



# Georgia's Energy Sector Electricity Market Watch

Georgia | Energy  
Monthly Bulletin  
March 25, 2016

**13.2MW Tkibuli coal power plant is now operating in test mode.** Tkibuli CPP is owned and operated by Georgian Industrial Group (GIG), per the build-operate-own agreement signed with the GoG in November 2015. Tkibuli CPP is already registered with the market operator, ESCO, to purchase electricity as an eligible consumer. Tkibuli CPP is bound by a 10-year PPA to sell 100% of the electricity generated September through April to ESCO at USc 5.9/kWh in 2016, with 2% annual increases starting in 2017. Tkibuli CPP does not have the designation of a guaranteed capacity source, unlike other TPPs, and will operate using locally mined coal exclusively.

## Electricity market highlights, February 2016

Balancing price of electricity in Georgia, February*	USc 5.5 / kWh
Market clearing price of electricity in Turkey, February*	USc 3.7 / kWh
Average export price for Georgian electricity, February*	No exports
Average import price for electricity, February*	USc 4.5 / kWh
Y/Y increase in domestic consumption* in kWh, February	3.6%
Y/Y increase in exports in kWh, February	No exports
Y/Y increase in exports to Turkey in kWh, February	No exports

\*Average exchange rates in February GEL/US\$ = 2.4829; TRY/US\$ = 2.9407

**Georgia will receive an additional 500 mmcm of natural gas from Azerbaijan, per the amendments signed by the two sides on March 4, 2016.** In line with this agreement, the price on social gas (households and power generation) will also be reduced, but the magnitude of the reduction has not been specified. SOCAR has also expressed readiness to reduce commercial prices for natural gas filling stations by US\$ 35-40/mcm.

**European Commission (EC) approved the agreement between Greece and Trans Adriatic Pipeline (TAP).** The approval is an important step towards completing the Southern Gas Corridor (SGC). Georgia is a strategic partner in the SGC project, which entails the expansion of SCP (Southern Caucasus Pipeline), the natural gas pipeline from Azerbaijan, through Georgia to Turkey – a crucial transit link for Azerbaijani gas supply to Turkey (TANAP) and further to Greece, Albania, and Italy (TAP). Georgia will be the recipient of US\$ 2bn investment in the coming three years and once the SCP expansion is complete, will have access to additional natural gas at a discounted price.

**GNERC will actively enforce supply quality control standards for distribution network operators.** GNERC will be applying indices that are widely used to monitor transmission and distribution companies in the EU. The key performance indicators actively monitored will be average outage duration, average number of interruptions, and energy not supplied due to incidents in the transmission network. DNOs will be fined if they cannot achieve the required improvements, as measured by these indicators. GNERC will also be expecting a three year supply development plan from water utilities.

## Electricity Generation, Consumption and Exports

**Domestic electricity consumption was up 3.6% y/y in February 2016.** The growth was concentrated in the greater Tbilisi area, with a 14.3% y/y increase in Telasi consumption (38.8% of total DNO consumption), while consumption in the regions (Energo-Pro, 56.8% of total DNO consumption) was up only 0.6% y/y. Consumption by eligible consumers is still decreasing (-13.8% y/y in February 2016), but at a significantly lower rate than in the previous months. Its share in total consumption is down from 12.3% in February 2015 to 10.2% in February 2016. Georgian Manganese remains the key driver of the decrease, with its consumption down 16.2% y/y in February 2016. Another factor was the Rustavi Water Company (RWC), which is no longer registered as an eligible consumer and is now serviced by Energo-Pro Georgia. It is worth noting that RWC only accounted for less than 3% of consumption by eligible consumers. The Abkhazian region faced an electricity deficit in February (expected to continue in March), due to low water levels in Enguri and Vardnili HPPs, the region's sole electricity sources. The Ministry of Energy implemented a short-term solution by negotiating a deal with Russian suppliers for additional capacity (29.2gWh). However, with ever-growing electricity demand in the Abkhazian region, a longer-term solution is needed, as underlined by the Minister of Energy.

**Nino Papava**

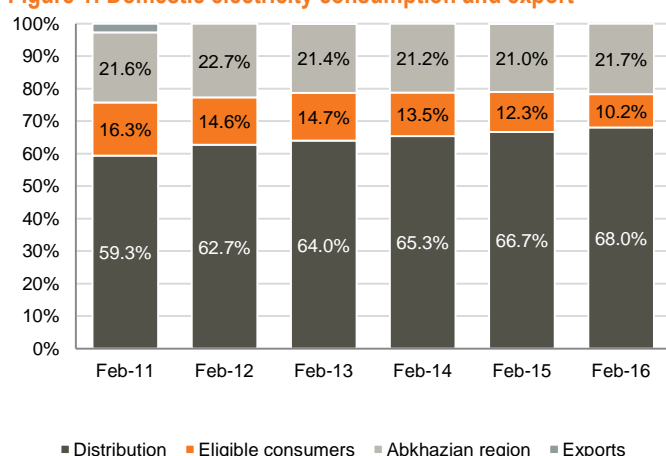
Head of Investment Research | n.papava@gt.ge | +995 322 401 111 ext.4693

**Tamara Kurdadze**

Analyst | tamarkurdadze@gt.ge | +995 322 401 111 ext.4298

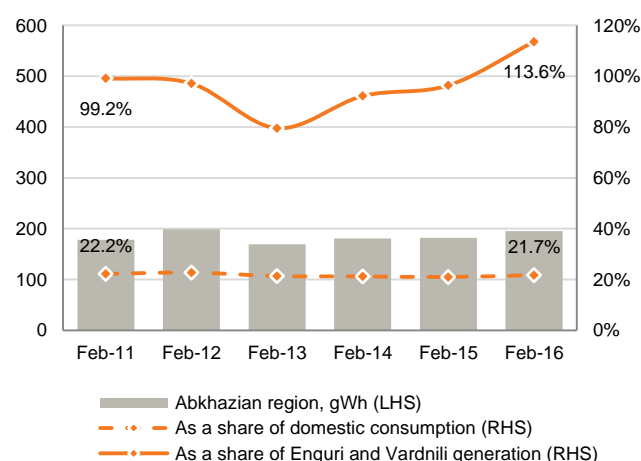


**Figure 1: Domestic electricity consumption and export**



Source: ESCO

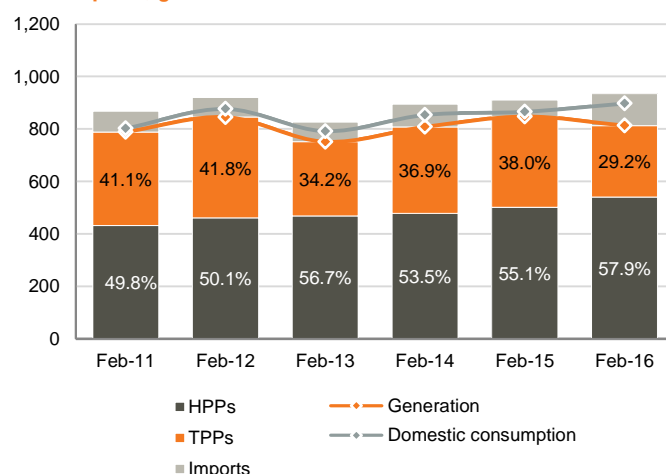
**Figure 2: Electricity consumption, Abkhazian region**



Source: ESCO

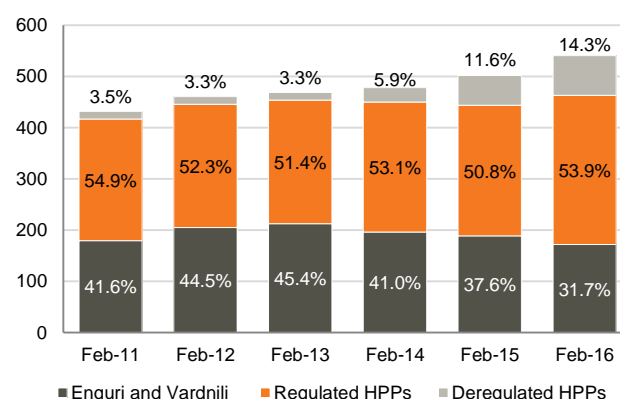
In February 2016, domestic generation decreased 4.0% y/y on the back of reduced TPP output. The amount of TPP-generated electricity decreased 21.3% y/y, due to a 93.6% y/y decrease in electricity generated by Tbilisres. Tbilisres accounted for only 4.3% of total TPP output in February 2016, while that figure was 53.2% in February 2015. This drop was partially offset by the newly commissioned Gardabani TPP, which accounted for 40.4% of total TPP output in February 2016. Consequently, the share of imported electricity increased in the total electricity supplied to the grid, with imports almost doubling (+91.8% y/y) in comparison to February 2015. The drastic increase was partly due to a one-off event – importing additional electricity from Russia to fill the deficit in the Abkhazian region. Output of the regulatory HPPs, Enguri and Vardnili, was down 8.9% y/y due to low precipitation. Generation by other HPPs was up, resulting in an increased share in domestic generation.

**Figure 3: Electricity generation, import, and domestic consumption, gWh**



Source: ESCO

**Figure 4: Hydro generation, gWh**



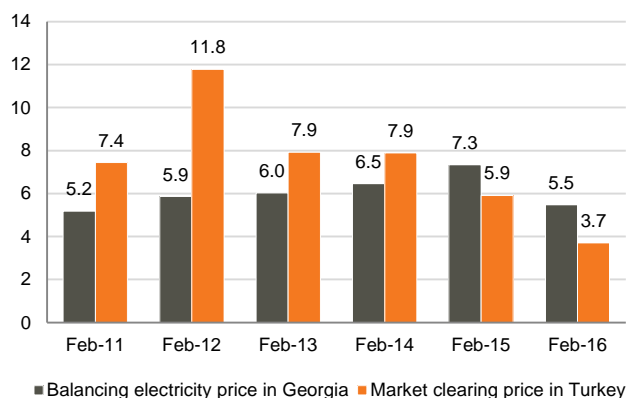
Source: ESCO

## Electricity Prices in Georgia and Turkey

The balancing electricity price in Georgia was down 25.3% y/y to USc 5.5/kWh. The market clearing price of electricity in Turkey was down 37.3% y/y to USc 3.7/kWh. Since the balancing electricity price in Georgia is the weighted average price of electricity traded by ESCO, it is important to note that in February 2016, only 7.5% of locally generated electricity was sold through ESCO; the rest was traded through bilateral contracts. Furthermore, 60.9% of ESCO-traded electricity in February 2016 was imported, so the balancing electricity price largely reflected the price of imported electricity. Average import price of electricity was down 31.7% y/y to USc 4.5/kWh, as compared to over USc 6/kWh in previous years. The relatively low price of imported electricity was due to the significantly discounted Russian electricity that Georgia imported to fill the deficit in the Abkhazian region. 92.0% of total imported electricity came from Russia and the rest from Azerbaijan. There were no electricity exports in February 2016.

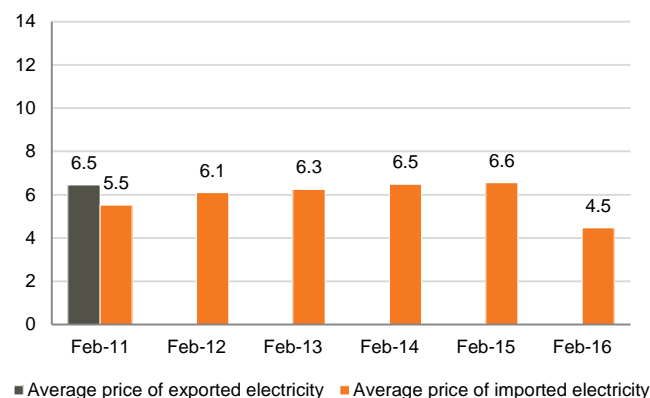


**Figure 5: Electricity prices in Georgia and Turkey, US\$/kWh**



Source: ESCO, EPIAS

**Figure 6: Average prices for electricity imports and exports, US\$/kWh**

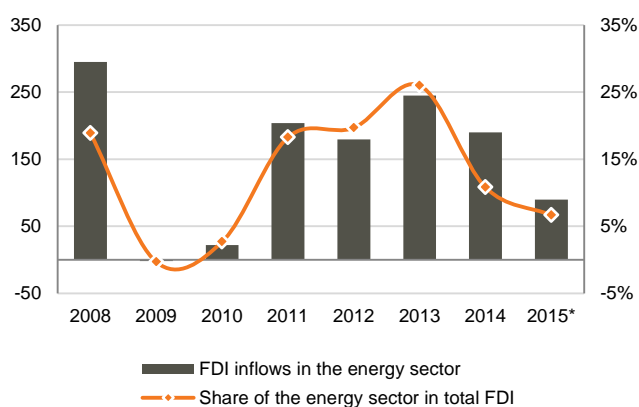


Source: ESCO, GeoStat

## FDI in the Energy Sector

According to preliminary figures, net FDI inflows in the energy sector made up US\$ 89.9mn, or 6.7% of total FDI inflows in 2015. A significant recipient of FDI was the Shuakhevi HPP in the Adjara region, which is being constructed by Clean Energy (Norway) and Tata Power (India). Along with Adjara'sqali Georgia (the joint venture building Shuakhevi HPP), Nenskra Hydro also landed among the top 10 recipients of FDI in 2015. While there was a 52.7% y/y drop in net FDI to the energy sector, investor interest in the hydro sector remains high. As of February 2016, 26 HPP projects, with total installed capacity of 1,869MW, are in the construction or licensing stages (estimated investment cost of US\$ 3.2bn), while an additional 25 HPP projects (1,075MW total installed capacity) are in the feasibility study stage with construction rights.

**Figure 7: FDI in the energy sector, US\$ mn**



Source: GeoStat  
\* Preliminary data



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## Head of Investment Research

Nino Papava | [n.papava@gt.ge](mailto:n.papava@gt.ge)

## Economist

Eva Bochorishvili | [evabochorishvili@gt.ge](mailto:evabochorishvili@gt.ge)

## Economist

Alim Hasanov | [ahasanov@gt.ge](mailto:ahasanov@gt.ge)

## Senior Associate

Giorgi Iremashvili | [giremashvili@gt.ge](mailto:giremashvili@gt.ge)

## Senior Analyst

David Niniklashvili | [dniniklashvili@gt.ge](mailto:dniniklashvili@gt.ge)

## Analyst

David Kutidze | [dkutidze@gt.ge](mailto:dkutidze@gt.ge)

## Analyst

Tamara Kurdadze | [tamarkurdadze@gt.ge](mailto:tamarkurdadze@gt.ge)

**Address:** 79 D. Agmashenebeli Avenue, Tbilisi 0102, Georgia

**Tel:** + (995) 32 2401 111

**Email:** [research@gt.ge](mailto:research@gt.ge)