

# Balance of electric power

## Quarter III - 2023

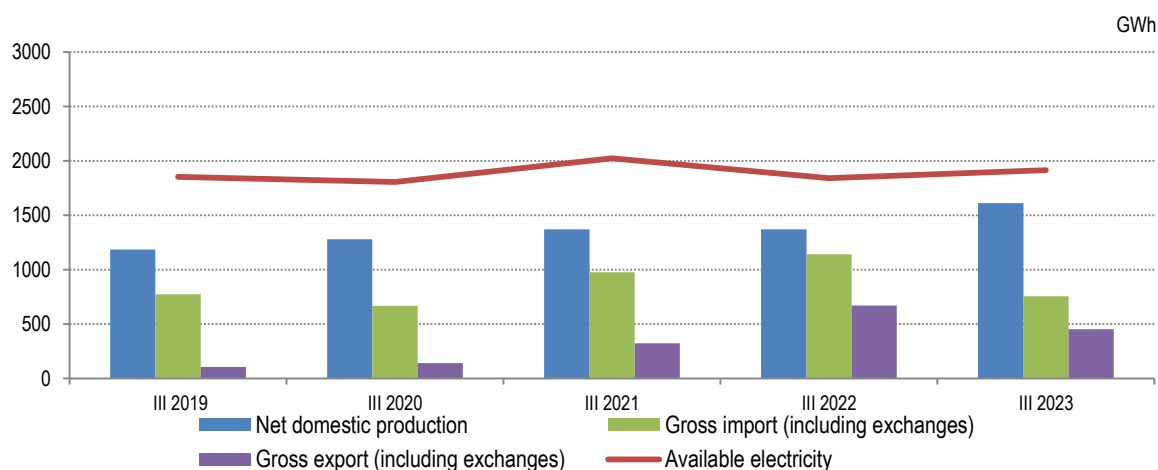
**Tirana, November 23, 2023:** During the third quarter of 2023, available electricity increased by 3.9 %.

**Net domestic production** of electric power in this period increased by 17.5 %, reaching the value 1,611 GWh from 1,371 GWh of electricity produced in the third quarter of 2022.

This production was realized by public hydro plants at 76.7 % of net domestic production, by independent power producers to the extent 21.5 % and other producers (Photovoltaics) that generated 1.8 % of net domestic electricity production.

Gross import of electric power (including exchanges), in the third quarter of 2023, reached the value 755 GWh from 1,142 GWh, compared to the same period of the previous year, marking an decrease by 33.9 %. Gross export (including exchanges) reached the value 453 GWh from 670 GWh, marking a decrease with 32.5 % (tab.1).

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



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**Tab. 1 Balance of electric power**

MWh

Indicators		Q.III 2022	Q.III 2023
<b>A</b>	<b>Available electricity (A=1+2-3)</b>	<b>1,842,158</b>	<b>1,913,213</b>
1	Net domestic production (1=1.1+1.2+1.3)	1,370,551	1,610,934
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	1,350,100	1,581,415
a	Net public producers (a=a.1-a.2)	1,025,953	1,235,716
a.1	Gross public producers	1,035,399	1,246,195
a.2	Losses and own consumption	9,445	10,480
b	Independent power producers	324,146	345,699
1.3	Other producers (Photovoltaics)	20,451	29,519
2	Gross import (including exchanges)	1,141,793	754,934
3	Gross export (including exchanges)	670,186	452,656
<b>B</b>	<b>Consumption of electricity (B=1+2)</b>	<b>1,842,158</b>	<b>1,913,213</b>
1	Electrical losses (1=1.1+1.2)	327,919	327,706
1.1	Losses in transmission	46,729	45,601
1.2	Losses in distribution (1.2=a+b) <sup>1</sup>	281,190	282,105
a	Technical losses in distribution	201,971	210,164
b	Non technical losses in distribution <sup>2</sup>	79,219	71,941
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,514,239	1,585,507
2.1	Households	695,613	731,584
2.2	Non households	818,626	853,923

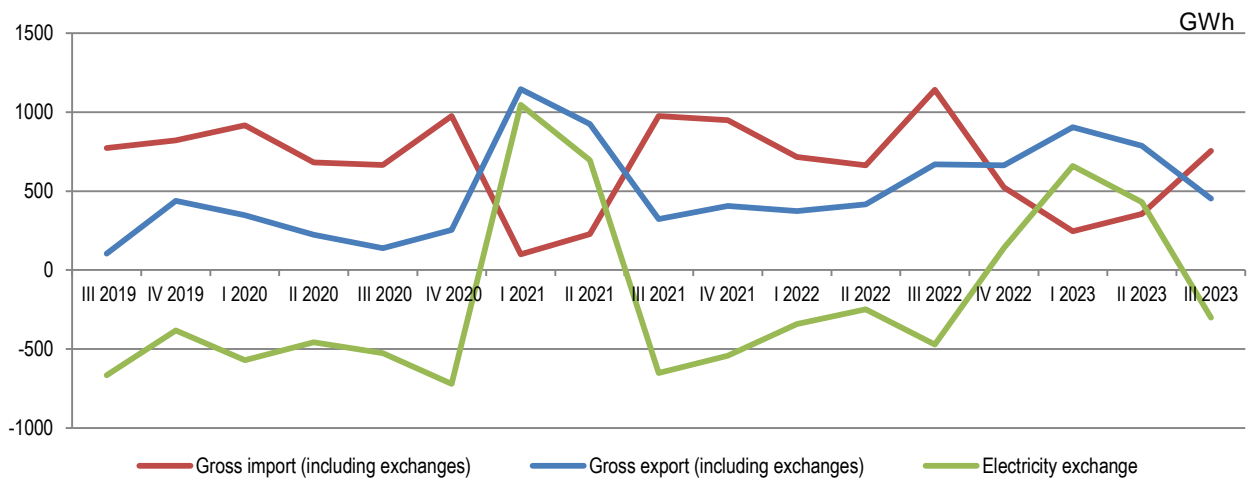
<sup>1</sup> Breakdown of technical and non-technical losses is an estimation made by operators in the field of electricity.

<sup>2</sup> 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 third quarter of 2023, realized 1,236 GWh from 1,026 GWh realized in the third quarter of 2022, thus marking an increase in production by 20.4 %. While, **independent and concessionaire power producers** realized 346 GWh from 324 GWh realized to the same period of the previous year, thus marking an increase in production by 6.6 %.

**Electricity exchange (difference between gross exports and gross imports of electricity)**, in the third quarter of 2023 is -302 GWh, from -472 GWh that was in the same period of the previous year.

**Fig. 2 Electricity exchange**

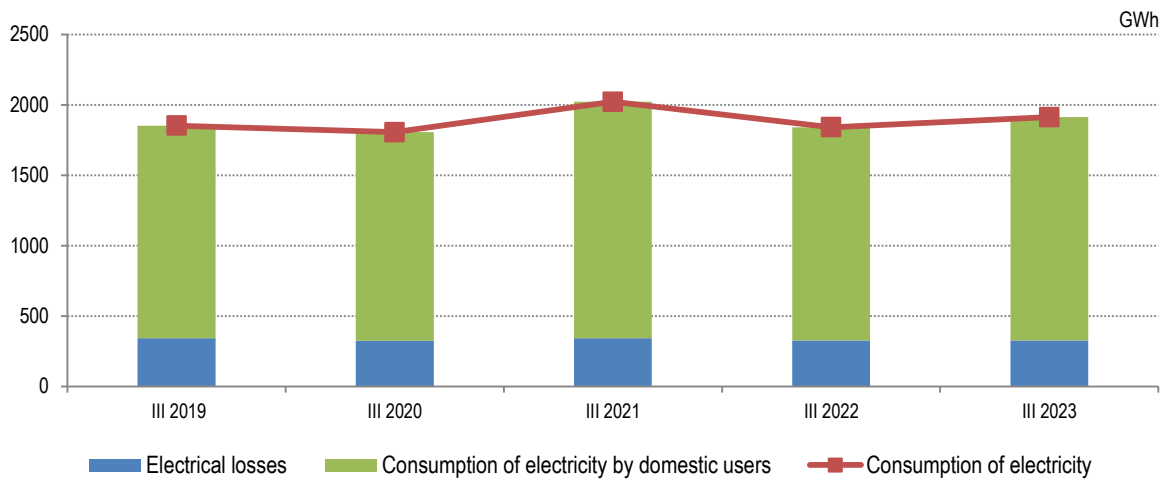


**Electrical losses** have reached value 327.7 GWh from 327.9 GWh marking a decrease by 0.1 %, compared with the third quarter of 2022.

**Losses in transmission** decreased by 2.4 %, while **losses in distribution** increased by 0.3 %.

**Technical losses in distribution** resulted on an increase with 4.1 %, while **non-technical losses in distribution** resulted on a decrease with 9.2 %, compared with the third quarter of 2022 (fig.3).

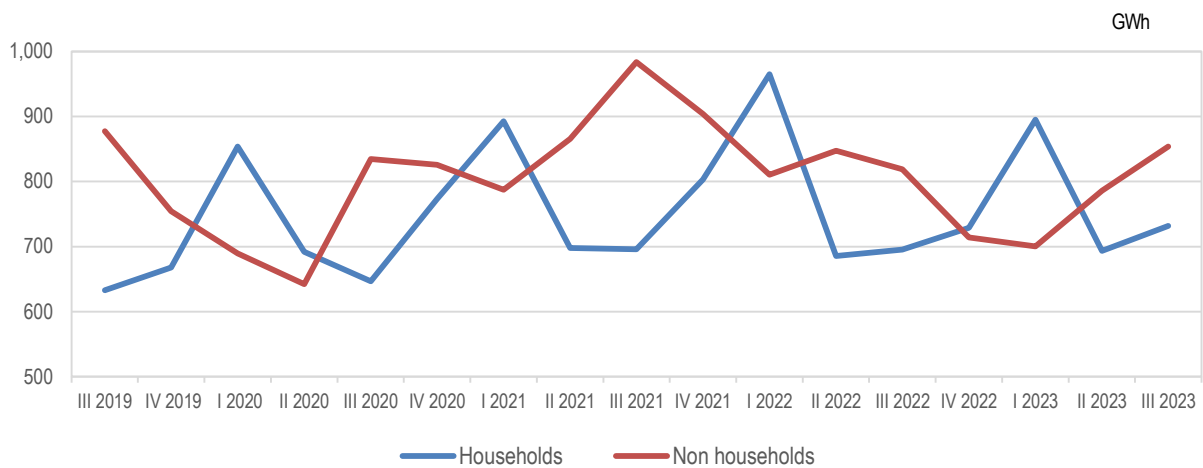
**Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users**



The consumption of electricity by domestic users, in the third quarter of 2023, increased by 4.7 %, reaching 1,586 GWh from 1,514 GWh realized in the third quarter of 2022.

The impact on the increase of the final consumption of electricity by domestic users was provided by **consumption of electricity by households** with an increase of electricity consumption by 5.2 %, while the energy consumed by **non-households** consumers increased by 4.3 % of (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.