

Balance of electric power

Quarter III - 2022

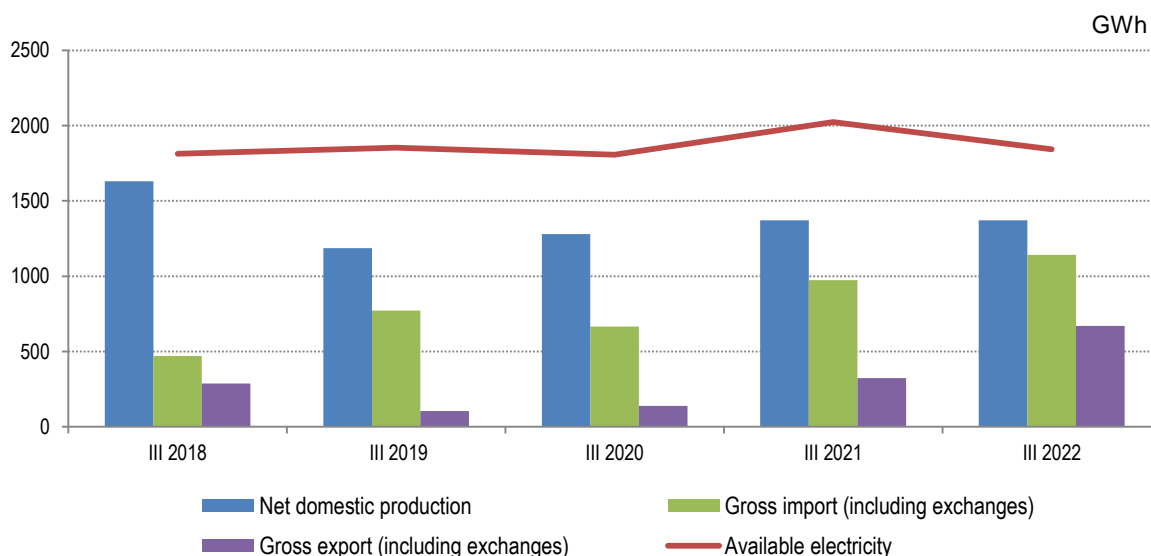
Tirana, November 23, 2022: During the third quarter of 2022, available electricity decreased by 8.9 %.

Net domestic production of electric power in this period decreased by 0.1 %, reaching the value 1,371 GWh electricity produced.

This production was realized by public hydro plants at 74.8 % of net domestic production, by independent power producers to the extent 23.7 % and other producers (Photovoltaics) that generated 1.5 % of net domestic electricity production.

Gross import of electric power (including exchanges), in the third quarter of 2022, reached the value 1,142 GWh from 975 GWh compared to the same period of the previous year, marking an increase with 17.1 %. Gross export (including exchanges) reached the value 670 GWh from 323 GWh marking an increase by 2.1 times (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 2021	Q.III 2022
A	Available electricity (A=1+2-3)	2,022,699	1,842,158
1	Net domestic production (1=1.1+1.2+1.3)	1,371,261	1,370,551
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	1,358,062	1,350,100
a	Net public producers (a=a.1-a.2)	1,047,110	1,025,953
a.1	Gross public producers	1,056,799	1,035,399
a.2	Losses and own consumption	9,689	9,445
b	Independent power producers	310,952	324,146
1.3	Other producers (Photovoltaics)	13,199	20,451
2	Gross import (including exchanges)	974,878	1,141,793
3	Gross export (including exchanges)	323,440	670,186
B	Consumption of electricity (B=1+2)	2,022,699	1,842,158
1	Electrical losses (1=1.1+1.2)	343,444	327,919
1.1	Losses in transmission	44,868	46,729
1.2	Losses in distribution (1.2=a+b) ¹	298,576	281,190
a	Technical losses in distribution	200,093	201,971
b	Non technical losses in distribution ²	98,483	79,219
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,679,255	1,514,239
2.1	Households	695,828	695,613
2.2	Non households	983,427	818,626

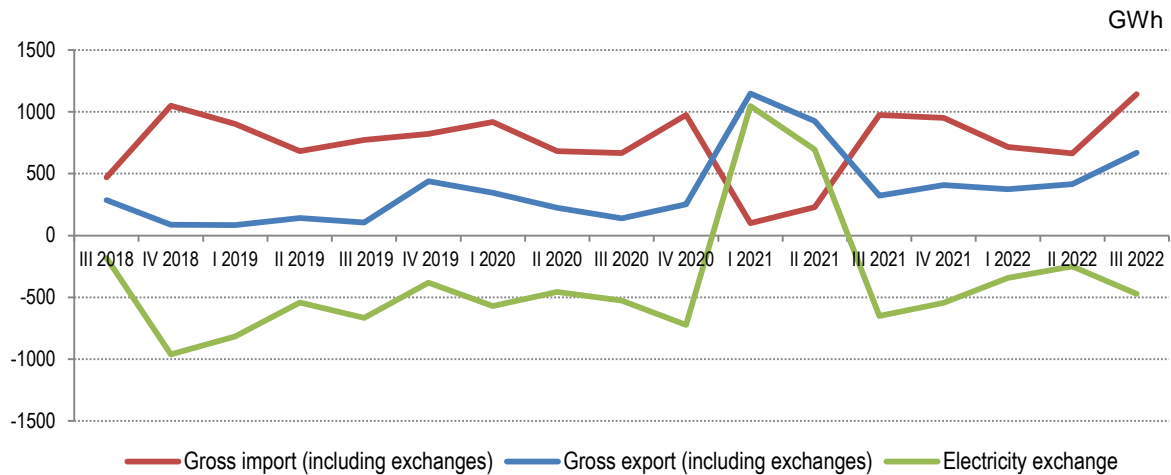
¹ Breakdown of technical and non-technical losses is an estimation made by operators in the field of electricity.

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 third quarter of 2022, realized 1,026 GWh from 1,047 GWh realized in the third quarter of 2021, thus marking a decrease in production by 2.0 %. While, **independent and concessionaire power producers** realized 324 GWh from 311 GWh realized to the same period of the previous year, thus marking an increase in production by 4.2 %.

Electricity exchange (difference between gross exports and gross imports of electricity), in the third quarter of 2022 has reached a negative value by 472 GWh compared to the same period of the previous year where it had a negative value of 651 GWh.

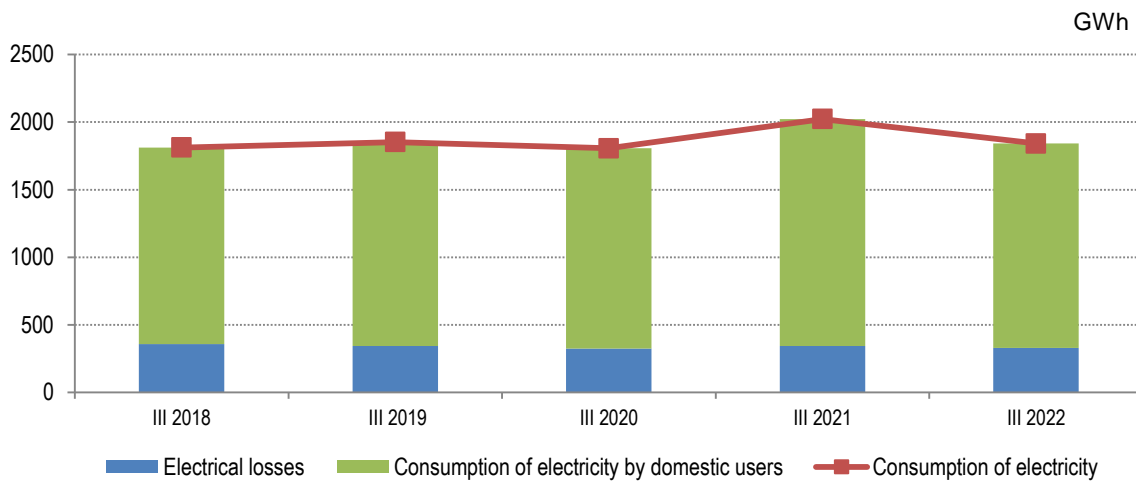
Fig. 2 Electricity exchange



Electrical losses have reached value 328 GWh from 343 GWh marking a decrease by 4.5 %. Furthermore, **losses in distribution** decreased by 5.8 %, reaching the value 281 GWh.

Technical losses in distribution resulted on an increase with 0.9 %, while **non-technical losses in distribution** resulted on a decrease with 19.6 %, compared with the third quarter of 2021 (fig.3).

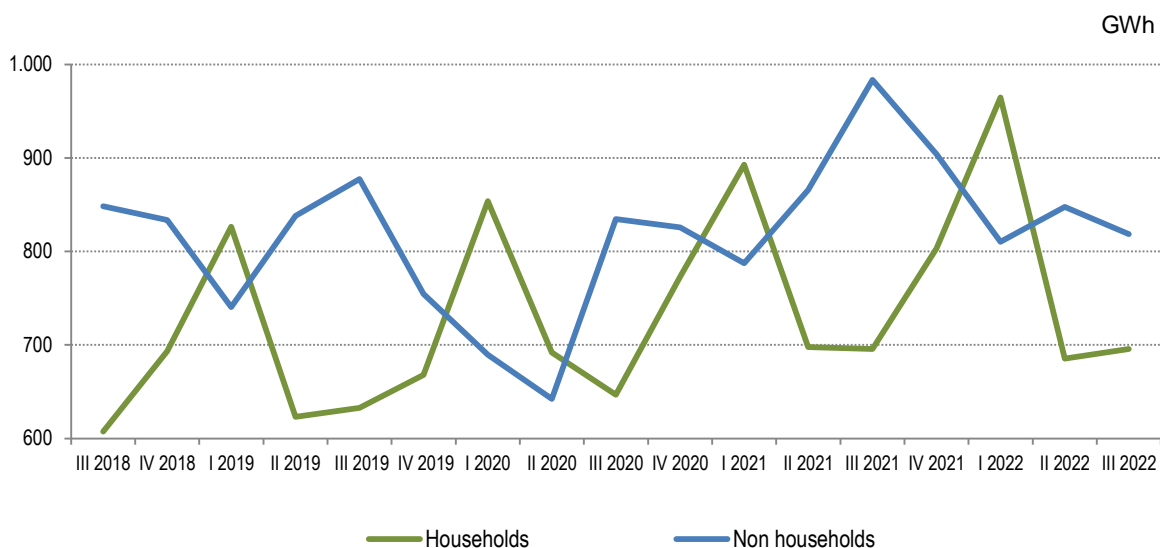
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the third quarter of 2022, decreased by 9.8 %, reaching 1,514 GWh from 1,679 GWh realized in the third quarter of 2021.

The largest impact on the decrease of the final consumption of electricity by domestic users was provided by **consumption of electricity by non-household** with a decrease of electricity consumption by 16.8 %, while energy consumed by **household consumers** had no impact on this decrease, as the amount consumed in the third quarter of both years was 696 GWh (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.

In this indicator calculation is included the economic damage, in the certain percentage for households consumers.

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.

In this indicator calculation is included the economic damage, in the certain percentage for non-households consumers.