Balance of electric power

Quarter II - 2024

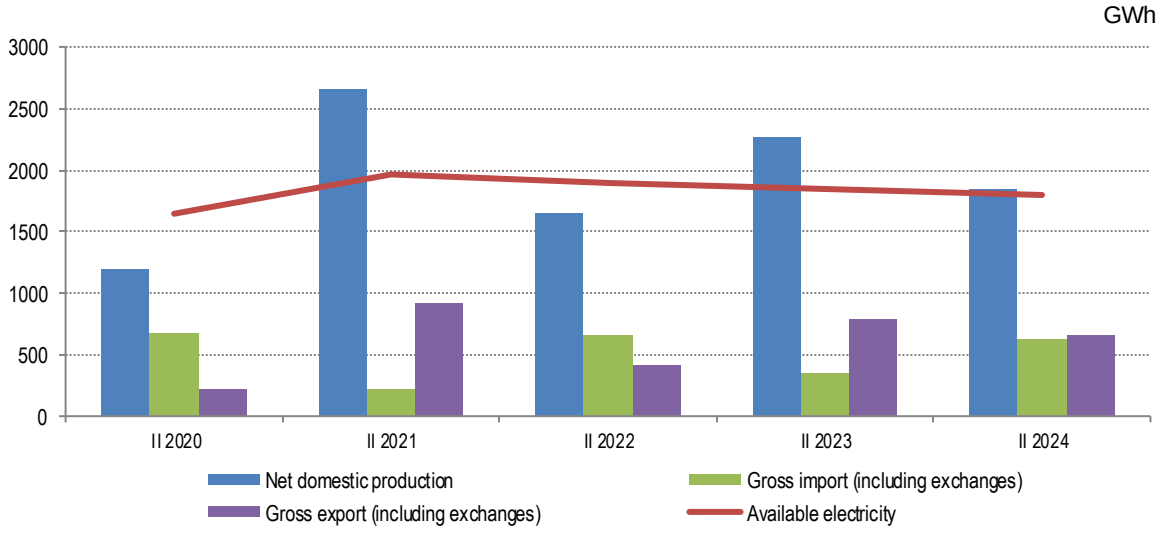
Tirana, August 27, 2024: During the second quarter of 2024, available electricity decreased by 2.2 %.

Net domestic production of electric power in this period decreased by 18.9 %, reaching the value 1,841 GWh from 2,269 GWh of electricity produced in the second quarter of 2023.

This production was realized by public hydro plants at 44.6 % of net domestic production, by independent power producers to the extent 48.6 % and other producers (Photovoltaics) that generated 6.8 % of net domestic electricity production.

Gross import of electric power (including exchanges), in the second quarter of 2024, reached the value 623 GWh from 355 GWh compared to the same period of the previous year, marking an increase by 75.2 %. Gross export (including exchanges) reached the value 665 GWh from 786 GWh marking a decrease with 15.4% (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.II 2023	Q.II 2024
A	**Available electricity (A=1+2-3)**	**1,838,290**	**1,798,283**
1	Net domestic production (1=1.1+1.2+1.3)	2,268,936	1,840,884
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	2,242,775	1,716,100
a	Net public producers (a=a.1-a.2)	1,186,204	821,173
a.1	Gross public producers	1,196,126	829,113
a.2	Losses and own consumption	9,921	7,940
b	Independent power producers	1,056,571	894,927
1.3	Other producers (Photovoltaics)	26,161	124,783
2	Gross import (including exchanges)	355,441	622,699
3	Gross export (including exchanges)	786,087	665,300
B	**Consumption of electricity (B=1+2)**	**1,838,290**	**1,798,283**
1	Electrical losses (1=1.1+1.2)	358,806	322,944
1.1	Losses in transmission	57,211	47,382
1.2	Losses in distribution (1.2=a+b)[1]	301,595	275,561
a	Technical losses in distribution	208,997	193,373
b	Nontechnical losses in distribution[2]	92,598	82,188
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,479,483	1,475,339
2.1	Households	693,614	707,923
2.2	Non households	785,870	767,417

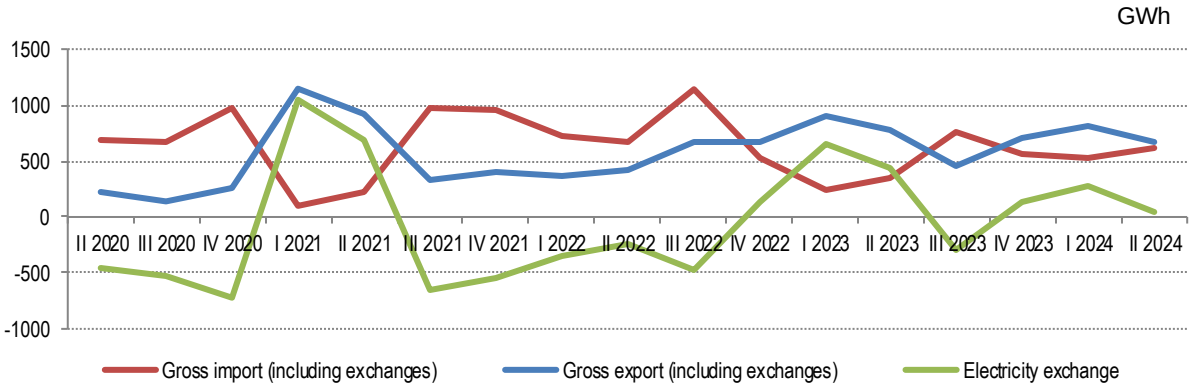
[1] Breakdown of technical and non-technical losses is an estimation made by operators in the field of electricity.

[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 second quarter of 2024, realized 821 GWh from 1,186 GWh realized in the second quarter of 2023, thus marking a decrease in production by 30.8 %. While, **independent and concessionaire power producers** realized 895 GWh from 1,057 GWh realized to the same period of the previous year, thus marking a decrease in production by 15.3 %.

Electricity exchange (difference between gross exports and gross imports of electricity), in the second quarter of 2024 has reached a positive value by 43 GWh, while on the same period of the previous year it had also a positive value of 431 GWh.

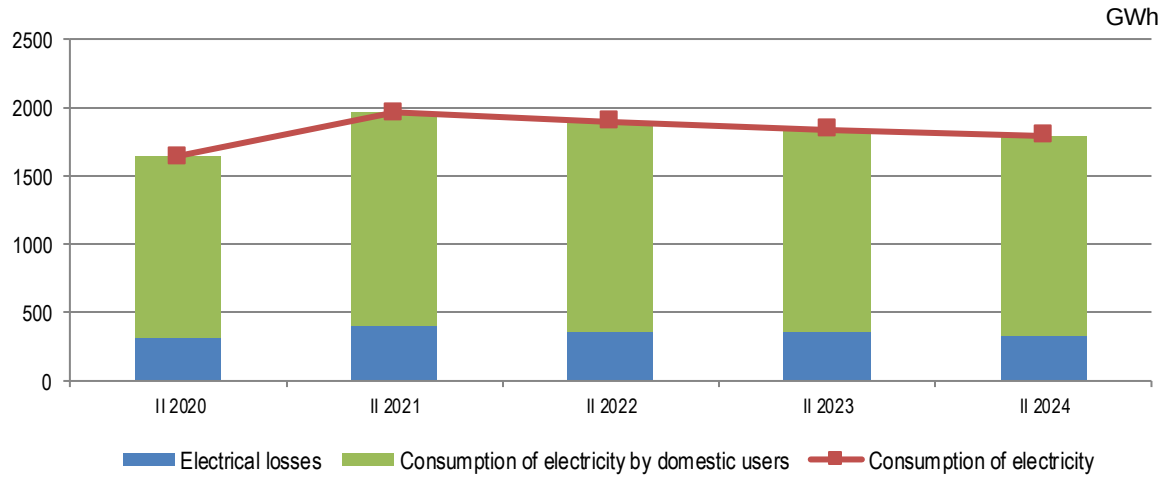
Fig. 2 Electricity exchange



Electrical losses have reached value 323 GWh from 359 GWh marking a decrease by 10.0 %. **Losses in transmission** decreased by 17.2 %, while **losses in distribution** also decreased by 8.6 %.

Technical losses in distribution resulted on a decrease with 7.5 %, while **non-technical losses in distribution** resulted on a decrease with 11.2 %, compared with the second quarter of 2023 (fig.3).

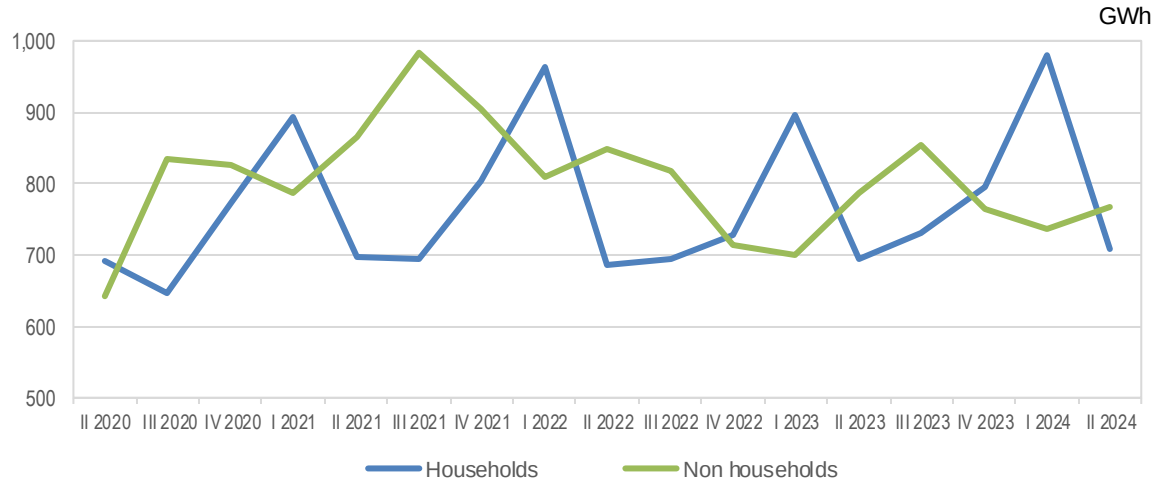
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the second quarter of 2024, decreased by 0.3 %, reaching 1,475 GWh from 1,479 GWh realized in the second quarter of 2023.

The impact on the decrease of the final consumption of electricity by domestic users was provided by **consumption of electricity by non-households** with an decrease of electricity consumption by 2.3 %, while the energy consumed by household consumers increased by 2.1 % 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.