





INVESTMENT ACTIVITIES

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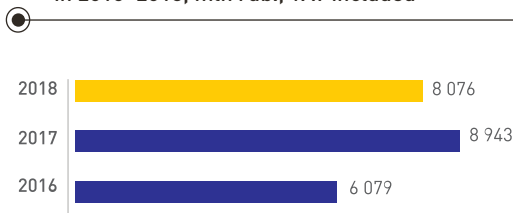
Investments are the basis of a reliable power supply and the most important component of the Company's business efficiency. The Company's investment programs are drawn up in accordance with the schemes and programs for the future development of the electric power industry of the Krasnodar Territory and the Republic of Adygea, the technical condition of the electrical networks, and available sources of funding, formed on the basis of tariff and balance decisions. The approval and control of the implementation of investment programs of Kubanenergo PJSC is carried out by the Ministry of Energy of

Russia. In the reporting year, the Company's investment activity was conducted in accordance with the investment program approved by the Ministry of Energy of Russia by order No. 18 dated 10.12.2018 "Concerning the approval of changes to the investment program of Kubanenergo PJSC, approved by order of the Ministry of Energy of Russia of December 1, 2017 No. 21."

THE MAIN PARAMETERS OF THE COMPANY'S INVESTMENT ACTIVITIES IN 2018

CAPITAL INVESTMENT	ENTERING FIXED ASSETS	FINANCING	POWER INPUT	
million rubles without VAT	million rubles without VAT	million rubles, VAT included	MegaVolt-Ampere (MVA)	km
7,727	3,911	8,076	355	582

Dynamics of financing capital investments of the Company in 2016–2018, mln rub., VAT included



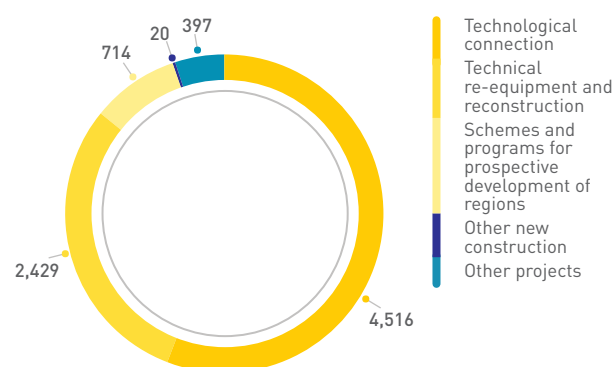
Commissioning of power facilities of state importance on the Taman Peninsula – substation "Port" 220 kV and 110–220 kV power transmission lines were expected in 2018. In the reporting year, Kubanenergo PJSC completed the construction of these facilities and received Rostekhnadzor approval for the commissioning work. Due to the unavailability of PKU Rostransmodernizatsiya, which serves as the state customer for the construction of power facilities, for setting up a 110 kV traction substation for voltage, the commissioning period of the 220 kV Port and 110–220 kV transmission lines were postponed to Q2 2019.

The actual financing of capital investments in 2018 amounted to 8,076 million rubles, which is 32.9% more than in 2016, and 9.7% less than in 2017.

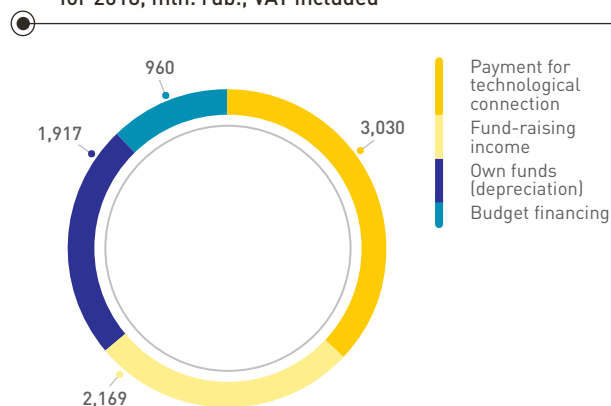
DIRECTIONS AND STRUCTURE CAPITAL FINANCING

The main areas for the investment program of Kubanenergo PJSC in 2018 were the following: financing of capital investments in technological connection – 4,516 million rubles with VAT (56%), technical re-equipment and reconstruction – 2,429 million rubles with VAT (30.1%). 20 million rubles with VAT (0.2%) accounted for other new construction. Investment projects, which implementation is conditioned by the schemes and programs for the future development of the power industry, –714 million rubles (8.8%). Other investment projects have been financed in the amount of 397 million rubles with VAT (4.9%).

Structure of the capital financing of Kubanenergo PJSC for 2018, mln. rub.



Sources of financing the Company's investment program for 2018, mln. rub., VAT included



Structure of financing of Kubanenergo PJSC in the dynamics for 2016–2018, mln rubles

	2016	2017	2018
In total	6,079	8,943	8,076
Technological connection	3,268	4,510	4,516
Reconstruction, modernization, technical re-equipment	1,883	2,860	2,429
Investment projects, which implementation is determined by schemes and programs for the future development of the electric power industry	643	629	714
Other new construction of power grid facilities	0	153	20
Purchase of land for the implementation of investment projects	1	0	0
Other investment projects	284	791	397

THE RESULTS OF THE IMPLEMENTATION OF THE INVESTMENT PROGRAM IN 2018

Information on the results achieved in 2018 due to the implementation of the measures included in the investment program following the order of the Ministry of Energy of Russia dated 14.03.2017, No. 177



SEQ NO.	INDICATORS	RESULTS 2018
1	The degree of loading the transformer substations	56%
2	Changes in the share of net power supply generated by electricity metering devices included in the data collection and transmission system (metering automation level)	+16.99%
3	Change in the average duration of the termination of the transmission of electricity to consumers of services	-1.1138 h
4	Change in the average frequency of stopping the transmission of electricity to consumers of services	-0.5012 шт.
5	The total number of grid connection commitments for the implementation of technological connection, executed in the framework of the investment program	26,985 contracts, including the preferential category of applicants – 21,401 contracts
6	Maximum power of connected electricity consumers, power generation facilities, electric grid facilities owned by other network organizations or other persons	723 MW, including the preferential category of applicants – 249 MW

LONG-TERM INVESTMENT PROGRAM

The long-term investment program of Kubanenergo PJSC is formed taking into account the current situation of the development of the Russian economy and the financial capabilities of Kubanenergo PJSC and by the scenario conditions for the formation of the Company's investment programs. Sources of financing of the investment program, considering current macroeconomic conditions for the activities of grid companies, and the approved tariff-balance decisions.

The Company's long-term investment program for the period 2017–2022, approved by the Ministry of Energy of Russia by Order No. 18, dated 10.12.2018 "On Approving Changes Made to the Investment Program of Kubanenergo PJSC, approved by Order No. 21, dated 01.12.2017, of the Ministry of Energy of Russia".

Parameters of the Company's long-term investment program for 2017–2022



	2017 (FACTED)	2018 (FACTED)	2019 (PLANNED)	2020 (PLANNED)	2021 (PLANNED)	2022 (PLANNED)
Financing facilities, million rubles VAT included	8,943	8,076	5,246	6,033	4,800	5,300
Capital investment, million rubles without VAT	6,700	7,727	22,115	5,436	3,697	4,172
Entering fixed assets, mln rub. without VAT	4,441	3,911	22,162	5,499	4,198	4,344
Km	836	582	966	711	384	353
MegaVolt-Ampere (MVA)	364	355	1,045	485	549	364

The main volume of investments planned in the long-term investment program of Kubanenergo PJSC for 2017–2022 will be directed to the new construction of electric grids.

QUALITY MANAGEMENT OF CAPITAL CONSTRUCTION

As a part of the implementation of the Government of the Russian Federation Decree No. 468 of June 21, 2010 "On the Procedure for Conducting Construction Control during Construction, reconstruction and overhaul of capital construction objects" in order to verify compliance of work performed in the process of construction, restoration, primary repair of capital construction objects, requirements of project documentation, technical regulations, urban development plan of the land, the results of engineering surveys carried out construction control.

Of the 18 facilities with a voltage of 35 kV and above, which meet the scenario conditions of organizing independent construction control, in which construction and installation works were completed in 2018, eight sites were covered by independent construction controls, that is, 44.4%.

KEY INVESTMENT PROJECTS COMPLETED IN 2018

The most important objects of the investment program of Kubanenergo PJSC, introduced into fixed assets in 2018

ENERGY FACILITY NAME	CONSTRUCTION PERIOD		POWER INPUT		VOLUME OF INPUT, MILLION RUBLES, EXCLUDING VAT
	THE BEGINNING	THE ENDING	KM	MEGAVOLT-AMPER (MVA)	
Reconstruction of the "Yugo-Zapadnaya" Substation 110/10 kV. Installation of a third transformer with a capacity of 40 MVA	2016	2018		40	288.5
Reconstruction of the substation "Severo-Vostochnaya" 110/6-10 kV . Installation of a third transformer with a capacity of 40 MVA	2016	2018		40	267
Reconstruction of the 35/10 kV Shapsug substation with conversion to 110/35/10 kV voltage with two transformers of 40 MVA each	2016	2018		80	416
Reconstruction of the substation "Turgenevskaya" 110/10 kV. Installation of a third transformer with a capacity of 40 MVA	2016	2018		40	385.5
Reconstruction of the substation 35/10 kV "Kalinino". Replacement of 2 × 10 MVA transformers with 2 × 16 MVA	2016	2018		32	295
Construction of Substation "Lazurnaya" 110 kV with overhangs of overhead lines 110 kV	2016	2018	0.3	20	402

The increase in transformer capacity at the commissioned facilities will allow the Company to increase the reliability of power supply and create the possibility of connecting additional consumers in the city of Krasnodar, Takhtamukaysky district of the Republic of Adygea and the city of Tuapse.

The technical re-equipment of the substations will provide a reliable power supply to consumers of the regional center, the Republic of Adygea and the city of Tuapse.

UBSTATION 220 KV "PORT"

Creating a modern energy infrastructure for the development of the Taman Peninsula – is the most significant project for the company.

CLOSED
TYPE SUBSTATION

2017 Start of work



Voltage 220 kV



Power 432 MVA



The volume of investments is 7 billion rubles.



Fully protected from wind and corrosion



Noise-free



Safe for the environment



FIRSTHAND EXPERIENCE

FOR US THIS IS A POWER FACILITY OF SPECIAL IMPORTANCE. FOR THE FIRST TIME IN MODERN HISTORY, KUBANENERGO IS BUILDING A SUBSTATION OF THIS VOLTAGE TYPE. THIS IS A MODERN HIGH-TECH CLOSED-TYPE SUBSTATION WITH A HIGH DEGREE OF RELIABILITY, DESIGNED FOR A LONG SERVICE LIFE, PROTECTED FROM ICING AND WIND LOADS.

GAVRILOV
ALEXANDER ILYICH

GENERAL DIRECTOR OF KUBANENERGO PJSC

PJSC KUBANENERGO



Power lines 35-110-220 kV



The total length of 186 km



Increased throughput



Protected from sticking of snow and ice

960

NUMBER OF POWER
TRANSMISSION
LINE TOWERS

- 1) Deadline for construction – December 2018
2) Commissioning – March 2019

20
18

Multi-sided supports



High strength galvanized steel



Height ~ 40 m



Firm foundation



Protected against corrosion

Service life \geq 50 years

The 220 kV substation will become the basis for the development of industry and infrastructure of the Taman Peninsula, it will meet the needs of the transport and railway crossings of the Crimean Bridge.

EQUIPMENT

Cubicle switchboards (metal-clad installations) 220/110 kV with hexafluorated sulfur (SF₆) insulation

Static capacitor batteries

Arc suppression reactors

Current-limiting reactors

T-1 and T-2 power transformers 16 MVA

Power transformers AT-1 and AT-2 220/100 200 MVA

Regulating transformers