

Balance of electric power

NOTE: IN THE CONTEXT OF THE SITUATION CREATED DUE TO COVID-19, THE INSTITUTE OF STATISTICS OF ALBANIA UPDATES THE DATA OF THE ELECTRICITY BALANCE. THE ELECTRICITY BALANCE PROVIDES STATISTICAL INFORMATION ON THE NET DOMESTIC PRODUCTION OF ELECTRICITY, ELECTRICITY EXCHANGE, ELECTRICAL LOSSES AND FINAL CONSUMPTION IN OUR COUNTRY FROM THE MONTHLY DATA COLLECTED FROM ADMINISTRATIVE SOURCES.

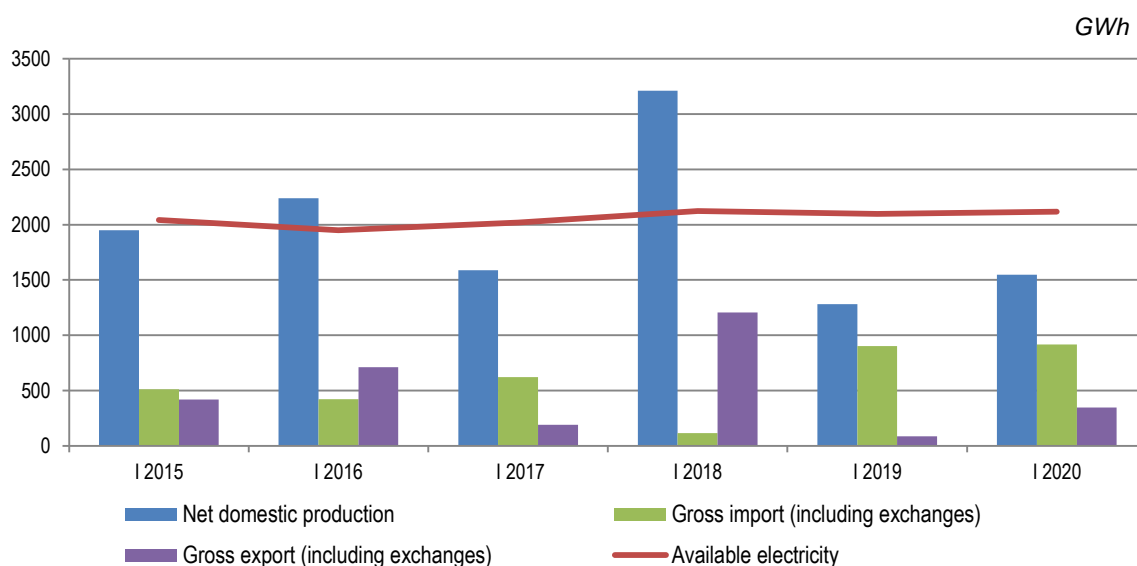
Quarter I - 2020

Tirana, May 22, 2020: During the first quarter of 2020, available electricity increased by 0.9 %.

Net domestic production of electric power in this period reached the value 1,546 GWh from 1,281 GWh of electricity produced in the first quarter of 2019, with an increase in production by 20.7 %.

This production was realized by public hydro plants at 48.0 % of net domestic production, by independent power producers to the extent 51.6 % and other producers (other renewable) that generated 0.4 % of net domestic electricity production.

Fig. 1 Available electricity, net domestic production, gross import and export



For release 22/05/2020

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Tab. 1 Balance of electric power

		<i>MWh</i>	
Indicators		Q. I 19	Q. I 20
A	Available electricity (A=1+2-3)	2,097,780	2,116,727
1	Net domestic production (1=1.1+1.2+1.3)	1,281,435	1,546,112
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	1,277,158	1,540,130
a	Net public producers (a=a.1-a.2)	687,145	742,593
a.1	Gross public producers	693,940	750,023
a.2	Losses and own consumption	6,796	7,430
b	Independent power producers	590,014	797,537
1.3	Other producers (other renewable)	4,277	5,982
2	Gross import (including exchanges)	900,840	917,077
3	Gross export (including exchanges)	84,495	346,462
B	Consumption of electricity (B=1+2)	2,097,780	2,116,727
1	Electrical losses (1=1.1+1.2)	530,850	573,204
1.1	Losses in transmission	38,179	51,470
1.2	Losses in distribution (1.2=a+b) ¹	492,671	521,734
a	Technical losses in distribution	323,874	326,490
b	Non technical losses in distribution ²	168,798	195,244
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,566,930	1,543,523
2.1	Households	826,444	853,900
2.2	Non households	740,486	689,622

¹ Breakdown of technical and non-technical losses are estimations made by operators in the field of electricity.

² Non-technical losses refer to the difference between total losses in distribution and technical losses in distribution and are added also statistical differences which derive from the differences in the period of measurement in production, consumption and trade of electricity.

NOTE: DATA FOR MARCH 2020 ON TECHNICAL AND NON-TECHNICAL LOSSES IN DISTRIBUTION HAS BEEN AFFECTED AS A RESULT OF THE "NATURAL DISASTER" SITUATION DUE TO COVID-19 PANDEMIC.

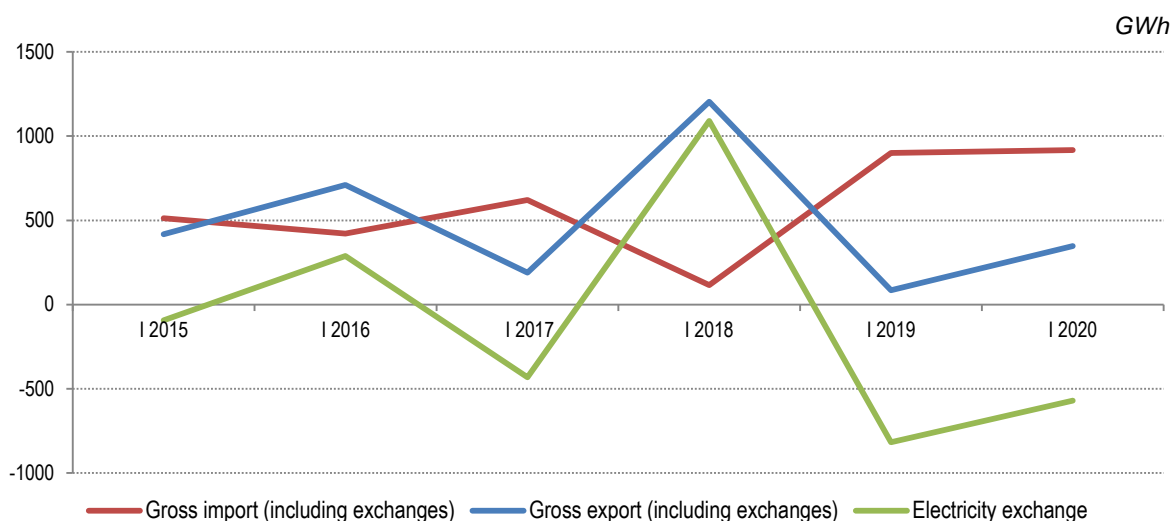
The increase of electricity production resulted on increase of gross imports of electric power (including exchanges) with about 1.0 times and increase of gross exports (including exchanges) of electric power with about 4.1 times, compared to the same period of the previous year.

Public hydro plants, in the first quarter of 2020, realized 1,540 GWh from 1,277 GWh realized in the first quarter of 2019, thus marking an increase in production by 20.6 %. While, **independent and concessionaire power producers** realized 798 GWh from 590 GWh realized to the same period of the previous year, thus marking an increase in production by 35.2 %.

Gross import (including exchanges) resulted in a growth, reaching the value of 917 GWh from 901 GWh compared to the same period of the previous year.

Gross export (including exchanges) resulted in a growth, reaching the value of 346 GWh from 84 GWh compared to the same period of the previous year.

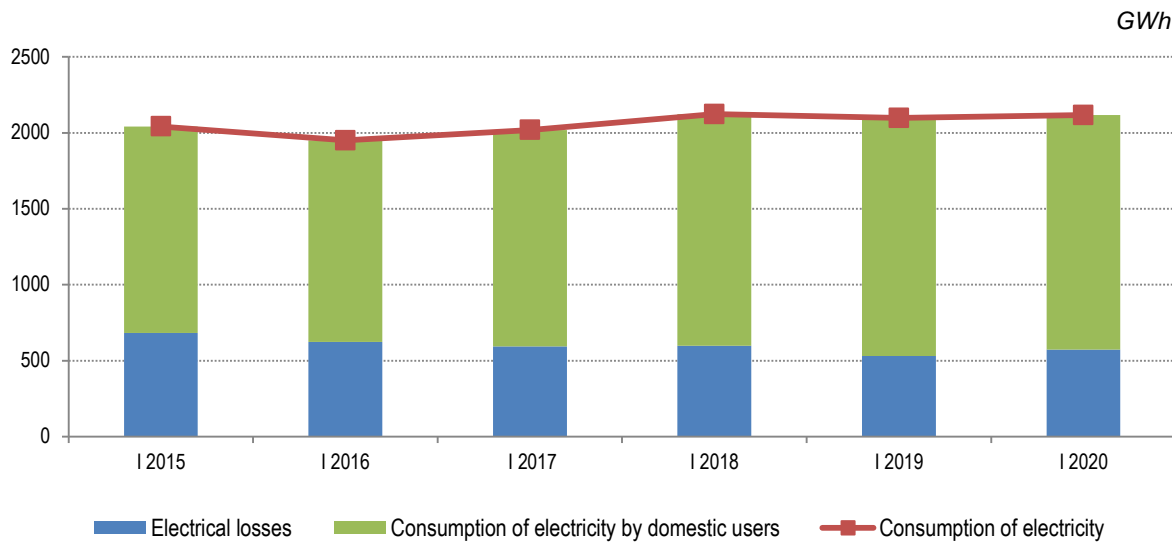
Fig. 2 Electricity exchange



Electrical losses have reached value 573 GWh from 531 GWh marking an increase by 8.0 %. **Losses in transmission** contributed with +2.5 percentage points in the total electrical losses, while **losses in distribution** contributed with +5.5 percentage points.

Technical losses in distribution resulted on increase with about 1.0 time, while **non-technical losses in distribution** increased with about 1.2 times, compared with the first quarter of 2019.

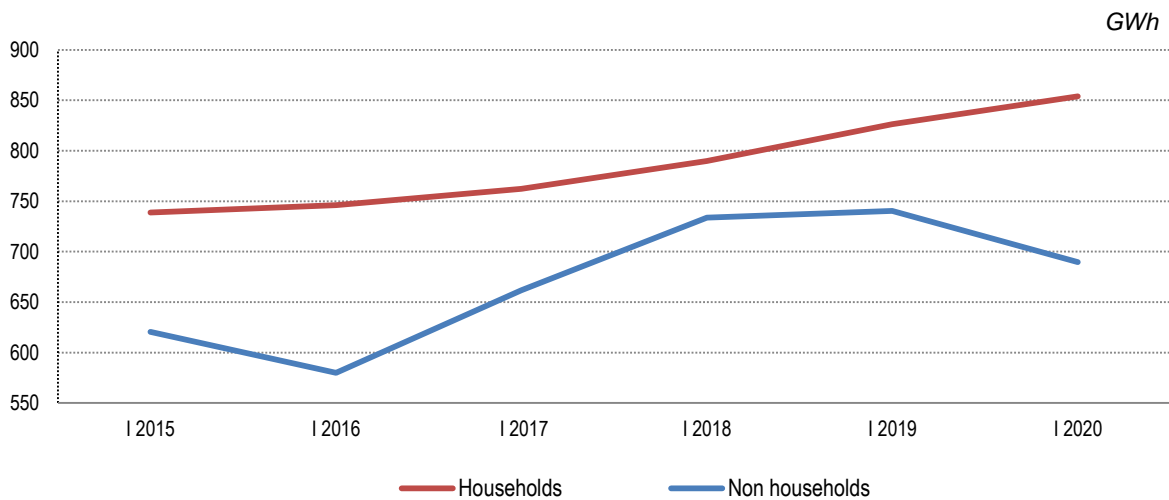
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the first quarter of 2020, decreased by 1.5 %, reaching 1,544 GWh from 1,567 GWh realized in the first quarter of 2019.

The largest impact on the decrease of the final consumption of electricity by domestic users was provided by **consumption of electricity by non-households** who contributed with -3.2 percentage points, while the contribution of **electricity consumed by households** was +1,8 percentage points.

Fig. 4 Consumption of electricity by domestic users



Methodology

Balance of electric power provides statistical information on domestic production of electricity, electricity exchange, losses in network also the usage of electricity for final consumption in our country. The publication of electric power balance is quarterly, based on monthly data collected from administrative sources as:

- KESH a.s., a state joint stock trading company, vertically integrated, which has the leading role and is the key producer of electricity in Albania;
- OSHEE a.s., a public company with 100% state-owned shares that carries out the supply and sales of electricity also the operation and management of the distribution network;
- OST a.s., transmission system operator is a public company with 100% state-owned shares that operates in the electricity transmission system from the physical and distribution concepts. OST a.s. provides the necessary transmission capacities for:
 - the supply of uninterrupted electricity for Distribution System substations (OSHEE a.s.) and electricity customers directly connected to the transmission network;
 - the transmission of electricity produced from domestic sources;
 - also transits and necessary exchanges with other countries in the region.

Definitions of basic indicators

Available electricity refers to the quantity of electricity generated by domestic production of electricity plus total amount of electricity exchange.

Net domestic production of electricity is equal to the gross electricity production from thermo plants, hydroelectric plants and other producers less the electrical energy absorbed by the generating auxiliaries and the losses in the main generator transformers.

Thermo electricity refers to electricity produced by thermo plants.

Hydro electricity refers to energy of water converted into electricity in hydroelectric plants.

Losses and own consumption is the total plant's consumption in generation process and production losses.

Independent power producers refer to private electricity producers which consist of private plants and concession contracts with the Republic of Albania. These producers are directly related to the transmission system and are licensed by the Energy Regulatory Entity (ERE) and may sell capacity or energy to OST and OSHEE, to cover losses in transmission and distribution system, as well as to other clients.

Other producers refer to electricity production from other energy sources, excluding hydro and thermo electricity.

Electricity exchange refers to the difference between imported and exported electricity, also including transits and necessary exchanges of electricity with other countries in the region.

Consumption of electricity refers to the total quantity of electricity consumed by final users and losses in networks. It is equal to the sum of the following categories: electrical losses and consumption of electricity by domestic users.

Electrical losses refer to losses in transmission network including own consumption in transmission and distribution losses. *Technical losses* in distribution are estimated by OSHEE a.s. *Non technical losses* refer to the difference between total losses in distribution and technical losses in distribution and are added also statistical differences which derive from the differences in the period of measurement in production, consumption and trade of electricity.

Consumption of electricity by domestic users refers to the quantity of electricity consumed by final users and is calculated as the sum of the consumption of households and non households.

Households refer to the quantity of household's electricity consumption.

Non households refer to the electricity consumption quantity that are not consumed by households but include the consumption of electricity by industry, transport, agriculture, public services, etc.