



Georgia's Energy Sector Electricity Market Watch

Electricity Consumption, Exports, Generation and Imports - May 2018

Domestic electricity consumption increased 12.3% y/y in May 2018 and 7.7% y/y in 5M18. The main drivers of consumption growth were the consumption of eligible consumers and distribution licensees.

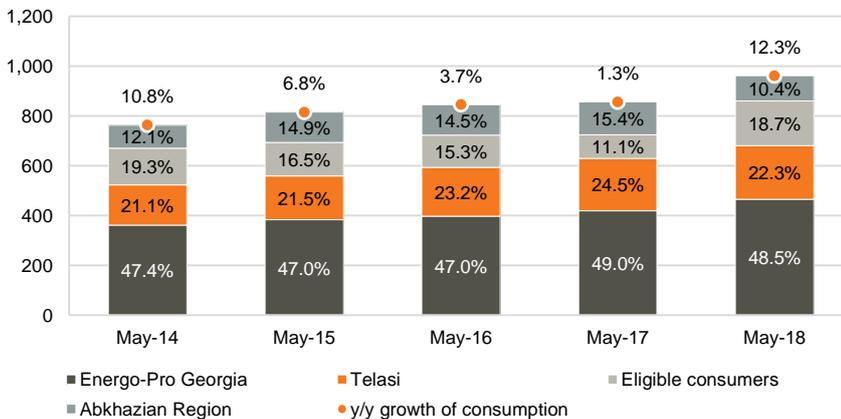
Eligible consumers' almost doubled (+89.9% y/y) their consumption in May 2018, accounting for 18.7% of domestic consumption. This growth can be explained by:

- Georgian Manganese electricity consumption growth by 54.0% y/y, the largest eligible consumer on the market, from a very low base in May 2017 (-30.1% y/y)
- Addition of 2 new companies (GFDC Georgia and Geo Servers) to the group of eligible consumers. This was in line with legal changes effective since May 2018 as their average monthly consumption of electricity was above 15MWh.

Consumption by **distribution licensees** was up by 8.2% y/y in May 2018, as consumption of new commercial subscribers fully compensated the reduced consumption caused by reallocation of 2 above mentioned large companies into different category.

Consumption by **Abkhazian region** was down by 24.1% y/y, subtracting 3.7ppts from the overall growth.

Figure 1: Domestic electricity consumption, GWh



Source: ESCO
Note: Kakheti Energy Distribution was purchased by Energo-Pro Georgia in August, 2017

Electricity exports were interrupted by the emergency situation on Enguri HPP. As a result, total exports in May 2018 were 23.4% below the planned level, but remained flat y/y. A 82.3% out of 200MWh total exports were directed to Turkey (+95.5% y/y), while the rest was exported to Armenia (13.5% of total exports) and Azerbaijan (4.2% of total exports). A 62.5% of electricity export to Turkey was conducted by ESCO in exchange of electricity imports during 4M18, while the rest was commercial export conducted by Georgian Urban Energy (28.2%) and Adjar energy 2007 (9.3%)

Electricity exports accounted for 16.6% of electricity supplied to the grid.

Eva Bochorishvili
Head of Research
evabochorishvili@gt.ge
+995 322 401 111 ext.8036

Mariam Chakhvashvili
Analyst
mchakhvashvili@gt.ge
+995 322 401 111 ext.7897

Table 1: Demand growth breakdown, May-18

Consumer	Growth rate, y/y	Share in consumption
Domestic consumption	+12.3%	100.0%
Abkhazian region	-24.1%	10.4%
Eligible consumers	+89.9%	18.7%
Distribution	+8.2%	70.8%
Energo-Pro Georgia	+11.0%	48.5%
Telasi	+2.6%	22.3%



Electricity supply mix differed from historic trend in May 2018 due to the accident on Enguri HPP. The forecasted annual balance envisaged to meet increased consumption and exports by hydro generation growth. However, accident on Enguri's powerhouse caused shutdown of the plant on May 24, 2018 before the full recovery on June 1, 2018. This accident caused unplanned deficit in the system, which was compensated by imports, thermal generation and abolished exports.

Electricity imports reached 44MWh and came from Azerbaijan (69.0%) and Russia (30.4%). The **thermal generation** reached 76.2 GWh and accounted for 6.3% of total electricity supplied to the grid. This was contrary to the historic trend, when hydro generation was the major supplier to the grid, with no need for electricity imports and thermal generation.

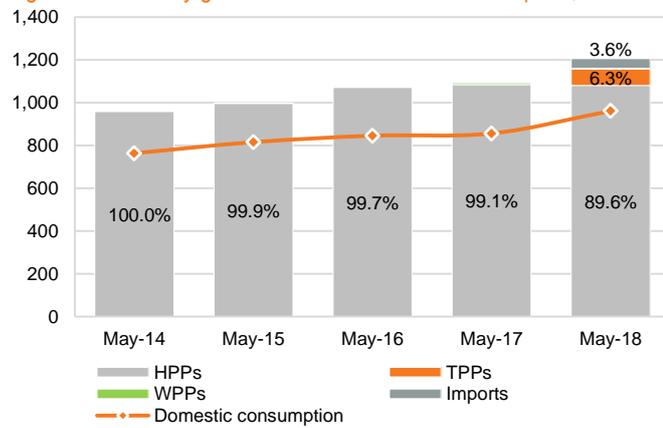
Table 2: Supply growth breakdown, May-18

Supply source	Growth rate, y/y	Share in supply
Total Supply	+10.1%	100.0%
Imports ¹	+2,639.0%	3.6%
Domestic generation	+6.2%	96.4%
TPPs ¹	+26,833.2%	6.3%
WPPs	-34.4%	0.4%
HPPs	-0.5%	89.6%
Enguri and Vardnili	-4.0%	41.9%
Other regulated HPPs	+6.8%	24.9%
Deregulated HPPs	-1.2%	22.7%

Source: ESCO

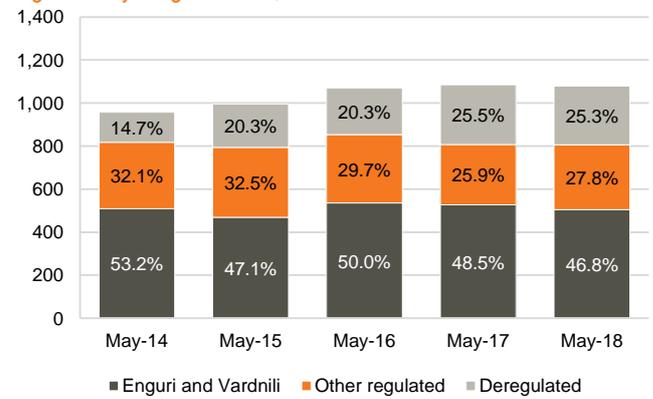
¹ One-off imports and thermal generation due to interruption on Enguri HPP

Figure 2: Electricity generation and domestic consumption, GWh



Source: ESCO

Figure 3: Hydro generation, GWh



Source: ESCO

The guaranteed capacity fee was down 45.2% y/y to USc 0.35/kWh in May 2018, due to maintenance works of Gardabani CCGT, G-Power and Block 3 of Tbilisres. The guaranteed capacity was provided for the full month only by Block 4 of Tbilisres and Mtkvari Energy.

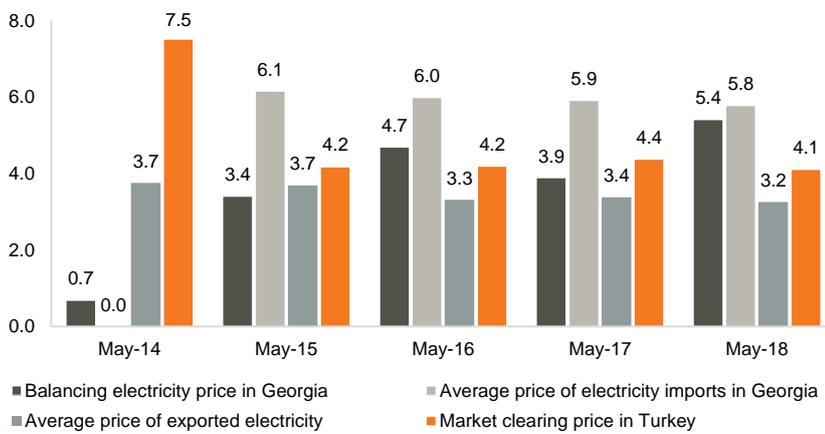


Electricity Prices in Georgia and Turkey - May 2018

Wholesale market price in Georgia increased by 39.2% y/y to USc 5.4/kWh, from USc 3.9 (-17.2% y/y) in May 2017. The reason behind this dramatic increase was the high share of electricity imports with average price of USc 5.8/kWh into the energy traded through ESCO. In total, only 7.0% of total electricity supplied to the grid was traded at the wholesale price through the market operator.

Average price of Georgia's electricity exports was slightly down (-3.8% y/y) to USc 3.2/kWh in May 2018. Average price of electricity in Turkey- the main exporting market for Georgia - was down 6.0% y/y to USc 4.1/kWh.

Figure 4: Electricity prices in Georgia and Turkey, USc/kWh



Source: ESCO, GeoStat, EPIAS



Table 3: Electricity Balance (GWh)

	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	2017	Jan-18	Feb-18	Mar-18	Apr-18	May-18	5M18
Domestic consumption, total	870	985	1,037	918	947	1,032	1,163	11,856	1,168	1,059	1,114	979	961	5,281
% change y/y	3%	10%	14%	16%	7%	7%	0%	7.7%	8%	5%	9%	5%	12%	7.7%
<i>Of which:</i>														
- Abkhazian Region	102	113	119	101	136	194	241	2,002	247	216	207	149	100	920
% change y/y	1%	3%	2%	-8%	-4%	-1%	-5%	3.9%	-2%	-7%	1%	-13%	-24%	-7.5%
- Eligible consumers	131	136	138	122	121	107	102	1,427	108	104	115	109	180	616
% change y/y	6%	21%	66%	91%	62%	32%	-17%	18.1%	1%	-8%	-11%	-14%	90%	7.8%
- Distribution Companies	637	736	780	695	690	732	819	8,427	812	738	792	721	680	3,745
% change y/y	3%	9%	10%	13%	4%	6%	4%	7.1%	12%	11%	16%	14%	8%	12.2%
<i>Of which:</i>														
- Energo-Pro Georgia	426	496	519	456	457	481	528	5,493	521	476	521	485	466	2,469
% change y/y	4%	11%	11%	13%	5%	10%	8%	8.1%	17%	16%	19%	16%	11%	15.9%
- Telasi	211	240	261	239	233	251	292	2,935	291	262	271	237	215	1,275
% change y/y	0%	5%	9%	12%	1%	-1%	-2%	5.2%	4%	2%	10%	9%	3%	5.5%
Domestic Generation, total	1,138	1,247	1,035	821	828	968	1,080	11,531	1,014	934	997	1,064	1,161	5,169
% change y/y	4%	18%	8%	3%	-9%	-3%	-9%	-0.4%	6%	15%	35%	30%	6%	17.1%
<i>Of which:</i>														
- HPPs	1,128	1,234	944	706	583	658	682	9,211	676	594	775	1,019	1,079	4,143
% change y/y	3%	16%	6%	10%	-11%	2%	0%	-1.3%	20%	64%	42%	41%	0%	26.5%
- TPPs	1	5	83	107	239	304	393	2,233	331	334	215	35	76	992
% change y/y	-76%	321%	31%	-32%	-6%	-14%	-21%	-0.1%	-14%	-24%	14%	-59%	26833%	-9.9%
- WPPs	9	7	8	7	7	5	6	88	7	6	7	9	5	35
% change y/y	N/A	N/A	N/A	N/A	N/A	178%	-19%	NM	10%	7%	-21%	0%	-34%	-9.4%
Imports	0	1	73	133	157	110	135	1,497	202	168	161	11	44	586
% change y/y	-100%	-78%	597%	449%	832%	766%	302%	212.6%	13%	-33%	-48%	-92%	2639%	-34.0%
Exports	230	222	32	0	0	1	0	686	-	-	-	62	200	262
% change y/y	9%	71%	16%	N/A	N/A	N/A	N/A	22.7%	N/A	N/A	N/A	N/A	0.00071	0.3002
Net Export/Import	230	221	(41)	(133)	(157)	(109)	(135)	(811)	(202)	(168)	(161)	51	156	(324)
Transit	-	-	93	32	15	23	53	254	-	13	-	-	15	13
% change y/y	N/A	N/A	-33%	-69%	-89%	-83%	-61%	-70.1%	N/A	-18%	N/A	N/A	263%	-65.5%

Source: ESCO

Note: Energo-pro Georgia includes consumption of Kakheti Energy Distribution before Aug-17



Disclaimer

This document is strictly confidential and has been prepared by JSC Galt & Taggart ("Galt & Taggart"), a member of BGEO group plc ("Group") solely for informational purposes and independently of the respective companies mentioned herein. This document does not constitute or form part of, and should not be construed as, an offer or solicitation or invitation of an offer to buy, sell or subscribe for any securities or assets and nothing contained herein shall form the basis of any contract or commitment whatsoever or shall be considered as a recommendation to take any such actions.

Galt & Taggart is authorized to perform professional activities on the Georgian market. The distribution of this document in certain jurisdictions may be restricted by law. Persons into whose possession this document comes are required by Galt & Taggart to inform themselves about and to observe any and all restrictions applicable to them. This document is not directed to, or intended for distribution, directly or indirectly, to, or use by, any person or entity that is a citizen or resident located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction.

Investments (or any short-term transactions) in emerging markets involve significant risk and volatility and may not be suitable for everyone. The recipients of this document must make their own investment decisions as they believe appropriate based on their specific objectives and financial situation. When doing so, such recipients should be sure to make their own assessment of the risks inherent in emerging market investments, including potential political and economic instability, other political risks including without limitation changes to laws and tariffs, and nationalization of assets, and currency exchange risk.

No representation, warranty or undertaking, express or implied, is or will be made by Galt & Taggart or any other member of the Group or their respective directors, employees, affiliates, advisers or agents or any other person as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of this document and the information contained herein (and whether any information has been omitted from this document) and no reliance should be placed on it. This document should not be considered as a complete description of the markets, industries and/or companies referred to herein. Nothing contained in this document is, is to be construed as, or shall be relied on as legal, investment, business or tax advice, whether relating to the past or the future, by Galt & Taggart any other member of the Group or any of their respective directors, employees, affiliates, advisers or agents in any respect. Recipients are required to make their own independent investigation and appraisal of the matters discussed herein. Any investment decision should be made at the investor's sole discretion. To the extent permitted by law, Galt & Taggart, any other member of the Group and their respective directors, employees, affiliates, advisers and agents disclaim all liability whatsoever (in negligence or otherwise) for any loss or damages however arising, directly or indirectly, from any use of this document or its contents or otherwise arising in connection with this document, or for any act, or failure to act, by any party, on the basis of this document.

The information in this document is subject to verification, completion and change without notice and Galt & Taggart is not under any obligation to update or keep current the information contained herein. The delivery of this document shall not, under any circumstances, create any implication that there has been no change in the information since the date hereof or the date upon which this document has been most recently updated, or that the information contained in this document is correct as at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same. No representation or warranty, expressed or implied, is made by Galt & Taggart or any other member of the Group, or any of their respective directors, employees, affiliates, advisers or agents with respect to the accuracy or completeness of such information.

The information provided and opinions expressed in this document are based on the information available as of the issue date and are solely those of Galt & Taggart as part of its internal research coverage. Opinions, forecasts and estimates contained herein are based on information obtained from third party sources believed to be reliable and in good faith, and may change without notice. Third party publications, studies and surveys generally state that the data contained therein have been obtained from sources believed to be reliable, but that there is no guarantee of the accuracy or completeness of such data. Accordingly, undue reliance should not be placed on any such data contained in this document. Neither Galt & Taggart, any other member of the Group, nor their respective directors, employees, affiliates, advisers or agents make any representation or warranty, express or implied, of this document's usefulness in predicting the future performance, or in estimating the current or future value, of any security or asset.

Galt & Taggart does, and seeks to do, and any other member of the Group may or seek to do business with companies covered in its research. As a result, investors should be aware of a potential conflict of interest that may affect the objectivity of the information contained in this document.

This document is confidential to clients of Galt & Taggart. Unauthorized copying, distribution, publication or retransmission of all or any part of this document by any medium or in any form for any purpose is strictly prohibited.

The recipients of this document are responsible for protecting against viruses and other destructive items. Receipt of the electronic transmission is at risk of the recipient and it is his/her responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

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

Tel: + (995) 32 2401 111

Email: research@gt.ge

Head of Research

Eva Bochorishvili | evabochorishvili@gt.ge

Economist

Lasha Kavtaradze | lashakavtaradze@gt.ge

Head of Analytics Unit

Giorgi Iremashvili | giremashvili@gt.ge

Analyst

Mariam Chakhvashvili | mchakhvashvili@gt.ge

Analyst

Bachana Shengelia | bshengelia@gt.ge

Analyst

Ana Nachkebia | ananachkebia@gt.ge

Analyst

Kakhaber Samkurashvili | ksamkurashvili@gt.ge

Analyst

Ioseb Kumsishvili | ikumsishvili@gt.ge