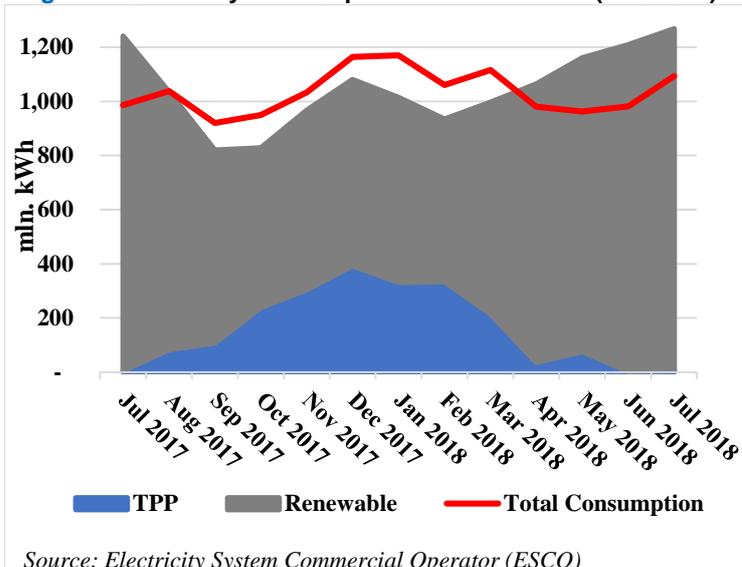




1. Electricity Generation – Consumption – Trade

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



In July 2018, Georgian power plants generated 1,268 mln. kWh of electricity. This represents a 2% increase in total generation, compared to the previous year (in 2017, total generation in July was 1,247 mln. kWh). The increase in generation on a yearly basis mainly comes from an increase in hydropower and wind power generation (more details below).

On a monthly basis, generation increased by 5% (in June 2018, total generation was 1,208 mln. kWh).

The share of electricity produced by renewable sources decreased to 99.4% of total generation (1,261 mln kWh), while thermal power generation increased in comparison to June 2018, accounting for 0.6% of total generation (7.1 mln. kWh).

Consumption of electricity on the local market was 1,093 mln. kWh (+11% compared to July 2017, and +11% with respect to June 2018). In July 2018, generation exceeded total consumption by 175 mln, which is 14% of the total amount generated (compared to 227 mln kWh and 19% excess in total generation for June 2018).

Among the different sources of electricity, hydropower became even more dominant. Specifically, in July 2018, hydropower (HPP) generation amounted to 1,253 mln. kWh (98.8% of total); wind power (WPP) was 8 mln. kWh (0.6% of total), and thermal power (TPP) was 7.1 mln. kWh (0.6% of total) (Figure 2). Among hydropower generators, large (regulatory) HPPs produced 73% (911 mln. kWh) of electricity, while seasonal and small HPPs produced 23% (292 mln. kWh) and 4% (50 mln. kWh), respectively (Figure 3).

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

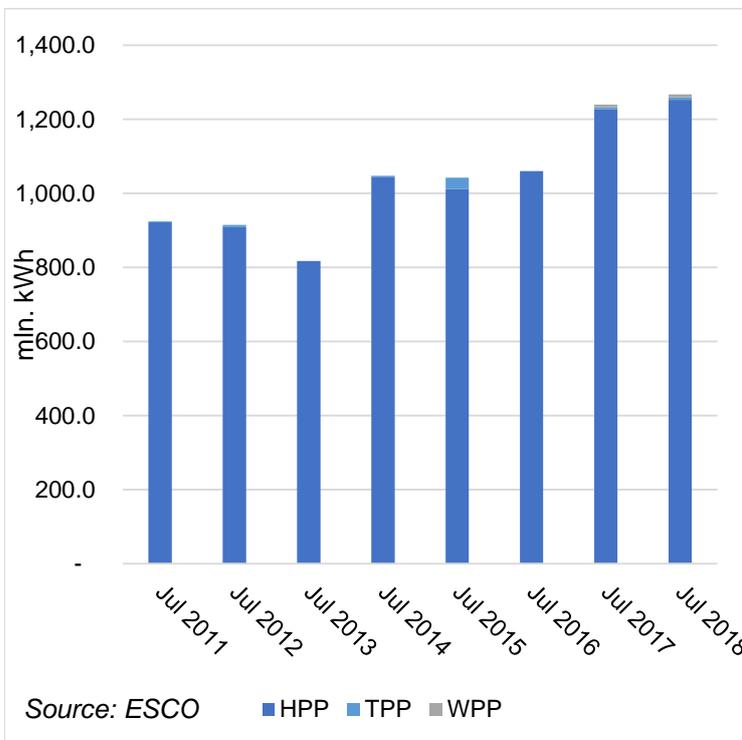
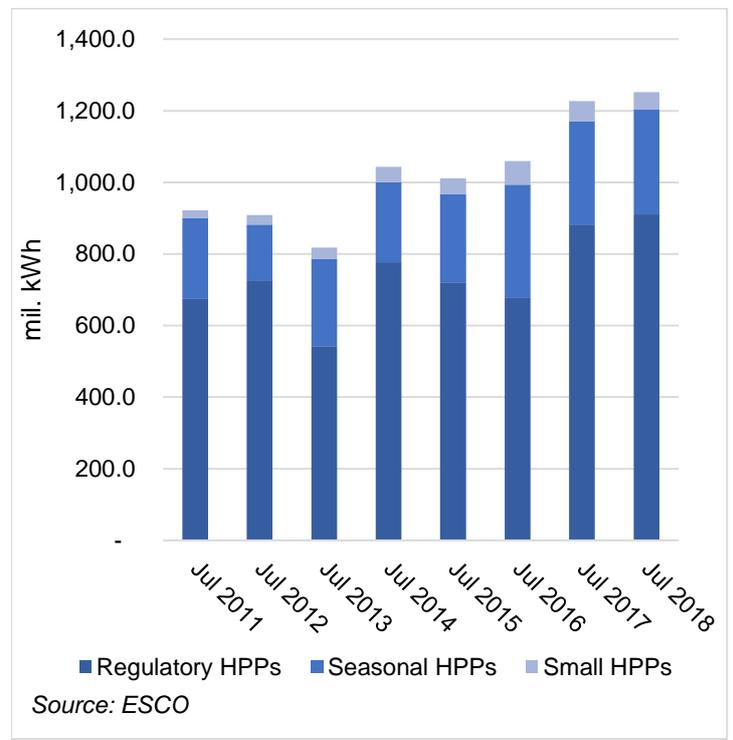


Figure 3. HPP Generation by Type (mln. kWh)



Among the large HPPs, Enguri and Vardnili generated the largest amounts of power, producing 740 mln. kWh and 96 mln. kWh, respectively - 66% of total generation (Figure 4). They also represent around 92% of generation for regulatory HPPs. Overall, compared to July 2017, power generation increased by 2% (Figure 5), due to a 2% increase in HPP generation, and 10% increase in WPP generation.





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

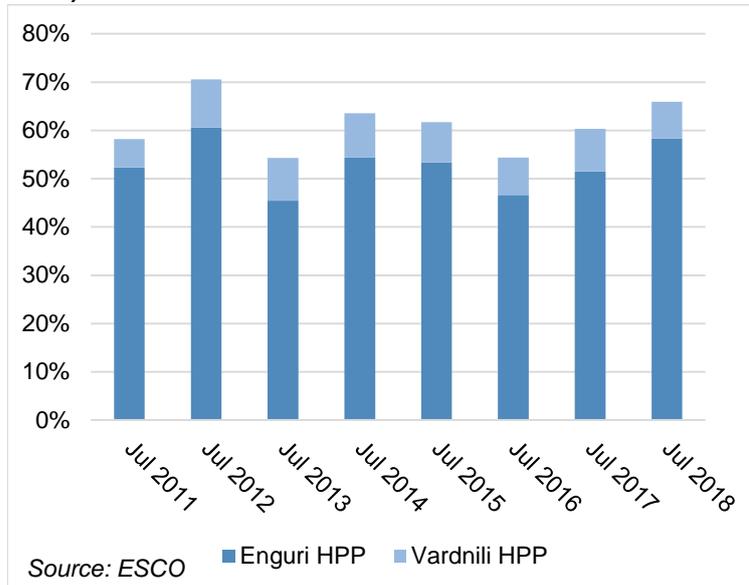
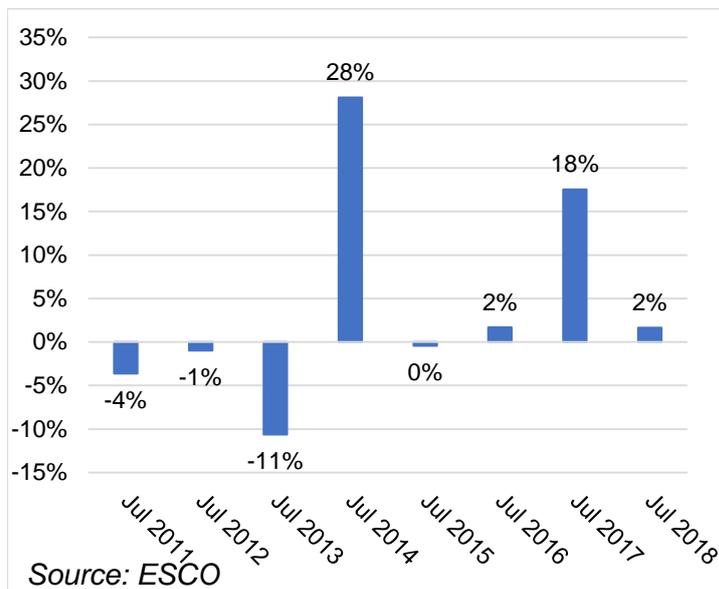


Figure 5. Growth of Generation (% y/y)



Total electricity consumption in Georgia came from: **Energopro Georgia** (48% - 523 mln. kWh), **Telasi** (25% - 270 mln. kWh), **Abkhazia** (11% - 116 mln. kWh), and **direct customers** (17% - 182 mln. kWh) (Figure 6). Overall, the annual increase in electricity consumption was 11% in July 2018, compared to July 2017 (Figure 7). Annual demand increased from Energopro Georgia by 6%, from Telasi by 13%, from direct consumers by 34%, and from Abkhazia by 3%.

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

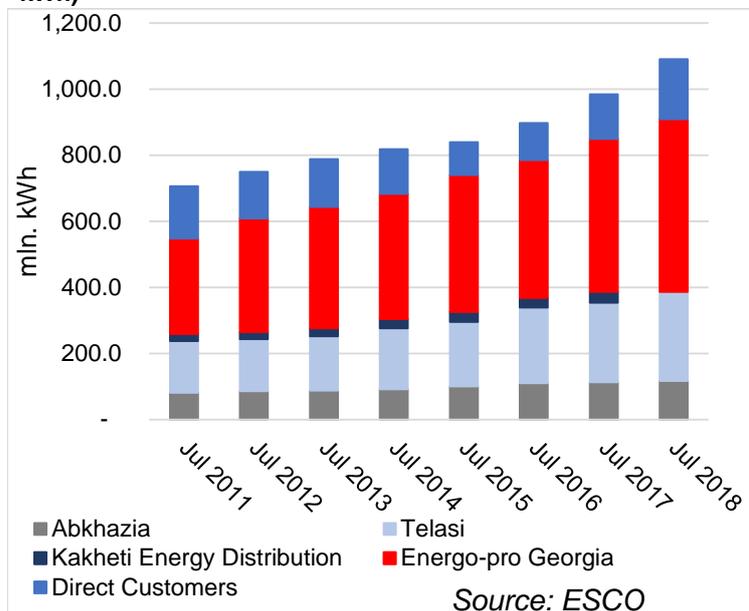
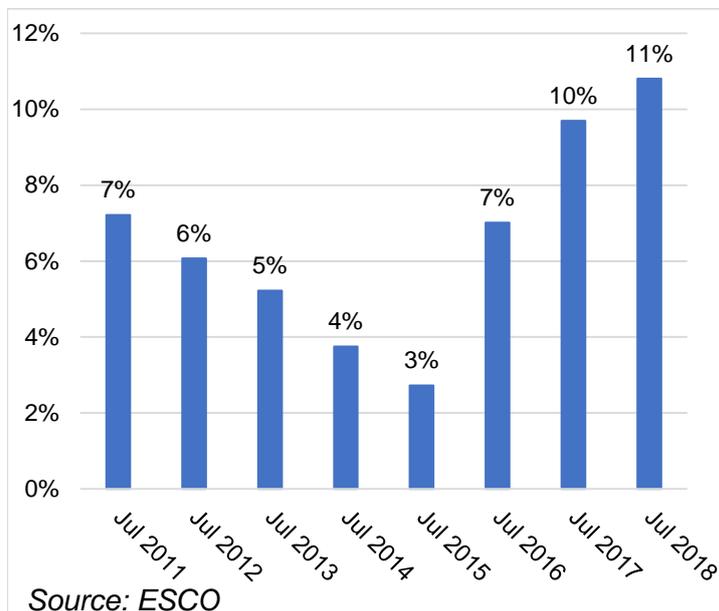


Figure 7. Electricity Consumption Growth (% y/y)



In July 2018, Georgia imported 1.2 mln. kWh of electricity (6.0¢ - 14.68 tetri). 98.2% of this electricity was imported from Azerbaijan, 0.2% was imported from Turkey, and 1.6% was imported from Russia (Figure 8). Imports decreased in comparison to June 2018 by 81%. In July 2018, Georgia exported 132 mln kWh of electricity (3.4¢ - 8.40 tetri). 52% of exports (69 mln kWh) were exported to Turkey, 33% (44 mln kWh) to Russia, 7% (10 mln kWh) to Armenia, and 7% (9 mln kWh) to Azerbaijan (see Figure 9)





Figure 8. Imports (mln. kWh)

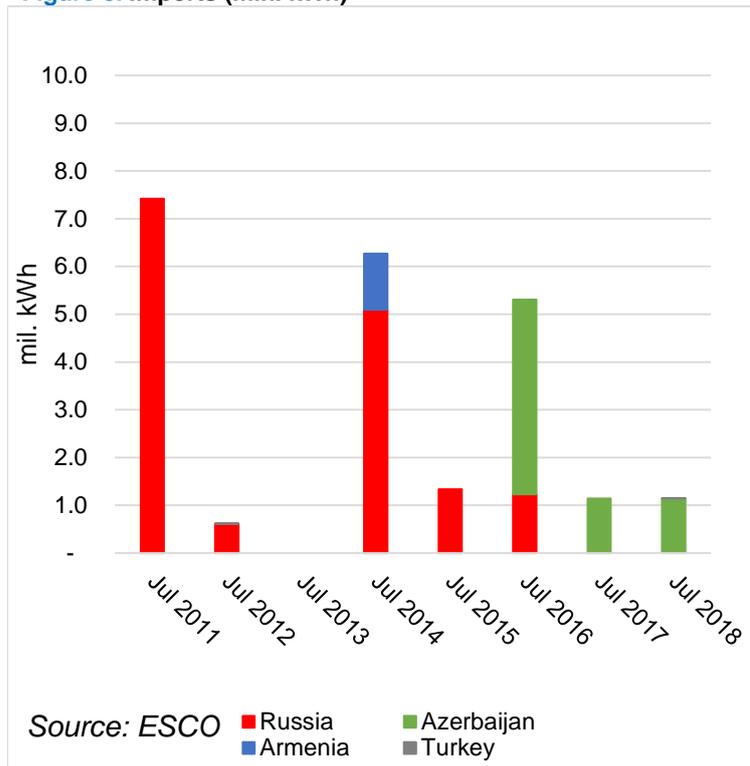
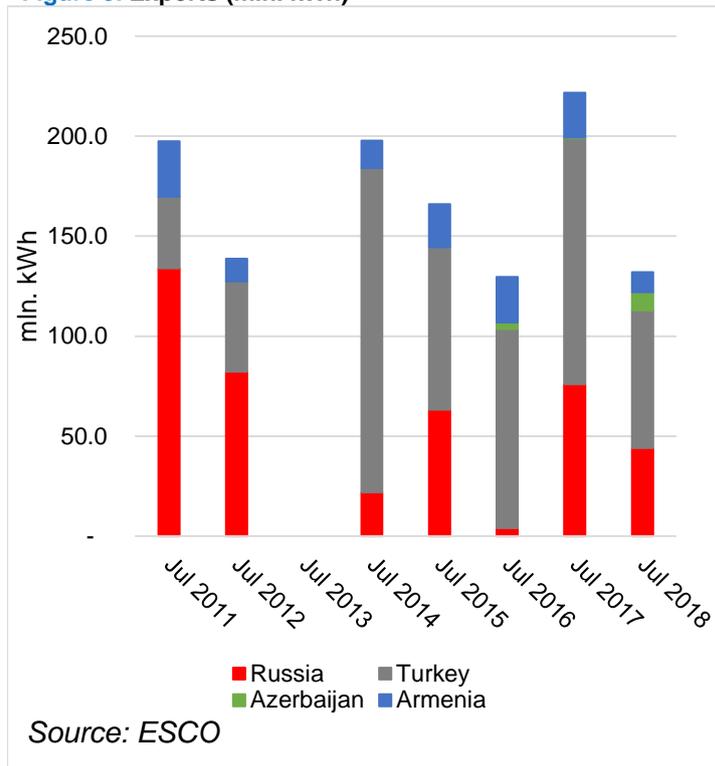
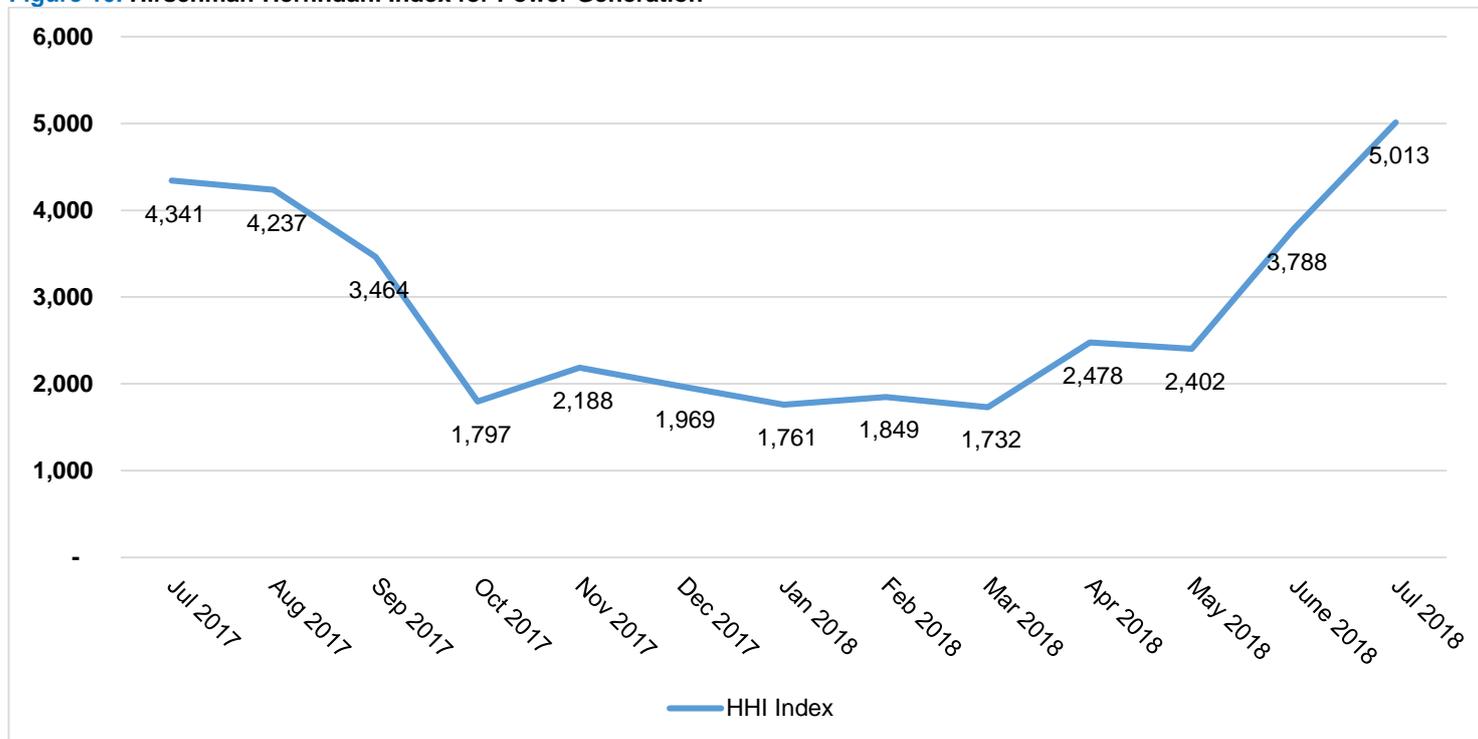


Figure 9. Exports (mln. kWh)



In conclusion, we utilize the Hirschmann-Herfindahl (HHI) market concentration index to evaluate how competitive the market was over the past few months. In July 2018, the Georgian electricity market was highly concentrated, with an HHI value of 5,013 (which is substantially higher than the threshold value for a highly concentrated market - 2,500). The level of concentration increased compared to the prior year (from an HHI value of 4.314 in July 2017).

Figure 10. Hirschman-Herfindahl Index for Power Generation





2. Market Operations

In July 2018, 95% (1,188 mln. kWh) of electricity sold on/from the local market was through direct contracts. The remaining 5% (69 mln. kWh) was sold as balancing electricity. (Figure 11).

The weighted average price of balancing electricity was 8.9 tetri/kWh in July 2018, which is an annual decrease of 25% compared to July 2017. As for the weighted average price for deregulated (small) HPPs, it reached 1.8 tetri/kWh (Figure 12).

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

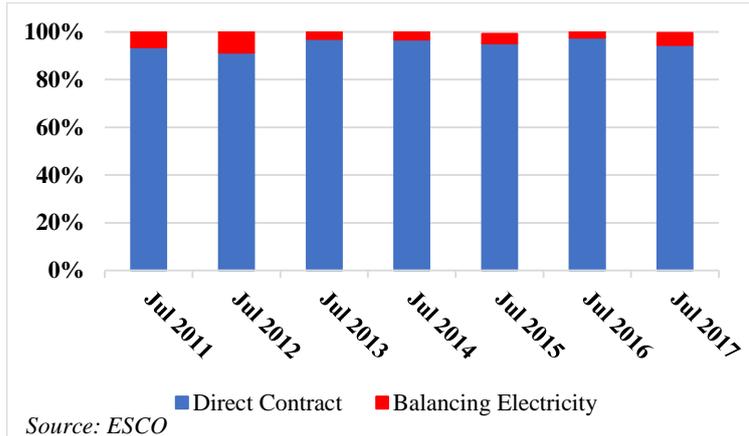
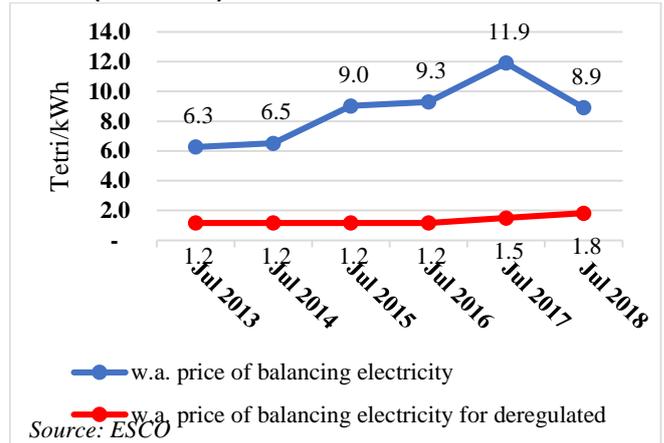


Figure 12. Balancing Electricity Prices Weighted Average and Weighted Average Price for Deregulated HPPs (Tetri/ Kwh)



Guaranteed capacity payments in July 2018 were roughly 10.31 mln. GEL, a decrease of 7% compared to July 2017 (Figure 13).

The average electricity import price in July 2018 decreased to 6.0¢ (14.68 tetri) per kWh (a decrease of 10%) compared to July 2017, and the export price increased to 3.4¢ (8.40 tetri) per kWh (an increase of 5%) compared to July 2017.

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

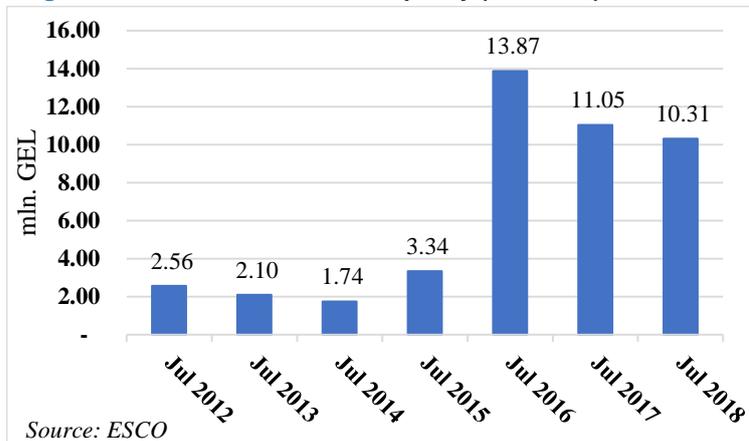
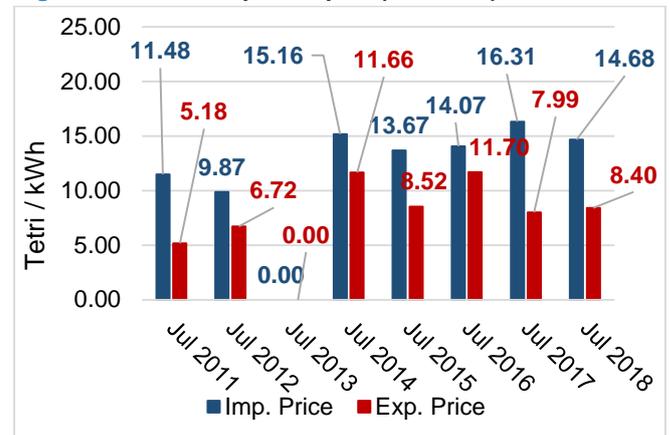


Figure 14. Prices Import/Export (tetri/kWh)¹



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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.

