

Balance of electric power

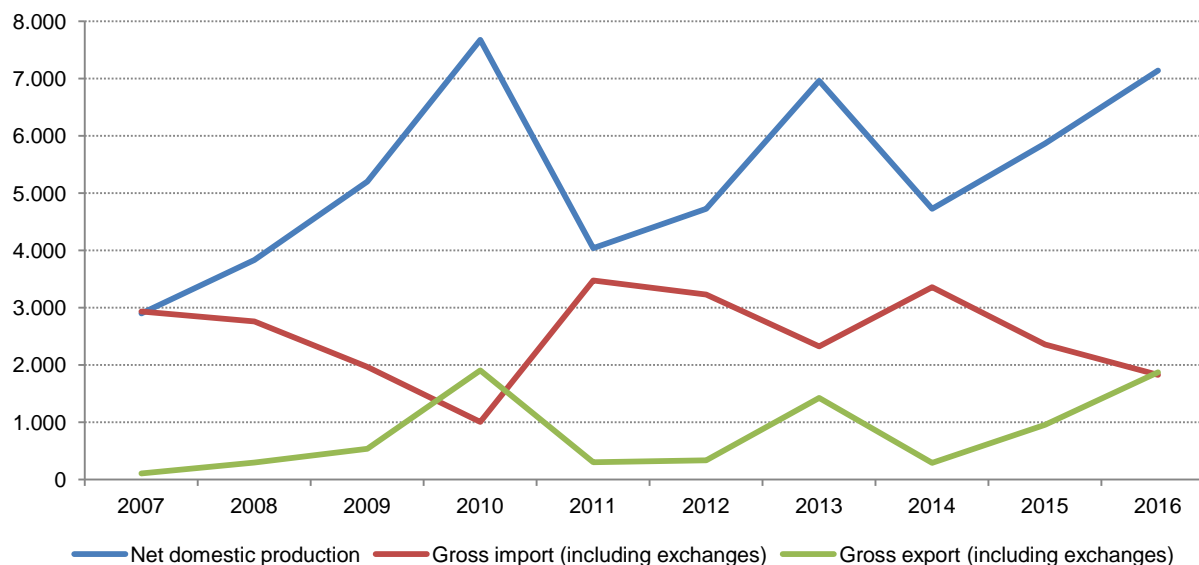
Year 2016

Tirana, March 24, 2017: The net domestic production of electric power during 2016 was 7,136 GWh from 5,866 GWh produced in 2015, which increased by 21.7 percent.

The increase of production of electricity during 2016 resulted on decrease of gross imports by 22.4% and increase of gross exports by 95.5 percent, compared with 2015.

During 2016, Albania resulted to be net exporting of electricity, for the first time those last five years.

Fig. 1 Available electricity, net domestic production, gross imports and exports, 2007-2016



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Tab. 1 Balance of electric power

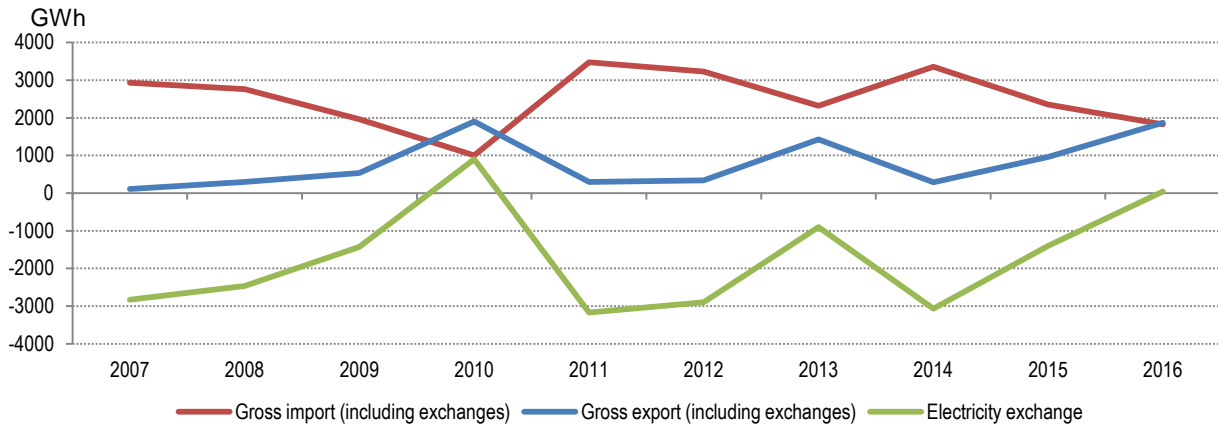
MWh

Indicators		2015	2016
A	Available electricity (A=1+2-3)	7,265,089	7,094,061
1	Net domestic production (1=1.1+1.2+1.3)	5,865,671	7,135,914
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	5,865,671	7,135,914
a	Net public producers (a=a.1-a.2)	4,451,975	5,091,616
a.1	Gross public producers	4,475,819	5,151,784
a.2	Losses and own consumption	23,844	60,168
b	Independent power producers	1,413,696	2,044,297
1.3	Other producers (other renewable)	0	0
2	Gross import (including exchanges)	2,355,358	1,826,753
3	Gross export (including exchanges)	955,941	1,868,605
B	Consumption of electricity (B=1+2)	7,265,089	7,094,061
1	Electrical losses (1=1.1+1.2)	2,195,837	1,985,901
1.1	Losses in transmission	158,581	190,008
1.2	Losses in distribution (1.2=a+b)*	2,037,256	1,795,892
a	Technical losses in distribution	1,366,520	1,346,501
b	Non technical losses in distribution	670,736	449,391
2	Consumption of electricity by domestic users (2=2.1+2.2)	5,069,252	5,108,160
2.1	Households	2,522,261	2,587,259
2.2	Non households	2,546,991	2,520,901

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

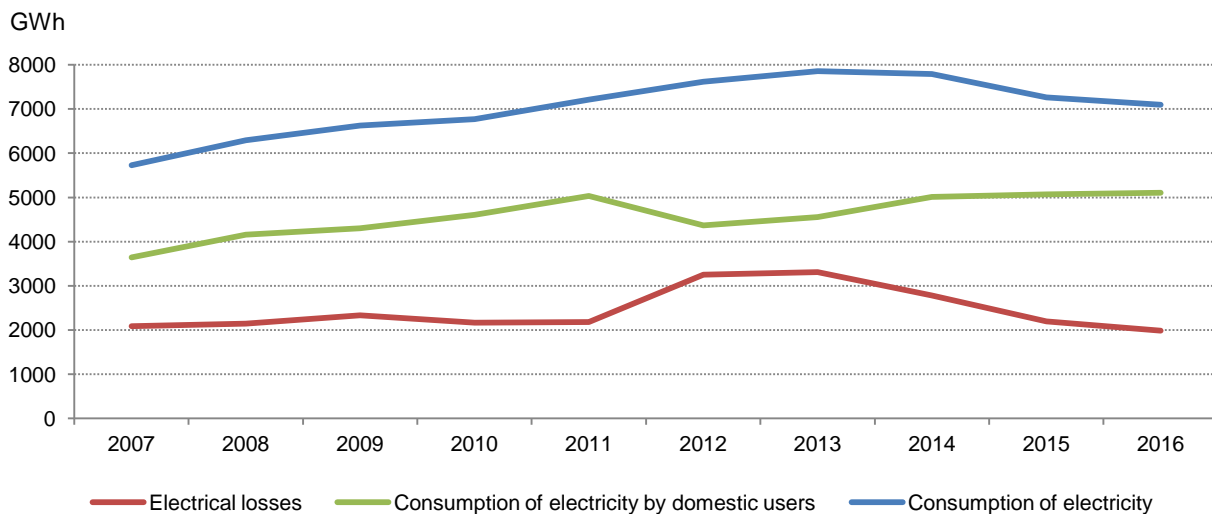
The quantity of electricity produced in 2016 was 7,136 GWh, where public hydropower plants production represents 71.4 percent of total net domestic production, while production of electricity from independent power producers constitutes 28.6 percent.

Fig. 2 Electricity exchange, 2007-2016



Total **network losses** decreased by 9.6 percent, from 2,196 GWh in 2015 to 1,986 GWh in 2016. **Losses in distribution**, during 2016 decreased by 11.8 percent compared with the same period of previous year. Transmission losses are increased, by 19.8 percent and constitute only 9.6 percent of total network losses.

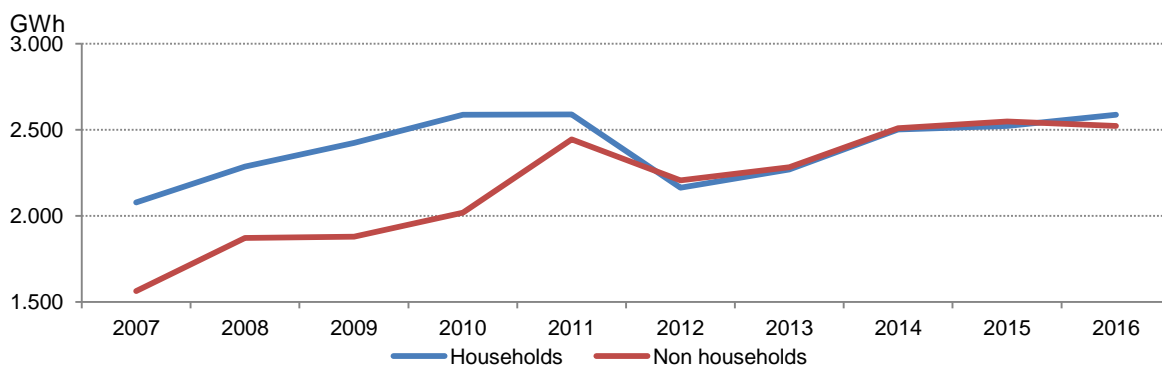
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users, 2007-2016



The consumption of electricity by domestic users, during 2016, increased by 0.8 percent compared with the previous year and reached 5,108 GWh from 5,069 GWh.

During 2016, the final consumption of electricity consumed by households increased by 2.6 percent. The situation differs for the final consumption of electricity consumed by non households, which decreased by 1.0 percent compared with 2015.

Fig. 4 Consumption of electricity by domestic users, 2007-2016



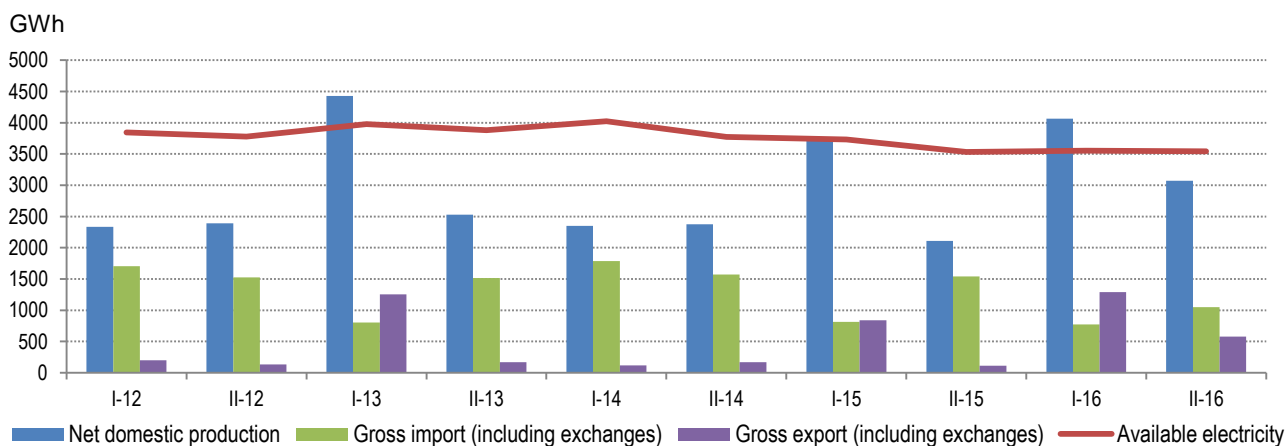
Second half of 2016

In the second half of 2016, the **net domestic production** of electric power increased by 45.7 percent, compared with the same period of 2015 and constitutes 43.0 % of the annual production of 2016 from 35.9% that constituted in the annual production of 2015.

Gross import (including exchanges), in the second half of 2016, decreased by 31.8 percent, compared with the same period of 2015

Gross export (including exchanges), in the second half of 2016, increased by 405.3 percent and reached 579 GWh in the second half of 2016.

Fig. 5 Available electricity, net domestic production, gross import and export, 2007-2016



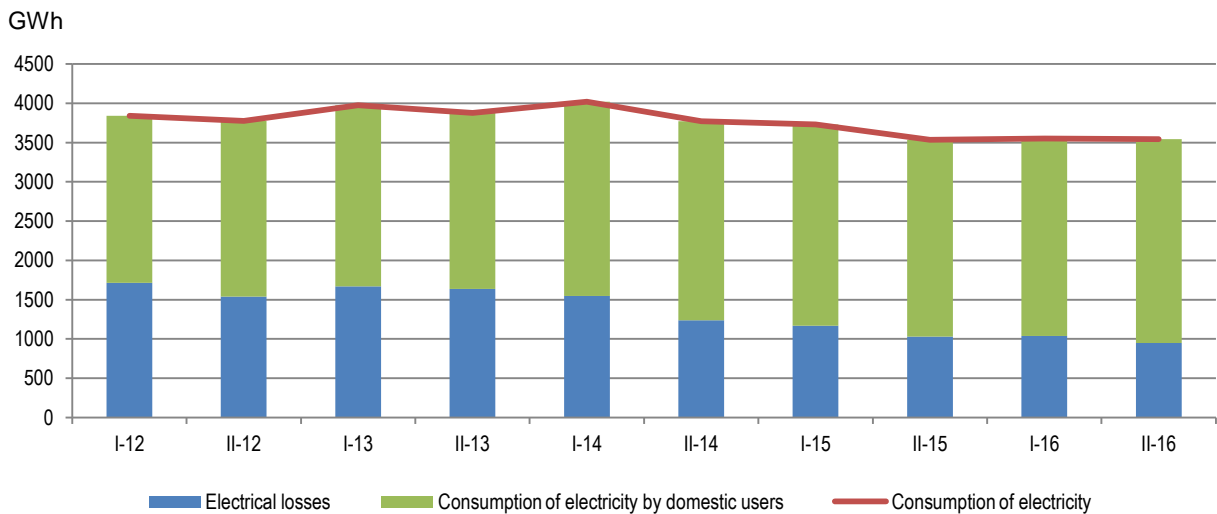
In second half of 2016, **total network losses** decreased by 7.8 percent compared with the same period of 2015 which is impacted from the decrease of the **losses in distribution** by 10.2 percent.

Distribution losses on the second half of 2016 represent 48.1 % of the annual distribution losses for 2016 while it represented 47.3 % of the distribution losses of 2015 in the second half of 2015.

The consumption of electricity by domestic users, during the second half of 2016, increased for both types of users.

During the second half of 2016, the final consumption of electricity consumed by households increased by 4.0 percent while the final consumption of electricity consumed by non households, increased by 3.1 percent compared with the second half of 2015.

Fig. 6 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 produced twice per year, 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.