

EFFICACY ENHANCEMENT

Capital construction quality control

In furtherance of the Russian Government Decree³⁶, with a view to evaluate compliance with project documentation, technical regulations, land plot development plan, site investigation outcomes, the Company supervises construction, reconstruction and refurbishment of capital construction facilities. Coverage of facilities constructed under the investment program with independent construction control totaled 54% in 2018.



Enhancement of energy efficiency

The target indicators, compliant with the OAO IDGC of Urals Energy-saving and Enhanced Energy Efficiency Program³⁷, are listed below:

- Reduction of electricity losses during transmission and distribution of electricity through the networks;
- Consumption of energy resources for economic and production needs;
- Equipment with energy-saving lighting facilities (since 2017).

Target and actual values of the target indicators for 2018*

	Measurement units	2018	
		Target	Actual
Electricity losses	Million kWh	5,192.76	4,856.31
	RUB million, net of VAT	12,928.00	10,894.30
	% of supply	7.91	7.32
In-house load of substations	Million kWh	84.82	79.56
	% of losses	1.63	1.64
Total consumption of energy resources for economic needs of administrative and production buildings, comprising:	RUB million, net of VAT	337.92	304.37
	Thousand tfoe	17.44	17.24
Electricity	Million kWh	78.89	77.58
	Thousand tfoe	9.47	9.31
	RUB million, net of VAT	257.03	233.65
	Million kWh/m ²	0.00	0.00
Thermal energy (heating system)	GCal thousand	50.11	50.66
	Thousand tfoe	7.16	7.24
	RUB million, net of VAT	76.50	68.01
	GCal/m ³	0.04	0.04
Natural gas (including liquid gas)	Thousand m ³	702.53	598.76
	Thousand tfoe	0.81	0.69
	RUB million, net of VAT	4.39	2.72
Total consumption of natural resources for economic needs of administrative and production buildings, comprising:	RUB million, net of VAT	6.12	3.55
	Thousand m ³	136.06	118.71
Hot water supply	Thousand m ³	7.24	8.13
	RUB million, net of VAT	0.27	0.19
Cold water supply	Thousand m ³	128.83	110.58
	RUB million, net of VAT	5.85	3.36
Total fuel consumption by vehicles and machinery, comprising:	Thousand liters	11,837.42	12,102.65
	Thousand tfoe	13.97	14.28
	RUB million, net of VAT	380.51	407.12
Gasoline, incl.:	Thousand liters	6,192.96	6,324.39
	Thousand tfoe	7.01	7.16
	RUB million, net of VAT	194.38	203.88
	Thousand liters / 100 km	0.02	0.02
Motorized vehicles	Thousand liters	5,705.46	5,843.62
	Thousand tfoe	6.46	6.62
	RUB million, net of VAT	179.41	188.26
	Thousand liters / 100 km	0.02	0.02
Special-purpose vehicles	Thousand liters	487.50	480.77
	Thousand tfoe	0.55	0.54
	RUB million, net of VAT	14.98	15.63
	Thousand liters / 100 km	0.02	0.03
	Thousand liters / motor hour	0.00	0.01
Diesel, incl.:	Thousand liters	5,644.46	5,778.26
	Thousand tfoe	6.96	7.12
	RUB million, net of VAT	186.13	203.24
	Thousand liters / 100 km	0.03	0.03
Motorized vehicles	Thousand liters	2,224.94	2,178.07
	Thousand tfoe	2.74	2.68
	RUB million, net of VAT	73.03	76.68
	Thousand liters / 100 km	0.03	0.03
Special-purpose vehicles	Thousand liters	3,419.52	3,600.19
	Thousand tfoe	4.21	4.44
	RUB million, net of VAT	113.10	126.55
	Thousand liters / 100 km	0.03	0.03
	Thousand liters / motor hour	0.01	0.01
Equipment with LED energy-saving lighting facilities*	%	30.5	20.8
Lighting facilities used, incl.:	pcs	75,769	74,700
With energy-saving lamps (net of LED lamps)	pcs	32,991	36,886
LED lamps	pcs	23,103	15,556

* No other energy resources were consumed by the Company during the reported period, except for the ones shown above.



Sverdlovenergo's activity "Autonomous resource of thermal power supply (gas boiler house)", conducted to optimize heating expenses, was acknowledged as the key target activity of 2018. The annual effect totaled 1.5 thousand GCal, 217.8 tfoe and RUB 0.9 million. It should be noted that registration of the Energetik health resort in fixed assets by our Sverdlovenergo branch had an adverse effect on in-house consumption: the consumption of resources by the facility totaled 0.2 million kWh, 1.2 thousand GCal, 2.5 thousand m3. However, by the end of 2018 grown consumption of electricity and cold water was compensated in full through upgrading of lighting system and organizational arrangements.

Consumption of gasoline and diesel increased due to the construction team drills arranged in 3Q and 4Q 2018 in the service areas of PAO IDGC of North Caucasus (70 motorized and special-purpose vehicles) and Krasnoyarsk branch of PAO IDGC of Siberia (16 vehicles) as well as in the Chelyabinsk region (100 vehicles), and due to the guaranteed supplier activities in the Sverdlovsk and Chelyabinsk regions. Grown consumption of motor fuel, as a consequence of increased period of use and mileage during the drills, was partly compensated by installation of fuel level sensors and hour meters and changes in the vehicle fleet towards more fuel-efficient models.

To achieve 30% equipment with LED energy-saving lighting facilities³⁸ the Company planned actions related to installation of LED lamps. By the end of 2018 these activities were only partially implemented due to the growth of costs in the investment program by 50% on connection and by 110% on other investment projects that included acquisition of motorized and special-purpose vehicles for the guaranteed supplier function and due to a lack of interest from energy service companies in the activities under energy service contracts. Partial performance was financed by own funds and helped increase the share of LED lamps from 8.6% in 2017 to 20.8%.

The total effect from the activities under the Energy-saving Program, Program on reduction of losses and other related activities is 28,003.4 tfoe and RUB 496.0 million.

The total effect from the activities under the Efficacy Programs is RUB 496.0 million.

Operating efficiency and cost cutting

The Company's Enhanced Operating Efficiency and Cost Cutting Program for 2018-2022 has been developed in furtherance of the Strategy¹, Russian Government Directive³⁹ (stipulating min 2% annual cuts of operating expenses), as well as Strategy of Long-term Social and Economic Development of the Urals region.

Key directions of the program that ensure opex reduction:

1. Intensification of the process liable for control over maintenance and repair of equipment, buildings and facilities, implementation of breakthrough technologies and innovations;
2. Intensification of control over working capital (optimization of overdue receivables, inventories and current liabilities);
3. Intensification of control over fixed assets.
4. Intensification of control over purchases and supply chains (reduction of purchase prices for all types of procurements; minimization of the share of imported equipment and materials; optimization of supply costs with regard to operating and investing activities);
5. Improvement of organizational and functional structure, optimization of headcount, personnel incentive and remuneration systems;
6. Enhancement of energy efficiency (reduction of electricity losses, consumption of energy resources for economic needs of administrative and production buildings);
7. Investment (reduction of per-unit investing costs per 1 km, 1 MVA; optimization of transformer load, cost-cutting of privileged connection).

By the year end the Company has achieved the target value of annual reduction of actual per-unit operating expenses.