



GALT & TAGGART
CREATING OPPORTUNITIES



Georgia's Electricity Market Watch

Summary of 2024

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Eva Bochorishvili

Head of research | evabochorishvili@gt.ge

Mariam Chakhvashvili

Head of sector | mchakhvashvili@gt.ge



2024 Highlights

Supply: In 2024, 15.5 TWh of electricity was supplied to the grid, out of which 14.2 TWh was local generation, and 1.2 TWh were imports. In 2024, the 44.5 MW Khobi-2 HPP and two small plants were commissioned.

Domestic electricity consumption was up by 6.0% y/y to 13.8 TWh in 2024, though still 2.3% below 2022 record. The growth was driven by both residential and commercial sectors. Direct consumers sharp (+14.1% y/y) growth was largely due to the temporary revival of the crypto-mining and metallurgy sectors.

Export: The decrease in both export volume (1.0 TWh, -28.7% y/y) and export price (USc 4.7, -27.9% y/y), caused export revenues to halve to US\$ 49.2mn.

Trade balance: Georgia remained a net exporter of electricity in value terms with US\$ 25.7mn net export, but became net importer in volume terms with 0.2 TWh net import.

Electricity price: wholesale price of electricity in Georgia increased by 5.9% y/y to USc 5.6 /kWh. The largest share of balancing electricity generation is still dominated by PPA-owned stations. Transactions on day-ahead market platform were minimal.

Net metering regulation reached its limits for Energo-pro Georgia's grid and was suspended until planned regulatory changes are implemented. However, Telasi continues to accept applications. In 2024, 49.4 MW of micro power plants were commissioned under the net metering regulation, bringing the total capacity to 117.0 MW.



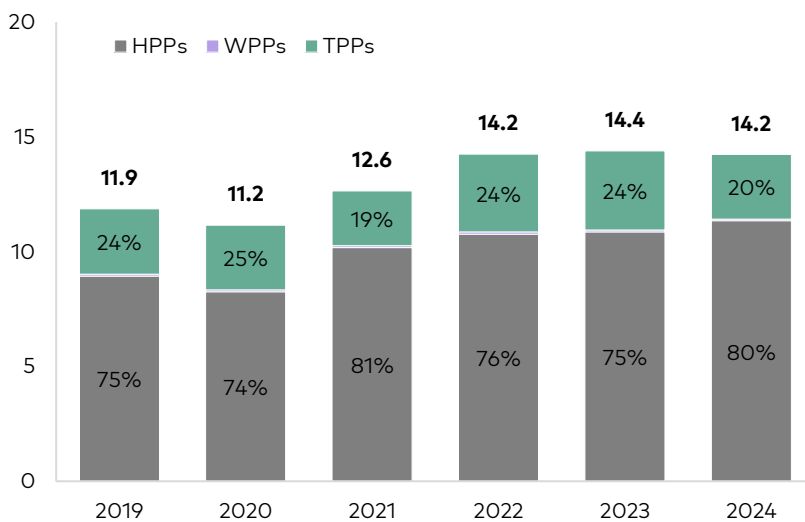
Electricity generation

Electricity generation in Georgia decreased by 1.1% to 14.2 TWh in 2024.

Hydro generation was up by 4.4% y/y to 11.3TWh and made up 79.7% of the total generation. The increase was due to the favourable hydrology.

Thermal generation decreased significantly by 18.4% y/y, driven by increased hydro generation and import and reduced electricity exports.

Figure 1: Electricity generation, TWh



Source: GNERC, Galt & Taggart

Table 1: Electricity generation breakdown, 2024

Supply source	Growth rate, y/y
Total generation	-1.1%
TPPs	-18.4%
WPPs	-9.9%
HPPs	+4.4%
<i>Of which</i>	
Enguri and Vardnili	-2.8%
Other regulated HPPs	+4.0%
Deregulated HPPs	+12.5%



Electricity consumption

Electricity consumption in Georgia returned to an upward trend in 2024 following the previous year's low base. Total domestic consumption grew by 6.0% y/y to 13.8 TWh but remained 2.3% below the record-high level of 2022.

This growth was driven by increased consumption of direct consumers (+13.1% y/y) and retail consumption (+7.5% y/y), offsetting Abkhazian region's decreased (-5.6% y/y) consumption.

Direct consumers' sharp growth is attributed to a revival of the crypto-mining and metallurgy sectors, fuelled by rising product prices. However, ferroalloy operations were halted in Oct-24, with no timeline for their resumption. Notably, electricity consumption forecast of 2025, adopted by MoESD, foresees increase in electricity consumption levels of these entities from 2Q25.

Retail consumption in 2024 increased for both Telmico (+8.9% y/y) and Ep Georgia (+6.5% y/y) subscribers.

In the retail segment:

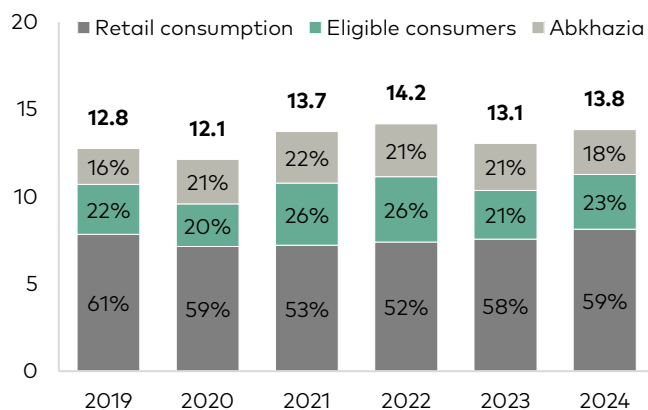
- **Household consumption** increased by 7.5% y/y to 3.0 TWh, with Telmico subscribers up by 6.8% y/y and EP Georgia subscribers up by 8.0% y/y.
- **Commercial consumption** also rose by 7.5% y/y, driven by an annual 5.4% increase for EP Georgia customers and a 10.0% rise for Telmico subscribers.

Table 2: Local demand growth breakdown, 2024

Consumer	Growth rate, y/y
Domestic consumption	+6.0%
Abkhazian region	-5.6%
Direct Consumers	+13.1%
Retail consumption	+7.5%
Of which:	
Households	+7.5%
EPG supply	5.4%
Telmico	10.0%
Commercial users	7.5%
EPG supply	8.0%
Telmico	6.8%
Distribution losses	+7.5%

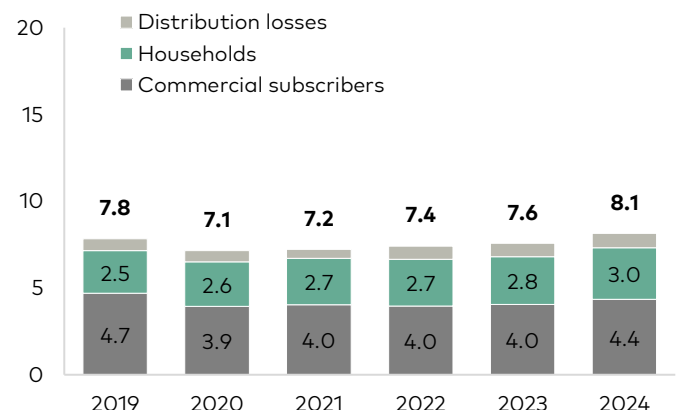
Source: GNERC, Galt & Taggart

Figure 2: Electricity consumption by consumer groups, TWh



Source: GNERC, Galt & Taggart

Figure 3: Retail consumption of electricity, TWh



Note 1: **Retail consumption** includes consumption of EPG Supply, Energo-pro Georgia, Telmico and Telasi. EPG Supply used to be Energo-pro Georgia and Telmico used to be Telasi prior Jun-21. The titles and functions changed in line with ongoing energy reform's unbundling requirement.

Note 2: Criteria for mandatory registration as **direct consumer** is currently 0.4GWh consumption per month. The revision of the criteria is planned for Jul-25 to include more companies. For details see page 10.



Foreign trade of electricity

Export

The electricity **export volume** decreased by 28.7% y/y to 1.0 TWh in 2024. The export season started in April and lasted until August. Turkey remained the main export market, with an 82.6% share of exports.

The top 3 exporters were Bookup Solutions, Cross Border Trading and Tbilisi Investment Group.

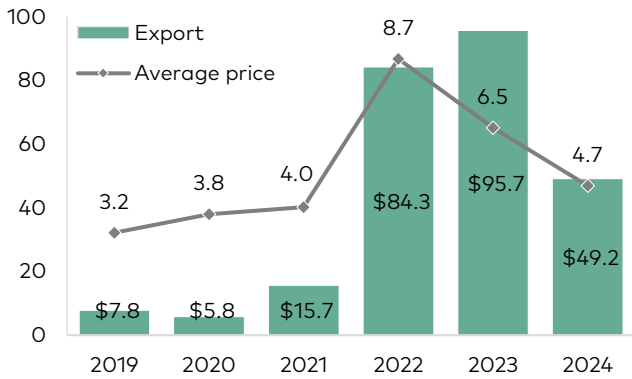
Export revenue almost halved to US\$ 49.2mn (-48.6% y/y) in 2024, caused by decrease in both export volume (-28.7% y/y) and export price (-27.9% y/y). The average price of electricity export was USc 4.7 /kWh in 2024.

Transit

In 2024, 1.1 TWh (-68.8% y/y) of electricity was transited through Georgia to Turkey. A 94.4% of which was from Azerbaijan and the rest from Russia.

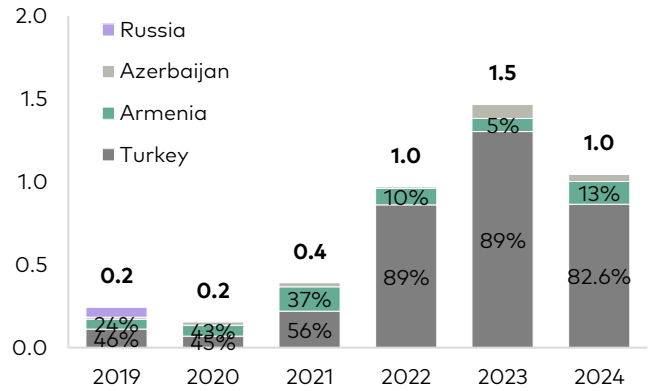


Figure 4: Export value (US\$ mn) and average price (USc/kWh) of electricity exports



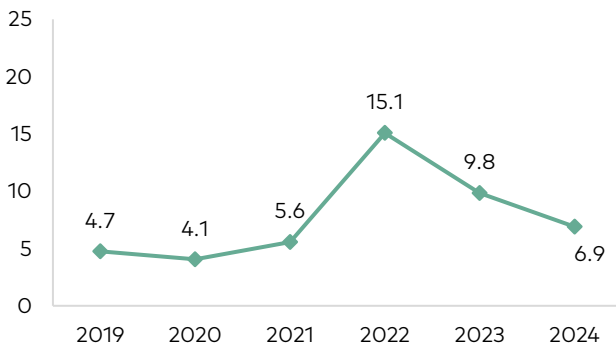
Source: GNERC, Geostat, Galt & Taggart

Figure 5: Electricity exports by destination, TWh



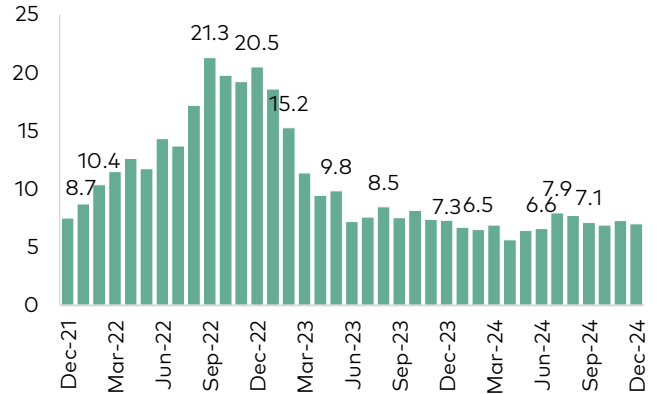
Source: GNERC, Geostat, Galt & Taggart

Figure 6: Average annual Market Clearing Prices in Turkey, USc/kWh



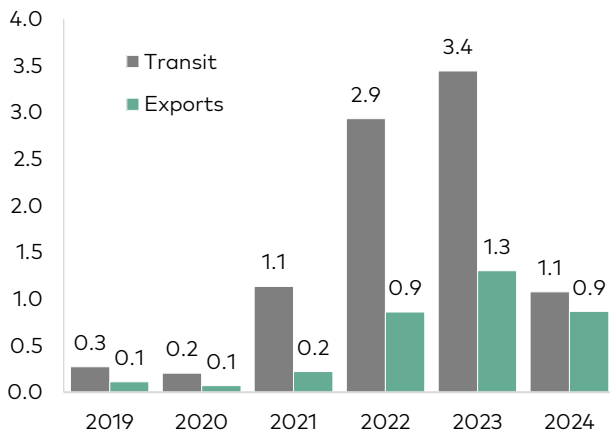
Source: EPIAS, EVDS, Galt & Taggart

Figure 7: Average monthly Market Clearing Prices in Turkey, USc/kWh



Source: EPIAS, EVDS, Galt & Taggart

Figure 8: Electricity export and transit to Turkey, TWh



Source: GNERC, Galt & Taggart



Import

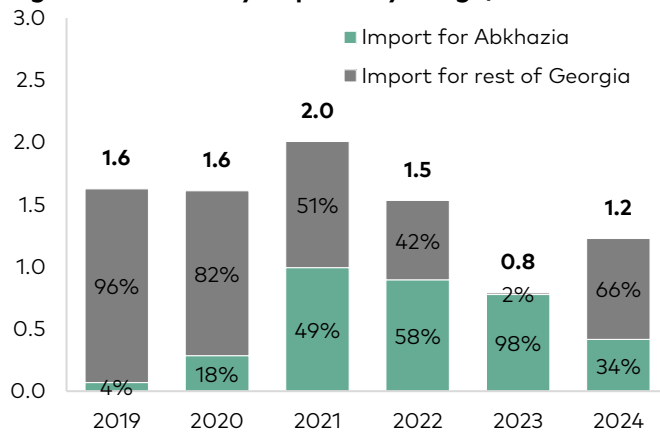
Electricity imports increased by 55.4% y/y to 1.3 TWh in 2024. An 79.9% of the imported electricity came from Russia, out of which 43.1% was directed to Abkhazian region.

Import value reached US\$ 23.3 mn in 2024. Average price of imported electricity was USc 1.9/kWh. Notably, the average price was significantly influenced by the "special price" of USc 0.1/kWh offered by Russia for the Abkhazian region.

Trade balance

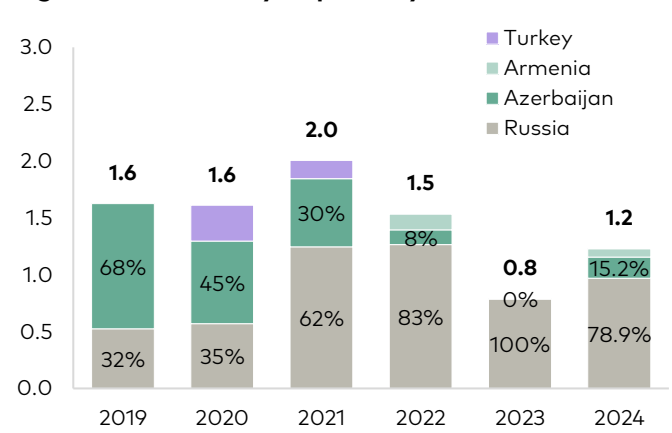
Georgia remained a net exporter of electricity in value terms in 2024, third year in a row. However, positive trade balance reduced significantly in line with reduced exports and increased imports. Net export of electricity was US\$ 25.2mn (-72.8% y/y) in 2024. In volume terms, Georgia went back to being net importer with 0.2TWh net import.

Figure 9: Electricity imports by usage, TWh



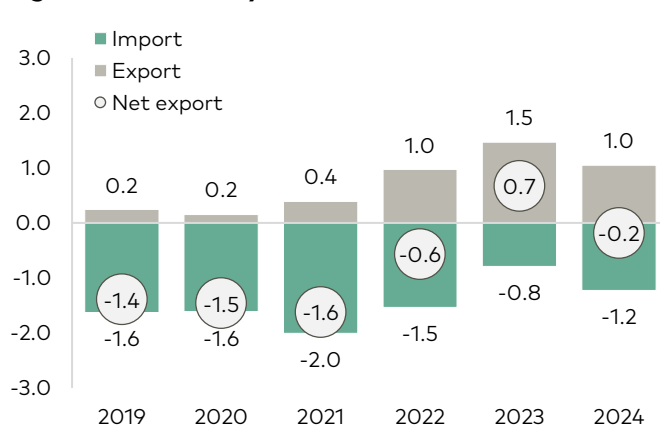
Source: GNERC, Geostat, Galt & Taggart

Figure 10: Electricity imports by countries, TWh



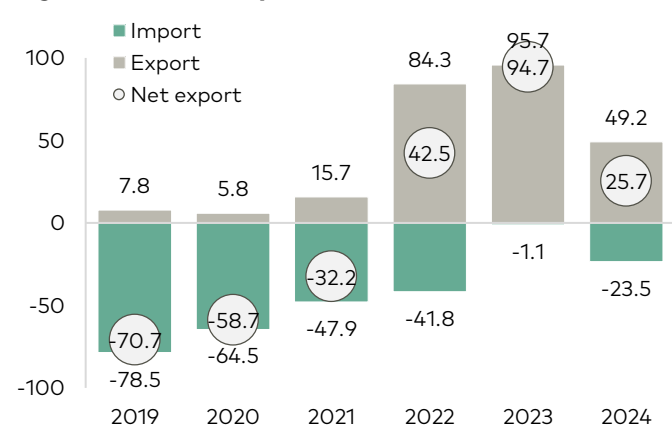
Source: GNERC, Geostat, Galt & Taggart

Figure 11: Electricity trade, TWh



Source: GNERC, Geostat, Galt & Taggart

Figure 12: Electricity trade, US\$ mn



Source: GNERC, Geostat, Galt & Taggart

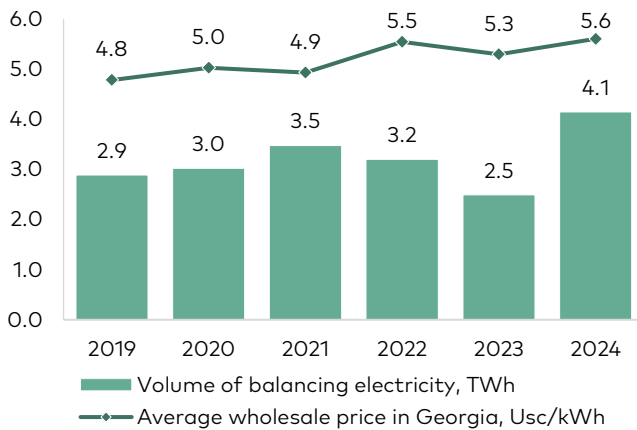


Electricity price in Georgia

The volume of electricity traded through ESCO as balancing electricity was up by 26.8% y/y to 4.1 TWh, accounting for 26.8% of total traded volume. The increase in volume was due to the inclusion of electricity generated by Mtkvari Energy and Tbilisresii in ESCO's purchases, which was linked to the rise in their selling prices. The selling price of TPPs increased due to the rise in the gas purchase price from US\$ 143 to US\$ 210.

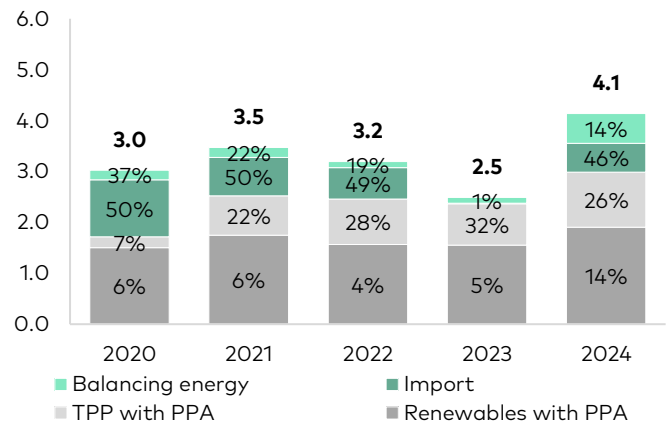
The average selling price of balancing electricity increased by 5.9% y/y to USc 5.6/kWh. On a monthly basis, the price of balancing electricity fluctuated within USc 4.6-5.9/kWh.

Figure 13: Balancing electricity volume (TWh) and prices (USc/kWh)



Source: GNERC, ESCO, Geostat, Galt & Taggart

Figure 14: Composition of ESCO's balancing electricity volume, TWh



Source: ESCO, Galt & Taggart



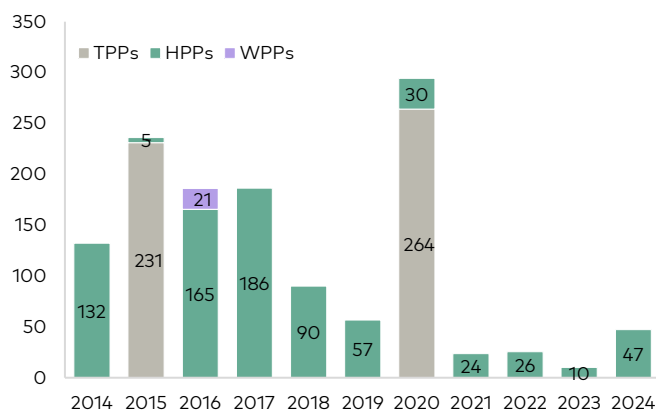
News on the market

New generation capacities

In 2024, Georgia commissioned the 44.5MW Khobi-2 HPP, along with two smaller HPPs - Shevaburi (1.9MW) and Dagva (0.8MW).

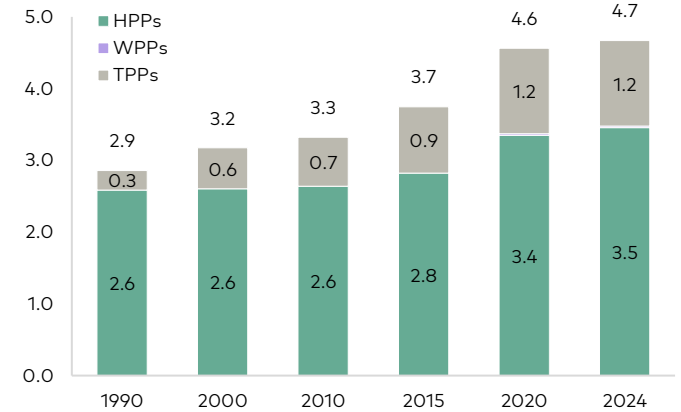
By year-end, Georgia's total installed capacity reached 4.6GW, consisting of 3.4GW from HPPs (122 stations), 1.2GW from thermal plants (7 stations), and 20.6MW from wind power. With the introduction of the Contract for Differences (CFD) mechanism to support renewable energy development, we expect increased investor interest and faster capacity growth in the coming years.

Figure 15: Capacity additions, MW



Source: GSE, Galt & Taggart

Figure 16: Installed capacity of Georgia, GW



Source: GSE, Galt & Taggart

Net-metering regulations

Micro power plants saw notable growth in 2024, with 477 plants adding 49.4MW to the grid. These plants have an installed capacity under 0.5MW and fall under "Net Metering" regulations, allowing direct trade between power plants and consumers. Their generation reduces consumption and is not included in overall generation statistics.

By end-2024, net metering plants totaled 117.0MW (1,620 stations), with 85MW connected to Energo-pro Georgia's grid and 32MW to Telasi's.

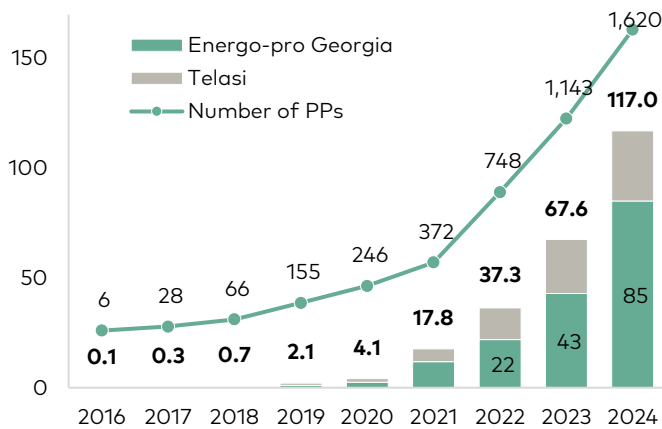
Net metering for Energo-pro Georgia's grid is suspended as applications reached the 14% grid limit. However, Telasi continues to accept applications. GNERC's regulation limits net metering capacity to 14% of a system operator's peak



load. Initially set at 2%, the limit was gradually increased to 14% due to high demand. However, GNERC has decided not to raise the limit further due to grid security reasons and tariff adequacy reasons. Instead GNERC suspended new applications for Energo-pro Georgia and plants to:

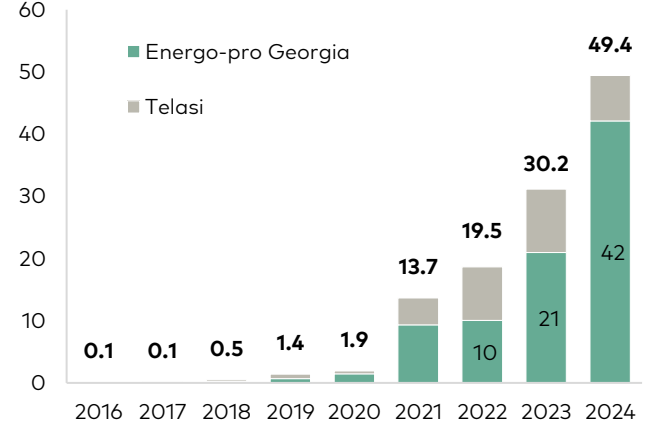
- Reduce the definition of a micro power plant from 500kW to 100kW starting in February or March 2025.
- Transition from net metering to net billing regulations starting in 2027. GNERC has already received recommendations from Energy Commission representatives regarding this ([see the document](#)).

Figure 17: Total capacity of micro power plants benefitting from net metering regulations, MW



Source: GNERC, Galt & Taggart

Figure 18: Capacity additions of micro power plants benefitting from net metering regulations, MW



Source: GNERC, Galt & Taggart

New direct consumers on the market

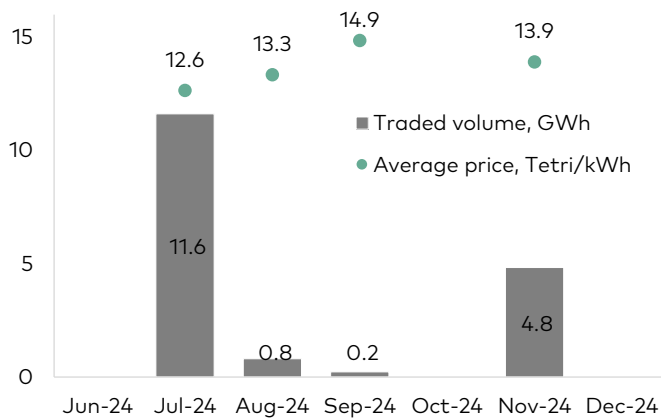
From Jul-25, legislative changes will bring new direct consumers into the market. Currently, companies connected to the 35-110 kV grid and consuming at least 0.4mn kWh per month are registered as direct consumers. After Jun-25, this will expand to include all companies connected to 35-110 kV grid and companies on the 6-10 kV grid consuming at least 1.0mn kWh per month. These companies will no longer be subscribers of Telmico or EP Georgia and will purchase electricity directly from the wholesale market. The forecasted consumption for these new direct consumers in 2H25 is 245.0 GWh, or 7.8% of total direct consumption of 2024.



Energy exchange platform

An insignificant volume of electricity was traded on the day-ahead market in 2024. Only 17.5 GWh, or 0.1% of the 2024 total supply, has been traded by 21 registered users since the energy exchange launched on July 1, 2024. This volume is insufficient for analyzing pricing or supply curves. Active trading seems unlikely until hourly settlement is enforced, planned for 2025 but likely to be delayed by a few years.

Figure 19: Transactions on day-ahead market



Source: GENEX, Galt & Taggart



Electricity Balance, TWh

	2019	2020	2021	2022	2023	2024	2025F
Domestic consumption, total	12,759	12,136	13,730	14,165	13,053	13,834	14,721
<i>% change y/y</i>	1.4%	-4.9%	13.1%	3.2%	-7.9%	6.0%	6.4%
Of which:							
Abkhazian Region	2,060	2,552	2,956	3,029	2,703	2,553	2,610
<i>% change y/y</i>	7.2%	23.9%	15.8%	2.5%	-10.8%	-5.6%	2.3%
Eligible consumers	2,864	2,438	3,554	3,726	2,779	3,142	3,832
<i>% change y/y</i>	59.6%	-14.9%	45.8%	4.8%	-25.4%	13.1%	21.9%
Retail consumption	7,835	7,146	7,219	7,411	7,572	8,139	8,279
<i>% change y/y</i>	-11.6%	-8.8%	1.0%	2.7%	2.2%	7.5%	1.7%
Domestic Generation, total	11,865	11,160	12,645	14,247	14,396	14,234	15,341
<i>% change y/y</i>	-2.3%	-5.9%	13.3%	12.7%	1.0%	-1.1%	7.8%
Of which:							
Thermal Power Plants	2,840	2,821	2,380	3,388	3,446	2,812	3,705
<i>% change y/y</i>	34.3%	-0.7%	-15.6%	42.4%	1.7%	-18.4%	31.8%
Wind Power Plants	85	91	83	87	86	78	85
<i>% change y/y</i>	0.5%	7.3%	-8.2%	5.0%	-1.6%	-9.9%	9.0%
Hydro Power Plants	8,940	8,248	10,182	10,771	10,863	11,344	11,551
<i>% change y/y</i>	-10.1%	-7.7%	23.4%	5.8%	0.9%	4.4%	1.8%
Foreign trade							
Import	1,627	1,610	2,006	1,533	790	1,228	748
<i>% change y/y</i>	7.8%	-1.0%	24.6%	-23.6%	-48.5%	55.4%	-39.1%
Export	243	154	391	971	1,468	1,047	674
<i>% change y/y</i>	-58.6%	-36.8%	154.2%	148.4%	51.2%	-28.7%	-35.6%
Trade balance	-1,383	-1,456	-1,615	-562	679	-180	-74
<i>% change y/y</i>	50.3%	5.3%	10.9%	-65.2%	-220.7%	-126.5%	-59.1%
Transit	272	204	1,135	2,933	3,444	1,074	
<i>% change y/y</i>	913.6%	-25.2%	457.8%	158.3%	17.4%	-68.8%	

Source: GNERC, Matsne, Galt & Taggart
Note: 2025F figures are based on MoESD 's forecasted annual balance of 2025

Price of electricity, USc/kWh

	2019	2020	2021	2022	2023	2024	2025F
Balancing price, selling	4.8	5.0	4.9	5.5	5.3	5.6	5.7
<i>% change y/y</i>	-5.4%	8.1%	-5.9%	17.0%	-6.2%	5.9%	1.8%
Average import price	4.8	4.0	2.4	2.7	0.1	1.9	
<i>% change y/y</i>	-5.4%	8.1%	-5.9%	17.0%	-6.2%	-	
Average export price	3.2	3.8	4.0	8.7	6.5	4.7	5.0
<i>% change y/y</i>	-5.4%	8.1%	-5.9%	17.0%	-6.2%	-27.9%	6.4%

Source: GNERC, Geostat, Galt & Taggart



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Galt & Taggart

Address: 3 Pushkin Street, Tbilisi 0105, Georgia

Tel: + (995) 32 2401 111

Email: research@gt.ge