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Balance of electric power

Year 2024

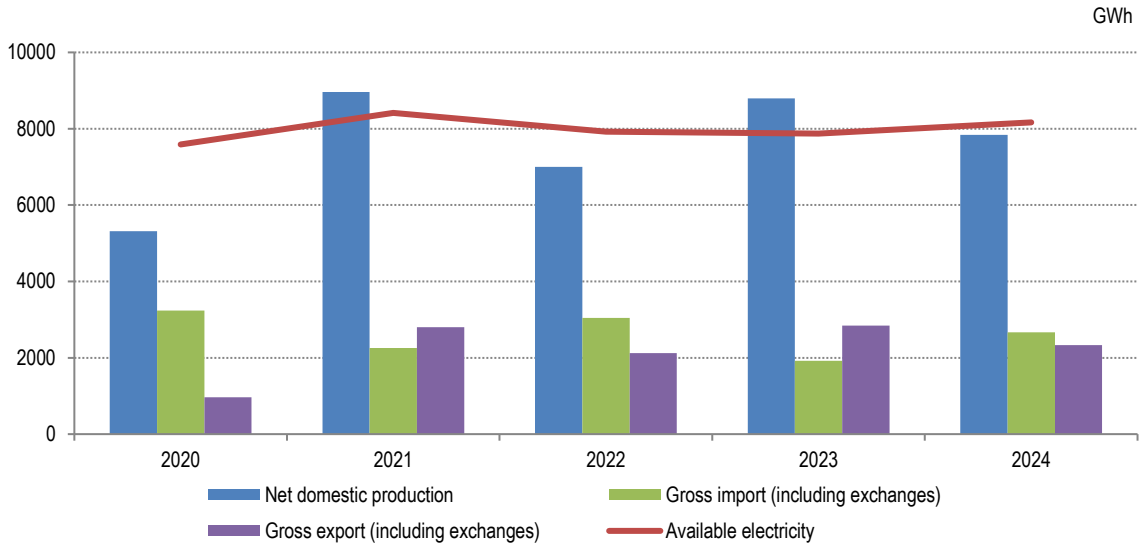
Tirana, March 3, 2025: During 2024, available electricity increased by 3.7 %.

Net domestic production of electric power in 2024, reached the value 7,837 GWh, from 8,796 GWh of electricity produced in 2023, with a decrease in production by 10.9 %.

This production was realized by public hydro plants at 52.1 % of net domestic production, by independent power producers to the extent 41.4 % and other producers that generated 6.5 % of net domestic electricity production.

Gross import of electric power (including exchanges), reached the value 2,669 GWh from, 1,922 GWh in the previous year, marking an increase with 38.9 %. **Gross export** (including exchanges) reached the value 2,335 GWh, from 2,842 GWh marking a decrease with 17.8 % (tab.1).

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



For release 03/03/2025

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Tab. 1 Balance of electric power, 2023-2024

MWh

Indicators		2023	2024
A	**Available electricity (A=1+2-3)**	**7,875,822**	**8,170,517**
1	Net domestic production (1=1.1+1.2+1.3)	8,795,634	7,836,625
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	8,705,910	7,330,077
a	Net public producers (a=a.1-a.2)	5,123,417	4,084,914
a.1	Gross public producers	5,166,787	4,124,239
a.2	Losses and own consumption	43,370	39,325
b	Independent power producers	3,582,493	3,245,163
1.3	Other producers[1]	89,724	506,548
2	Gross import (including exchanges)	1,921,743	2,668,771
3	Gross export (including exchanges)	2,841,555	2,334,878
B	**Consumption of electricity (B=1+2)**	**7,875,822**	**8,170,517**
1	Electrical losses (1=1.1+1.2)	1,654,540	1,614,264
1.1	Losses and self-consumption in transmission	220,267	201,342
1.2	Losses in distribution (1.2=a+b)[2]	1,434,273	1,412,922
a	Technical losses in distribution	990,500	997,284
b	Non-technical losses in distribution[3]	443,773	415,638
2	Consumption of electricity by domestic users (2=2.1+2.2)	6,221,282	6,556,253
2.1	Households	3,116,817	3,408,870
2.2	Non households	3,104,465	3,147,383

1 Other producers refer to the production of electricity from other energy sources, excluding hydro and thermal energy (photovoltaic, oil, etc.).

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

3 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.

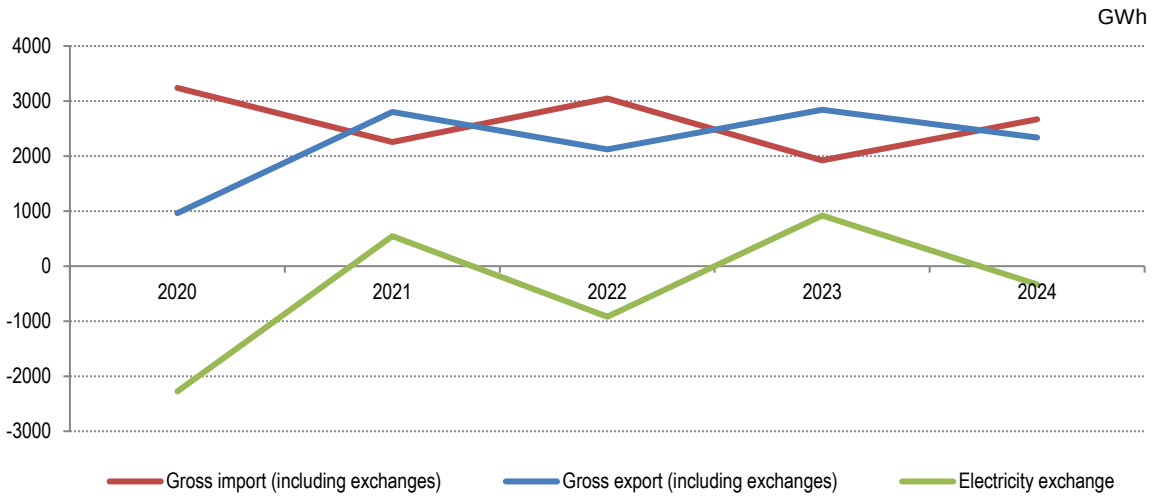
Public hydro plants, in 2024, produced 4,085 GWh, from 5,123 GWh produced in 2023, thus marking a decrease in production by 20.3 %.

Independent and concessionaire power producers produced 3,245 GWh, from 3,582 GWh produced in the previous year, thus marking a decrease in production by 9.4 %.

Other producers produced 507 GWh, from 90 GWh produced in the previous year, thus marking a increase in production by 5.6 times.

Electricity exchange (difference between gross exports and gross imports of electricity), in 2024, has reached a negative value of 334 GWh (fig.2).

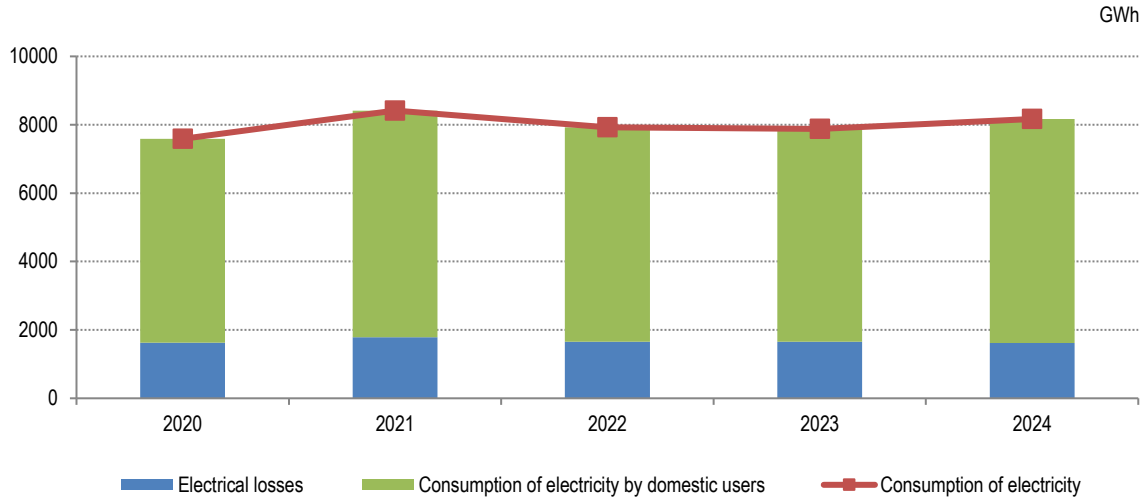
Fig. 2 Electricity exchange



Electrical losses have reached value 1,614 GWh in 2024, from 1,655 GWh in 2023, marking a decrease by 2.4 %. The share of **electrical losses** in the total available energy in 2024 is 19.8 %, compared to 21.0 % in 2023, marking a decrease by 1.2 %.

During the year 2024, **losses in transmission** decreased by 8.6 % and **losses in distribution** decreased by 1.5 %, compared to 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 2024, reaching the value 6,556 GWh, from 6,221 GWh realized in 2023.

The consumption of electricity by households increased by 9.4 %, reaching the value 3,409 GWh in 2024, from 3,117 GWh in 2023, while **the consumption of electricity by non-households** increased by 1.4 % reaching the value 3,147 GWh, from 3,104 GWh, compared to the previous year (fig.4).

Fig. 4 Consumption of electricity by domestic users

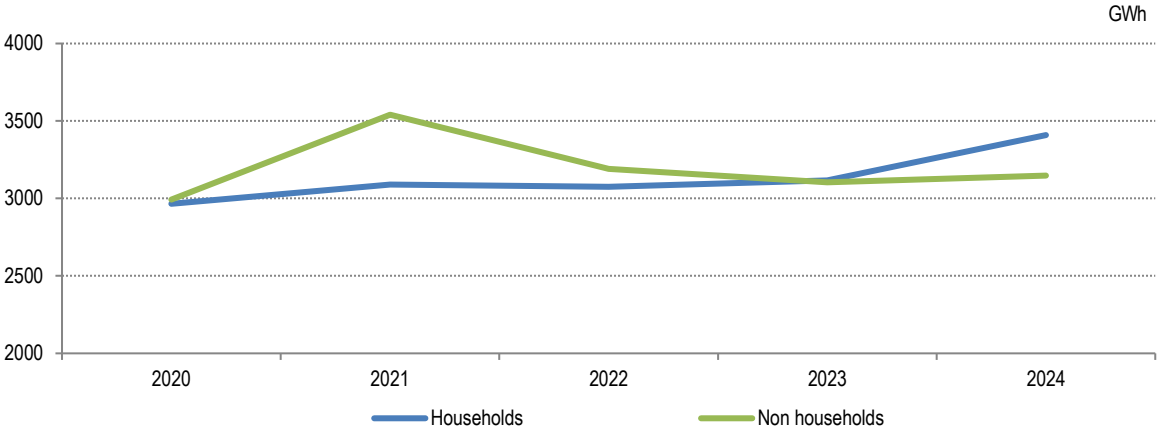
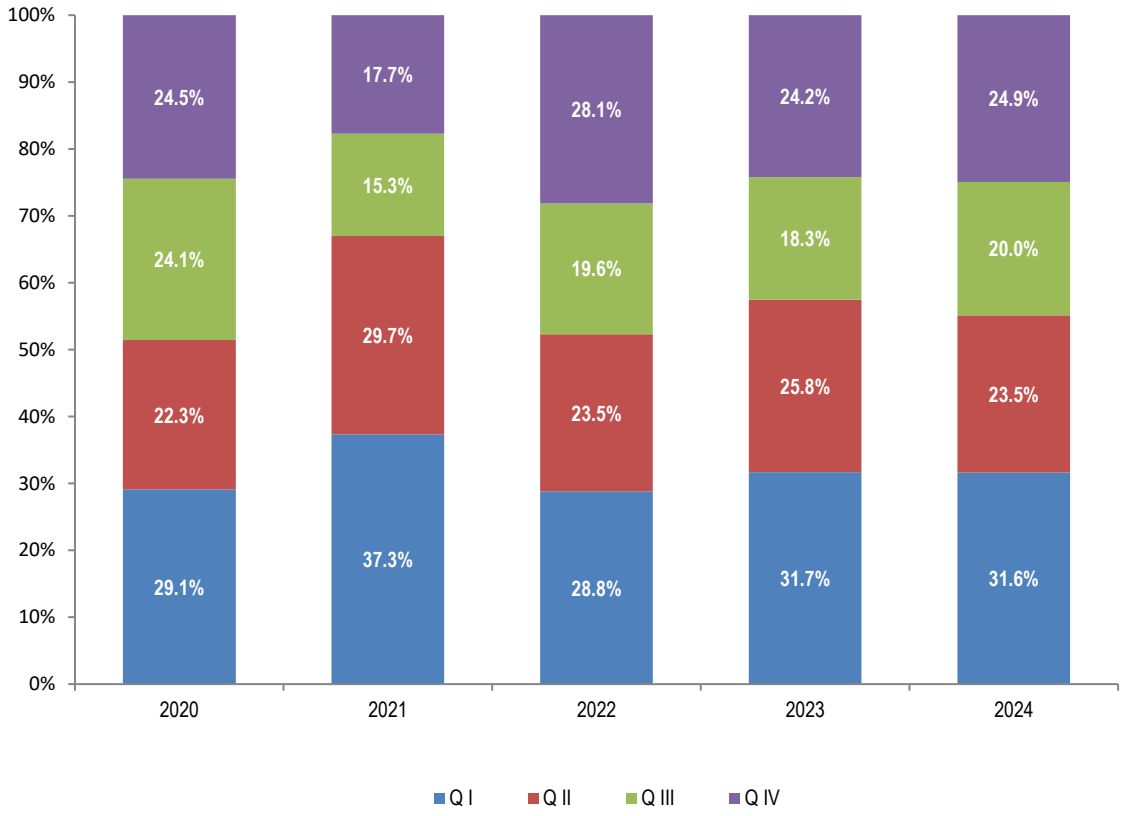


Fig.5 shows **the structure in percentage of net domestic production by quarters** for the period 2020-2024. In 2024 noted a decrease in net domestic production in the first and second quarters and an increase in net domestic production in the third and fourth quarters, compared to 2023.

Fig. 5 Sructure in percentage of net domestic production by quarters, 2020-2024 (%)



Quarter IV 2024

During the fourth quarter of 2024, available electricity increased by 6.6 %. **Net domestic production** of electric, in the fourth quarter of 2024, reached the value 1,953 GWh, from 2,129 GWh of electricity produced in the fourth quarter of 2023, marking a decrease in production by 8.2 % (tab.2).

Tab. 2 Balance of electric power, IV quarter

MWh

Indicators		Q. IV 2023	Q. IV 2024
A	**Available electricity (A=1+2-3)**	**1,995,514**	**2,128,077**
1	Net domestic production (1=1.1+1.2+1.3)	2,128,517	1,953,147
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	2,110,987	1,826,386
a	Net public producers (a=a.1-a.2)	1,087,011	1,014,176
a.1	Gross public producers	1,097,158	1,024,108
a.2	Losses and own consumption	10,147	9,932
b	Independent power producers	1,023,976	812,210
1.3	Other producers[1]	17,530	126,760
2	Gross import (including exchanges)	565,508	748,626
3	Gross export (including exchanges)	698,511	573,695
B	**Consumption of electricity (B=1+2)**	**1,995,514**	**2,128,077**
1	Electrical losses (1=1.1+1.2)	434,507	464,491
1.1	Losses and self-consumption in transmission	55,596	51,727
1.2	Losses in distribution (1.2=a+b)[2]	378,911	412,764
a	Technical losses in distribution	258,539	263,978
b	Non technical losses in distribution[3]	120,372	148,786
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,561,007	1,663,586
2.1	Households	796,658	881,729
2.2	Non households	764,349	781,857

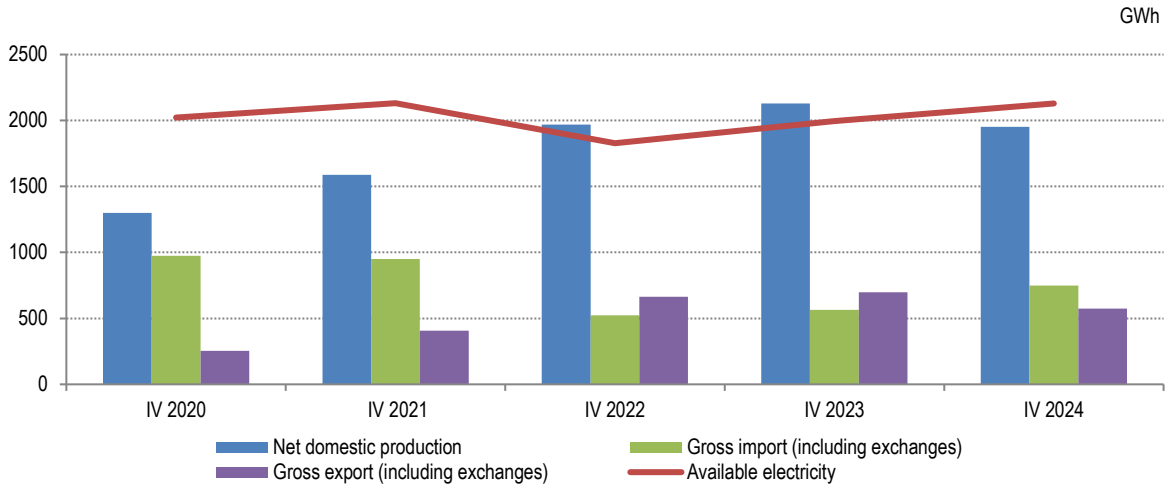
1 Other producers refer to the production of electricity from other energy sources, excluding hydro and thermal energy (photovoltaic, oil, etc.).

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

3 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.

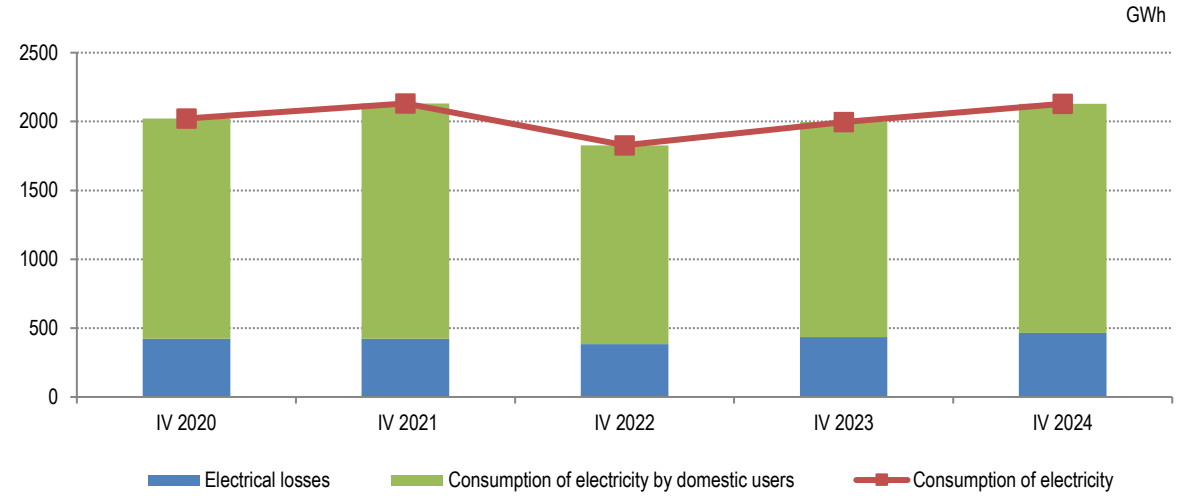
During the fourth quarter of 2024, **gross imports** of electric power (including exchanges) increased by 32.4 % and **gross exports** of electric power (including exchanges) decreased by 17.9 %, compared to the same period of the previous year (fig.6).

Fig. 6 Available electricity, net domestic production, gross import and export



The consumption of electricity by consumers increased by 6.6 %. The **consumption of electricity by households** increased by 10.7 %, the **consumption of electricity by non-households** increased by 2.3 %**.**

Fig. 7 Consumption of electricity, electrical losses and consumption of electricity by domestic users



Methodology

Balance of electric power provides statistical information on domestic net 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, an independent state company that produces , transforms and carries out the sale and purchase of electricity;
- OSSH a.s, as a public company state shares that carries out the supply and sales of electricity , construction also the operation and management of the distribution network;
- OST a.s, an independent state company that operates in the electricity transmission system from the physical and distribution concepts. OST as. 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.

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

Losses and own consumption refers to the electricity used by the auxiliary activities of the power station directly related to production, such as water cooling, power station services, heating, lighting,etc.

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 use by household consumers and the amount of losses in the electricity power.

Electrical losses refer to losses in transmission network including own consumption in transmission and distribution losses. *Technical losses* in distribution are estimated by OSSH as *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.