

INVESTMENT AND INNOVATION ACTIVITIES

INVESTMENT ACTIVITY

Financing of the consolidated investment programme amounted to RUB 92.0 bn. RUB 65.6 bn was spent on investment projects of RusHydro Group excluding RAO ES East Subgroup, RUB 26.4 bn - RAO ES East Subgroup. Commissioning of new capacity: generation capacity - 242.28 MW, thermal energy - 475.34 Gcal/h, transmission lines - 1,470.68 km, transformer capacity - 455.78 MVA. The investment activity of the Company is regulated by the Regulation on the investment management process in the form of capital investments.

Principles of the investment policy of PJSC RusHydro

The compliance of investment decisions and projects with statutory requirements, building codes and regulations and environmental standards

Compliance with the sequence of stages of implementation of investment projects

The compliance of investment decisions and projects with the requirements to the levels of profitability and risk established by the Board of Directors

Analysis of the benefits and costs of implementing alternative investment decisions at the end of each stage of the investment project with a change in its main parameters

Provision of all investment projects with funding sources

Approval of the investment programmes is within the competence of the Boards of Directors of RusHydro Group companies. In addition, the investment programmes of the electrical power entities within RusHydro Group are approved by the authorised executive bodies. The projects of the investment programmes of RusHydro Group companies are formed on the basis of the parameters of RusHydro Group's consolidated investment programme

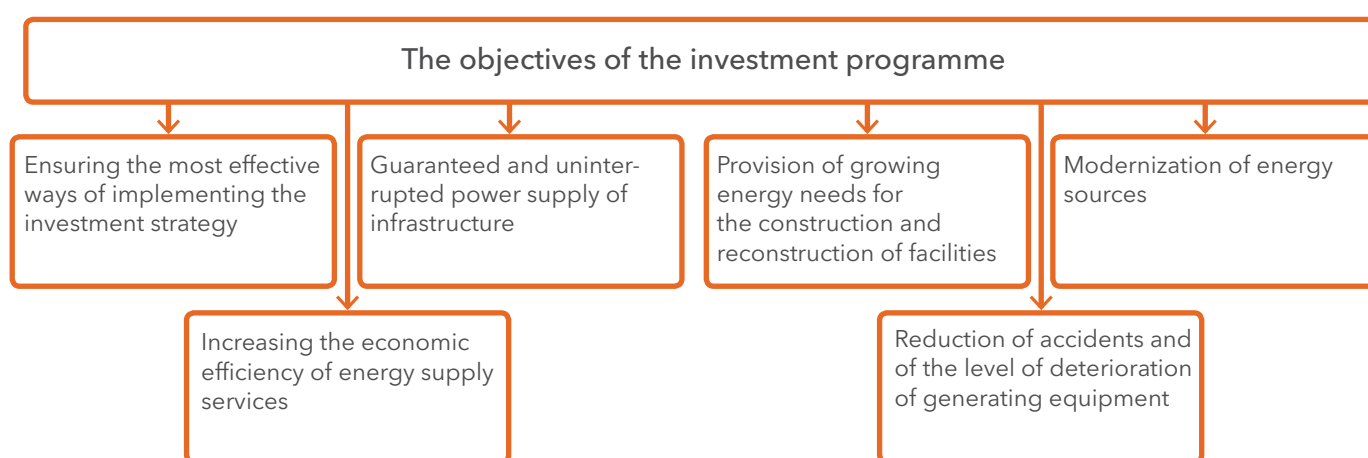
project approved by the Management Board of PJSC RusHydro and considered by the Board of Directors of PJSC RusHydro. Before submitting investment programmes to the authorized bodies of executive power for approval, the projects of investment programmes of the electrical power industry subjects are preliminarily approved by the Boards of Directors of the respective companies.

Investment Programme

Investment programme of PJSC RusHydro for 2017-2027 was approved by the Decree of the Ministry of Energy of Russia of December 30, 2016 No. 1458 and in accordance with the decree of the Ministry of Energy of Russia of 29.12.2017 No. 34@ On approval of the investment programme of PJSC RusHydro for period of 2018-2027" and changes introduced in the investment programme of PJSC RusHydro approved by the decree of the Ministry of Energy of Russia of December 30, 2016 No. 1458 (date of publication: December 29, 2017), provides for the correction of the parameters of its implementation in 2017.

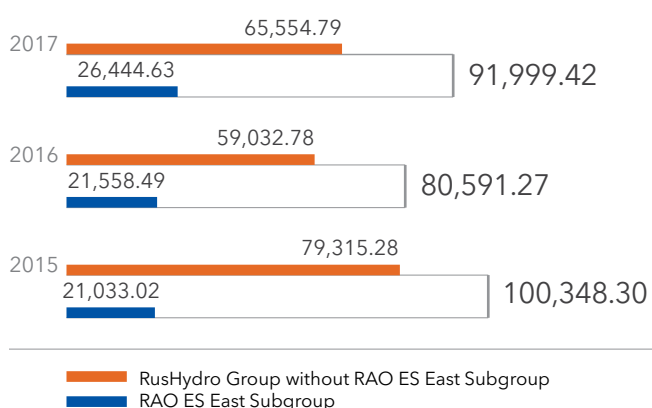
The adjustment of the business plan for 2017, approved by the decision of the Board of Directors (Minutes of October 13, 2017 No. 258), verified the parameters of the adjusted investment programme of PJSC RusHydro for 2017.

There are no investments with an expected return of more than 10% per year.

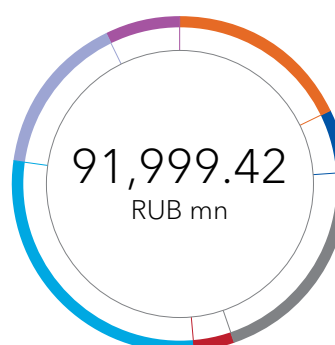


Implementation of RusHydro Group's investment programme in 2017

Investment dynamics, RUB mn



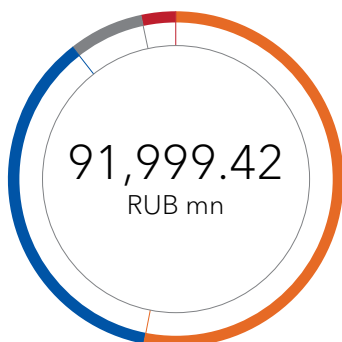
Funding sources structure in 2017, RUB mn



| | |
|---|------------------|
| Profit | 16,297.80 |
| Unused funds of the FB at the beginning of the year | 5,683.77 |
| Other unused funds | 18,777.25 |
| Borrowed funds | 3,545.39 |
| Depreciation | 26,056.87 |
| VAT refund | 14,146.09 |
| Other | 6,492.25 |

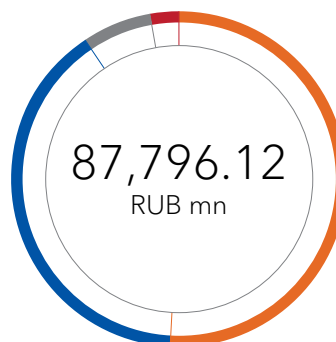
The main directions of investments within the framework of the consolidated Investment Programme of RusHydro Group in 2017 (fact), RUB mn

Financing¹, RUB mn



| | |
|--|-----------|
| Technical rehabilitation and modernisation programme | 49,039.32 |
| New construction | 33,461.46 |
| Technological connection | 6,520.17 |
| Other | 2,978.47 |

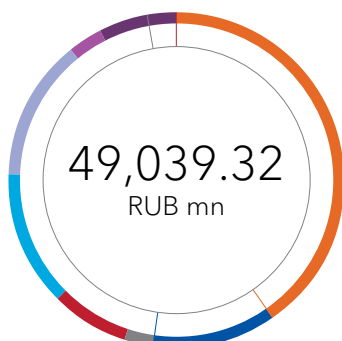
CAPEX execution², RUB mn



| | |
|--|-----------|
| Technical rehabilitation and modernisation programme | 44,766.62 |
| New construction | 34,952.10 |
| Technological connection | 5,715.49 |
| Other | 2,361.92 |

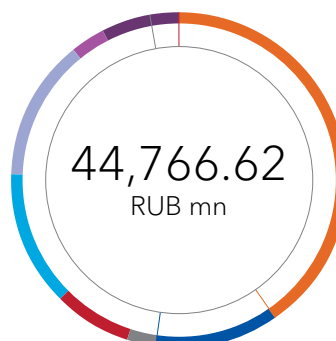
The structure of investments in "New Construction" in 2017 (fact), RUB mn

Financing¹, RUB mn



| | |
|--|-----------|
| Priority projects in the Far East | 19,853.72 |
| Off-site infrastructure of Far East projects | 5,763.98 |
| Construction of GTP-CHPP | 1,372.50 |
| Ust-Srednekanskaya HPP | 3,739.32 |
| Zaramagskiye HPP | 6,391.42 |
| Nizhne-Bureyskaya HPP | 6,649.23 |
| SHPPs of North Caucasus Federal District | 1,609.41 |
| Other | 3,659.74 |

CAPEX execution², RUB mn



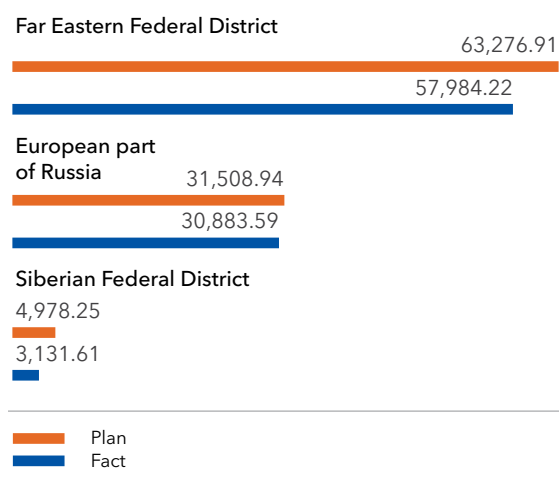
| | |
|--|-----------|
| Priority projects in the Far East | 20,517.96 |
| Off-site infrastructure of Far East projects | 5,800.28 |
| Construction of GTP-CHPP | 1,298.36 |
| Ust-Srednekanskaya HPP | 3,243.21 |
| Zaramagskiye HPP | 5,105.09 |
| Nizhne-Bureyskaya HPP | 5,177.86 |
| SHPPs of North Caucasus Federal District | 746.26 |
| Other | 2,877.59 |

In accordance with the accepted management accounting standards:

¹ The financing of the investment programme means the amount of money spent by the companies of RusHydro Group on the implementation of investment projects, including transfers to suppliers and contractors, as well as expenses carried out by Customers;

² Capital investments are understood to mean the volume of capital investments accepted for accounting on the basis of acted volumes, accepted from suppliers and contractors, and reflected in the accounting of customer's expenses.

Financing of the consolidated investment programme, by regions in accordance with the business plan in 2017, RUB mn



The differences between the sum of the investment in accordance with the business plan (RUB 87,796 mn) and the sum of capital expenditures reflected in RusHydro Group's reporting under IFRS (RUB 87,267 mn) are explained with the help of capitalised interest accounting rules, accounting rules for capital expenditures at the initial recognition of facilities of fixed assets and unfinished construction in accordance with the International Financial Reporting Standards (IFRS), as well as the difference in the perimeter of consolidation of companies in the part of PJSC Boguchanskaya HPP (joint venture of RusHydro Group and UC Rusal).

Capacity commissioning

| Power indicator | Far East | | Europe and Siberia | |
|---------------------------------|----------|----------|--------------------|-------|
| | Plan | Fact | Plan | Fact |
| Generation, MW | 517.31 | 197.52 | 89.76 | 44.76 |
| Heat, Gcal/h | 474.98 | 475.34 | - | - |
| Transmission lines, thousand km | 1,068.86 | 1,470.68 | - | - |
| Transformer capacity, MVA | 710.74 | 455.78 | - | - |

Main investment projects (under construction) of RusHydro Group

| Projects | Design capacity | Construction | | Commissioning | |
|--|---------------------------|--------------|------------------|---------------|-------------------------|
| | | Start | End ¹ | 2017 | 2018 ² |
| Priority projects in the Far East | | | | | |
| 1st stage of Sakhalinskaya GRES-2 Due to a new power station the problem of the substitution of the ageing Sakhalin power plant will be solved, as well as the efficiency of Sakhalin power system functioning will be improved. | 120 MW 18.2 Gcal/h | 2011 | 2018 | - | 120 MW |
| CHPP in Sovetskaya Gavan The CHP plant is being built to replace the outgoing capacity of the Mayskaya GRES and to meet the growing electricity demand for the scheduled power outages in Sovetskaya Gavan. | 120 MW 200 Gcal/h | 2011 | 2019 | - | - |
| The first stage of the Yakutskaya GRES-2 The project envisages the substitution of capacities of the ageing Yakutskaya GRES, ensuring the growth of consumption and increasing the reliability of energy supply. | 193.48 MW 469.6 Gcal/h | 2011 | 2017 | 193,48 MW | - |
| Construction of GTP-CHPP in Vladivostok on the central steam-water boiler facility platform The project is aimed at replacing the morally and physically obsolete equipment of the existing Artemovskaya CHPP, as well as covering the growth of electrical demand in Vladivostok. | 139.5 MW/ 432 Gcal/h | 2011 | 2018 | | 139.5 MW/ 432 Gcal/h |

¹ Signing the act of acceptance for the completed construction of the facility and its launch.

² Plan.

Results of Activities

| Projects | Design capacity | Construction | | Commissioning | |
|--|-----------------------|--------------|------------------|---------------|----------------------|
| | | Start | End ¹ | 2017 | 2018 ² |
| Zaramagskie HPP Construction is carried out in order to cover the electricity shortage in the Republic of North Ossetia-Alania from 80% to 30%. | 342 MW | 1976 | 2018 | - | 342 MW |
| Nizhne-Bureyskaya HPP The station will become a counter-regulator of the Bureyskaya HPP, which levels of daily fluctuations in the water level in the river, which are generated by the operation of the hydroelectric power station. This will remove the restrictions on the operation modes of the Bureyskaya HPP and eliminate the winter flooding of a number of settlements located in the downstream. | 320 MW | 2010 | 2019 | - | - |
| Ust-Srednekanskaya HPP Increase of the reliability of the power system, the supply of electricity to mining enterprises of the region | 310.5 MW | 1991 | 2018 | - | 142.5 MW |
| Gasification of Anadyr CHPP Provision of reliable heat and power supply to the Anadyr energy hub; improving the efficiency of the electricity generation of the Anadyr CHP by using a more economical type of fuel; creating conditions for curbing tariff growth; improving the ecology of electricity generation in Anadyr | - | 2015 | 2018 | - | - |
| Construction of two single-circuit 110 kV high voltage line Pevek-Bilibino (construction stage No. 1) Ensuring the flow of electric power in the Chaun-Bilibino energy center in connection with the construction of the floating NPP; Increasing the reliability of the functioning of the Chaun-Bilibino power district | 490.59 km 12.6 MVA | 2018 | 2020 | - | - |
| Construction of a wind power station 900 kW in the village of Tiksi, Bulunsky ulus Substitution of the output of a local diesel power plant (DPP of Bulun Electric Power Grids of JSC Sakhaenergo) for generation from a renewable energy source by saving expensive diesel fuel | 0.9 MW | 2017 | 2019 | - | - |
| Construction of a DEL-3000 kW with a storage tank as part of the wind farm in the village of Tiksi, Bulunsky ulus The construction of a diesel power plant based on equipment from Japanese manufacturers, which is an integral part of the normal and effective operation of the wind farm as part of a single wind farm complex and testing of modern technologies for the accumulation of electricity in order to provide reliable power supply in the village of Tiksi; reduction of fuel consumption for electricity generation | 3 MW | 2018 | 2020 | - | - |
| Technological connection of 220 kV HVL "Orotukan-Palatka-Tsentralnaya" Implementation of technological connection of HVL 220 kV "Orotukan-Palatka-Tsentralnaya" to the electrical networks of PJSC Magadanenergo, in accordance with contract No. 797 / 20-2016 of July 29, 2016. | 220 kV | 2017 | 2018 | - | - |
| Expansion of the Maya 220 kV substation and construction of the Megino-Kangalas Region power transmission lines of the Republic of Sakha (Yakutia) for connection to the electricity grids of PJSC FGC UES of the electrical installations of PJSC Yakutskenergo (Phase 2 of construction - construction of branchings) Providing parallel operation of the South Yakutia and Central Power Regions of the Republic of Sakha (Yakutia) and improving the reliability of power supply for the Zarechny group of districts. | 25.86 km 92.04 MW | 2017 | 2018 | - | 25.86 km 92.04 MW |

¹ Signing the act of acceptance for the completed construction of the facility and its launch.

² Plan.

Plans for investment activity

Investment plans for 2018¹

| Volume of investments | RUB mn | Capacity to be commissioned | |
|--|-------------------|-----------------------------|----------|
| Technical rehabilitation and modernization | 34,302.63 | Generation, MW | 797.12 |
| New construction | 71,242.71 | Heat, Gcal/h | 782.89 |
| Technological connection | 12,302.61 | Transformer capacity, MVA | 992.37 |
| Other | 4,943.77 | Grid infrastructure, km | 1,728.79 |
| Total | 122,791.71 | | |

INNOVATIVE DEVELOPMENT

RusHydro Group Innovation development programme for 2016-2020, with a prospect up to 2025

The main objectives of the Innovation Development Programme of RusHydro Group for the medium term are to increase the economic and operational efficiency of the Company's operations through the introduction of innovative technical and management solutions aimed at:

- increasing the service life and productivity of equipment;
- developing technologies to increase reliability and economic efficiency of equipment operation;

- improving the quality of equipment diagnostics and proactive identification and elimination of production risks;
- reducing the dependence on imported equipment and focusing on import substitution;
- reducing the negative footprint on nature;
- increasing energy efficiency and reducing losses.

¹ Investment programme of PJSC RusHydro for 2018 was approved as part of the business plan of PJSC RusHydro for 2018-2022. (Minutes of the Board of Directors from 26.12.2017 No. 264).