

INVESTMENTS

The OAO IDGC of Urals 2018-2022 investment program and its revisions³¹ were adopted by the Russian Ministry of Energy³².

Investing parameters in 2018

Branch	Capex, RUB million, net of VAT	New fixed assets, RUB million, net of VAT	Funding, RUB million, plus VAT	Commissioning	
				MVA	km
OAO IDGC of Urals	7,599	7,492	8,226	457	2,896

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 transmitting capacitance of networks for sustainable performance and connection of consumers;
- increase of anti-diversionary protection and counter-terrorist security of energy facilities.

Investment funding structure in 2016-2018, RUB million plus VAT

Kind of investment	2016	2017	2018
Total	6,462	7,100	8,226
Connection	3,801	2,981	3,774
Reconstruction, upgrade and refurbishment	2,095	2,925	2,951
Investment projects, implemented under energy sector perspective development schemes and programs	0	1	584
Other greenfield construction of energy facilities	133	261	288
Purchase of land plots for investment projects	0.2	0	1
Other investment projects	432	931	629

The bulk of the 2018 funding (46%) was channeled to connection. Investments spent on reconstruction, upgrade and refurbishment totaled 36%. An 8% share of the total funding was spent on other investment projects (ready-to-operate devices, IT projects, etc.). Funding of investment projects, implemented under the energy sector perspective development schemes and programs, and greenfield construction totaled 7% and 3%, respectively. Purchase of land plots for investment projects got the smallest portion of the funding (0.01% of the total investments).

As for the sources of financing, the Company's internal funds contribute the most to the total funding (77% or RUB 6,299 million). Income from connection fees to be used as investments totaled RUB 956 million (or 12%). Other resources contribute 10% (or RUB 830 million). Borrowings totaled RUB 140 million (or 2%). We have no state-funded facilities.

Outcomes of the activities enlisted in the investment program³³:

- 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:

Roll-out of metering systems on retail electricity market (6-10 kV). Upgrade/build-up of MIS (169 devices)	G_SE553	0.02
Roll-out of metering systems on retail electricity market (0.4 kV). Upgrade/build-up of MIS. Installation of meters with remote data collection (2018), 932 devices.	H_ChE1380	0.20
Roll-out of metering systems on retail electricity market. Upgrade/build-up of MIS in the Western Electric Network production department, 1st stage (3,298 devices)	G_ChE665	2.15
Roll-out of metering systems on retail electricity market (6-10 kV). Upgrade/build-up of MIS. Installation of innovative 10 kV meters (2018), 43 devices	H_ChE1369	0.01
Roll-out of metering systems on retail electricity market (6-10 kV). Upgrade/build-up of MIS. Acquisition and installation of 6-10 kV meters (2018), 36 devices	H_ChE1370	0.01
Roll-out of metering systems on retail electricity market (0.4 - 6(10) kV). Installation of meters with remote data collection (2018), 756 devices	H_ChE1375	0.09

- total connection liabilities executed under the investment program reached 10,866 connections;
- maximum capacity of connected consumers totaled 384.88 MW.

Key investment projects completed in 2018

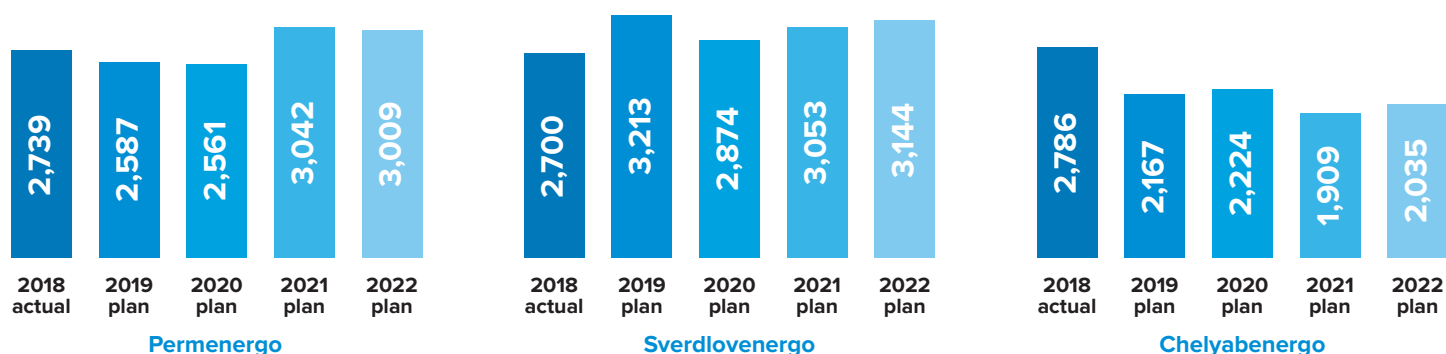
Region	Project's title	M.u.	Effect
Perm region	Reconstruction of 110/6 kV "Balatovskaya" substation	56 6-KV cells	Replacement of obsolete equipment. Provision of increasing load and supply reliability.
	Construction of 10-6 kV cable power line in Parkovyi microdistrict	9.9 km	Construction of a distribution network in the city of Perm.
Chelyabinsk region	Reconstruction of 110 kV "Zlatoust – Taganay" aerial power line	17.9 km	Network upgrade, improvement of technical status index.
Sverdlovsk region	Reconstruction of 110/35/6 kV "Markovskaya" substation	80 MVA	Replacement of obsolete equipment. Provision of increasing load and supply reliability.

Under our investment program we also completed the following projects related to the development of digital network:

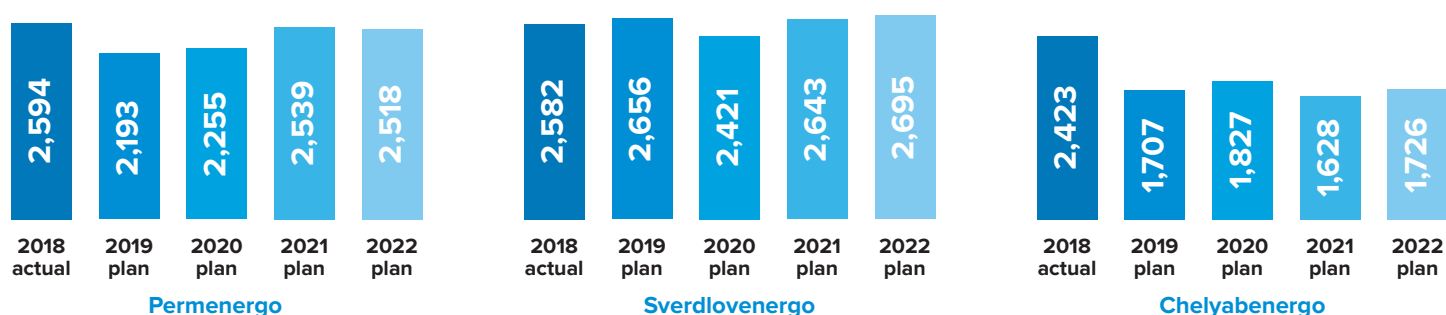
- Substations with "digital" substation elements (RUB 436 million), incl. reconstruction of 110/35/6 kV "Markovskaya" substation and incoming 35 kV aerial power lines (80 MVA, 0.54 km).
- Enhancement of network observability (RUB 313 million), incl. IA&TS upgrade at 110 kV "Zapadnaya", "Larino", "Mayakskaya", "Peschanaya", "Polotsk", "Agapovskaya", "Borovaya", "Argayash", "Korkino", "Gorod-2" substations (10 devices); reconstruction of 110/35/10 kV "Bunarskaya" substation (1 IA&TS device).
- Automated metering systems (RUB 79 million), incl. roll-out of metering systems on retail electricity market (6-10 kV), upgrade/build-up of MIS (169 devices).

The Company's 2018-2022 investment program is prepared with due allowances to regional development plans, equipment health, importance of grid facilities and current domestic environment. It stipulates RUB 39,620 million (plus VAT) funding, RUB 33,829 million (net of VAT) capex and RUB 34,416 million (net of VAT) commissioning.

Funding of the Company's investment program for 2018-2022, RUB million (plus VAT)



Capital expenditures under the Company's investment program for 2018-2022, RUB million (net of VAT)



Commissioning under the Company's investment program for 2018-2022, RUB million (net of VAT)

