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Balance of electric power

Quarter I - 2019

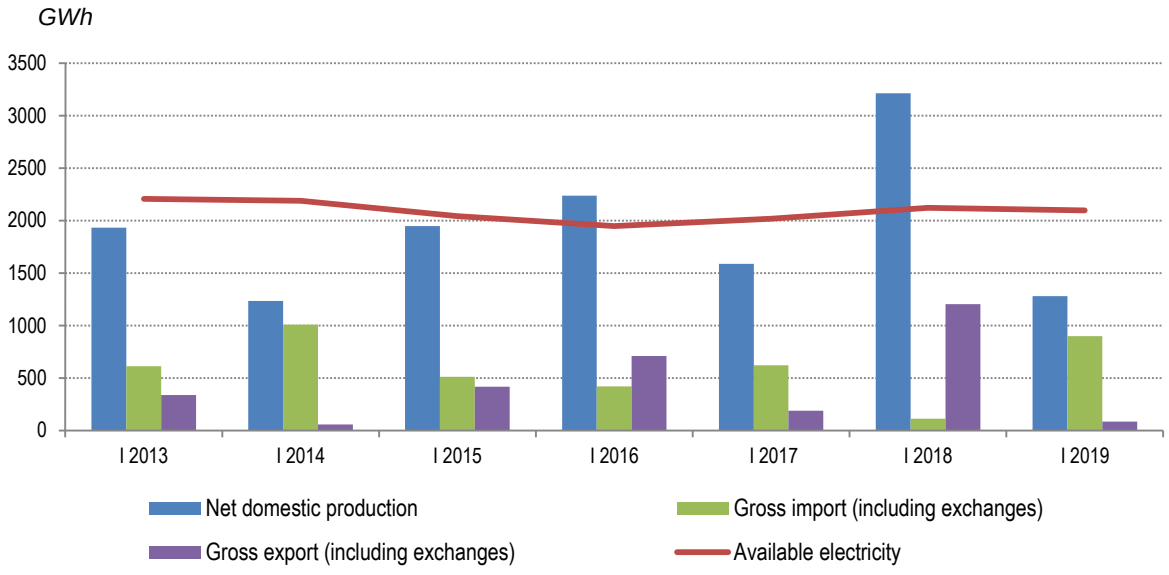
Tirana, May 24, 2019: During the first quarter of 2019, **available electricity** decreased by 1.2 %.

Net domestic production of electric power, decreased by about 2.5 times in this period, reaching 1,281 GWh from 3,213 GWh of electricity produced in the first quarter of 2018.

This electricity production was realized by public hydro plants at 53.6 % of net domestic production, by independent power producers to the extent 46.1 % and other producers (other renewable) that generated 0.3 % of net domestic electricity production.

The decrease of production of electricity, in the first quarter of 2019, resulted on increase of gross imports of electric power (including exchanges) with about 7.9 times and decrease of gross exports (including exchanges) of electric power with about 14.3 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

	Indicators	Q. I 2018	Q. I 2019
A	**Available electricity (A=1+2-3)**	**2,122,904**	**2,097,780**
1	Net domestic production (1=1.1+1.2+1.3)	3,212,878	1,281,435
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	3,212,878	1,277,158
a	Net public producers (a=a.1-a.2)	2,087,108	687,145
a.1	Gross public producers	2,104,946	693,940
a.2	Losses and own consumption	17,839	6,796
b	Independent power producers	1,125,771	590,014
1.3	Other producers (other renewable)	0	4,277
2	Gross import (including exchanges)	114,656	900,840
3	Gross export (including exchanges)	1,204,630	84,495
B	**Consumption of electricity (B=1+2)**	**2,122,904**	**2,097,780**
1	Electrical losses (1=1.1+1.2)	599,122	530,850
1.1	Losses in transmission	86,596	38,179
1.2	Losses in distribution (1.2=a+b)[1]	512,526	492,671
a	Technical losses in distribution	343,330	323,874
b	Non-technical losses in distribution[2]	169,196	168,798
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,523,782	1,566,930
2.1	Households	789,967	826,444
2.2	Non households	733,814	740,486

[1] Breakdown of technical and non-technical losses are estimations made by operators in the field of electricity.

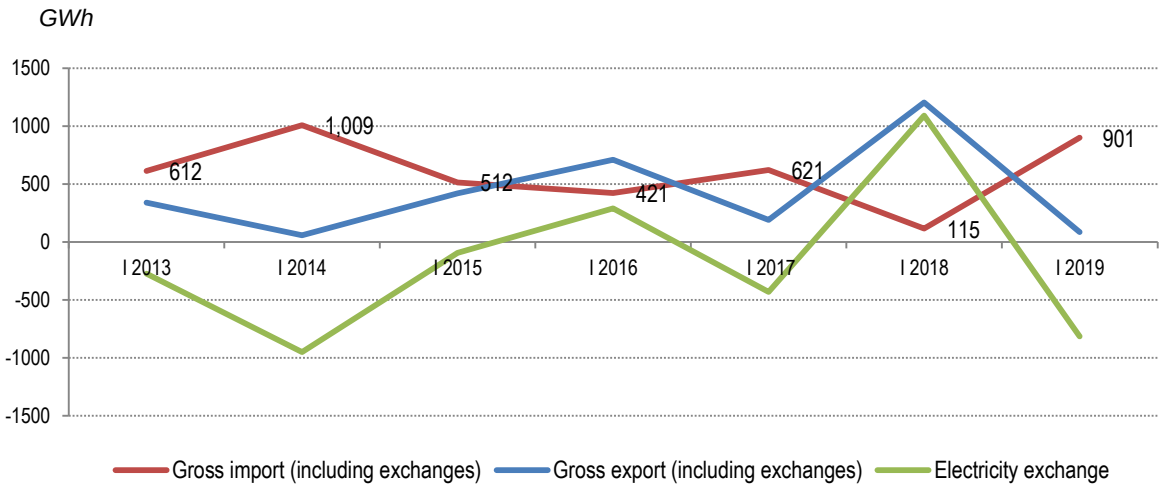
[2] Non-technical losses refer to the difference between total losses in distribution and technical losses in distribution and are added also statistical differences which derive from the differences in the period of measurement in production, consumption and trade of electricity.

Public hydro plants, in the first quarter of 2019, realized 687 GWh from 2,087 GWh realized in the first quarter of 2018, thus marking a decrease in production by about 3 times. While, **independent and concessionaire power producers** realized 590 GWh from 1,126 GWh realized to the same period of the previous year, thus marking a decrease in production by about 1.9 times.

Gross import (including exchanges) in the first quarter of 2019, resulted in a growth, reaching the value of 901 GWh from 115 GWh in the first quarter of 2018.

Gross export (including exchanges) in the first quarter of 2019, resulted in a reduction, reaching the value of 84 GWh from 1,205 GWh in the first quarter of 2018.

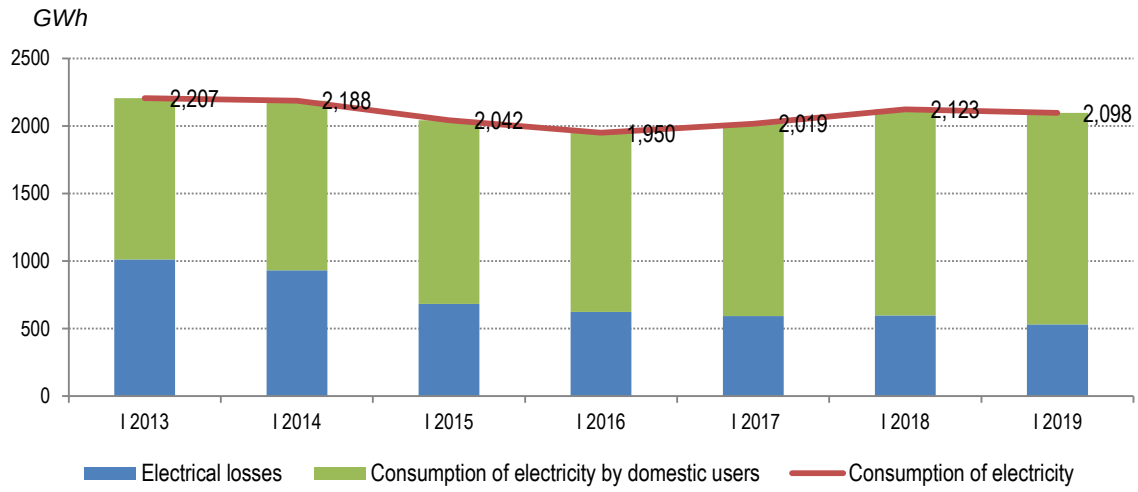
Fig. 2 Electricity exchange



During the first quarter of 2019, **electrical losses** were 531 GWh from 599 GWh in the first quarter of 2018, with a decrease by 11.4 %. Impact on this reduction has had the decrease of **losses in distribution**, which accounts for 92.8 % of the total electrical losses and **losses in transmission** which accounts for 7.2 % of total losses.

Losses in distribution decreased by 3.9 % compared with the first quarter of the previous year as a result of the decrease **of technical losses in distribution** by 5.7 % and decrease of **non-technical losses in distribution** by 0.2 %, while **losses in transmission** decreased by 55.9 % compared to the same period of the previous year.

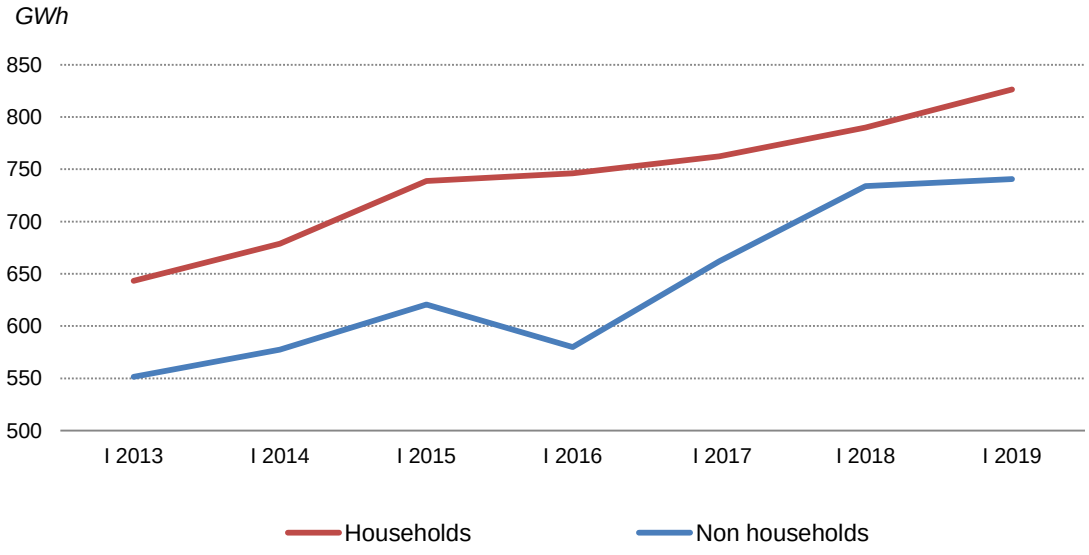
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the first quarter of 2019, increased by 2.8 %, reaching 1,567 GWh from 1,524 GWh, compared to the same period of the previous year.

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 +2.4 percentage points in the first quarter of 2019 compared with the first quarter of 2018, while the contribution of **electricity consumed by non-households** was +0,4 percentage points.

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;
- 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.