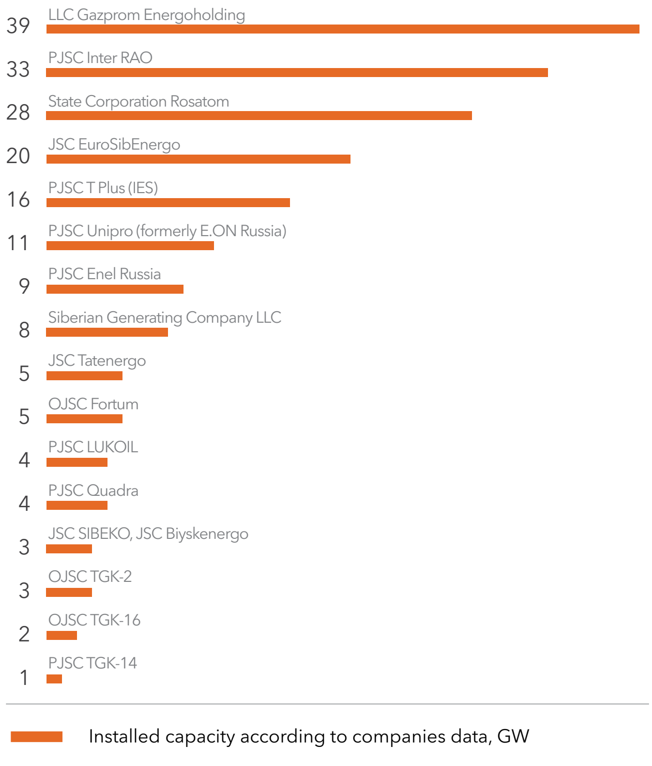
The main competitors of RusHydro Group[1]



In 2011, RusHydro Group acquired a 90% stake in the Sevan-Hrazdan HPPs Cascade with 561.4 MW of installed capacity in the Republic of Armenia. Thus, entering the electricity market of Armenia, PJSC RusHydro gained a significant share of this market.

MARKET OVERVIEW

RusHydro Group companies operate with electricity and capacity in the wholesale electricity and capacity market, as well as in retail markets - the electricity market and the heat energy market. [102-6]

Electricity and capacity market

The electricity and capacity market in the Russian Federation is divided into wholesale (WECM) and retail (REM) markets. According to the requirements of the law, all owners of power generation (capacity) facilities with an installed capacity of over 25 MW sell electricity (power) only on the Wholesale Electric Capacity Market. Stations with a capacity below 5 MW operate only on REM, stations from 5 to 25 MW can sell electricity (capacity) on both markets.

Participants in the wholesale electricity and capacity market are: generation companies, electricity export / import operators, energy sales organisations, electric grid companies (in terms of acquiring electricity to cover transmission losses), large-scale consumers. The wholesale electricity and capacity market operates in price and non-price zones. The first price zone includes the territories of the European part of Russia and the Urals, the second - Siberia. In non-price zones (Arkhangelsk and Kaliningrad regions, the Komi Republic, regions of the Far East) wholesale trade in electricity (capacity) is carried out according to special rules (4-sided contracts). The rules of the retail electricity market are enforced on the territories of the country, which are not categorised in price and non-price zones and different from REM zone rules

For some zones of the Far East, there is a special premium, which is collected in the first and second price zones of the WECM. This premium is aimed at reducing tariffs in the Far East to the average Russian level. PJSC RusHydro is appointed by the Government of the Russian Federation to collect and transfer such allowance to the Far East.

Electricity market zones

First price zone
Second price zone
Non-price zones and isolated energy systems

[1] Without taking into account the capacities used by the companies - consumers of electricity for their own production needs.

Wholesale electricity and capacity market

There are several sectors that differ in terms of transaction and delivery terms in the WECM:

- regulated contracts (RC);
- quadrilateral agreements;
- day-ahead markets (DAM);
- balancing markets (BM);
- free electricity and / or capacity purchase and sale contracts (FECC, FCC);
- free bilateral contracts for the sale of electricity (FBC);
- competitive capacity auctions (CCA);
- purchase and sale agreements for the capacity of new nuclear and hydroelectric power stations (including pumped storage power plants) (DPMs) put into operation;
- bilateral agreements in non-price zones (BA in NPZ).

In the United Energy Systems of the East (UES of the East), a wholesale market model with a single purchaser is implemented. Electricity and capacity suppliers sell electricity and capacity at the tariffs set for them to a single purchaser. Buyers of the wholesale market purchase electricity and capacity from a single buyer at prices calculated by the Administrator of the Trading System, on the basis of indicative prices set for the buyers of FAS Russia.

In accordance with clause 170 of the Russian Federation Government Decree No. 1172 of December 27, 2010, the functions of a single purchaser are assigned to an energy sales organisation created as a result of the reorganisation of joint-stock companies of power and electrification functioning in the indicated territory and supplying to the retail market more than half of the volume of electric energy consumed in the territory of the Far East. This organisation is PJSC DEK - a guaranteed supplier in the territories of the Amur Region, the Jewish Autonomous Region, the Khabarovsk and Primorye Territories. The total supply volume of PJSC DEK in the retail market is more than 85% of the power consumption of the UES of the East.

Retail electricity markets

Work on REM in price zones is carried out under free bilateral contracts with consumers provided for by the rules of the retail market. Tariff regulation in this sector of the market is absent. Electricity is sold at a contract-based market price.

Within the retail electricity markets, electricity is sold from the wholesale electricity and capacity market, as well as electricity generated by generating companies that are not participants in the wholesale market. In the territories of the constituent entities of the Russian Federation, united in non-price zones of the wholesale market, when determining the prices for electricity supplied to retail markets to end-users, the principles of wholesale-to-retail market prices mark-up are applied. The wholesale-to-retail market prices mark-up is carried out with respect to all final consumers, with the exception of the population and equivalent categories of consumers.

Electricity supply to the population and to equivalent categories of consumers is carried out at regulated prices (tariffs) established by the executive authority of the region (the territorial entity) of the Russian Federation in the field of state regulation of tariffs.

In addition, there are regions in the territories of which only the retail market operates - isolated power systems of the Kamchatka Region, the Magadan Region, the Chukotka Autonomous Region, the Western and Central regions of the Republic of Sakha (Yakutia) and the Sakhalin Region that do not have technological links with the unified energy system of the country. Because of absence of a free market in the territories of isolated power systems, the sale of electricity to all categories of consumers is carried out at 100% regulated prices approved by the executive authorities of the regions of the Russian Federation in the field of state regulation of tariffs in the territory where these power systems are located.

Tariffs for stations of isolated REM zones are established by regional authorities in the field of tariff regulation (hereinafter referred to as the Regulator), in accordance with the developed methods of the Federal Tariff Service of Russia:

- Decree of the Federal Tariff Service of Russia No. 20-e / 2 of August 6, 2004 (method of economically justified costs);
- Decree of the Federal Tariff Service of Russia No. 275-e / 4 of July 5, 2005 (indexing method).

The choice of the method of regulation is proposed to the regulated organisation, but always remains at the discretion of the Regulator.

Performance at WECM 2017

Dynamics of average tariffs and required gross revenue (RGR) for electricity generation

	2016		2017		2017 - 2016		2017/2016	
	Average selling price	RGR	Average selling price	RGR	Average selling price	RGR	Average selling price	RGR
Market zones	RUB / thousand kWh	mn RUB	RUB / thousand kWh	mn RUB	RUB / thousand kWh	mn RUB	%	%
Wholesale market, including:	385.07	27,599.3	385.82	29,742.1	0.75	2,142.8	100.20	107.76
RC	342.91	21,499.3	340.67	23,049.8	-2.24	1,550.5	99.35	107.21
Centre	443.61	17,813.6	444.96	18,784.1	1.36	970.6	100.31	105.45
Siberia	148.40	3,275.2	151.51	3,780.0	3.11	504.8	102.10	115.41
Caucasus	873.01	410.5	978.26	485.6	105.26	75.2	112.06	118.32
NPZ[1]	679.49	6,100.0	709.88	6,692.3	30.39	592.3	104.47	109.71
Far East	679.49	6,100.0	709.88	6,692.3	30.39	592.3	104.47	109.71

Reasons for tariff increase on the Wholesale Electricity and Capacity Market:

- indexation of tariffs;
- increase in tax rates for the use of water bodies without water usage for the purposes of hydropower (in accordance with the Tax Code of the Russian Federation for 2017, tax rates are applied taking into account the coefficient of 1.52);
- increase in the prices of DPM in 2017 for previously introduced hydroelectric power plants - the facilities of the DPM.

The main reason for the increase is the higher average yield of long-term government liabilities.

Sales volumes of electricity and capacity at the WECM by generating companies of RusHydro Group (price and non-price zones) for 2017[2]

Company	Type of goods	2016	2017	2017/2016, %
PJSC RusHydro	Electricity, mn kWh	95,960.9	96,324.8	0.38
	Capacity, MW	21,663.6	21,644.8	-0.09
JSC DGK	Electricity, mn kWh	20,065.82	21,245.22	5.88
	Capacity, MW	5,591.06	5,629.64	0.69
PJSC Peredvizhnaya Energetika	Electricity, mn kWh	143.07	98.97	-30.82
	Capacity, MW	121.09	121.97	0.73
Total	**Electricity, mn kWh**	**116,169.79**	**117,668.99**	**1.29**
	Capacity, MW	**27,375.75**	**27,396.41**	**0.08**

PJSC RusHydro, JSC DGK, PJSC Peredvizhnaya Energetika are represented in the wholesale market as generating companies. The total volume of electricity sales on the Wholesale Electricity and Capacity Market in 2017 amounted to 117,669 mn kWh; compared with 2016, sales grew by 1.29%. The total volume of capacity sales on the Wholesale Electricity and Capacity Market in 2017 was 27,396 MW; compared to 2016, sales grew by 0.08%.

[1] The indicators are reflected only in the part of the Bureyskaya and Zeyskaya HPP.

[2] The data is given taking into account the retail market.

Structure of electricity and capacity sales at the markets by generating companies of RusHydro Group[1]

Index	2016	2017	2017/2016, %
Sales volume, mn kWh, including:	116,449.4	117,940.3	1.3
under regulated contracts	41,348.9	43,244.6	4.6
on the day ahead market	65,871.4	66,880.3	1.5
on the balancing market	5,687.7	5,061.3	–11.0
under free bilateral contracts	3,261.7	2,482.8	–23.9
on the retail market	279.6	271.3	-3.0
Capacity, MW, including:	27,375.7	27,396.4	0.1
under regulated contracts	13,383.4	13,796.3	3.1
as a result of competitive auction	11,380.7	5,110.9	–55.1
under free bilateral contracts	2,487.2	8,210.9	230.1
under DPM	124.4	278.3	123.6

Electricity

The increase of 1.3% in the volume of electricity sales by power plants for the reporting period in comparison to the indicators of 2016 is due to the following factors:

- 4.6% increase in the sales under regulated contracts is due to a change in the binding of volume and value indicators between counterparties for the RC for 2017 in comparison to 2016 and the growth in sales volumes under 4-sided contracts in NPZ WECM;
- 1.5% increase in the volume of electricity sales at the day-ahead market is due to a corresponding increase in the generation of electricity at HPPs in price zones;
- 11.0% decrease in electricity sales at the balancing market is due to the regulatory instructions of the System Operator to ensure reliable operation of the UES;
- 23.9% decrease in the volume of electricity sales under free bilateral contracts was due to a decrease in sales volumes under bilateral agreements in the non-price zone of the Wholesale Electricity and Capacity Market because of a decrease in the production of HPPs of non-price zones compared to 2016;
- 3.0% decrease in the volume of electricity sales in the retail market was due to a 4.5% decrease in the sales of Nikolaevskaya CHPP in comparison to the values of 2016 and partially offset by an increase in the inflow and accordingly, the electricity generation by small HPPs in the North Caucasus region.

Capacity

The 3.1% increase in the sales of capacity by RC is due to the change in the binding of volume and cost indicators between counterparties for the RC for 2017 in comparison to 2016.

The conclusion of free bilateral contracts for the purchase and sale of capacity (an increase of 230.1%) is due to the need to improve payment discipline in the WECM. As a result of the conclusion of the FCC, the share of non-payers for the capacity sold through the competitive power take-off mechanism has been reduced, thereby increasing the overall level of payment for the delivered capacity.

The increase in sales of capacity by FCC led to a 55.1% decrease in sales volumes in the CCA due to the actual redistribution of capacity between FCC and CCA.

The 123.6% increase in the volume of capacity sales under DPM was primarily due to the lifting of restrictions on the delivery of capacity at the Gotsatlinskaya HPP as part of the Dagestan branch, as well as the commissioning of the Zelenchukskaya HPP-PSP in the Karachayevo-Cherkesiya branch.

[1] The data is given taking into account the retail market.

The prices for the sale of electricity and capacity at the WECM (price and non-price zones)

Company	Type of goods	2016	2017	2017/2016, %
PJSC RusHydro	Electricity, RUB / MWh	805.7	818.8	1.6
	Capacity, RUB / MW per month	141,684.4	251,766.6	77.7
JSC DGK	Electricity, RUB / MWh	1,307.1	1,367.9	4.6
	Capacity, RUB / MW per month	247,272.4	258,105.2	4.4
PJSC Peredvizhnaya Energetika	Electricity, RUB / MWh	1,880.9	1,938.6	3.1
	Capacity, RUB / MW per month	235,379.8	235,593.4	0.1
Total	**Electricity, RUB / MWh**	**893.6**	**918.9**	**2.8**
	Capacity, RUB / MW per month.	**163,663.5**	**252,997.1**	**54.6**

The average selling price of electricity at the WECM in 2017 was 918.9 rubles / MWh; compared to 2016, the price growth was 2.8%. The average selling price of capacity at the WECM in 2017 was 252,997.1 rubles / MW per month; compared with 2016, the price increase was 54.6%. The sharp increase is due to a surcharge on the price of capacity in the price of CCA.

There was introduced an premium for capacity in the first and second price zones (by Federal Law No. 508-FL of December 28, 2016 On Amendments to the Federal Law "On Electric Power"), thereby tariffs in the Far East are reduced to a basic level determined by the Government of the Russian Federation.

The prices for the sale of electricity and capacity at the energy markets of power plants by generating companies of RusHydro Group

Index	2016	2017	2017/2016, %
Prices (tariffs)			
Average output price for electricity (capacity), rubles / MWh	1,369.2	1,638.8	19.7
Electricity, RUB / MWh, including:	907.5	933.5	2.9
under regulated contracts	566.7	623.9	10.1
on the day ahead market	1,081.7	1,096.6	1.4
on the balancing market	1,088.4	1,066.3	-2.0
under free bilateral contracts	898.9	967.4	7.6
on the retail market	6,664.7	7,296.8	9.5
Capacity, RUB / MW per month, including	163,664.1	252,997.1	54.6
under regulated contracts	174,299.3	181,225.4	4.0
as a result of competitive auctions	140,498.0	574,900.3	309.2
under free bilateral contracts	115,348.8	118,185.7	2.5
other types of capacity purchase and sale	2,104,833.0	1,876,756.7	-10.8

The 10.1% increase in the price (tariff) of the sale on RC, taking into account the sale of 4-sided contracts in NPZ WECM, is due to the indexation of regulated tariffs and the magnitude of the positive cost imbalance in NPZ in the reporting period.

The 2.0% decrease in selling prices on the BM is due to the redistribution of the volumes of electricity sold by the hour of the day due to the regulatory instructions of System Operator, which, when the indicator was averaged, led to its derivation.

In 2016, the sale under FBC was carried out only in the NPZ WECM. In 2017, in addition to the supply under BCs to the NPZ, sales were made in the first price zone of the WECM at a price close to the DAM, which far exceeded the maximum possible selling price of hydroelectric power in the NPZ (no higher than the double tariff for electricity in accordance with the WECM Rules). Accordingly, the average selling price for the FBC in 2017 increased by 7.6% in comparison to 2016.

The 9.5% increase in the price of electricity sold at REM is due to the actual redistribution of the volumes of electricity sold between HPPs of the REM relative to the planned indicators, incl. during the reporting period, as well as by the hour of the day, and a corresponding increase in the transmission prices of the guaranteed suppliers, as well as an increase in the tariff for the electricity supplied by the Nikolaevskaya CHPP.

The rate for energy at the stations of MPP Kazym and MPP Urengoy PJSC Peredvizhnaya Energetika, approved by a decree of FAS Russia dated November 30, 2016 No. 1692/16, supplying to the WECM in a forced mode, for the second half of 2017 saw an increase of 4.8% and 3.7% to the first half of 2017 respectively. No significant tariff growth in capacity has been detected.

Proceeds from the sale of electricity and capacity at WECM (price and non-price zone) by RusHydro Group of companies, RUB mn

Company	Type of goods	2016	2017	2017/2016, %
PJSC RusHydro	Electricity	77,313.5	78,867.1	2.0
	Capacity	36,832.7	65,393.2[1]	77.5
	Total electricity + capacity	114,146.2	144,260.4	26.4
JSC DGK	Electricity	26,228.9	29,061.4	10.8
	Capacity	16,590.2	17,436.5	5.1
	Total electricity + capacity	42,819.1	46,497.9	8.6
JSC Peredvizhnaya Energetika	Electricity	269.1	191.9	-28.7
	Capacity	342.0	344.8	0.8
	Total electricity + capacity	611.1	536.7	-12.2
Total	**Electricity**	**103,811.5**	**108,120.4**	**4.2**
	Capacity	**53,764.9**	**83,174.5[1]**	**54.7**
	Total electricity + capacity	**157,576.4**	**191,295.0**	**21.4**

The total sales of electricity and capacity on the WECM by generating companies in 2017 amounted to RUB 191,295.0 mn; compared to 2016, revenue growth was 21.4%.

Net revenue from the sale of electricity (capacity) increased by 22.2% compared to the level of 2016 due to the following factors:

- receiving a premium to the price of capacity;
- growth in sales volume under FECC;
- 3.8% growth in the price at DAM in the second price zone;
- 1% increase of output;
- indexation of tariffs in markets with regulated pricing.

[1] The revenue from the sale of capacity in the amount of the premium RUB 23,995 mn is reflected in the consolidated financial statements of RusHydro Group under IFRS deducted with the amount of free-of-charge targeted contributions to the budgets of the constituent entities (regions) of the Russian Federation, rolled up with the cost of its transfer.

Revenues from sales of electricity and capacity on energy markets by generating companies of RusHydro Group, RUB mn

Index	2016	2017	2017/2016, %
Cost indicators			
Revenues for electricity and capacity, total	**159,519.9**	**193,357.0**	**21.2**
Wholesale market, including	157,576.4	191,295.0	21.4
Electricity, including	103,811.5	108,120.4	4.2
under regulated contracts	23,432.9	26,981.6	15.1
at the day ahead market	71,256.1	73,340.0	2.9
at the balancing market	6,190.5	5,397.1	-12.8
under free bilateral contracts	2,932.1	2,401.8	-18.1
Capacity, including	53,764.9	83,174.5	54.7
under regulated contracts	27,992.5	30,002.9	7.2
as a result of competitive auctions	19,187.6	35,259.1	83.8
under free bilateral agreements	3,442.7	11,644.9	238.2
other kinds of capacity purchase and sale	3,142.1	6,267.6	99.5
Electricity supplied to the retail market	1,863.5	1,979.8	6.2
Reactive capacity control services (SO services)	79.9	82.2	2.8
Net revenue for electricity (capacity)	152,340.2	186,186.4	22.2
Purchase Costs			
purchased electricity	7,161.7	7,159.7	0.0
purchased capacity	18.0	10.9	-39.6
Total costs	**7,179.7**	**7,170.6**	**-0.1**

Electricity supply at the retail market and sale to consumers by PJSC RusHydro's controlled companies (excluding RAO ES East Subgroup), mn kWh

Name	2016	2017	2017/2016, %	Reasons
PJSC Krasnoyarskenergosbyt	13,580	12,540	–9	The main impact on the decline in output in 2017 relative to the previous year was the entry of large consumers in WECM, in accordance with the corporate strategy. The following factors influenced the growth of volumes in the Population group: ■ high rates of newly introduced housing; ■ temperature factor
PJSC RESK	2,711	2,661	–2	Reasons for the decline: ■ withdrawal in 2017 to the wholesale market of an energy-intensive enterprise - LLC Guardian Steklo Ryazan, a decrease of 49.6 mn kWh; ■ a significant reduction in electricity consumption by JSC Mezhregionenergosbyt, a decrease of 22.8 mn kWh; ■ reduction of losses for grid companies acquiring electricity to compensate for losses in their networks, a decrease of 18.6 mn kWh
JSC Chuvash Retail Energy Company	3,274	3,320	1	The increase is due to the increase in the consumption of the population and the growth of average weighted unregulated prices transmitted from the wholesale electricity (capacity) market for consumers in the retail electricity market
JSC ESC RusHydro	2,360	2,186	–8	The decrease is due to the cancellation of contracts with consumers in the Republic of Bashkortostan in the 4th quarter of 2017. At the same time JSC ESC RusHydro concluded contracts with new customers in other constituent entities of the Russian Federation
Total	**21,925**	**20,707**	**-6**	

Tariffs for electricity and electricity production in the Far Eastern Federal District

Activities in the non-price and isolated zones of the Far Eastern Federal District are carried out at tariffs set by the state federal executive bodies (FTS of Russia - until July 21, 2015, after July 21, 2015 - FAS Russia) and executive authorities of the regions of the Russian Federation in the field of state regulation of tariffs hereinafter - regional regulating bodies), in accordance with the pricing principles and the rules of state regulation of tariffs for electrical and thermal energy in the Russian Federation. Prices in the Far Eastern Federal District are not market-based.

Federal Law No. 35-FL of March 26, 2003 " On the electric power industry" sets out the main principles for regulating prices (tariffs) in the sphere of electric power and the authority of regulators. The basic principles, methods of regulation, as well as the procedure for calculating and approving tariffs for thermal energy are defined in Resolution of the Government of the Russian Federation No. 1178 of December 29, 2011 "On Pricing in regulated prices (tariffs) in the electric power industry".

When approving tariffs, regulators adhere to the following methods of tariff regulation

- tariffs for electricity (capacity) to JSC DGK, supplied in NPZ WECM, are approved by Decree of FAS Russia of December 8, 2016 No. 1736/16, calculated by indexing;
- tariffs for electricity transmission services for DRSK JSC (except for the South Yakutsk Electric Networks branch), are approved by using the RAB method;
- Sales increase for the PJSC DEK - in accordance with the Guidelines for calculation of sales mark-ups for guaranteed suppliers, approved by Decree of the Federal Tariff Service of Russia of October 30, 2012 No. 703-e;
- Electricity tariffs for the end user in an isolated area - using the method of economically justified costs.

Dynamics of average tariffs for electricity supplied to consumers, kopecks / kWh

Companies	2016	2017	2017/2016, %
Isolated zone	**605.27**	**658.17**	**8.7**
PJSC Yakutskenergo	614.73	680.85	10.8
PJSC Kamchatskenergo	572.28	641.73	12.1
PJSC Magadanenergo	457.70	523.65	14.4
PJSC Sakhalinenergo	520.08	526.35	1.2
JSC Chukotenergo	980.47	1,091.99	11.4
JSC SENK	2,438.58	2,419.34	–0.8
Non-price zone (tariffs for the zone of PJSC DEK)	**296.89**	**318.97**	**7.4**
Primorsky Krai	312.13	333.05	6.7
Khabarovsk Region	329.90	343.33	4.1
Amur Region	258.14	278.21	7.8
Jewish Autonomous Region	232.13	319.02	37.4

The average increase in tariffs for electricity delivered to end users by JSC RAO ES East in an isolated zone in 2017 grew by 8.7% to the level of 2016. The minimum increase in tariffs was 1.2% for PJSC Sakhalinenergo, the maximum - 14.4% for PJSC Magadanenergo. With a decrease of 0.8%, the average tariff rate for JSC SENK is set, which is due to the adjustment of expenditures - falling income, excess income, and the increase in output is 1.7% compared to 2016.

The decrease in electricity sales volumes under free bilateral contracts by 29.1% was due to a decrease in sales volumes for Bilateral Contracts in the NPZ WECM because of a decrease in the production of non-price zones compared to 2016.

In the territory of the non-price zone of the WECM, from July 1, 2016 onwards, no numerical values of tariffs for other consumers are established. The growth of tariffs in the NPZ WECM was from 4.1% to 37.4%.

Dynamics of average tariffs for electricity production in isolated areas, RUB / thousand kWh

Companies	2016	2017	2017/2016, %
Isolated areas of the Retail Market			
JSC Geotherm	2,695	2,715	100.71
JSC Pauzhetskaya GeoPP	6,395	6423	100.44
Kolymskaya HPP	1,032	1,203	116.60
Kolyma Electric grids	2,040	2,372	116.25
PJSC KamGEK	3,355	4,027	120.01

In 2017, according to the objects of the REM, which produces electricity (power) at HPPs, GeoPPs and regulated by the method of economically justified costs, growth was achieved above the deflator index.

Electricity supply in the retail market and sales to consumers in the Far East including VAT 18%

	2016		2017		2017/2016	
	mn kWh	mn RUB	mn kWh	mn RUB	Net supply, %	Revenue, %
Total for RAO ES East Subgroup	32,309.1	127,027.0	31,495.2	116,046.6	-2.5	-8.6

In comparison to 2016 there was a decrease in the supply of electrical energy. This was influenced by the change in electricity consumption by the companies of PJSC DEK and PJSC Yakutskenergo.

Main reasons:

- decrease in the output for grid companies acquiring electricity in order to compensate for losses,
- the transition of a part of consumers from the retail electricity market to the wholesale market.

Structure of the net supply of electricity in the Far East

Consumer group	Revenues[1], mn RUB	Share, %
Network organisations that purchase electricity to compensate for losses	8,463.3	7.3
Industry	21,943.9	18.9
Transport and communications	5,176.7	4.5
Agriculture	1,398.0	1.2
Enterprises financed by the federal budget	6,424.9	5.5
Enterprises financed by the local (regional) budget	5,112.2	4.4
Heat supply organisations	7,758.1	6.7
Housing and utilities	11,136.9	9.6
Population, on direct calculations	23,124.1	19.9
UK, HOA, HBC	4,986.8	4.3
Other	20,521.7	17.7
Total	**116,046.6**	**100.0**

[1] Including VAT 18%.

Reflection of the premium to the price of capacity. Changes in legislation in 2017

Federal Law No. 508-FL of December 28, 2016 and No. 129-FL of June 30, 2017 "On Amendments to the Federal Law" On Electric Power Industry introduced a premium to the price for capacity in the first and second price zones, due to which tariffs in the Far East were reduced to the national average.

This change provides for the application of a surcharge to the price of capacity sold by the Company in the price zones of the wholesale electricity and capacity market, with the subsequent transfer of funds received as a result of the application of this allowance to the budgets of constituent entities of the Russian Federation such as a part of the Far Eastern Federal District in the form of targeted contributions.

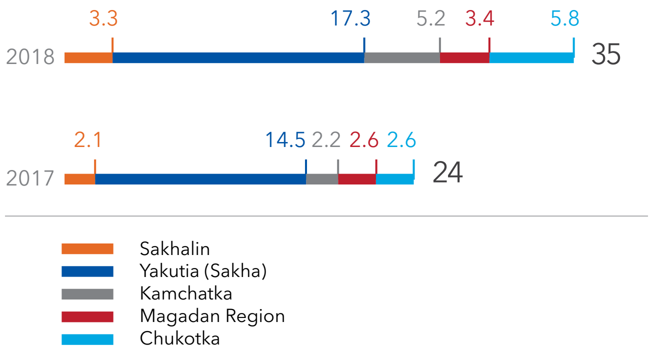
As part of the introduction of a mechanism for bringing prices (tariffs) for electricity (capacity) to consumers of the Far Eastern Federal District, with the exception of the population, a number of by-laws have been adopted to the basic levels (Decree of the Government of the Russian Federation No. 895 of July 28, 2017; Decree No. 1614 of the Government of the Russian Federation of July 28, 2017, Decree of the Government of the Russian Federation of July 28, 2017 No. 1615-р), after the enforcement of which, consumers (industrial consumers) of the five regions of the Far East (isolated systems: the Republic of Sakha (Yakutia), Magadan Region, Chukotka Autonomous District, Kamchatka Territory, Sakhalin area) already in 2017 received tariffs for electricity aligned to the average Russian level (the base level). The base level of prices (tariffs) for electricity (capacity) by the decree of the Government of the Russian Federation for 2017 is set at 4.00 RUB / kWh. The current average tariff for industrial consumers in the above-mentioned territories in the current year is from 4.7 RUB / kWh to 11.3 RUB / kWh.

As part of the implementation of the mechanism to bring prices to the basic level in the Far East, in accordance with the decision of the Government for 2017, the premium for 2017 is determined at the amount of RUB 23,995.28 mn.

Work is underway to formulate proposals for changing the tariff regulation in respect to tariffs for electricity (capacity), which are currently established by the method of economically justified expenditures. This is done to introduce long-term methods of regulation that ensure the preservation of the effect obtained by optimising costs and improving the efficiency of energy companies and getting a return on capital (profitability) when implementing new investment projects.

Levelling tariffs in the Far Eastern Federal District. Impact on regions and RusHydro Group

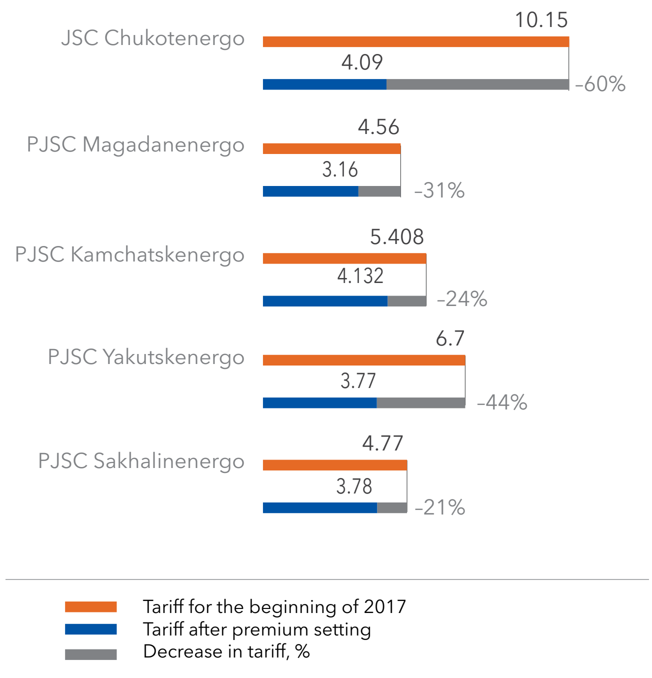
Amount of premium, bn RUB



In 2017, the mechanism was introduced in five of the nine regions of the Far Eastern Federal District, in which the average tariff for electricity for consumers was above 4 rubles / kWh.

The reduction of tariffs does not lead to a decrease in revenues, as it is completely compensated by subsidies allocated from budgets, which are paid at the expense of the surcharge to the price of CCA. The total amount of subsidies received by guaranteed suppliers - enterprises included in the Group (within the Decree of the Government of the Russian Federation of July 28, 2017 No. 895), amounted to RUB 17,254 mn. In addition, other subsidies received by the RusHydro Group amounted to RUB 15,491 mn. [201-4]. The situation with accounts receivable will improve as a result of replacing part of the proceeds from consumers with direct subsidies from regional budgets.

Tariff levelling, RUB / kWh



Heat energy market

In the heat (thermal) generation market, RusHydro Group is represented through the activities of the RAO ES East Subgroup, as well as through the activities of the Bureyskaya and Zeyskaya HPPs.

The supply of heat energy is carried out centrally from thermal power plants and boiler houses operated by power systems. At the same time, a number of power systems are engaged to supply thermal energy, carrying out activities for the production and distribution of thermal energy, others - only carry out activities for the production of thermal energy.

The sale of thermal energy, in accordance with the legislation of the Russian Federation, is a fully regulated type of activity.

Federal Law No. 190-FL of July 27, 2010 On Heat Supply sets out the main principles for regulating prices (tariffs) in the sphere of heat supply and the authority of regulators in the field of price (tariff) regulation in the heat supply sphere. The basic principles, methods of regulation, as well as the procedure for calculating and approving tariffs for thermal energy are defined by Russian Government Decree No. 1075 of October 22, 2012 On Pricing in the Sphere of Heat Supply.

The prices (tariffs) for thermal energy sold by energy companies for all consumer groups are approved by the executive authorities of the regions of the Russian Federation in the field of state regulation of prices (tariffs) within the limits of tariff levels approved by the FAS of Russia.

Dynamics of tariffs for thermal energy in the Far East

Name	2016, RUB / Gcal	2017, RUB / Gcal	2017/2016, %
PJSC RusHydro	**749.49**	**765.02**	**102.1**
Branch of PJSC RusHydro - Bureyskaya HPP[1]	701.29	708.63	101.0
Branch of PJSC RusHydro - Zeyskaya HPP[1]	797.68	821.41	103.0
JSC DGK	**1,397.31**	**1,450.80**	**103.8**
Amur Region	806.86	856.79	106.2
Primorye Territory (Primorskaya Generation, PTS)	1,689.95	1,767.85	104.6
Primorye Territory (LuTEK)	1,268.54	1,328.28	104.7
Khabarovsk Territory (Khabarovsk Generation, HTSK)	1,287.44	1,339.78	104.1
Khabarovsk Territory (Volochaevskaya Boiler-house)	1,503.88	1,909.15	126.9
The Jewish Autonomous Region (Birobidzhan CHPP)	1,896.37	1,929.28	101.7
Republic of Sakha (Yakutia) (Neryungrinskaya GRES)	1,867.96	1,980.23	106.0
Isolated zones:	**3,200.64**	**3,312.29**	**103.5**
PJSC Yakutskenergo	1,452.32	1,620.14	111.6
PJSC Kamchatskenergo	5,029.23	5,459.45	108.6
PJSC Magadanenergo	4,029.84	4,203.02	104.3
PJSC Sakhalinenergo[2]	848.26	826.66	97.5
JSC Chukotenergo[2]	3,339.38	3,546.96	106.2
JSC SENK	13,042.15	13,599.96	104.1
JSC Sakhaenergo	9,323.52	10,384.74	111.4
JSC Teploenergoservis	5,444.32	5,359.91	98.4

[1] It supplies thermal energy produced by electric boiler houses.

[2] PJSC Sakhalinenergo, JSC Chukotenergo carry out the release of heat energy from collectors to wholesale consumers-resellers.

The growth of tariffs for thermal energy produced in the mode of combined generation of electrical and thermal energy by heat energy sources with an installed generating capacity of electrical power production of 25 MW or more is limited to the minimum and maximum tariff levels approved by the FAS of Russia Decree No. 1646/16 of November 21, 2016.

Starting from 2016, tariffs for heat energy supplied by heat supply organisations to other consumers are not limited to the maximum level of tariff growth, and the growth of tariffs for heat energy for the population is limited by the index of changes in the amount of utility payments paid by citizens for the constituent entities of the Russian Federation, defined by Russian Government Decree of November 19, 2016 No. 2464-r.

According to the zone of activity of JSC DGK as a whole, the increase in the average tariff was 3.8%, including a minimum growth of 1.7% for the Jewish Autonomous Region, and a maximum of 26.9% for the Volochaevskaya Boiler House in the Khabarovsk Territory.

In the isolated zone as a whole, the increase of average tariffs for thermal energy supplied to end-users amounted to 3.5%. The minimum increase in tariffs was 4.1% for JSC SENK, the maximum - 11.6% for PJSC Yakutskenergo. According to PJSC Sakhalinenergo, the average delivery rate was set at 2.5% lower than the approved one for 2016, which is due to the adjustment of costs for individual aspects of expenditure, incl. dropping incomes, without taking into account that the increase in tariff for 2017 as compared to 2016 is 1.0%.

Sale of thermal energy in the Far East including VAT 18%

	2016		2017		2017/2016, %	
	thousand Gcal	RUB mn	thousand Gcal	RUB mn	Net supply	Revenue
Total	23,661.1[1]	46,447.1	22,717.2[1]	46,288.5	-4.0	-0.3

The following factors influenced the decrease in the net supply of heat energy in comparison with 2016:

- higher average monthly temperatures of outdoor air during the heating season of 2017,
- application of energy saving technologies, installation of metering devices.

Structure of the supply of thermal energy in the Far East

Consumer group	Revenues[2], mn RUB	Share, %
Industry	1,615.5	3.5
Agriculture	228.3	0.5
Federal budget	2,243.9	4.8
Regional, local budget	5,175.2	11.2
Heat supply, housing construction cooperative, Management Companies	5,905.5	12.8
Population	21,723.3	46.9
Heat supply organisations	4,865.1	10.5
Other	4,531.7	9.8
Total	**46,288.5**	**100.0**

[1] Net supply for consumers of thermal energy.

[2] Including VAT 18%.