

Balance of electric power

Quarter I - 2018

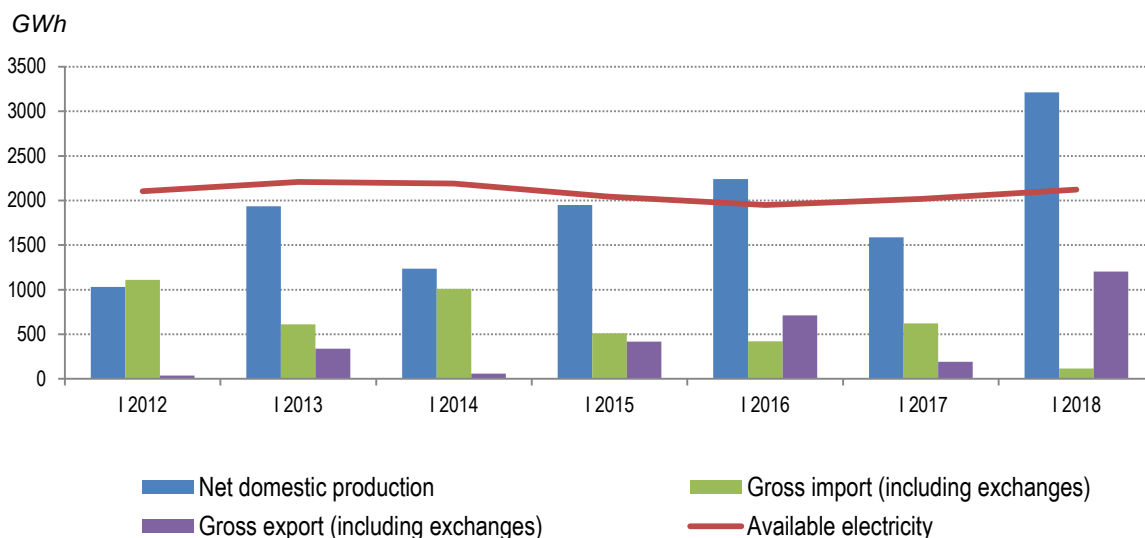
Tirana, May 25, 2018: During the first quarter of 2018, **available electricity** increased by 5.2 %

Net domestic production of electric power, almost doubled in this period, reaching 3,213 GWh from 1,588 GWh of electricity produced in the first quarter of 2017.

This electricity production was realized by public hydro plants at 65.0 % of net domestic production and private and independent and concessionaire power producers that generated 35.0 % of net domestic electricity production.

The increase of production of electricity, in the first quarter of 2018, resulted on decrease of gross imports of electric power (including exchanges) with about 5.4 times and increase of gross exports (including exchanges) of electric power with about 6.3 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

		(MWh)	
Indicators		Q I 2017	Q I 2018
A	Available electricity (A=1+2-3)	2,018,548	2,122,903
1	Net domestic production (1=1.1+1.2+1.3)	1,587,855	3,212,878
1.1	Thermo		
1.2	Hydro (1.2=a+b)	1,587,855	3,212,878
a	Net public producers (a=a.1-a.2)	1,068,301	2,087,108
a.1	Gross public producers	1,077,772	2,104,946
a.2	Losses and own consumption	9,471	17,839
b	Independent power producers	519,553	1,125,770
1.3	Other producers (other renewable)		
2	Gross import (including exchanges)	621,147	114,656
3	Gross export (including exchanges)	190,453	1,204,630
B	Consumption of electricity (B=1+2)	2,018,548	2,122,903
1	Electrical losses (1=1.1+1.2)	594,305	599,727
1.1	Losses in transmission	42,406	86,596
1.2	Losses in distribution (1.2=a+b) ¹	551,899	513.130
a	Technical losses in distribution	350,087	343.289
b	Non technical losses in distribution ²	201,812	169.841
2	Consumption of electricity by domestic users (2=2.1+2.2)	1,424,244	1.523.177
2.1	Households	762,407	789,967
2.2	Non households	661,836	733.209

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

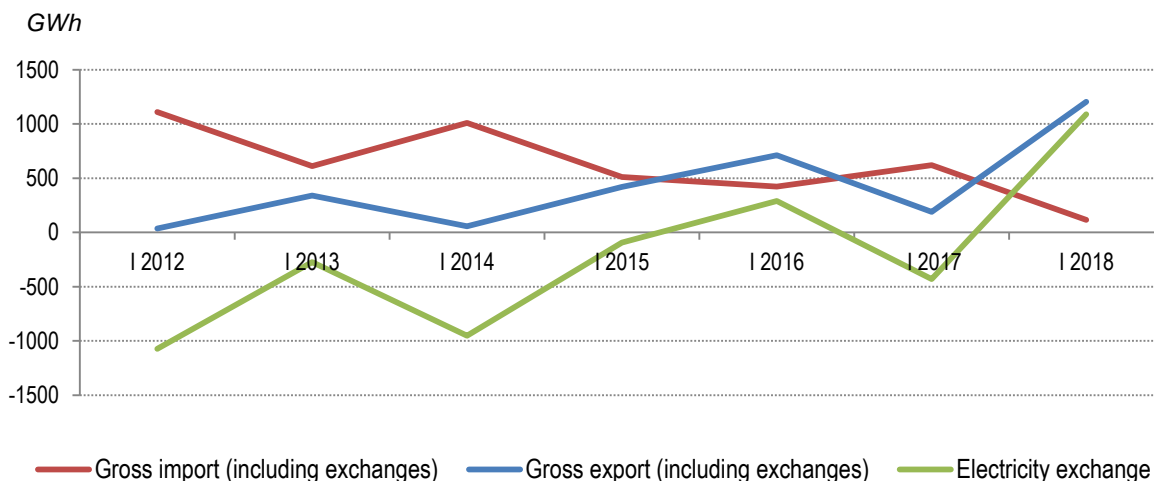
²Non technical losses refer to the difference between total losses in distribution and technical losses in distribution and are added also statistical differences which derive from the differences in the period of measurement in production, consumption and trade of electricity.

Public hydro plants, in the first quarter of 2018, realized 2,087 GWh from 1,068 GWh realized in the first quarter of 2017, thus marking a rise in production by about 2 times. While, **independent and concessionaire power producers** realized 1,126 GWh from 520 GWh realized to the same period of the previous year, thus marking a rise in production by about 2.2 times.

Gross import (including exchanges) in the first quarter of 2018, resulted in a reduction, reaching the value of 114 GWh from 621 GWh in the first quarter of 2017.

Gross export (including exchanges) in the first quarter of 2018, resulted in a growth, reaching the value of 1,205 GWh from 190 GWh in the first quarter of 2017.

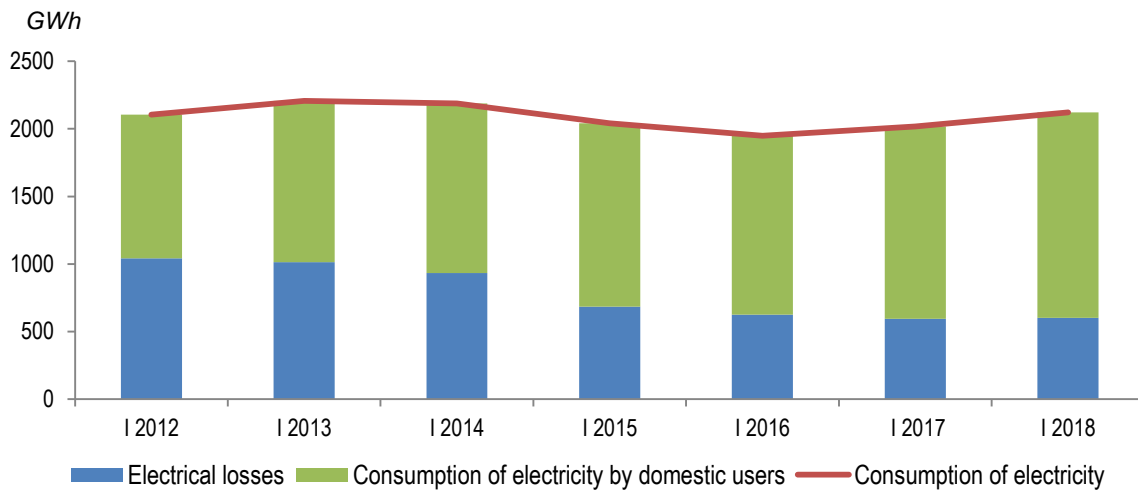
Fig.2 Electricity exchange



During the first quarter of 2018, **electrical losses** were 600 GWh from 594 GWh in the first quarter of 2017, with an increase by 0.9 %. Impact on this growth has had the increase of **losses in distribution**, which accounts for 14.4 % of the total electrical losses.

Losses in distribution decreased by 7.0 % compared with the first quarter of the previous year as a result of the decrease of **non-technical losses in distribution** by 15.8 % and decrease of **technical losses in distribution** by 1.9 % compared to the same period of the previous year.

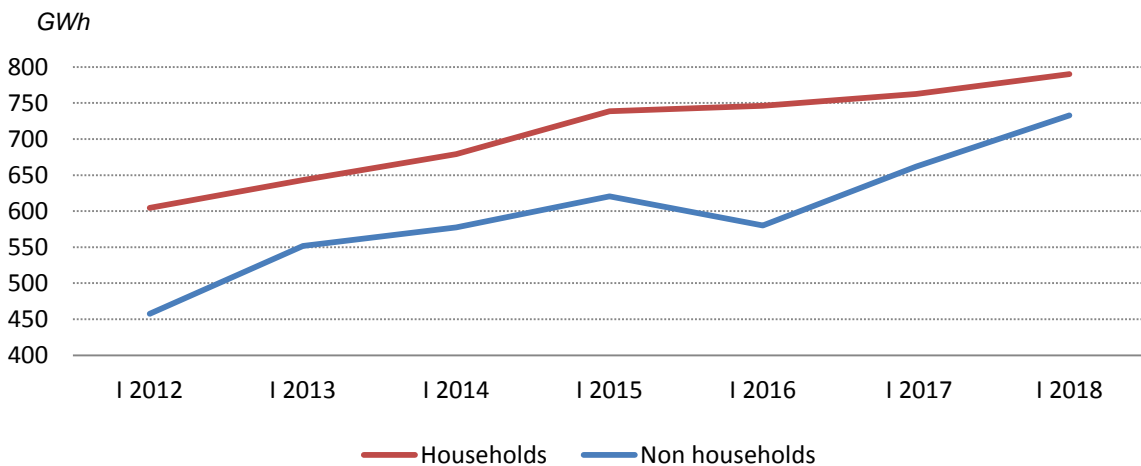
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



The consumption of electricity by domestic users, in the first quarter of 2018, increased by 6.9 %, reaching 1,523 GWh from 1,424 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 non-households** who contributed with +5.0 percentage points in the first quarter of 2018 compared with the first quarter of 2017, while the contribution of **electricity consumed by households** was +1,9 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.