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## **Balance of electric power**

## First half of 2014

**Tirana, August 25, 2014:** Electric power derived from all sources, during the first half of 2014 increased by 1.1 percent compared with 2013. The total quantity of electricity generated, imported and exported resulted 4,022 GWh.

**The domestic production** of electric power represents 58.5 percent of the total quantity of available electricity. During the first half of 2014, the total quantity produced was 2,353 GWh from 4,429 GWh produced in the same period in 2013 which decreased by 46.9 percent.

**Hydropower plants production** was the main source of electricity generation. The quantity of electricity produced by them decreased by 46.9 percent compared with the first half of 2013. Public hydropower plants production represents 66.7 percent of total domestic production, while electricity production from independent power producers constitutes 33.3 percent.

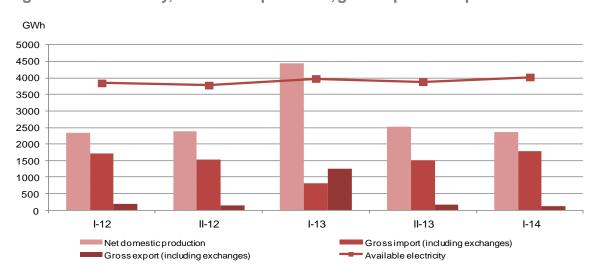


Fig. 1 Available electricity, net domestic production, gross import and export

Tab. 1 Balance of electric power

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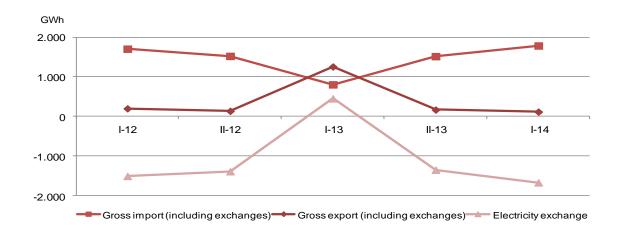
MWh			
	Indicators	First half of 2013	First half of 2014
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Α	Available electricity (A=1+2-3)	3,977,338	4,022,287
1	Net domestic production (1=1.1+1.2+1.3)	4,428,946	2,352,788
1.1	Thermo	0	0
1.2	Hydro (1.2=a+b)	4,428,946	2,352,788
а	Net public producers (a=a.1-a.2)	3,705,069	1,569,184
a.1	Gross public producers	3,722,747	1,579,854
a.2	Own consumption and losses	17,678	10,670
b	Independent power producers	723,876	783,604
1.3	Other producers (other renewable)	0	0
2	Gross import (including exchanges)	804,878	1,786,250
3	Gross export (including exchanges)	1,256,486	116,752
В	Consumption of electricity (B=1+2)	3,977,338	4,022,287
1	Electrical losses (1=1.1+1.2)	1,668,228	1,546,372
1.1	Losses in transmission	123,639	82,530
1.2	Losses in distribution (1.2=a+b)	1,544,589	1,463,842
а	Technical losses in distribution	553,698	552,065
b	Non technical losses in distribution	990,891	911,777
2	Consumption of electricity by domestic users (2=2.1+2.2)	2,309,109	2,475,915
2.1	Households	1,187,902	1,278,708
2.2	Non households	1,121,207	1,197,207

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

**Gross import (including exchanges)** reached 1,786 GWh and represents 44.4 percent of the total domestic production of electric power from 20.2 percent that constituted in the same period of the previous year.

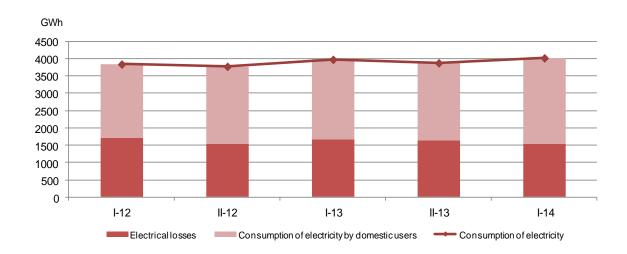
Gross export (including exchanges) decreased by 1,140 GWh.

Fig. 2 Electricity exchange



**Total network losses** decreased by 7.3 percent compared with the first half of 2013, from 1,668 GWh to 1,546 GWh. They constitute 38.4 percent of the total electricity quantity for final use. **Losses in distribution** represent 94.7 percent of the total losses in the network, which decreased by 5.2 percent.

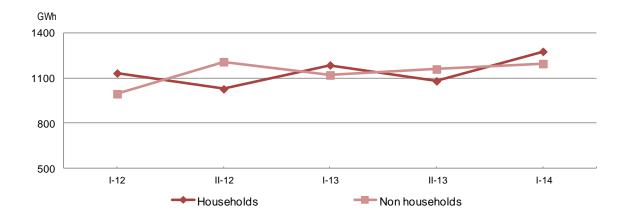
Fig. 3 Consumption of electricity, electrical losses and consumption of electricity by domestic users



In the first half of 2014, **the consumption of electricity by domestic users** increased by 7.2 percent compared with the first half of 2013 and reached 2,476 GWh from 2,309 GWh. Compared with the same

period of previous year, the final consumption of electricity consumed by households and non households, increased by 7.6 and 6.8 percent respectively.

Fig. 4 Consumption of electricity by domestic users



## Methodology

Balance of Electric Power provides statistical information on domestic production of electricity, gross balance of electricity imported and exported (including exchanges), losses in network and the usage of electricity for final consumption in our country. The publication of electric power balance is published twice per year, based on monthly data collected from administrative sources as:

- KESH a.s. is 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. is 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 concept. 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 by domestic sources.
  - Transits and necessary exchanges with other countries in the region.

## **Definitions of basic variables**

**Available electricity** refers to the quantity of electricity generated by domestic production of electricity plus gross imports (including exchanges), minus gross exports (including exchanges).

**Net domestic production** of electricity is equal to the gross electricity production minus 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.

**Own consumption and losses** are the total plant's electricity consumption in generation and transmission 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.

**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, public services, services, energy sector, etc.