

# Balance of electric power

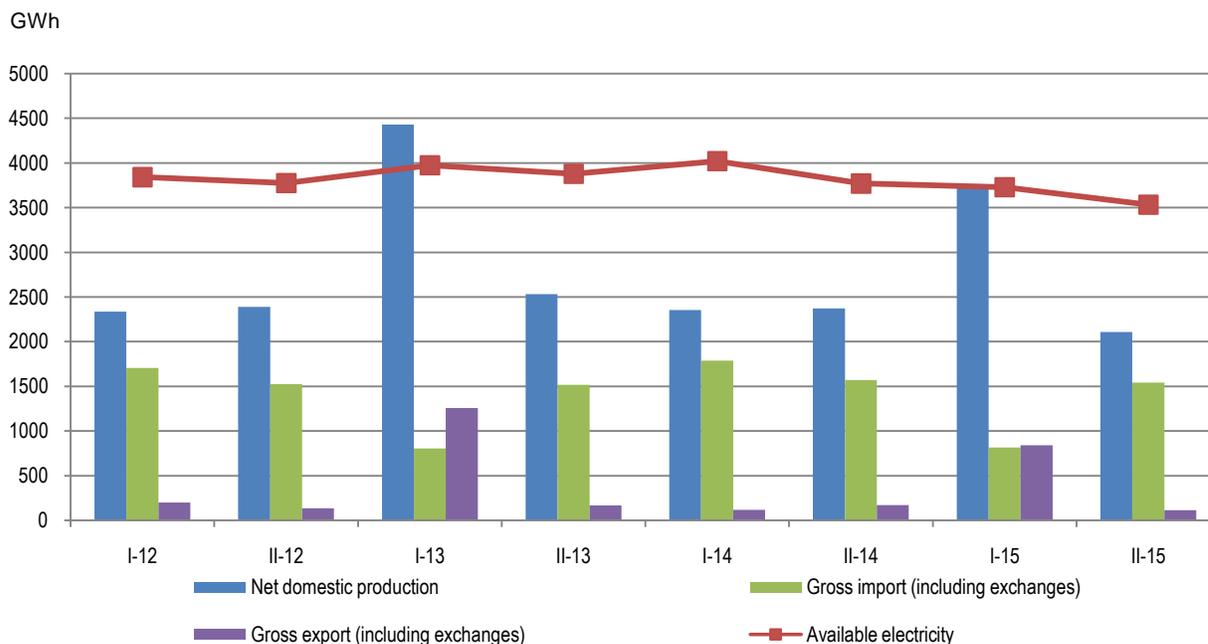
## Year 2015

**Tirana, March 23, 2016:** The net domestic production of electric power during 2015 was 5,866 GWh from 4,726 GWh produced in 2014, which increased by 24.1 percent.

The increase of production of electricity during 2015 resulted on increase of imports and decrease of exports. During 2015, Albania resulted to be net importing of electricity.

Network losses decreased by 21.1 percent, resulted from the decrease of distribution losses which comprise 92.8 percent of the network losses.

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



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Tab. 1 Balance of electric power

MWh

Indicators		2014	2015
<b>A</b>	<b>Available electricity (A=1+2-3)</b>	<b>7,793,736</b>	<b>7,265,089</b>
1	Net domestic production (1=1.1+1.2+1.3)	4,726,246	5,865,671
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	4,726,246	5,865,671
a	Net public producers (a=a.1-a.2)	3,408,556	4,451,975
a.1	Gross public producers	3,429,701	4,475,819
a.2	Losses and own consumption	21,145	23,844
b	Independent power producers	1,317,690	1,413,696
1.3	Other producers (other renewable)	0	0
2	Gross import (including exchanges)	3,355,987	2,355,358
3	Gross export (including exchanges)	288,497	955,941
<b>B</b>	<b>Consumption of electricity (B=1+2)</b>	<b>7,793,736</b>	<b>7,265,089</b>
1	Electrical losses (1=1.1+1.2)	2,783,182	2,195,837
1.1	Losses in transmission	160,942	158,581
1.2	Losses in distribution (1.2=a+b)*	2,622,240	2,037,256
a	Technical losses in distribution	1,459,175	1,366,520
b	Non technical losses in distribution	1,163,065	670,736
2	Consumption of electricity by domestic users (2=2.1+2.2)	5,010,554	5,069,252
2.1	Households	2,501,800	2,522,261
2.2	Non households	2,508,754	2,546,991

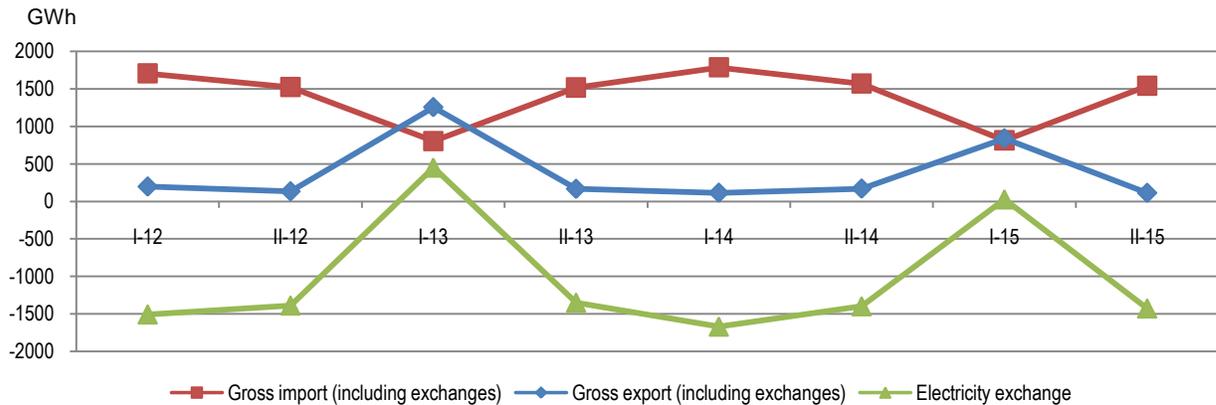
\* Breakdown of technical and non-technical losses are estimations made by operators in the field of electricity

The quantity of electricity produced in 2015 was 5,866 GWh compared with 2014 where public hydropower plants production represents 75.9 percent of total net domestic production, while production of electricity from independent power producers constitutes 24.1 percent.

**Gross import (including exchanges)**, in 2015, decreased by 29.8 percent and reached 2,355 GWh from 3,356 GWh for 2014.

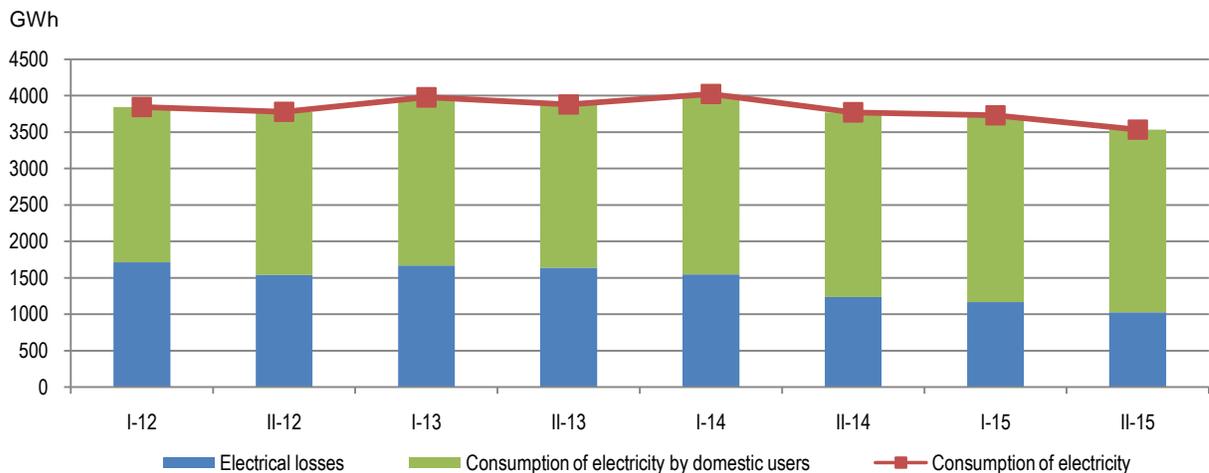
**Gross export (including exchanges)**, increased by 231.4 percent and reached 956 GWh in 2015 from 288 GWh in 2014.

Fig. 2 Electricity exchange



In 2015, **total network losses** decreased by 21.1 percent compared with 2014, from 2,196 GWh to 2,783 GWh. **Losses in distribution**, during 2015 decreased by 22.3 percent compared with the same period of previous year. Transmission losses are decreased too, by 1.5 percent and constitute only 7.2 percent of total network losses.

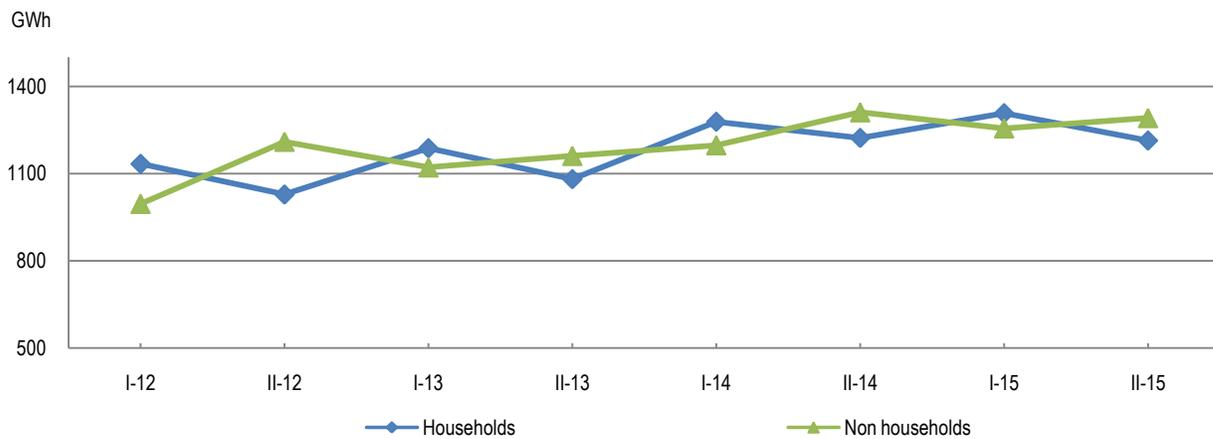
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



**The consumption of electricity by domestic users**, during 2015, increased by 1.2 percent compared with the previous year and reached 5,069 GWh from 5,011 GWh.

During 2015, the final consumption of electricity consumed by households increased by 0.8 while the final consumption of electricity consumed by non households, increased by 1.5 percent compared with 2014.

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 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.