

Balance of electric power

Quarter I - 2022

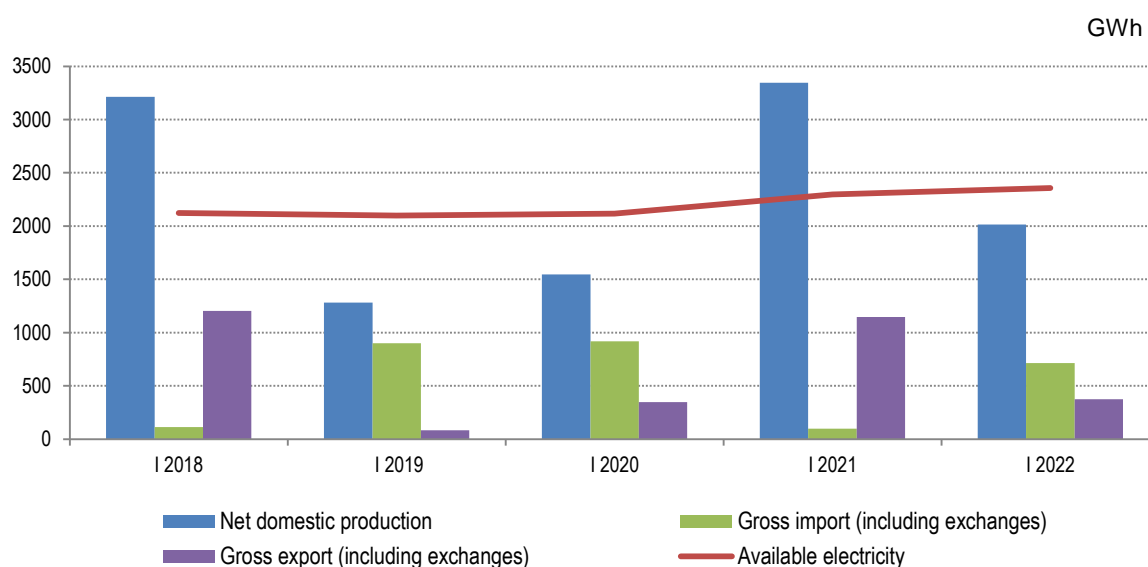
Tirana, May 24, 2022: During the first quarter of 2022, available electricity increased by 2.7 %.

Net domestic production of electric power in this period decreased by 39.7 %, reaching the value 2,016 GWh from 3,344 GWh of electricity produced in the first quarter of 2021.

This production was realized by public hydro plants at 52.8 % of net domestic production, by independent power producers to the extent 46.7 % and other producers (Photovoltaics) that generated 0.5 % of net domestic electricity production.

Gross import of electric power (including exchanges), in the first quarter of 2022, reached the value 715 GWh from 99 GWh compared to the same period of the previous year, marking an increase by 7.2 times. Gross export (including exchanges) reached the value 373 GWh from 1,147 GWh marking a decrease with 67.5 % (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.1 2021	Q.1 2022
A Available electricity (A=1+2-3)	2,296,754	2,357,960
1 Net domestic production (1=1.1+1.2+1.3)	3,344,097	2,015,893
1.1 Thermo	0	0
1.2 Hydro (1.2=a+b)	3,336,096	2,006,904
a Net public producers (a=a.1-a.2)	1,889,811	1,064,786
a.1 Gross public producers	1,906,673	1,074,971
a.2 Losses and own consumption	16,862	10,185
b Independent power producers	1,446,285	942,118
1.3 Other producers (Photovoltaics)	8,001	8,989
2 Gross import (including exchanges)	99,213	715,223
3 Gross export (including exchanges)	1,146,556	373,156
B Consumption of electricity (B=1+2)	2,296,754	2,357,960
1 Electrical losses (1=1.1+1.2)	616,751	582,749
1.1 Losses in transmission	74,057	47,727
1.2 Losses in distribution (1.2=a+b) ¹	542,694	535,022
a Technical losses in distribution	352,977	351,884
b Non technical losses in distribution ²	189,717	183,138
2 Consumption of electricity by domestic users (2=2.1+2.2)	1,680,003	1,775,211
2.1 Households	892,718	964,711
2.2 Non households	787,285	810,500

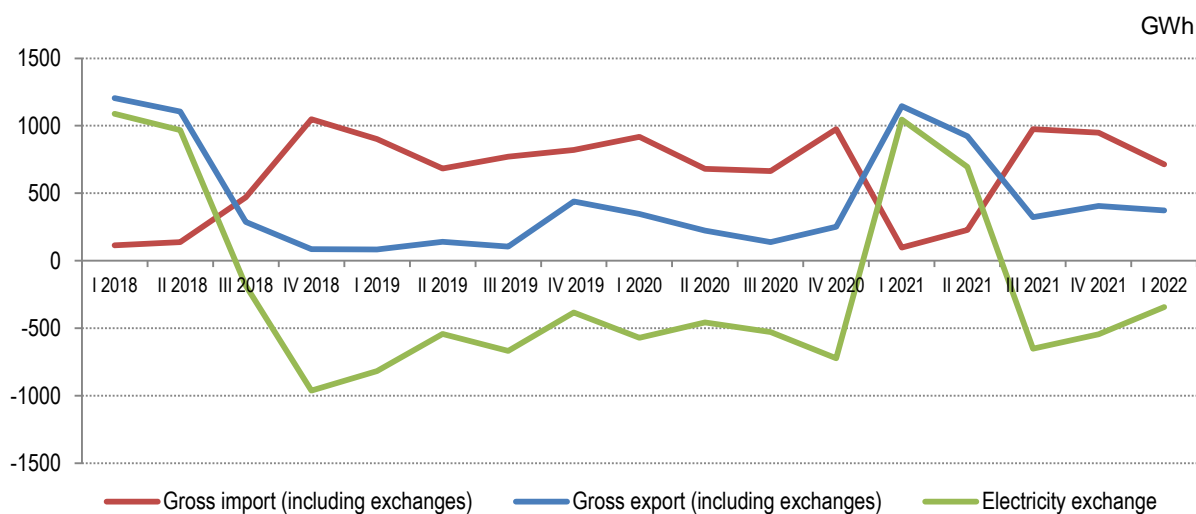
¹ Breakdown of technical and non-technical losses is an estimation made by operators in the field of electricity.

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 2022, realized 1,065 GWh from 1,890 GWh realized in the first quarter of 2021, thus marking a decrease in production by 43.7 %. While, **independent and concessionaire power producers** realized 942 GWh from 1,446 GWh realized to the same period of the previous year, thus marking a decrease in production by 34.9 %.

Electricity exchange (difference between gross exports and gross imports of electricity), in the first quarter of 2022 has reached a negative value by 342 GWh compared to the same period of the previous year where it had a positive value of 1,047 GWh.

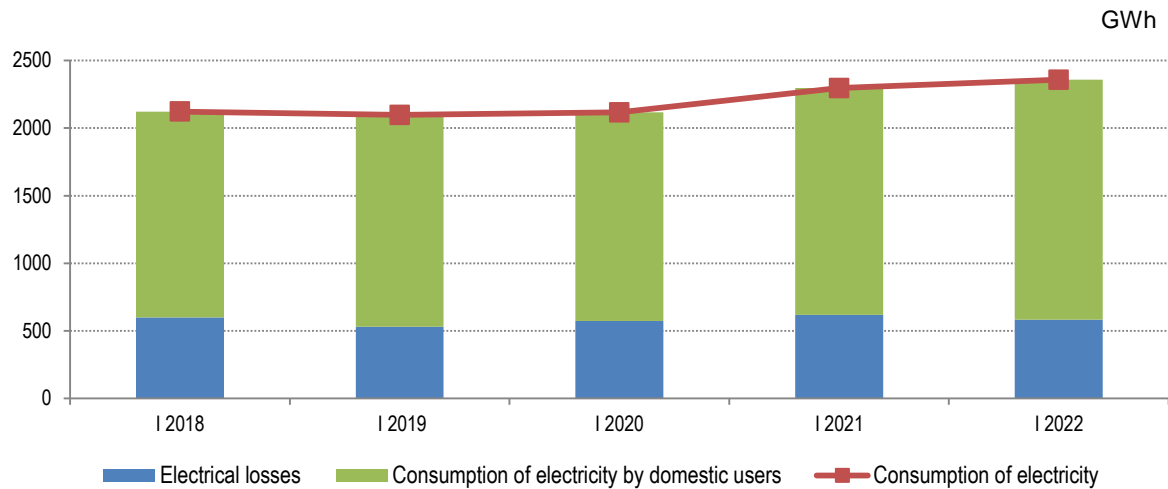
Fig. 2 Electricity exchange



Electrical losses have reached value 583 GWh from 617 GWh marking a decrease by 5.5 %. **Losses in transmission** decreased by 35.6 %, while **losses in distribution** decreased by 1.4 %.

Technical losses in distribution resulted on a decrease with 0.3 %, while **non-technical losses in distribution** resulted on a decrease with 3.5 %, compared with the first quarter of 2021 (fig.3).

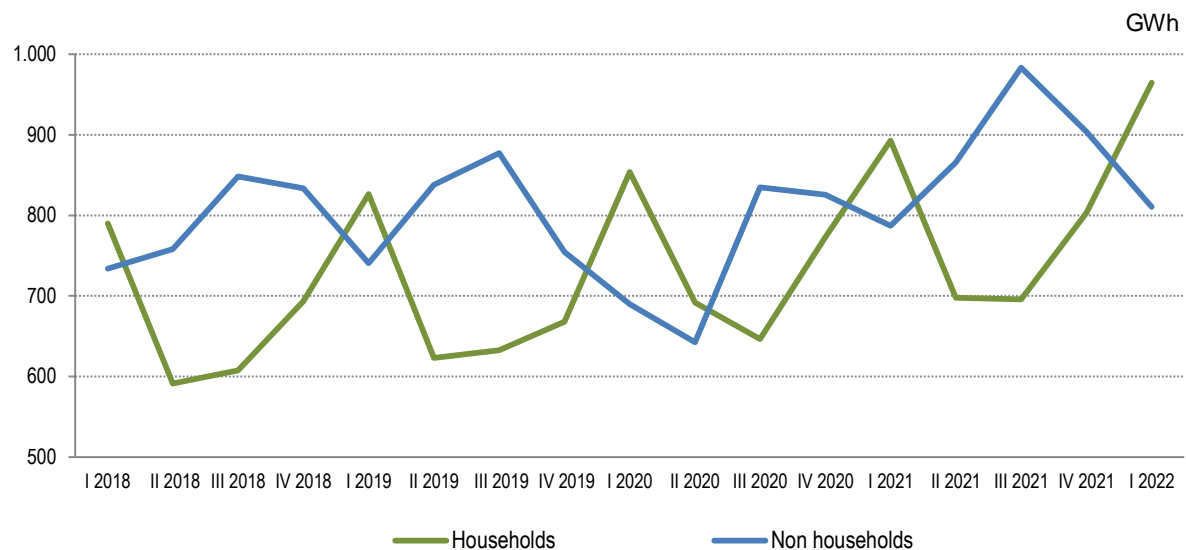
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the first quarter of 2022, increased by 5.7 %, reaching 1,775 GWh from 1,680 GWh realized in the first quarter of 2021.

The largest 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 8.1 %, compared to the increase by 2.9 % of energy consumed by **non-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.