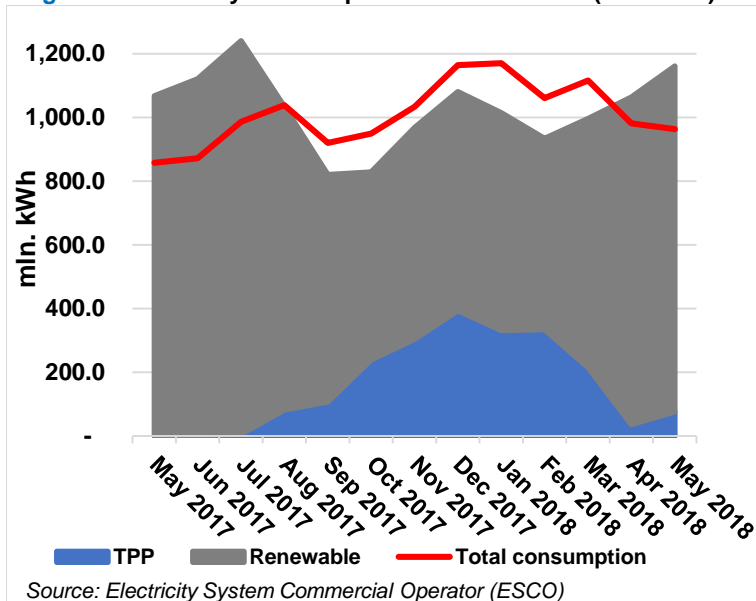




1. Electricity Generation – Consumption – Trade

Figure 1. Electricity Consumption and Generation (mln. kWh)



In May 2018, Georgian power plants generated 1,161 mln. kWh of electricity. This represents a 6% increase in total generation, compared to the previous year (in 2017, total generation in May was 1,093 mln. kWh). The increase in generation on a yearly basis mainly comes from an increase in hydropower generation (more details below).

On a monthly basis, generation increased by 9% (in April 2018, total generation was 1,064 mln. kWh).

The share of electricity produced by renewable sources decreased to 93% of total generation (1085 mln kWh), while thermal power generation increased in comparison to April 2018, accounting for 7% of total generation (76 mln. kWh).

Consumption of electricity on the local market was 963 mln. kWh (+12% compared to May 2017, and -2% with respect to April 2018). In May 2018, generation exceeded total consumption by 198 mln, which is 17% of the total amount generated (compared to 83 mln kWh and 8% excess in total generation for April 2018).

Among the different sources of electricity, hydropower became even more dominant. Specifically, in May 2018, hydropower (HPP) generation amounted to 1,079 mln. kWh (93% of total); wind power (WPP) was 5 mln. kWh (1% of total), and thermal power (TPP) was 76 mln. kWh (7% of total) (Figure 2). Among hydropower generators, large (regulatory) HPPs produced 56% (603 mln. kWh) of electricity, while seasonal and small HPPs produced 36% (392 mln. kWh) and 8% (84 mln. kWh), respectively (Figure 3).

Figure 2. Electricity Generation by Sources (mln. kWh)

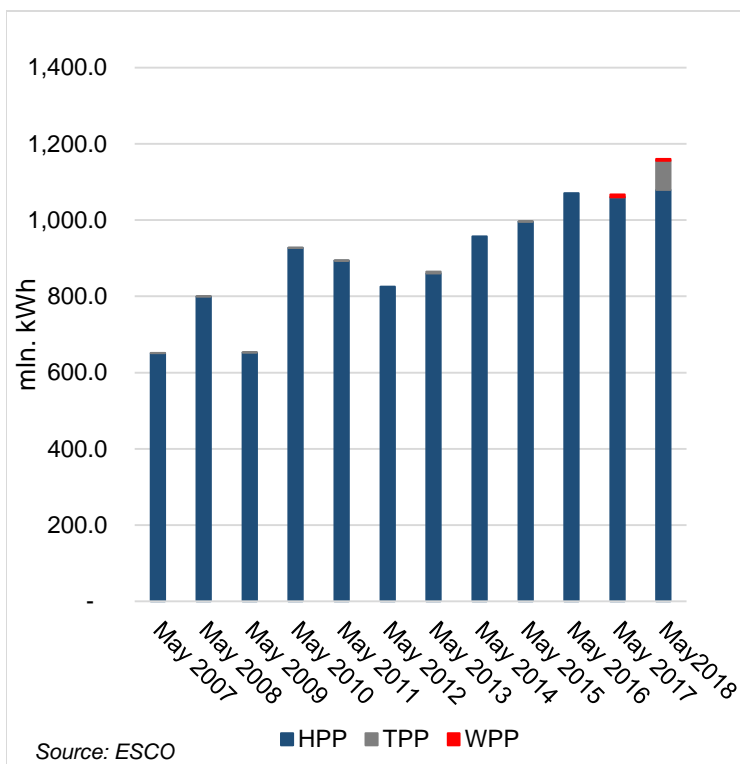
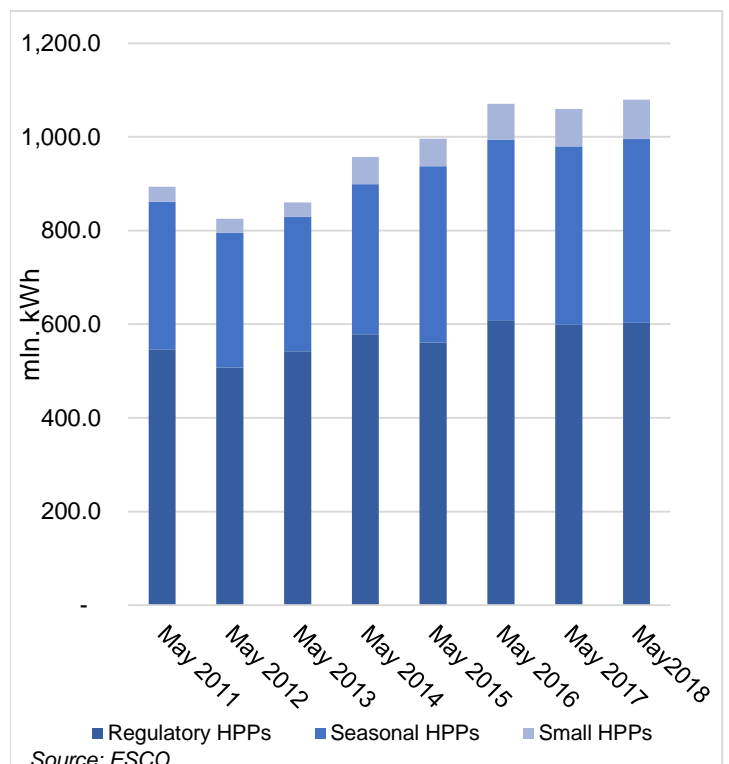


Figure 3. HPP Generation by Type (mln. kWh)



Among the large HPPs, Enguri and Vardnili generated the largest amounts of power, producing 428 mln. kWh and 77 mln. kWh, respectively - 44% of total generation (Figure 4). They also represent around 84% of generation for regulatory HPPs. Overall, compared to May 2017, power generation increased by 6% (Figure 5), due to a 2% increase in HPP generation, while WPP generation decreased by 34%.





Figure 4. Share of Enguri and Vardnili in Total Generation (mln. kWh)

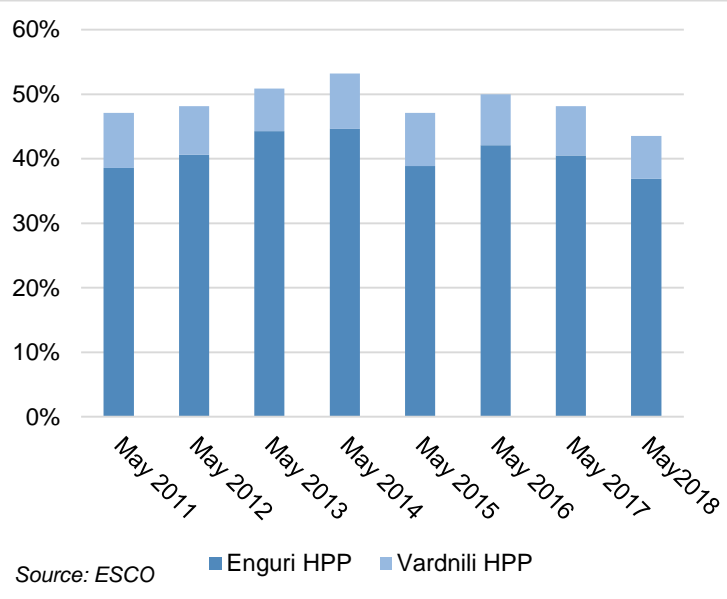
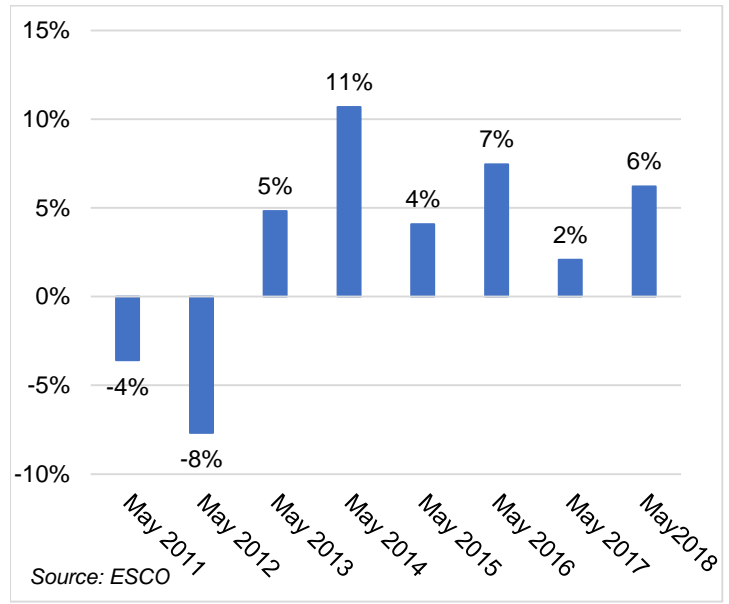


Figure 5. Growth of Generation (% y/y)



Total electricity consumption in Georgia came from: **Energo-Pro Georgia** (49% - 466 mln. kWh), **Telasi** (22% - 215 mln. kWh), **Abkhazia** (10% - 100 mln. kWh), and **direct customers** (19% - 180 mln. kWh) (Figure 6). Overall, the annual increase in electricity consumption was 12% in May 2018, compared to May 2017 (Figure 7). Annual demand increased from Energo-Pro Georgia by 11%, from Telasi by 3%, and from direct consumers by 89%, while demand from Abkhazia decreased by 24%.

Figure 6. Electricity Consumption by Type of Customer (mln. kWh)

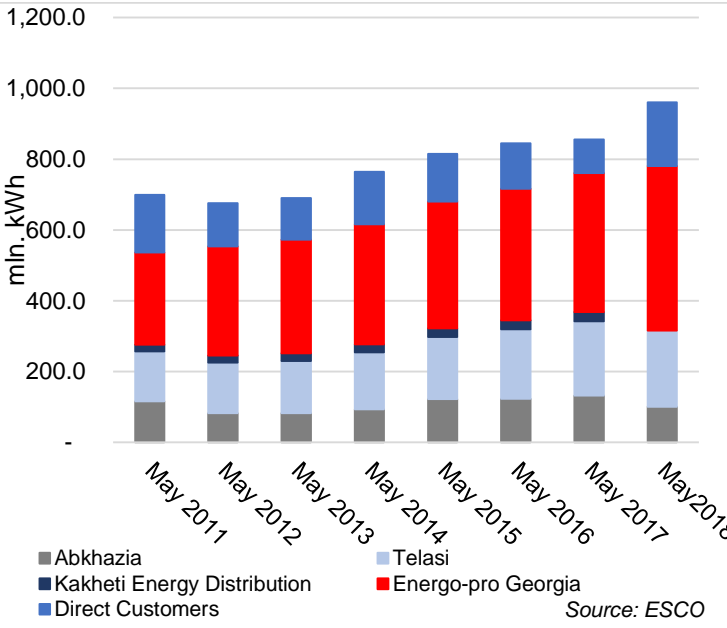
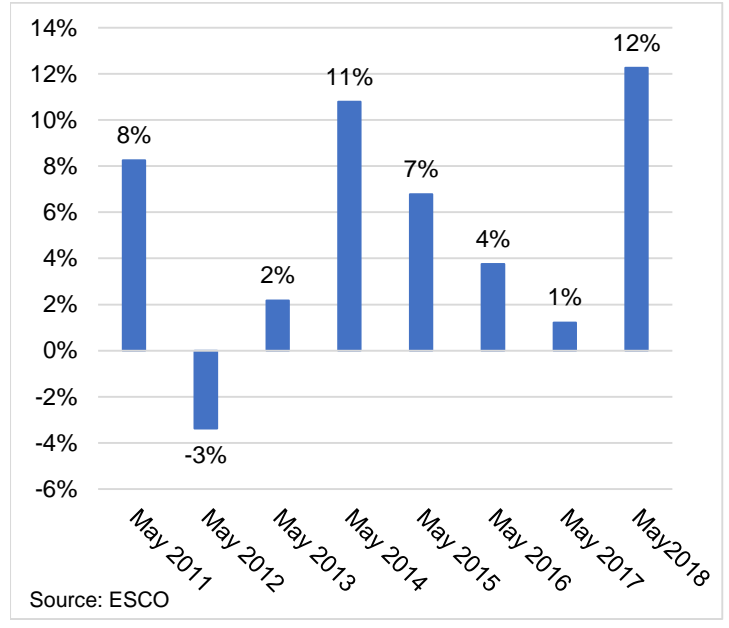


Figure 7. Electricity Consumption Growth (% y/y)



In May 2018, Georgia imported 44 mln. kWh of electricity (5.8 ¢ - 14.16 tetri per kWh). 30% of this electricity was imported from Russia, 69% was imported from Azerbaijan, and 1% was imported from Armenia (Figure 8). Imports increased in comparison to May 2017 by 26%. In May 2018, Georgia exported 200 mln kWh of electricity (3.2¢ -7.97 tetri per kWh). 82 % of exports (165 mln kWh) were exported to Turkey, 13% (27 mln kWh) to Armenia, and 4% (8 mln kWh) to Azerbaijan (see Figure 9).





Figure 8. Imports (mln. kWh)

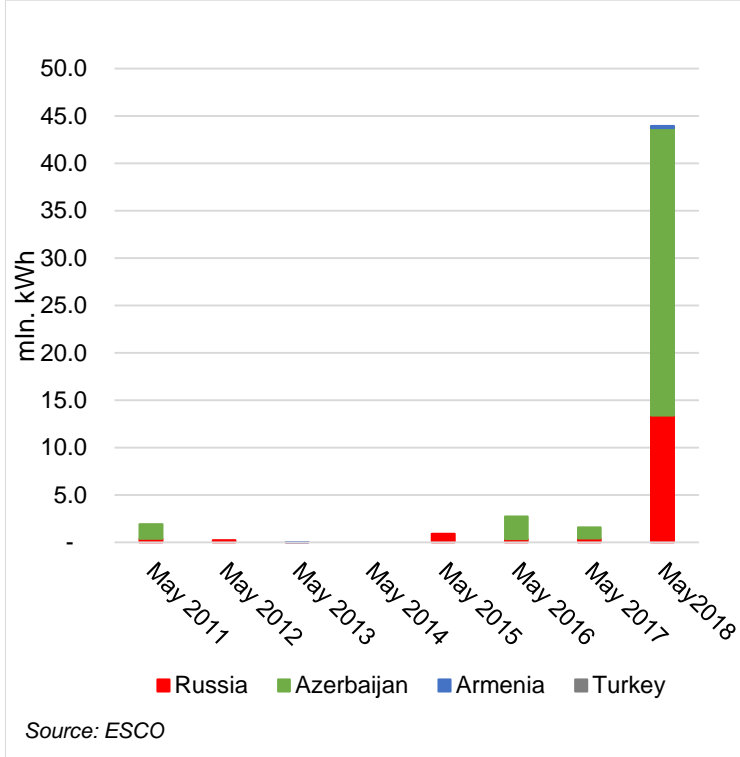
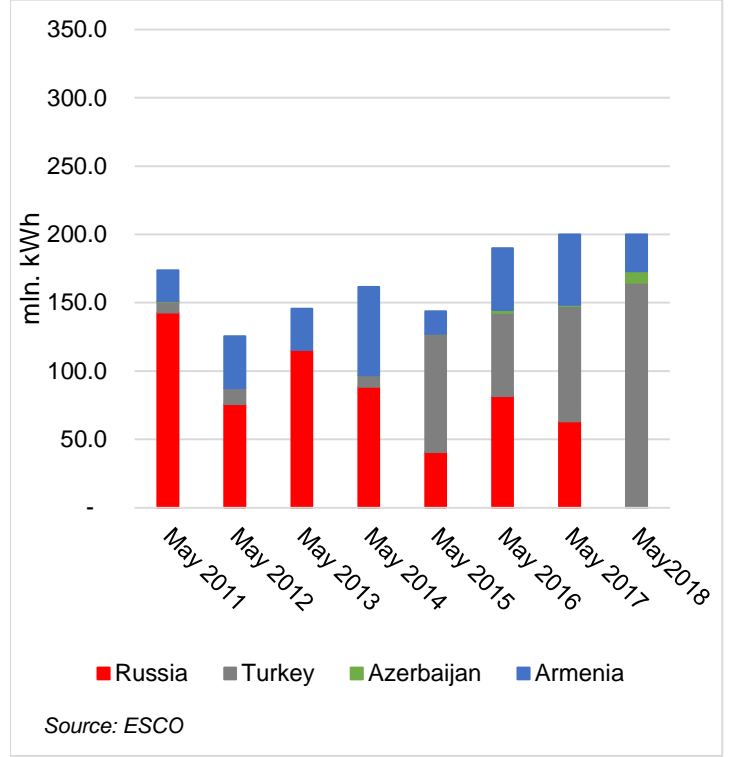
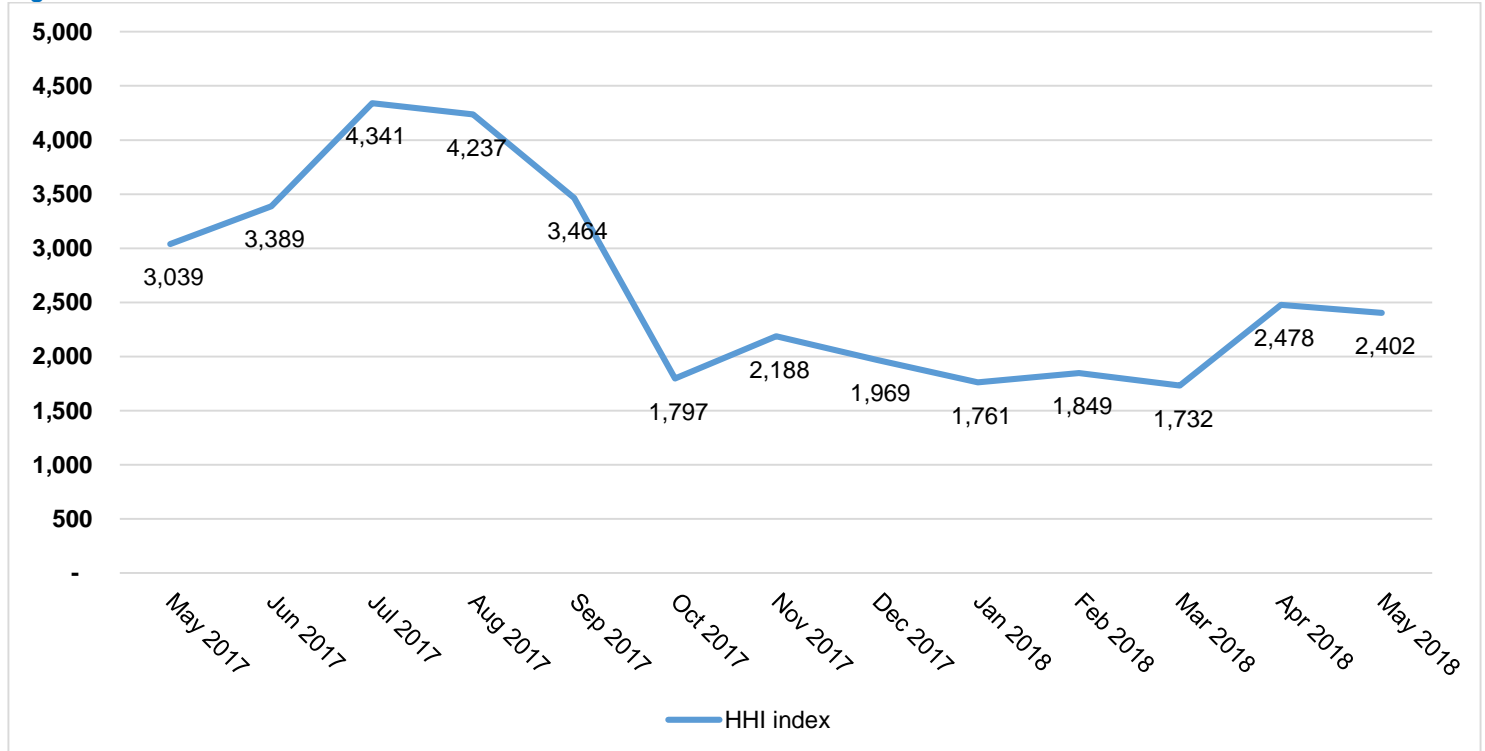


Figure 9. Exports (mln. kWh)



In summary, we utilize the Hirschmann-Herfindahl (HHI) market concentration index to evaluate how competitive the market was over the past few months. May 2018, the Georgian electricity market was still moderately concentrated, with an HHI value of 2,402 (a value that is quite close, however, to the value for a highly concentrated market, 2,500). The level of concentration decreased compared to the prior year (from an HHI value of 3,039 in May 2017).

Figure 10. Hirschman-Herfindahl Index for Power Generation





2. Market Operations

In May 2018, 93% (1100 mln. kWh) of electricity sold on/from the local market was through direct contracts. The remaining 7% (87 mln. kWh) was sold as balancing electricity. (Figure 11).

The weighted average price of balancing electricity was 13.3 tetri/kWh in May 2018, which is an annual increase of 41%, compared to May 2017. As for the weighted average price for deregulated (small) HPPs, it reached 2 tetri/kWh (Figure 12).

Figure 11. Electricity Purchased / Sold Shares of Direct Contracts and Balancing Electricity

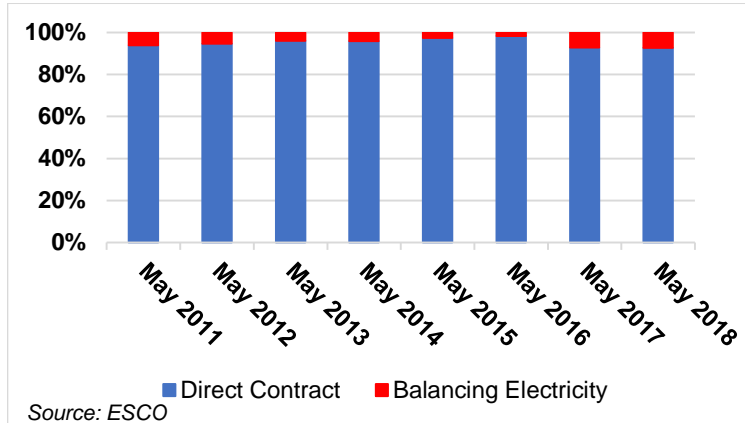
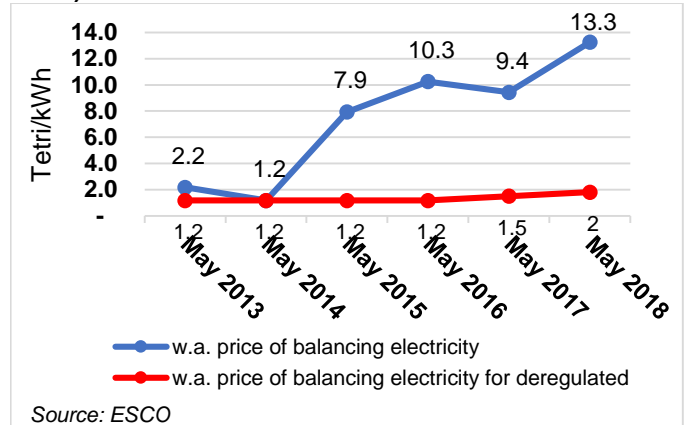


Figure 12. Balancing Electricity Prices Weighted Average and Weighted Average Price for Deregulated HPPs (Tetri/ Kwh)



Guaranteed capacity payments in May 2018 were roughly 9.12 mln. GEL, a decrease of 36% compared to May 2017 (Figure 13).

The average electricity import price in May 2018 decreased to 5.8 ¢ (14.16 tetri) per kWh, compared to same month in the previous year (an increase of 2%), and the export price decreased to 3.2 ¢ (7.97 tetri) per kWh (a decrease of 4%) compared to May 2017.

Figure 13. Cost of Guaranteed Capacity (mln. GEL)

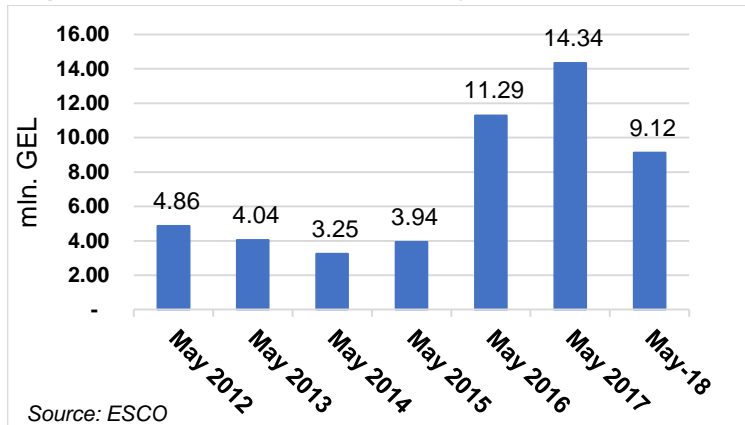
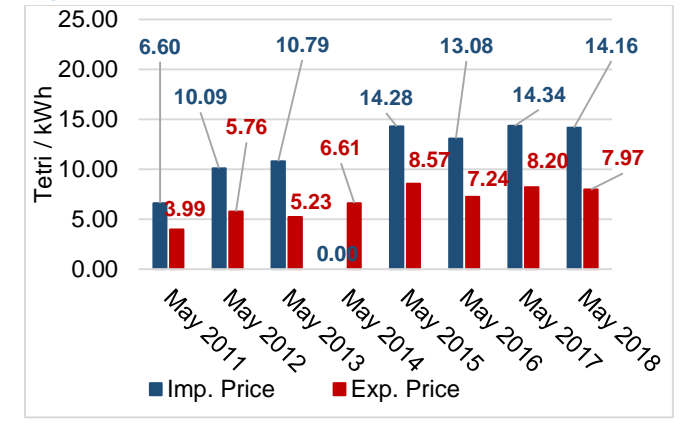


Figure 14. Prices Import/Export (tetri/kWh)¹



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¹ Data is provided in US dollars and is converted to GEL using the average monthly exchange rate as reported by National Bank of Georgia.

