upgrade of 10 kV networks from 110/35/10 kV “Vasilyevskaya” substation, installation of 33 reclosers, dismantling of RP-2 Rusaki and RP-5 Moskvino (33 pcs.). Goal: Upgrade of electric network, reduction of consequences of equipment failures, increase of technical status index. Commissioning in 2021: RUB 67.75 million

Chelyabinsk region: Upgrade of networks of the Sosnovsky District (installation of reclosers) (Stages 3,4), 52 pcs.. Goal: Connection of OOO Krasnoturinsk-Polymetall to grid facilities of Sverdlovenergo branch. Commissioning in 2021: RUB 72.69 million

Upgrade of IATS on 110 kV “Komsomolskaya”, “Kurortnaya”, “Filimonovo”, “Gorkovskaya”, “Klyuchevskaya”, “Spasskaya”, “Solnechnaya Dolina”, “Stroitelnaya” substations (8 pcs). Goal: Enhancement of reliability of electricity supply, reduction in expenses for repair and maintenance, replacement of dangerous equipment. Commissioning in 2021: RUB 117.79 million

Sverdlovsk region: Construction of 110/10 kV “Polymetall” substations, branch lines from 110 kV “Vorontsovsky GOK - Serov” power line, to “Ptitsefabrika” substation, 110 kV “Vorontsovsky GOK - Krasnoturinsk” power line with branch lines (20 MVA, 2.2 km). Goal: Enhancement of dispatching and automation level of 10 kV networks. Commissioning in 2021: RUB 269.17 million

Reconstruction of 10 kV “Sinigorsk - Serebryanka” power line, installation of reclosers (52.526 km; 3 pcs). Goal: Enhancement of observability and manageability of a 110 kV substation in Chelyabenergo. Commissioning in 2021: RUB 70.68 million

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The Company’s 2021–2025 cost and physical parameters

Parameter	2021	2022	2023	2024	2025
Funding, RUB million, incl VAT	11,520	10,555	9,245	8,506	9,751
Capex, RUB million net of VAT	11,147	7,660	6,480	6,295	6,623
New fixed assets, RUB million net of VAT	10,753	7,567	6,227	7,884	6,598
Commissioning of transformer capacity, MVA	266	267	352	281	227
Commissioning of power lines, km	1,535	1,114	984	931	1,010

The Company’s investment program for 2021–2025 stipulates RUB 49,577 million (incl. VAT) funding, RUB 38,205 million (net of VAT) capex, RUB 39,029 million (net of VAT) new fixed assets, commissioning of 1,393 MVA transformer capacity and 5,575 km power lines. The Company’s 2021–2022 investment program is prepared with due allowances to regional development plans, equipment health, importance of grid facilities and current domestic environment.