

Balance of electric power

Quarter II - 2021

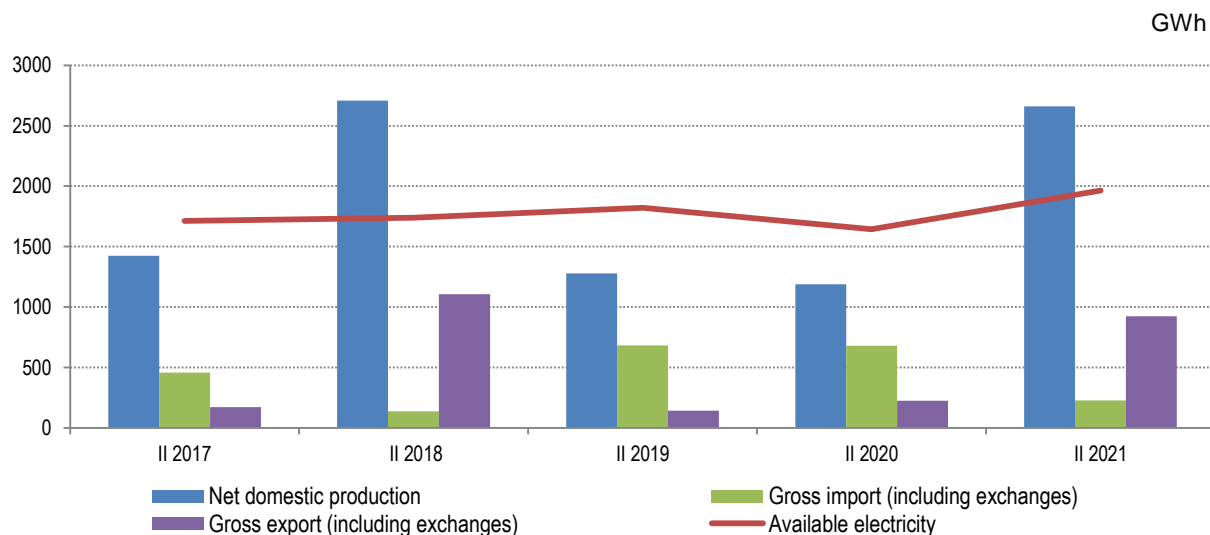
Tirana, August 25, 2021: During the second quarter of 2021, available electricity increased by 19.4 %.

Net domestic production of electric power in this period increased by 2.2 times, reaching the value 2,660 GWh from 1,188 GWh of electricity produced in the second quarter of 2020.

This production was realized by public hydro plants at 58.5 % of net domestic production, by independent power producers to the extent 41.0 % and other producers (other renewable) that generated 0.5 % of net domestic electricity production.

Gross import of electric power (including exchanges), in the second quarter of 2021, reached the value 228 GWh from 681 GWh compared to the same period of the previous year, marking a decrease with 66.5 %. Gross export (including exchanges) reached the value 924 GWh from 224 GWh marking an increase by 4.1 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.2 2020	Q.2 2021
A Available electricity (A=1+2-3)	1,644,621	1,963,921
1 Net domestic production (1=1.1+1.2+1.3)	1,187,699	2,659,642
1.1 Thermo	0	0
1.2 Hydro (1.2=a+b)	1,177,799	2,646,536
a Net public producers (a=a.1-a.2)	571,205	1,556,770
a.1 Gross public producers	577,135	1,570,399
a.2 Losses and own consumption	5,930	13,629
b Independent power producers	606,594	1,089,766
1.3 Other producers (other renewable)	9,900	13,106
2 Gross import (including exchanges)	681,245	228,239
3 Gross export (including exchanges)	224,323	923,960
B Consumption of electricity (B=1+2)	1,644,621	1,963,921
1 Electrical losses (1=1.1+1.2)	310,343	400,441
1.1 Losses in transmission	37,593	60,694
1.2 Losses in distribution (1.2=a+b) ¹	272,751	339,747
a Technical losses in distribution	177,314	222,494
b Non technical losses in distribution ²	95,437	117,253
2 Consumption of electricity by domestic users (2=2.1+2.2)	1,334,278	1,563,480
2.1 Households	691,937	697,801
2.2 Non households	642,341	865,679

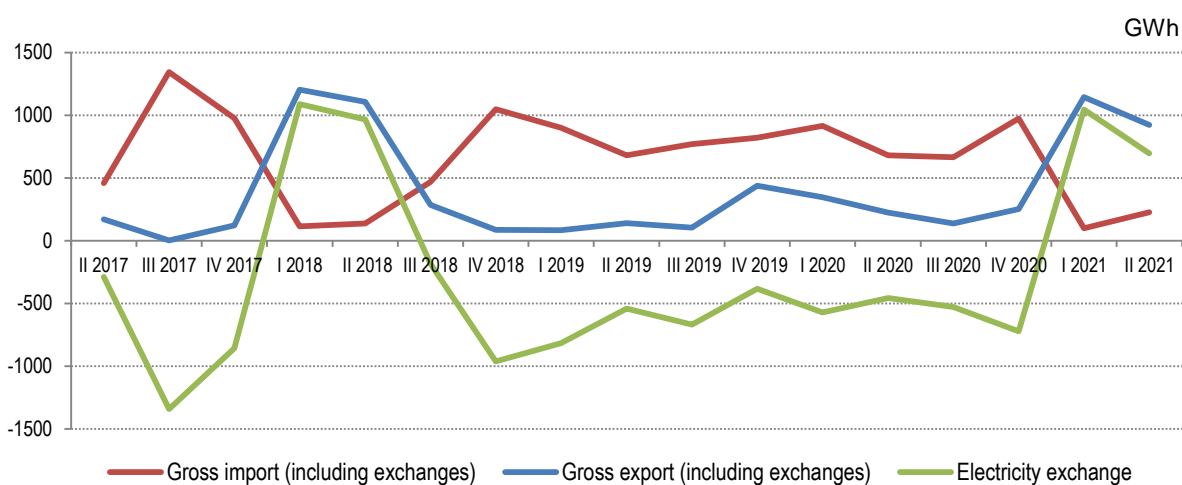
¹ Breakdown of technical and non-technical losses is an estimation made by operators in the field of electricity.

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 2021, realized 1,557 GWh from 571 GWh realized in the second quarter of 2020, thus marking an increase in production by 2.7 times. While, **independent and concessionaire power producers** realized 1,090 GWh from 607 GWh realized to the same period of the previous year, thus marking an increase in production by 79.7 %.

Electricity exchange (difference between gross exports and gross imports of electricity), in the second quarter of 2021 has increased, reaching the value 696 GWh compared to the same period of the previous year where it had a negative value of 457 GWh.

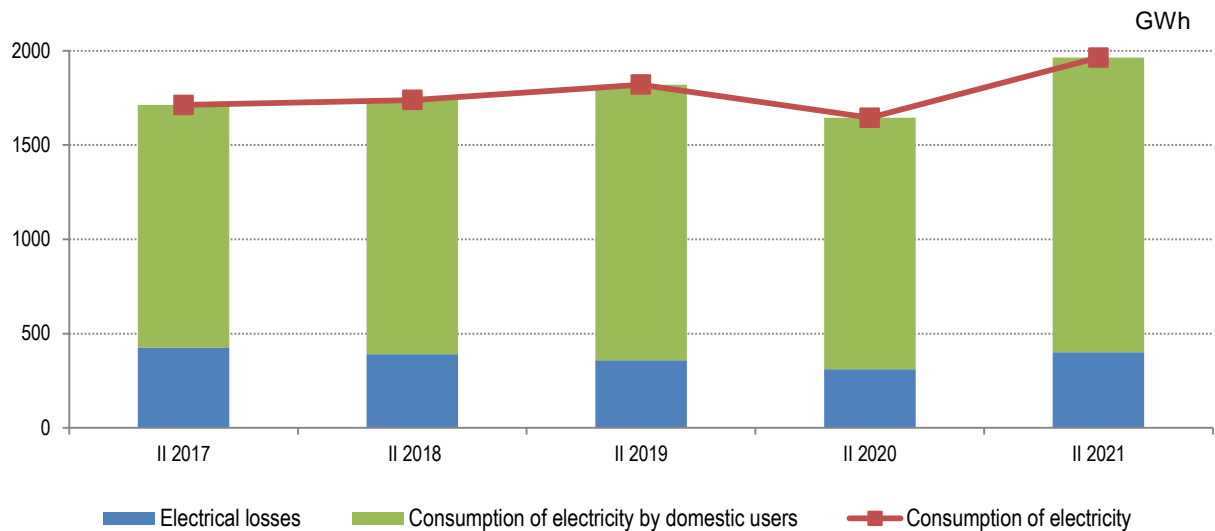
Fig. 2 Electricity exchange



Electrical losses have reached value 400 GWh from 310 GWh marking an increase by 29.0 %. **Losses in transmission** increased by 61.5 %, while **losses in distribution** increased by 24.6 %.

Technical losses in distribution resulted on an increase with 25.5 %, while **non-technical losses in distribution** resulted on an increase with 22.9 %, compared with the second quarter of 2020 (fig.3).

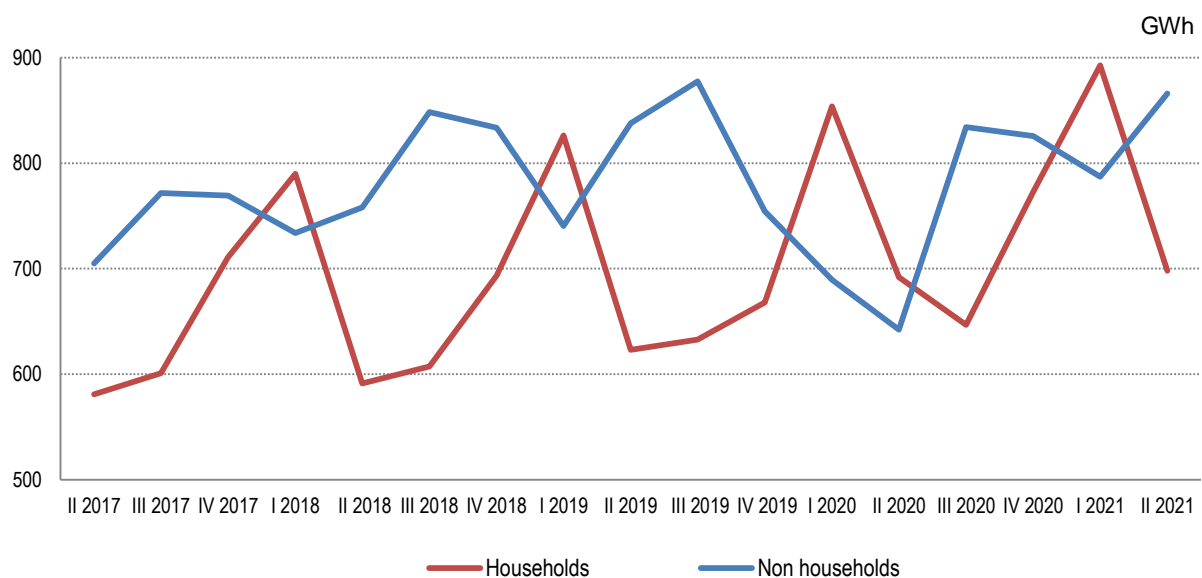
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the second quarter of 2021, increased by 17.2 %, reaching 1,563 GWh from 1,334 GWh realized in the second quarter of 2020.

The largest impact on the increase of the final consumption of electricity by domestic users was provided by **consumption of electricity by non-households** with an increase of electricity consumption by 34.8 %, compared to an increase of 0.8 % of energy consumed by **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.