

Balance of electric power

Year 2019

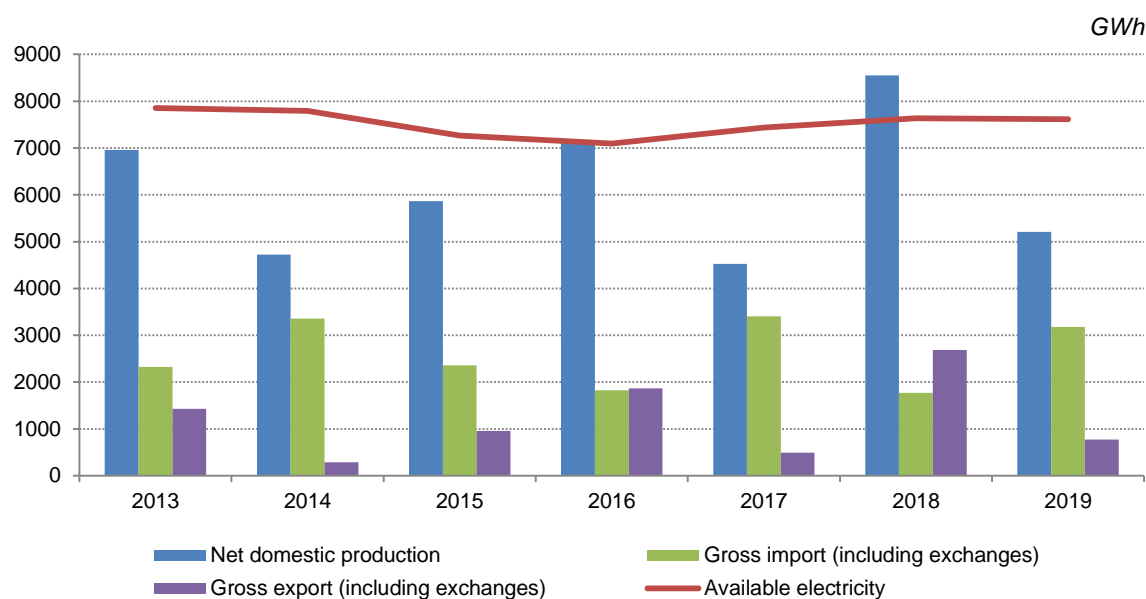
Tirana, March 5, 2020: During 2019, available electricity decreased by 0.3 %.

Net domestic production of electric power in this period reached the value 5,208 GWh from 8,552 GWh of electricity produced in 2018, with a decrease in production by 39.1 %.

This production was realized by public hydro plants at 57.2 % of net domestic production, by independent power producers to the extent 42.3 % and other producers (other renewable) that generated 0.5 % of net domestic electricity production.

The decrease of electricity production resulted on increase of gross imports of electric power (including exchanges) with about 1.8 times and decrease of gross exports (including exchanges) of electric power with about 3.5 times, compared to the same period of the previous year.

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



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Tab. 1 Balance of electric power

MWh

Indicators	2018	2019
A Available electricity (A=1+2-3)	7,638,848	7,613,964
1 Net domestic production (1=1.1+1.2+1.3)	8,552,154	5,207,928
1.1 Thermo		0
1.2 Hydro (1.2=a+b)	8,552,154	5,185,732
a Net public producers (a=a.1-a.2)	5,850,934	2,981,136
a.1 Gross public producers	5,901,698	3,009,839
a.2 Losses and own consumption	50,764	28,703
b Independent power producers	2,701,220	2,204,596
1.3 Other producers (other renewable)	0	22,196
2 Gross import (including exchanges)	1,771,740	3,176,515
3 Gross export (including exchanges)	2,685,045	770,480
B Consumption of electricity (B=1+2)	7,638,848	7,613,964
1 Electrical losses (1=1.1+1.2)	1,783,118	1,653,465
1.1 Losses in transmission	242,705	168,621
1.2 Losses in distribution (1.2=a+b) ¹	1,540,412	1,484,844
a Technical losses in distribution	1,070,560	954,300
b Non-technical losses in distribution ²	469,852	530,544
2 Consumption of electricity by domestic users (2=2.1+2.2)	5,855,731	5,960,499
2.1 Households	2,681,875	2,750,172
2.2 Non households	3,173,856	3,210,327

¹ Breakdown of technical and non-technical losses are estimations 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.

Note:

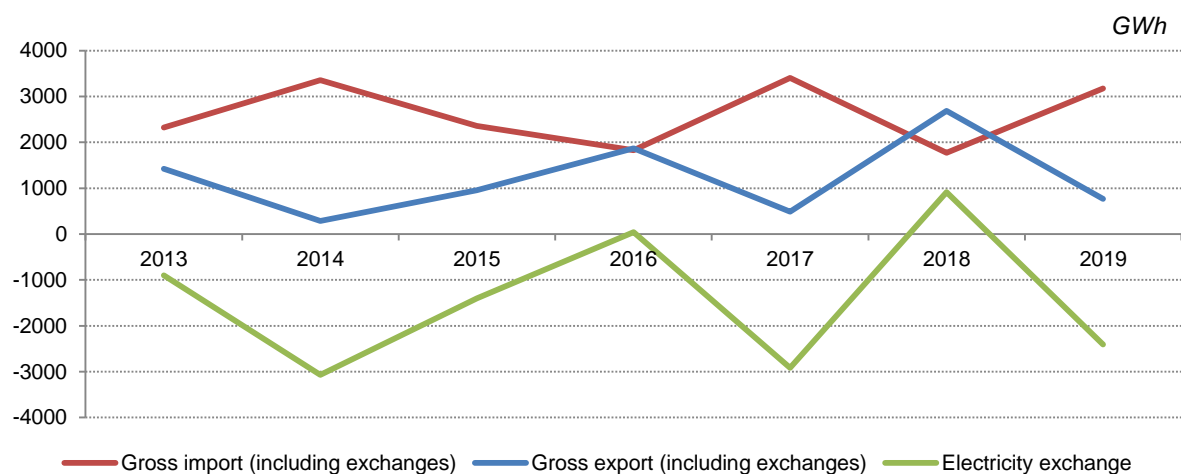
In this publication, the figures are considered preliminary, as the processing of information from administrative sources has not yet been completed.

Public hydro plants, in 2019, realized 2,981 GWh from 5,851 GWh realized in 2018, thus marking a decrease in production by 49.0 %. While, **independent and concessionaire power producers** realized 2,205 GWh from 2,701 GWh realized to the same period of the previous year, thus marking a decrease in production by 18.4 %.

Gross import (including exchanges) resulted in a growth, reaching the value of 3,177 GWh from 1,772 GWh compared to the same period of the previous year.

Gross export (including exchanges) resulted in a reduction, reaching the value of 770 GWh from 2,685 GWh compared to the same period of the previous year.

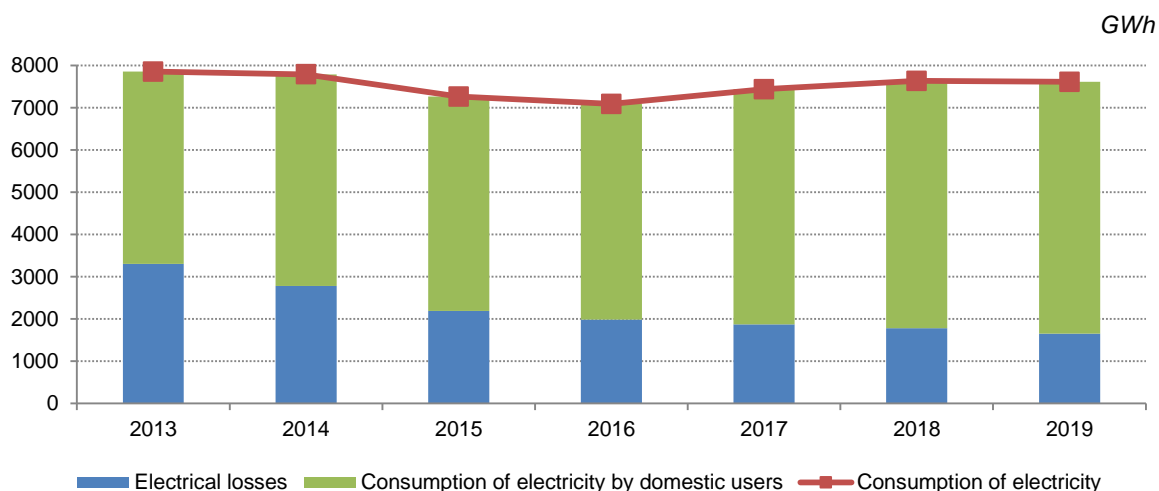
Fig. 2 Electricity exchange



Electrical losses have reached value 1,653 GWh from 1,783 GWh marking a decrease by 7.3 %. **Losses in transmission** decreased by 30.5 % and the weight that occupies in the total electrical losses is 10.2 %.

Losses in distribution occupy a greater weight, around 89.8 % of electrical losses, where **technical losses in distribution** decreased approximately 10.9 % compared to the same period of the previous year.

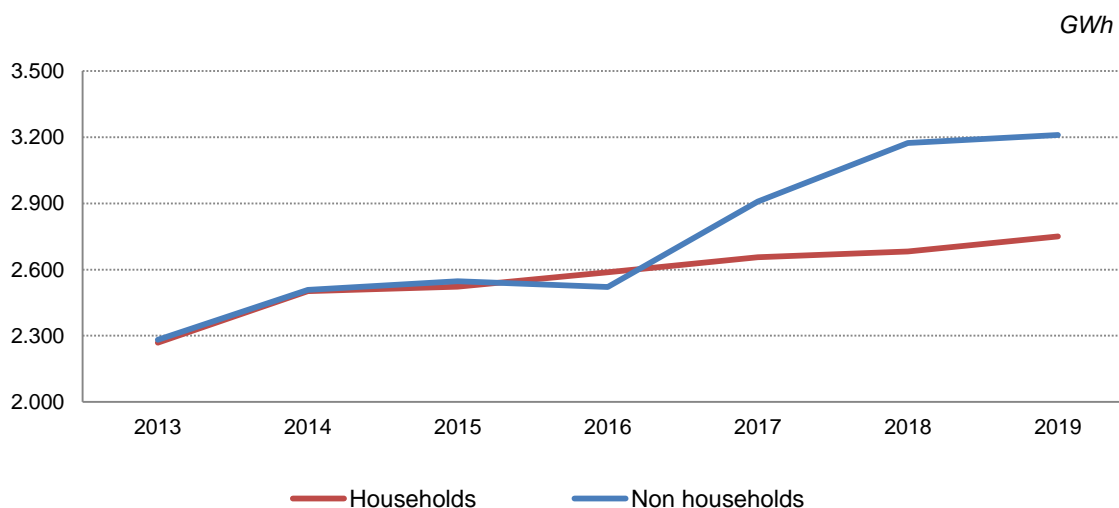
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in 2019, increased by 1.8 %, reaching 5,960 GWh from 5,856 GWh realized in 2018.

The largest impact on the increase of the final consumption of electricity by domestic users was provided by **consumption of electricity by households** who contributed with +1.2 percentage points, while the contribution of **electricity consumed by non-households** was +0,6 percentage points.

Fig. 4 Consumption of electricity by domestic users

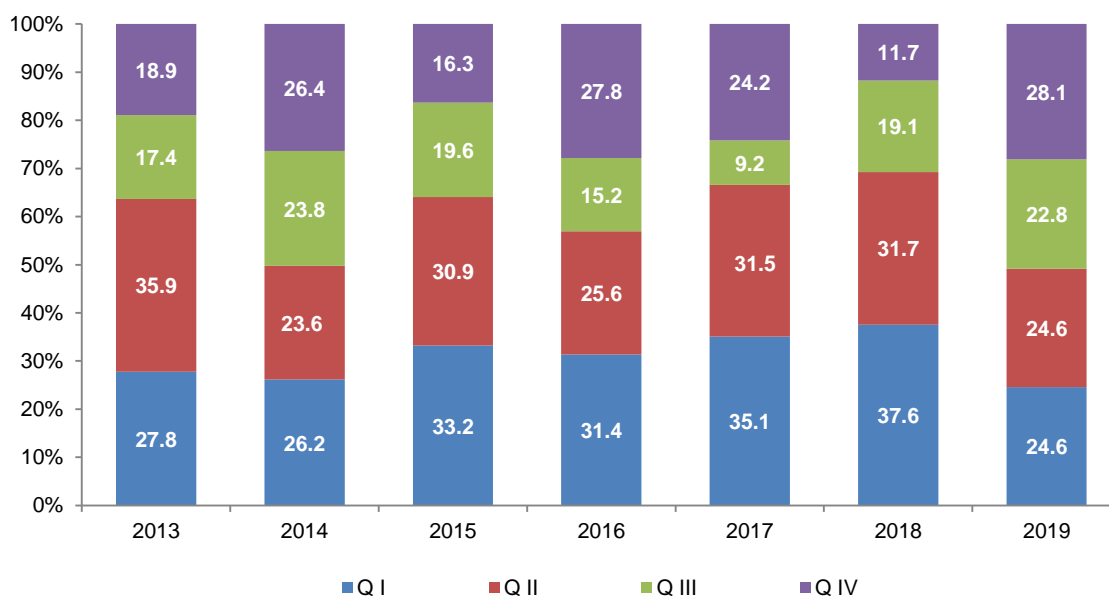


Quarter IV 2019

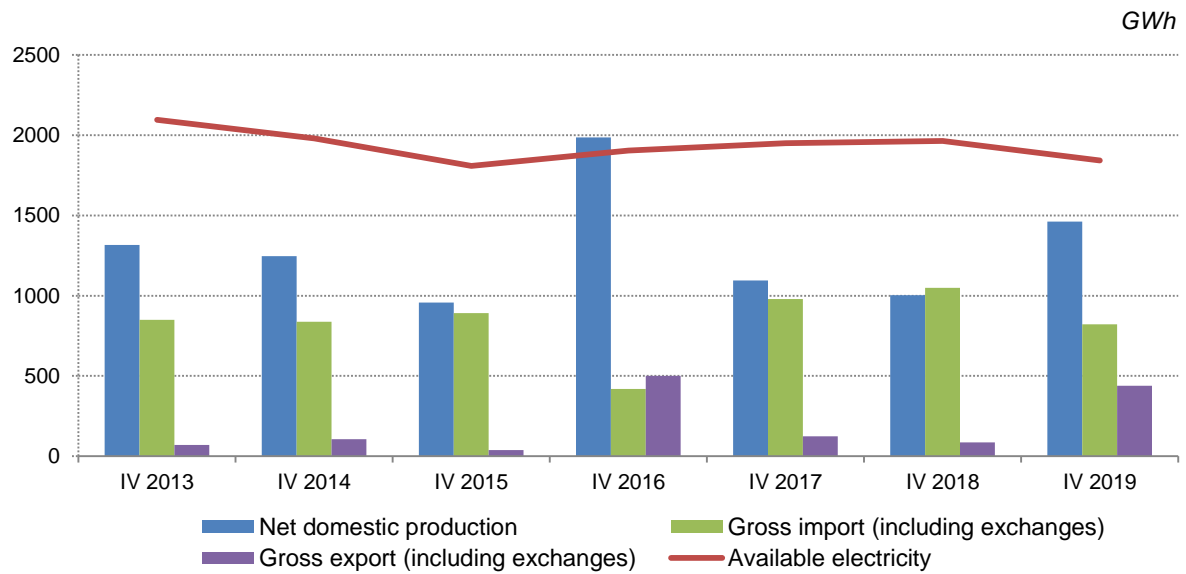
During the fourth quarter of 2019, **available electricity** decreased by 6.2 %.

Net domestic production of electric power in this period reached the value 1,461 GWh from 1,003 GWh of electricity produced in the fourth quarter of 2018, with an increase in production by 45.8 %.

Fig. 5 Structure in percentage of net domestic production by quarters, 2012-2019 (%)

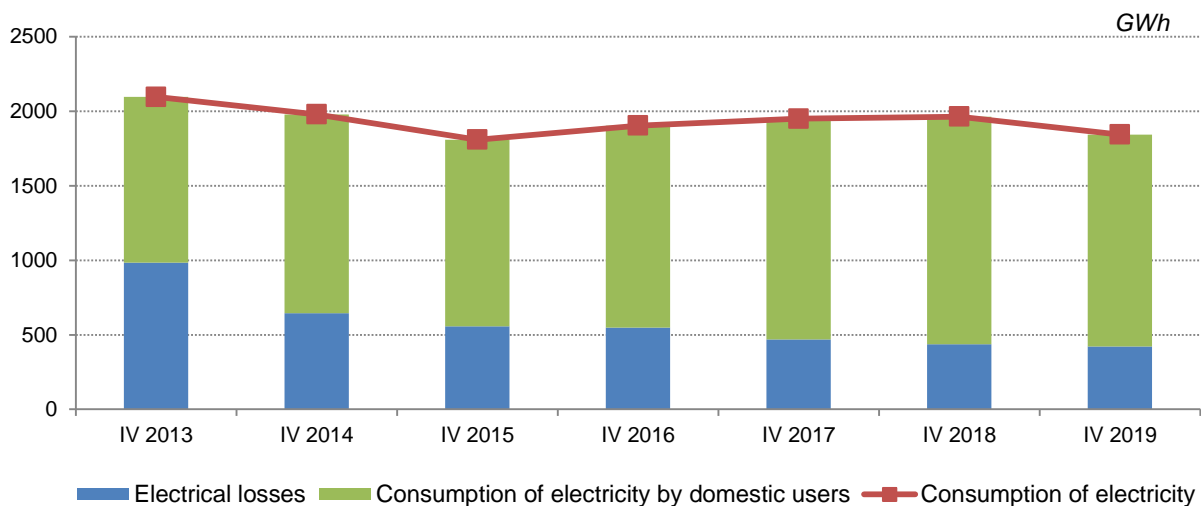


The increase of production of electricity during the fourth quarter of 2019, resulted on decrease of gross imports of electric power (including exchanges) with 1.3 times and increase of gross exports (including exchanges) of electric power with 5.1 times, compared to the same period of the previous year.

Fig. 6 Available electricity, net domestic production and electricity exchange

During the fourth quarter of 2019, **electrical losses** dropped by 3.8 %, where the largest impact was the decline of **losses in distribution** by 6.7 %.

The consumption of electricity by domestic users decreased by 6.8 % compared to the same period of the previous year. The **consumption of electricity by households** decreased by 3.7 %, while the contribution of **electricity consumed by non-households** decreased by 9.5 %.

Fig. 7 Consumption of electricity, electrical losses and 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;
- OSHEE 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 (OSHEE a.s.) 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 OSHEE, 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 OSHEE 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.