

Balance of electric power

Quarter I - 2021

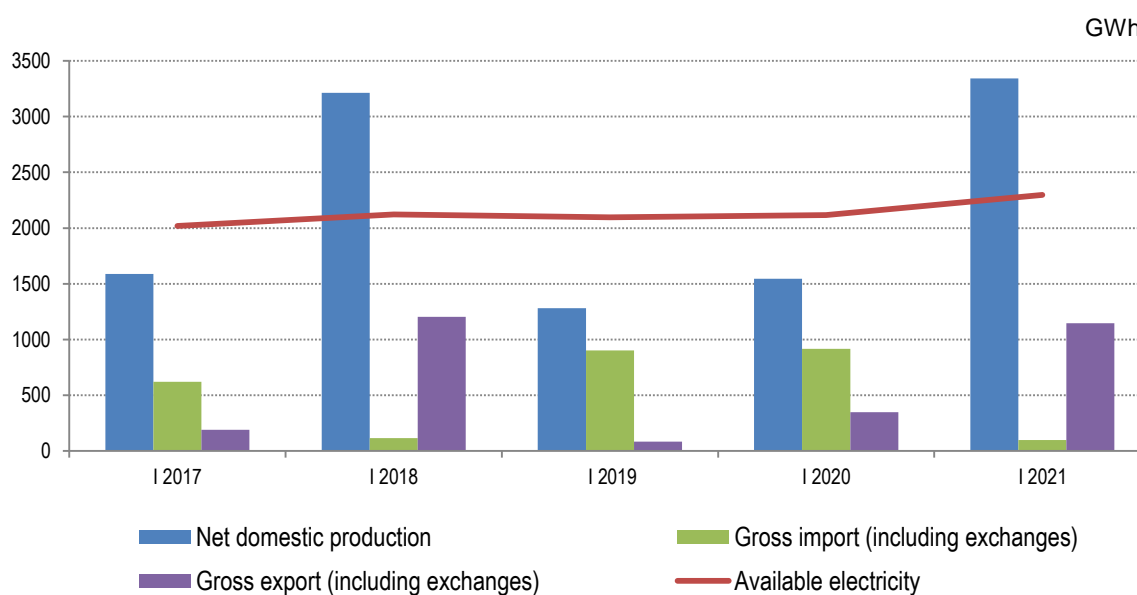
Tirana, May 21, 2021: During the first quarter of 2021, available electricity increased by 8.5 %.

Net domestic production of electric power in this period increased by 2.2 times, reaching the value 3,344 GWh from 1,546 GWh of electricity produced in the first quarter of 2020.

This production was realized by public hydro plants at 56.5 % of net domestic production, by independent power producers to the extent 43.2 % and other producers (other renewable) that generated 0.3 % of net domestic electricity production.

Gross import of electric power (including exchanges), in the first quarter of 2021, reached the value 99 GWh from 917 GWh compared to the same period of the previous year, marking a decrease with 89.2 %. Gross export (including exchanges) reached the value 1,147 GWh from 346 GWh marking an increase by 3.3 times (tab.1).

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



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Tab. 1 Balance of electric power

		<i>MWh</i>	
Indicators		Q.1 2020	Q.1 2021
A	Available electricity (A=1+2-3)	2,116,250	2,296,754
1	Net domestic production (1=1.1+1.2+1.3)	1,545,635	3,344,097
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	1,539,653	3,336,096
a	Net public producers (a=a.1-a.2)	742,116	1,889,811
a.1	Gross public producers	750,023	1,906,673
a.2	Losses and own consumption	7,907	16,862
b	Independent power producers	797,537	1,446,285
1.3	Other producers (other renewable)	5,982	8,001
2	Gross import (including exchanges)	917,077	99,213
3	Gross export (including exchanges)	346,462	1,146,556
B	Consumption of electricity (B=1+2)	2,116,250	2,296,754
1	Electrical losses (1=1.1+1.2)	572,726	616,751
1.1	Losses in transmission	51,470	74,057
1.2	Losses in distribution (1.2=a+b) ¹	521,256	542,694
a	Technical losses in distribution	326,490	352,977
b	Non technical losses in distribution ²	194,767	189,717
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,543,524	1,680,003
2.1	Households	853,900	892,718
2.2	Non households	689,624	787,285

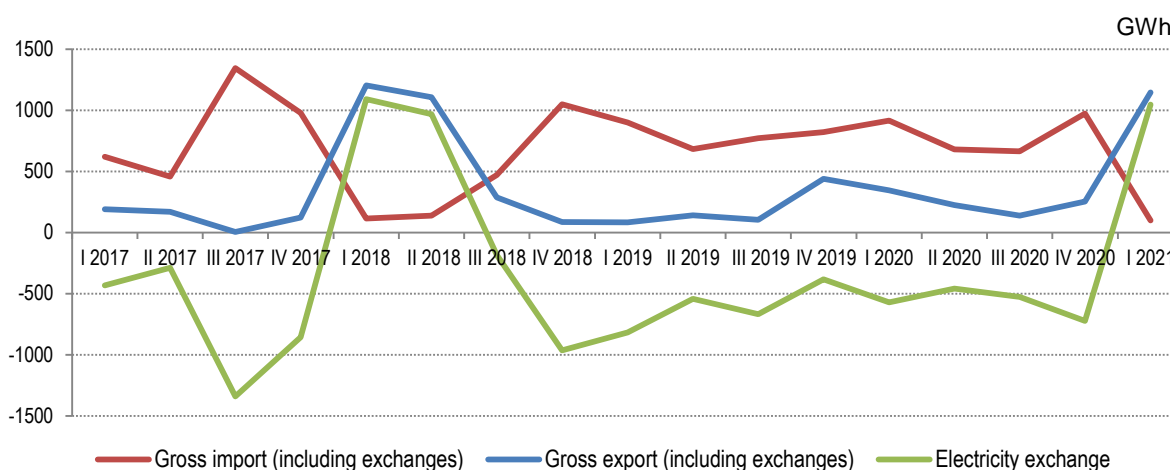
¹ Breakdown of technical and non-technical losses is an estimation made by operators in the field of electricity.

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.

Public hydro plants, in the first quarter of 2021, realized 1,890 GWh from 742 GWh realized in the first quarter of 2020, thus marking an increase in production by 2.5 times. While, **independent and concessionaire power producers** realized 1,446 GWh from 798 GWh realized to the same period of the previous year, thus marking an increase in production by 81.3 %.

Electricity exchange (difference between gross exports and gross imports of electricity), in the first quarter of 2021 has increased, reaching the value 1,047 GWh compared to the same period of the previous year where it had a negative value of 571 GWh.

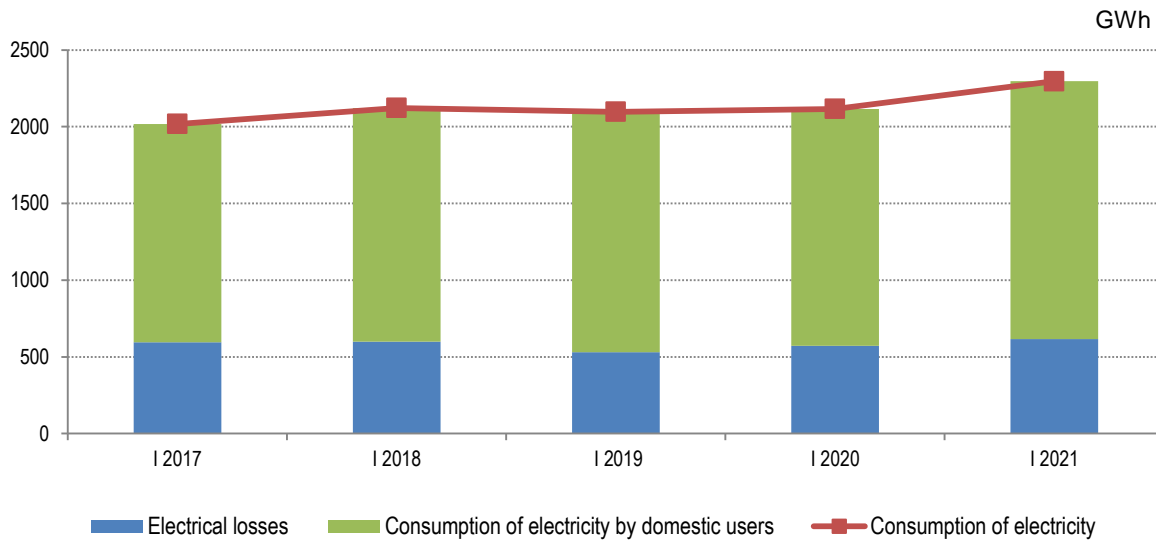
Fig. 2 Electricity exchange



Electrical losses have reached value 617 GWh from 573 GWh marking an increase by 7.7 %. **Losses in transmission** increased by 43.9 %, while **losses in distribution** increased by 4.1 %.

Technical losses in distribution resulted on an increase with 8.1 %, while **non-technical losses in distribution** resulted on a decrease with 2.6 %, compared with the first quarter of 2020 (fig.3).

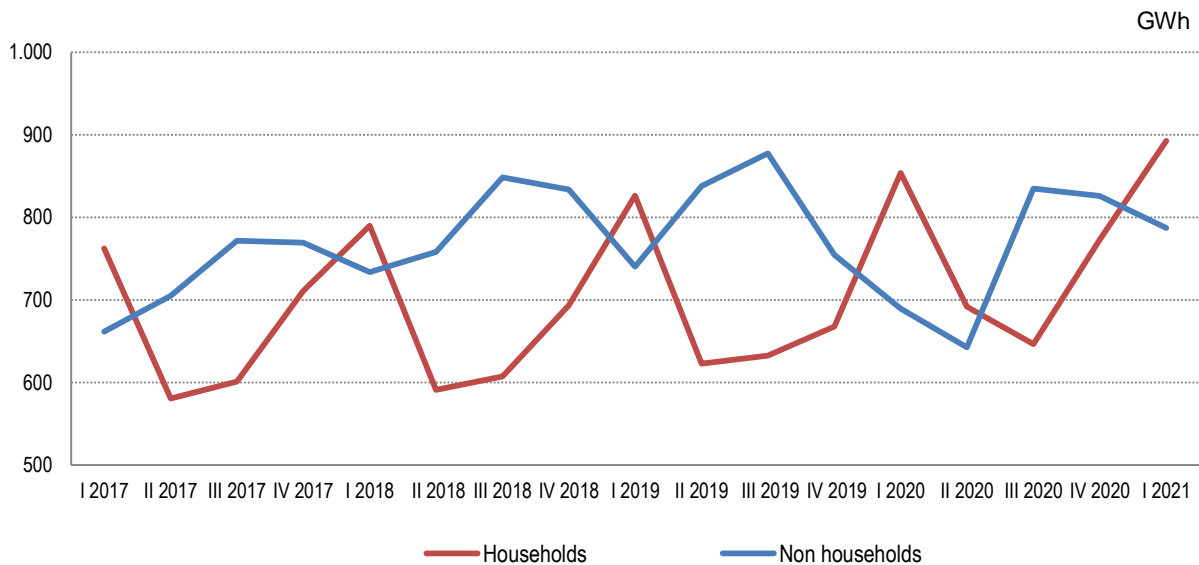
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the first quarter of 2021, increased by 8.8 %, reaching 1,680 GWh from 1,544 GWh realized in the first quarter of 2020.

The largest impact on the increase of the final consumption of electricity by domestic users was provided by **consumption of electricity by non-households** with an increase of electricity consumption by 14.2 %, compared to an increase of 4.5% of energy consumed by **household consumers (fig. 4)**.

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;
- OSSH 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 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 OSSH, 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 OSSH 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.