
Georgia Global Utilities

Investor presentation

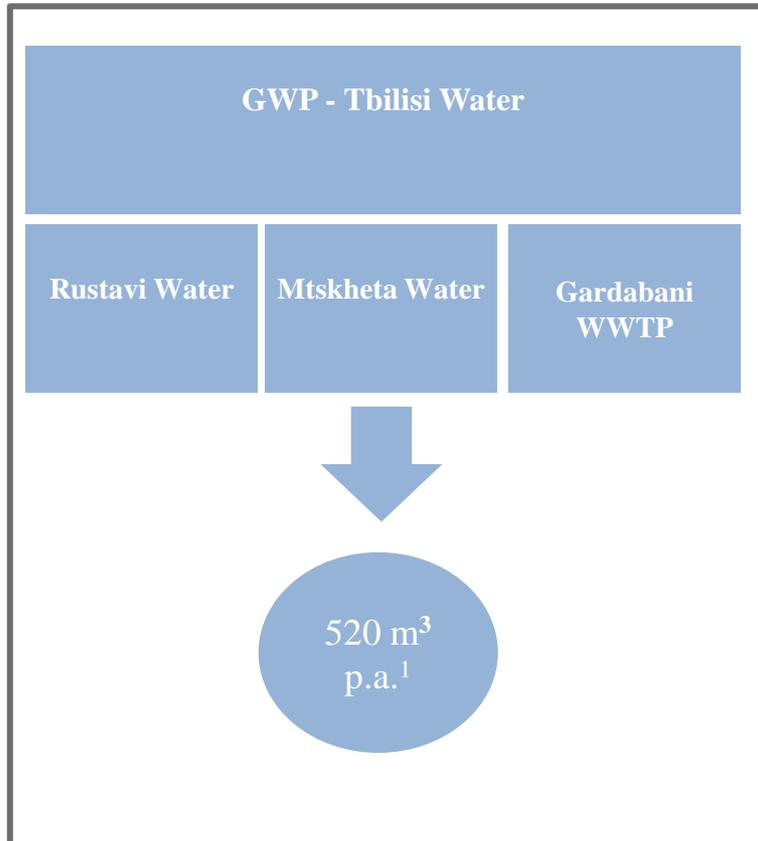
October 2017



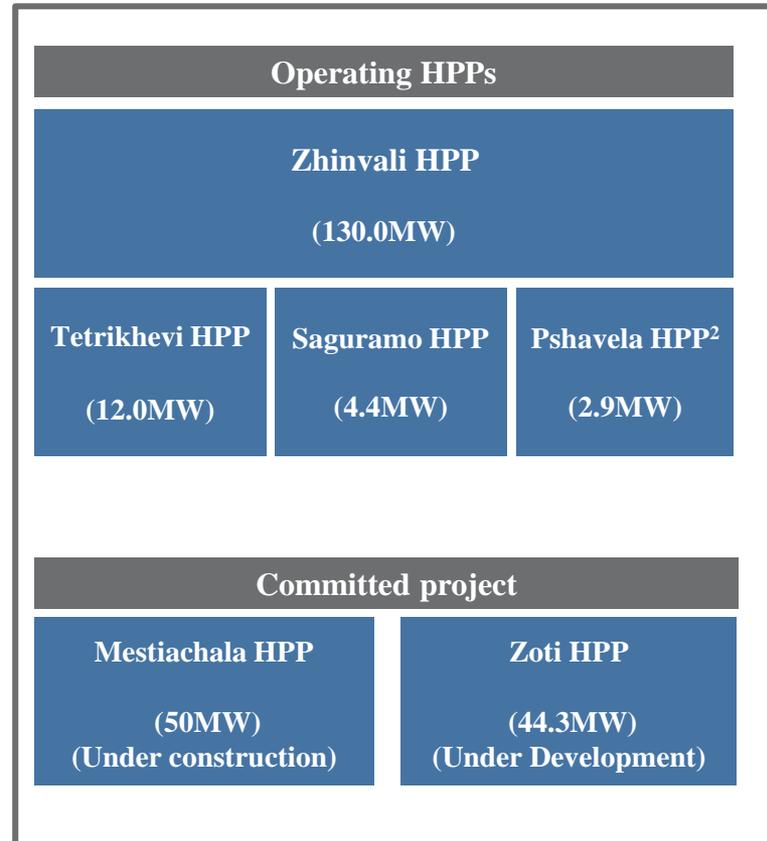
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Water



Energy

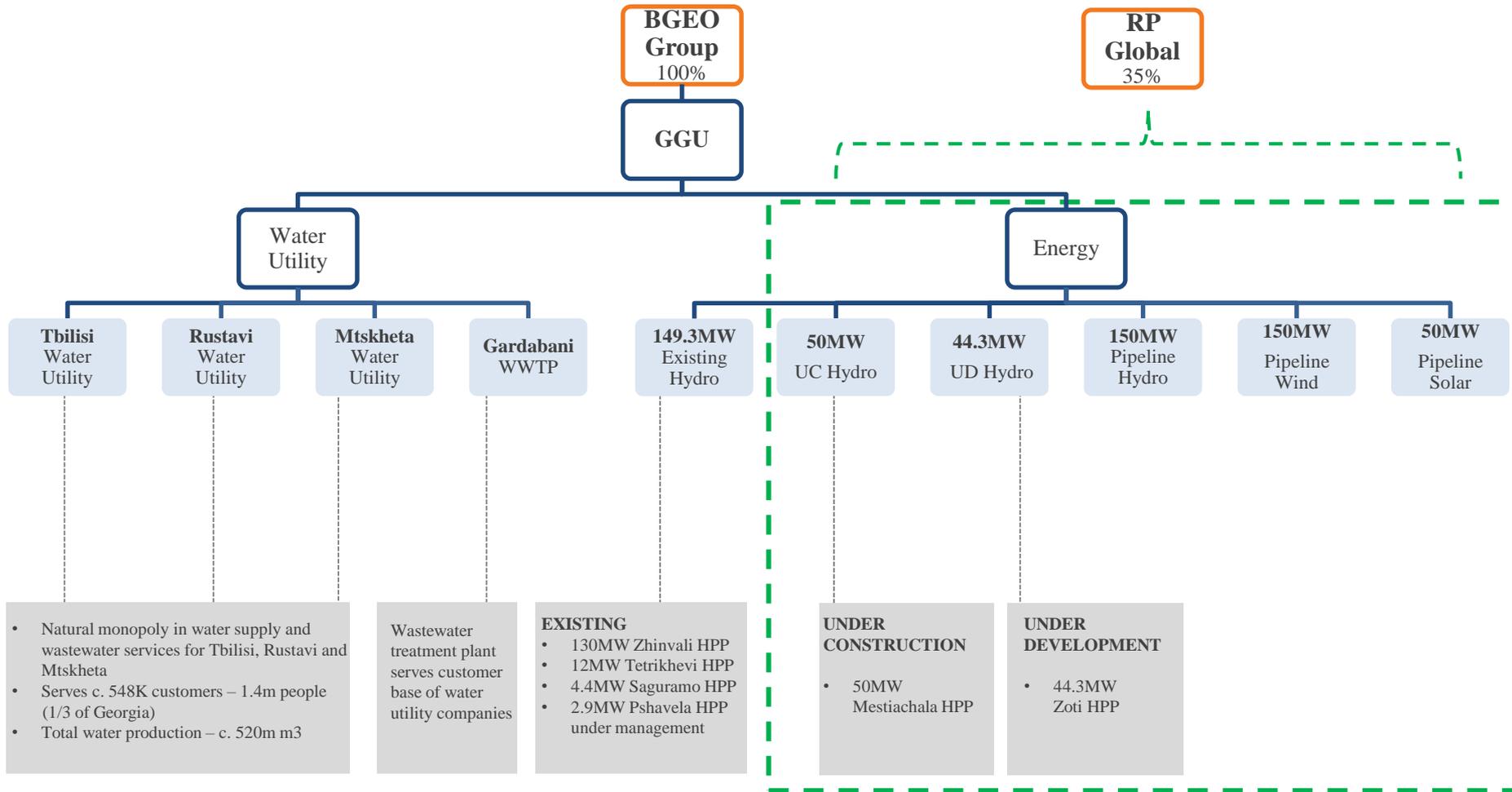


At a glance

Note:

1. Water production
2. Under operating lease

GGU structure by shareholders and activities



Note:

1. UC refers to under construction
2. UD refers to under development
3. WWTP refers to wastewater treatment plant

Information on renewable projects are provided separately on an indicative basis

Partnership in hydro & other renewables

1

BGEO Group

Georgia focused investment platform

65% majority shareholder

Georgia's leading investment platform.
Owns & operates 149.3 MW of hydro power capacity
in Georgia in its GGU water utility and energy
business.

2

RP Global

Austria-based renewables IPP

35% shareholder

30 years experience in developing, building,
owning and operating renewable power plants,
globally (hydro, wind & solar).

BGEO Group and RP Global teamed up in 2014 with an initial focus on developing specific hydro power plants

The partnership was deepened in Q1/2017 with the target to establish Georgia's leading renewables developer, as an integral part of BGEO's GGU water utility and energy business

GGU's energy arm develops and implements a diversified renewable power portfolio in Georgia, split between the three main renewable technologies of hydro, wind and solar

GGU selects best project opportunities from an identified potential for each technology and aims to develop additionally on top of the existing 149.3MW installed capacity about 400MW in the mid term, out of which 50MW are under construction and 44.3MW are ready to build

GGU strategy

	CURRENT STANDING	MEDIUM TERM GOAL	TARGETING
1 WATER UTILITY	REVENUE 2016: GEL 117.1m EBITDA 2016: GEL 56.7m	EBITDA 2019: GEL 70+ m	DIVIDEND PROVIDER
2 ENERGY	REVENUE 2016: GEL 15.0m EBITDA 2016: GEL 11.8m 149MW existing capacity	EBITDA 2019: GEL 38+ m 200MW existing capacity	VALUE CREATION UPSIDE

IPO in 2-3 years time

GGU management team



Archil Gachechiladze
Chief Executive Officer

- Joined GGU in November 2016
- Previously served as Deputy CEO, Corporate & Investment Banking at Bank of Georgia (BOG), prior to that he served as BGEO Group CFO and Deputy CEO Investment management at BOG. Archil joined Bank of Georgia in October 2009 as Deputy CEO Corporate Banking.
- Holds MBA degree from Cornell University and also is a CFA charterholder



Giorgi Vakhtangishvili
Chief Financial Officer

- Joined GGU in April 2015
- Previously held different managerial positions at BGEO Group's companies; before joining GGU, Giorgi served as CEO of m2 Real Estate, the leading real estate development company in Georgia
- Holds BBA degree from European School of Management (ESM)



Giorgi Tskhadadze
Head of Water Utility

- Joined GGU in December 2014
- Previously held executive positions at several leading local companies, holding position of CFO at IDS Borjomi and Poti Sea Port. Prior to joining GGU, Giorgi was acting as a partner at Proxima Prime Partners
- Holds BSc degree in Economics and Engineering from Tbilisi State University



Zurab Gordeziani
Head of Hydropower

- Joined GGU in January 2015
- Joined BGEO Group in 2013 to develop hydro projects. Before that, he was involved in the energy sector of Georgia for 14 years and was part of the team that developed current legislative framework for the energy sector in Georgia. He also served on executive positions in JSC Energo-Pro Georgia, Georgian Electrosystem and Ministry of Energy
- Holds degrees in Law and Economics from Tbilisi State University



Giorgi Bezhushvili
Head of Wind and Solar Power

- Joined GGU in July 2016
- Previously held executive positions at several leading local companies, among them serving as General Director at Georgian Energy Development Fund. Before joining GGU, Giorgi served at GRPC as Deputy CEO, wind and solar
- Holds a master's degree from Paris-Sud University in Economics, Technology and Territories



Eter Iremadze
Head of Strategic Projects

- Joined GGU in February 2017
- Joined BGEO Group in 2006 and held numerous executive positions at Bank of Georgia; among those are head of SOLO (Premium Banking) department and head of Blue Chip Corporate Banking Unit covering structured lending, M&As, significant buyouts in Georgia, and project financing. Overall, Eter has 18 years of experience in banking
- Holds Dual MBA degree from Grenoble Graduate School of Business & Caucasus University



Jaba Mamulashvili
Chief Legal Officer

- Joined GGU in February 2016
- Before joining GWP he held a position of a partner at Begiashvili & Co. Limited, one of the leading Georgian law firms. Jaba specializes in commercial law and has a notable experience in equity investments, corporate and project financing, etc.
- Holds a master's degree in International Business Law from University of Manchester



Tina Simonishvili
Head of Investor Relations

- Joined GGU in February 2016
- Previously worked for BGEO Group companies for more than 6 years, namely as an associate in department of DCM at Galt & Taggart – leading investment bank in Georgia and as a principal corporate banker at Bank of Georgia
- Holds BBA degree from Caucasus School of Business and MSc in International Management from King's College London

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GGU – a privately-owned natural monopoly

GGU is the only profitable water-utilities player in Georgia with plenty of efficiency rooms

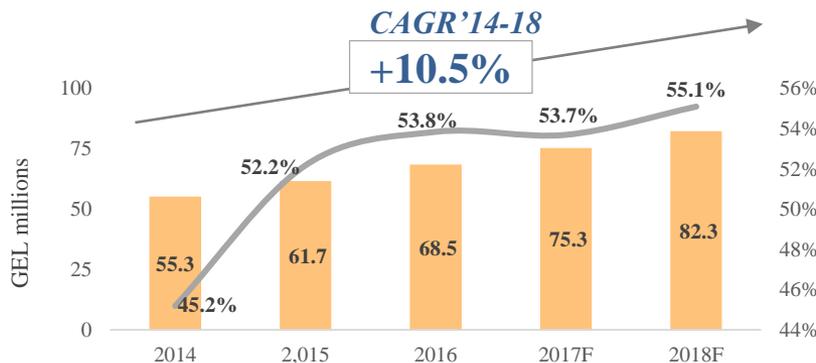
GGU is the largest privately owned water utility company in Georgia

- 2 core activities:
 1. **Water supply and sanitation** (including wastewater collection and processing) – Provides water to 1.4m people (1/3 of Georgia) 2016A: 522M m³
 1. **Generation of electric power** – Owns 3 HPPs and has 1 HPP under management with total installed capacity of 149.3MW. **Generated power is primarily used by GGU’s water business.** The excess amount of generated power is sold to the third party clients every year
- Revenue of GEL 127.2m in 2016, +7.6% y-o-y
- EBITDA of GEL 68.5m in 2016, +11.0% y-o-y

Company has strong execution track record & financial strength

- Management team with extensive experience in utility business
- “BB-” rating affirmed by Fitch Ratings to major subsidiary of GGU – Georgian Water and Power in 2016 (currently Georgia’s sovereign rating is “BB-” and the country ceiling is BB by Fitch)
- First bond placement by utility company in Georgia (GEL 8.6m) through Georgian Water and Power in 2015
- GGU issued GEL 30m 5-year local currency bond– the largest amount ever issued in local currency by a non-financial institution in Georgia
- GGU attracted long-term IFI financing of EUR 81.5m in 2017 from FMO, DEG and EIB. For EIB this was first loan provided directly to a private corporate entity in Georgia

EBITDA (in GEL m) & EBITDA margin (in %)

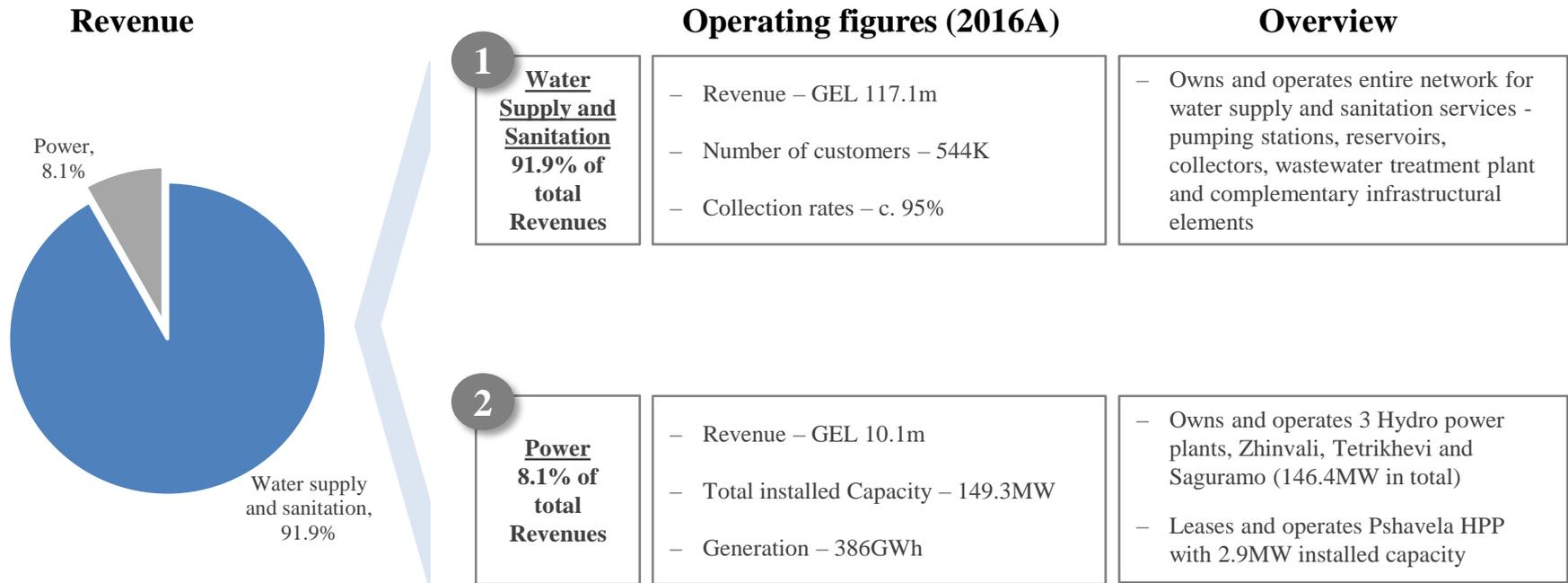


EBITDA growth drivers:

- Cost saving from reduction in technical water losses
- Subsequent savings from freed-up energy

GGU business lines

Two revenue streams, each with solid cash generation capabilities

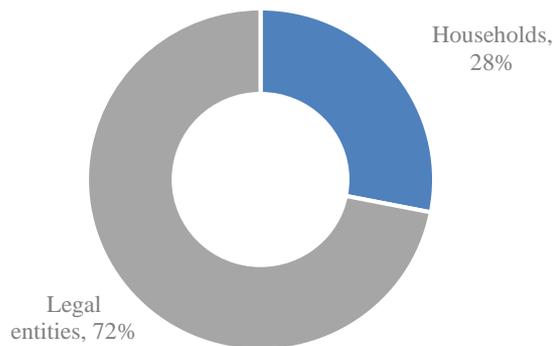


GGU water sales

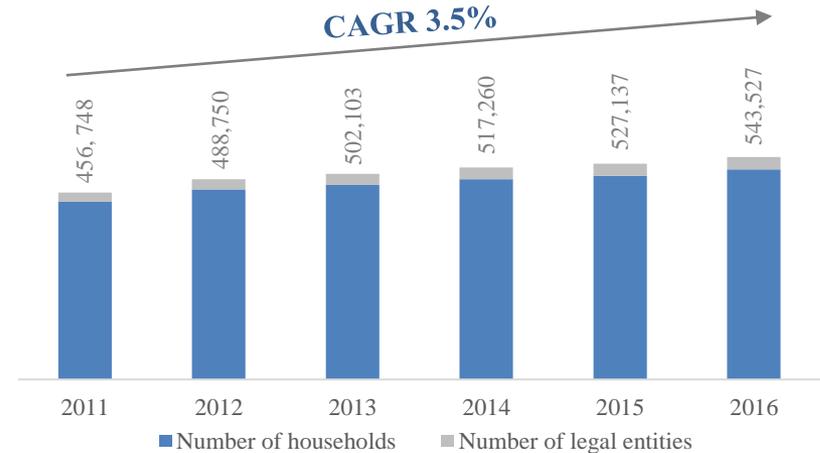
Overview

- Water is sourced from Zhinvali reservoir (90%) and Mukhrani/Natakhtari (10%) aquifer to feed the cities of Tbilisi, Rustavi and Mtskheta
- Customer pool includes both legal entities and households:
 - Legal entities - metered clients. Water meters are read on a cyclical basis. Collection rates are close to 100%
 - Households - significant portion of this client base remains non-metered (c. 75%). Non-metered customers are billed based on the number of individuals formally registered by the civil registrar and by application of the relevant tariff fixed per capita per month

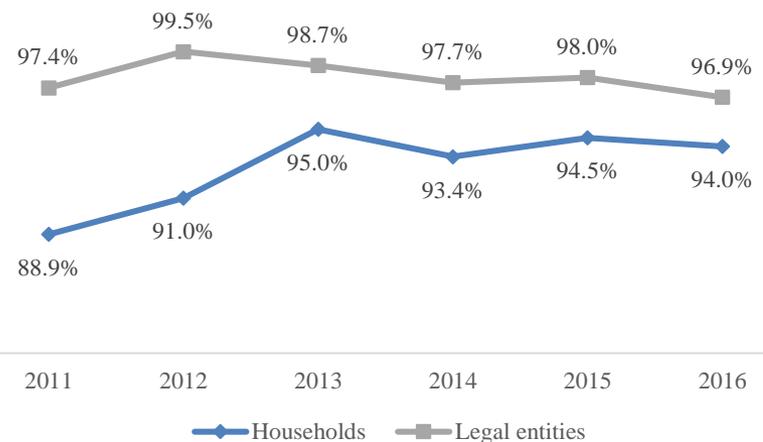
Water sales split per type of clients 2016 (in %)



Number of clients 2011-2016



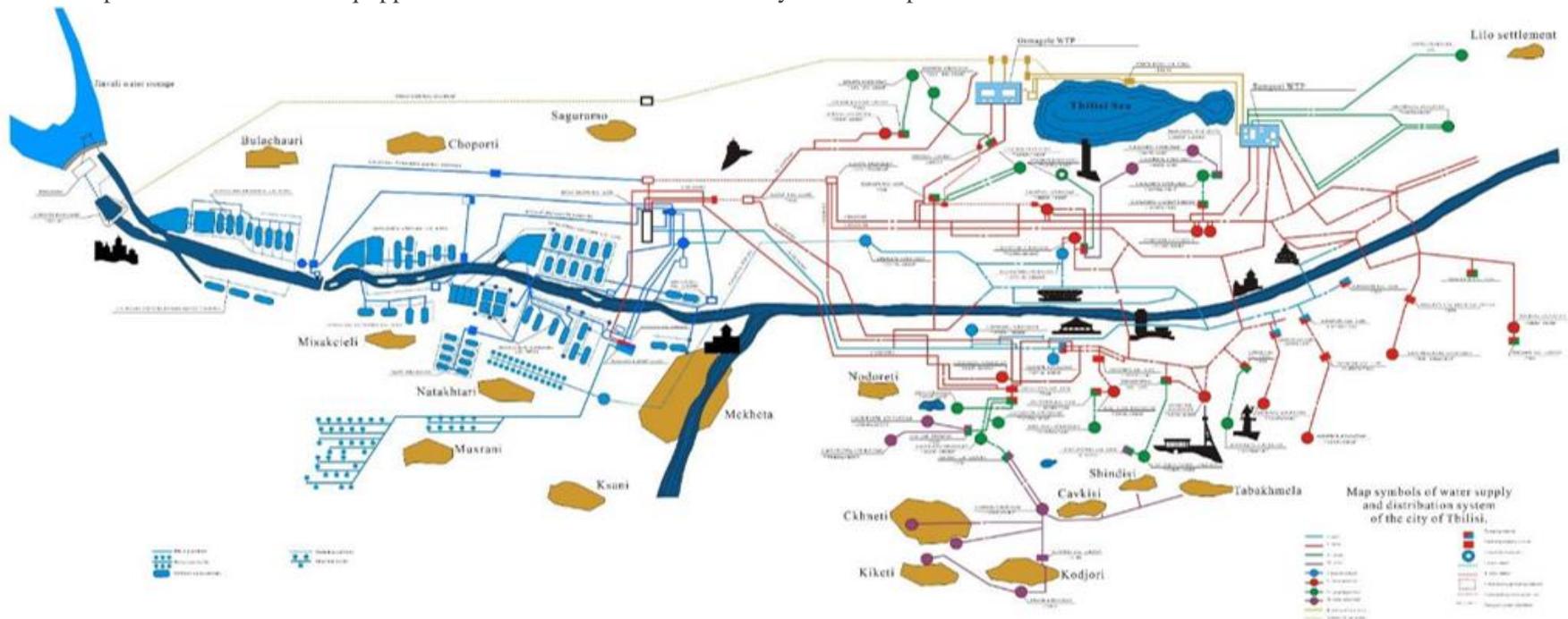
Collection rates 2011-2016



GGU infrastructure network overview - Tbilisi

GGU owns 100% of the infrastructure

- Company operates c. 2,700km of water supply and c. 1,700km of wastewater pipeline network which consists of: trunk lines, tunnels of potable water and aqueducts, distribution networks to customers
- Around 522m³ of potable water is supplied from water production/treatment facilities in Bulachaari, Natakhtari, Saguramo, Samgori and Grmaghele on an annual basis
- Water quality monitoring is conducted on a daily basis, along with planned recurrent monitoring procedures in Tbilisi and its surroundings on 374 points of water supply network
- In total the enterprise has 45 pumping stations, 104 reservoirs of pure water with total capacity of approx. 300,000 m³. The most important reservoirs are equipped with level detectors monitored by central dispatch service



GGU P&L (2016)

Numbers are given in GEL, thousand

	2016A	2015A	y-o-y % change
REVENUES			
Revenue from water supply to legal enteties	78,139	74,587	4.8%
Revenue from water supply to individuals	31,264	30,170	3.6%
Revenue from electric power sales	10,112	9,182	10.1%
Revenue from technical support	4,573	3,683	24.2%
Other income	3,151	647	387.4%
Total revenue	127,239	118,268	7.6%
OPERATING EXPENSES			
Provision of trade receivables	(2,198)	(432)	408.4%
Salaries and benefits	(16,680)	(20,920)	-20.3%
Electricity and transmission costs	(17,747)	(11,554)	53.6%
Raw materials, fuel and other consumables	(2,856)	(5,253)	-45.6%
Infrastructure assets maintenance expenditure	(2,402)	(4,251)	-43.5%
General and administrative expenses	(3,101)	(2,950)	5.1%
Taxes other than income tax	(3,298)	(3,398)	-2.9%
Professional fees	(2,286)	(2,475)	-7.6%
Insurance expense	(793)	(317)	150.1%
Other operating expenses	(7,363)	(5,001)	47.2%
Total operating expenses	(58,724)	(56,551)	3.8%
EBITDA	68,515	61,717	11.0%
<i>EBITDA Margin</i>	54%	52%	
Depreciation and amortisation	(17,842)	(17,919)	-0.4%
EBIT	50,673	43,798	15.7%
<i>EBIT Margin</i>	40%	37%	
Finance income	220	180	22.2%
Finance cost	(10,985)	(7,658)	43.4%
Foreigns exchange gains(losses)	(462)	(14,158)	-96.7%
EBT	39,447	22,162	78.0%
Income tax expense	(3,659)	(6,948)	-47.3%
NET INCOME/LOSS FOR THE PERIOD	35,787	15,214	135.2%
<i>Net Income Margin</i>	28%	13%	

- Total water sales increased by 4.4% as compared to LY comparative results
- Increase of electric power sales of 10.1% is due to the increased volume of sales due to higher electricity generation
- Increase of transmission cost compared to the LY is due to the hike of GCF by 238%
- Decrease of maintenance expenses compared to LY is due to prudent rehabilitation works
- Decrease of the income tax expense is due to the write-off of the accumulated deferred tax liability and retention of only those charges which may be realized before 1-Jan-2017

GGU P&L (1H17)

Numbers are given in GEL, thousand

	1H17A	1H16A	y-o-y % change
REVENUES			
Revenue from water supply to legal entities	38,928	36,384	7.0%
Revenue from water supply to individuals	16,053	15,132	6.1%
Revenue from electric power sales	3,094	4,162	-25.7%
Revenue from technical support	1,412	792	78.2%
Other income	1,296	458	182.8%
Total revenue	60,783	56,929	6.8%
OPERATING EXPENSES			
Provision of trade receivables	(1,125)	(1,473)	-23.6%
Salaries and benefits	(9,298)	(8,605)	8.1%
Electricity and transmission costs	(8,885)	(9,060)	-1.9%
Raw materials, fuel and other consumables	(1,327)	(1,961)	-32.3%
Infrastructure assets maintenance expenditure	(658)	(1,212)	-45.7%
General and administrative expenses	(1,611)	(1,553)	3.8%
Taxes other than income tax	(1,783)	(1,557)	14.5%
Professional fees	(966)	(953)	1.3%
Insurance expense	(529)	(266)	98.7%
Other operating expenses	(3,401)	(3,688)	-7.8%
Total operating expenses	(29,583)	(30,328)	-2.5%
EBITDA	31,199	26,601	17.3%
<i>EBITDA Margin</i>	51%	47%	9.8%
Depreciation and amortisation	(9,820)	(8,381)	17.2%
EBIT	21,379	18,220	17.3%
<i>EBIT Margin</i>	35.2%	32.0%	9.9%
Finance income	499	171	191.6%
Finance cost	(5,624)	(5,064)	11.1%
Foreign exchange gains (losses)	(63)	(535)	-88.2%
EBT	16,191	12,792	26.6%
Income tax expense	(641)	(1,741)	-63.2%
NET INCOME/LOSS FOR THE PERIOD	15,550	11,051	40.7%
<i>Net Income Margin</i>	25.6%	19.4%	31.8%

Revenues

- Electric power sales declined due to lower generation of Zhinvali HPP
- Revenue from technical support increased because of doubled new connection applications compared to LY
- Other income increase is attributable to the sale of land plots and recognition of deferred income per IFRS 15
- Finance income increase is due to the interest rate improvements on cash balances in banks

Expenses

- Lower own consumption and Zhinvali HPP tail race construction works which completed 2 weeks ahead of time resulted in the decrease of electricity and transmission costs
- Maintenance expenditure decrease along with other consumables reduction is due to the preventive capital investments, that led to maintenance cost saving

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Projects going forward in hydro & other renewables

2017

50 MW HPP (Svaneti Hydro)

Status – Under construction
Project cost – USD 62.7m
Completion – by the end of 2018.

2018

44.3 MW HPP (Zoti Hydro)

Status – Under development
Project cost – USD 57.5m
Completion – by the end of 2020.

Long-term pipeline¹

Hydro

Capacity – up to 100 MW
Project cost per MW USD 1.2 - 1.5m

Wind

Capacity – up to 150 MW
Project cost per MW: up to USD 1.3m

Solar

Capacity – up to 50 MW
Project cost per MW: up to USD 1.1m

Note
1. Pipeline projects are at a very early stage of development, therefore given information is highly indicative

Mestiachala / 50 MW

Project main characteristics

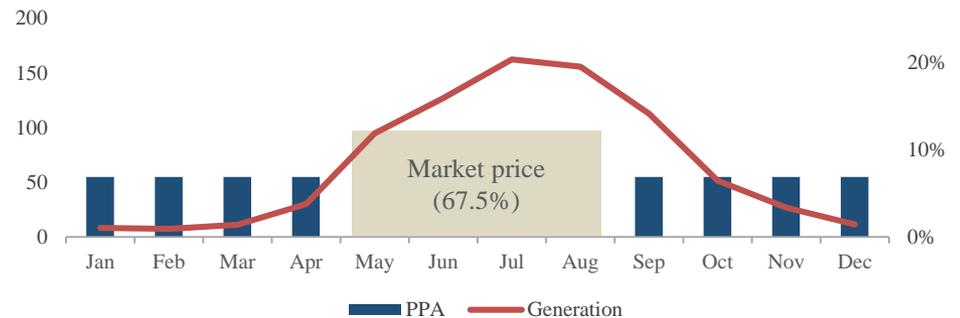
- Location – near city Mestia, Svaneti region
- Cascade of 2 power plants
- Penstock routes – 10 km
- Total – 2 powerhouses with 20 and 30 MWs installed capacity

Project highlights

Total project cost (US\$ k)	62,720
Total cost per MW (US\$ k)	1,254
Nominal installed capacity (MW)	50.1
Net annual generation (GWh)	174.3
PPA for 8 months (cents)	5.5c
Debt/Equity structure	70/30
BCR (%)	10.1%



Monthly generation (%) and price (USD/MWh)



Zoti / 44.3 MW

Project main characteristics

- Location - village of Zoti, Guria region in Western Georgia
- Cascade of 2 power plants
- 2 tunnels – 1.2 km and 1.6 km
- Penstock routes – 7.5 km
- Grid connection – available by 2020

Project highlights

Total project cost (US\$ k)	57,485
Total cost per MW (US\$ k)	1,297
Nominal installed capacity (MW)	44.3
Net annual generation (GWh)	164.3
PPA for 8 months (cents)	Nov-Feb: 4.4c Mar-Apr-Sep-Oct: 5.5c
Debt/Equity structure	70/30
BCR (%)	11.0%



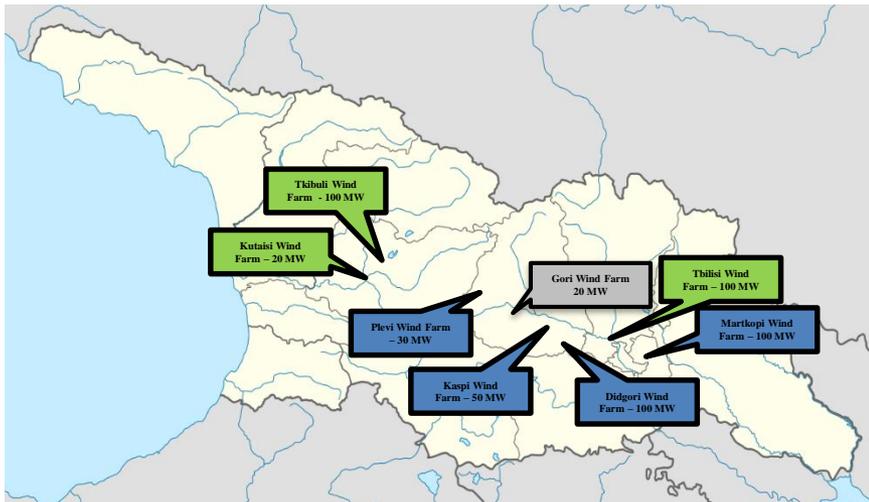
Monthly generation (%) and price (USD/MWh)



Wind projects

Identifying wind project opportunities

- Feasibility MoUs signed with government for all 7 projects in early 2017
- Land securing for Tkibuli, Kutaisi and Tbilisi projects to be finalized by December, 2017
- **Based on preliminary findings 3 main locations are defined as stage 1 development with total capacity of 100MW, targeting construction in 2019**

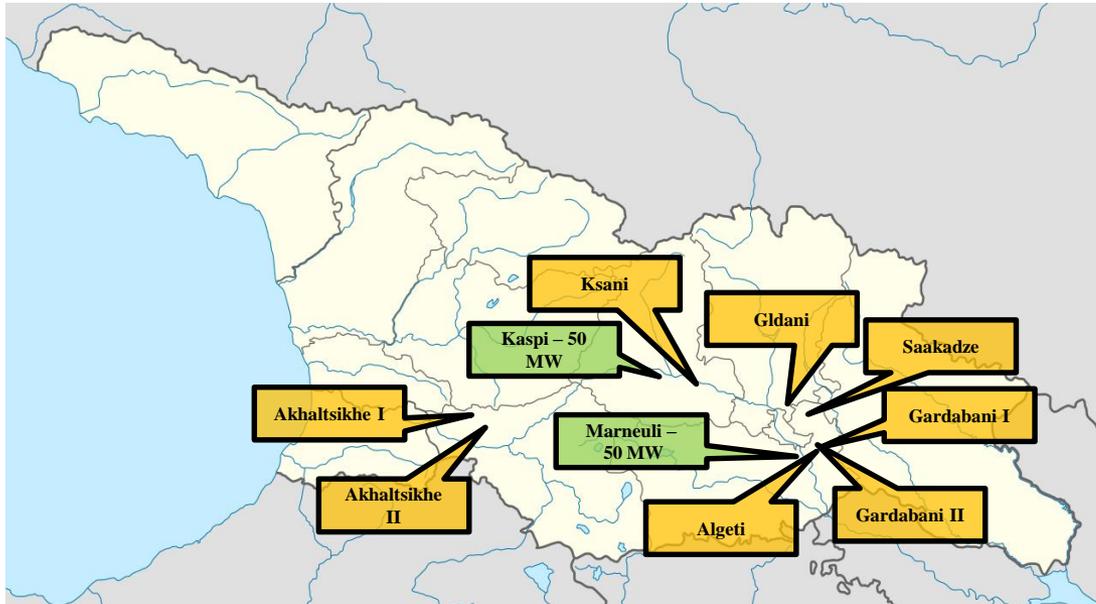


-  Further development stage
-  Feasibility study stage
-  Existing government-owned wind farm



Solar projects

Identifying solar project opportunities



- Further measurement stage
- Early feasibility stage

- Exclusivity Feasibility MoU with the Government was signed in early 2017 for 18 months

Based on preliminary findings 2 main locations are defined for further development (measurement stage)

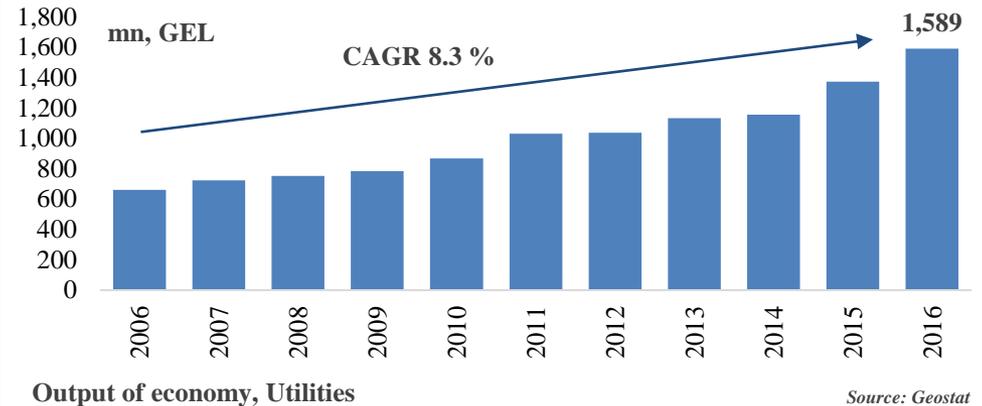
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Utilities in Georgia – largely private, reforms in progress

Utility sector in is largely privatized with high barriers to entry; reforms in progress for approximating the sector with the EU regulations

- Utilities sector represents ~3% of total economic output in Georgia and is constantly growing at a sustainable rate (CAGR 8.3% in 2006 – 2016)
- Bulk of sector players are natural monopolies and the barriers to entry are high
- Large part of the industry is privatized, except for the fraction of WSS utilities and irrigation
- Reforms are in progress in utilities sector to approximate the sector with EU energy regulations in accordance to Georgia’s undertaking under the Association Agreement with the EU



Georgia’s utility sector is regulated by an independent regulator that sets tariffs, manages licenses, mediates disputes and imposes sanctions

- Georgian National Energy and Water Supply Regulatory Commission (GNERC) is an independent body that regulates the utilities market
- GNERC is independent from the Government of Georgia and has no direct supervision from any state authorities and its independence is guaranteed by a legally mandated, self-sufficient revenue stream from the regulation fees paid by utility market participants (0.3% of the utility revenues)
- The sector is regulated by the set of laws, by-laws and government decrees on tariff setting, utilities (*water, electricity, natural gas*) market rules, grid / network codes, legislation on licensing, resource extraction and environmental accountability

Elements of regulatory discretion

	GNERC	MoEn	MRDI	MoA	MENR
Tariff regulation	█				
Resource extraction					█
Infrastructure development			█		
Licensing	█				
Drinking water quality control				█	
National policy development		█	█	█	█
Dispute mediation	█				
Sanction imposition	█				

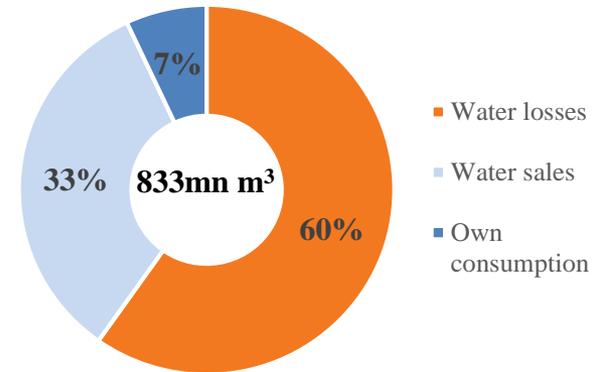
MRDI – Ministry of Regional Development and Infrastructure MoEn – Ministry of Energy MoA – Ministry of Agriculture
MENR – Ministry of Environment and Natural Resources

Water utilities – capitalizing on efficiency gains

Underdeveloped industry offers ample potential for efficiency gains and long-term sustainable growth

- Significant funding-gap in the past has led to largely depreciated water and sanitation infrastructure with an average technical water losses at 50% (4-5 times higher than in western Europe) which sets the ground for significant efficiency gains in the future under well managed operations and infrastructure planning
- Water losses are also caused due to aging assets in the residential buildings and excessive water consumption, usually symptomatic to non-metered customers (~70% of the customer base)
- GGU has introduced extensive measures against resource dissipation (e.g. zoning, bulk metering) and has motivational schemes for staff to identify water larceny and is continuously implementing resource efficient practices within its infrastructure

Water balance (m³), 2015



Source: GNERC

GGU is the only profitable player on Georgia’s WSS market with over 95% average collection rates

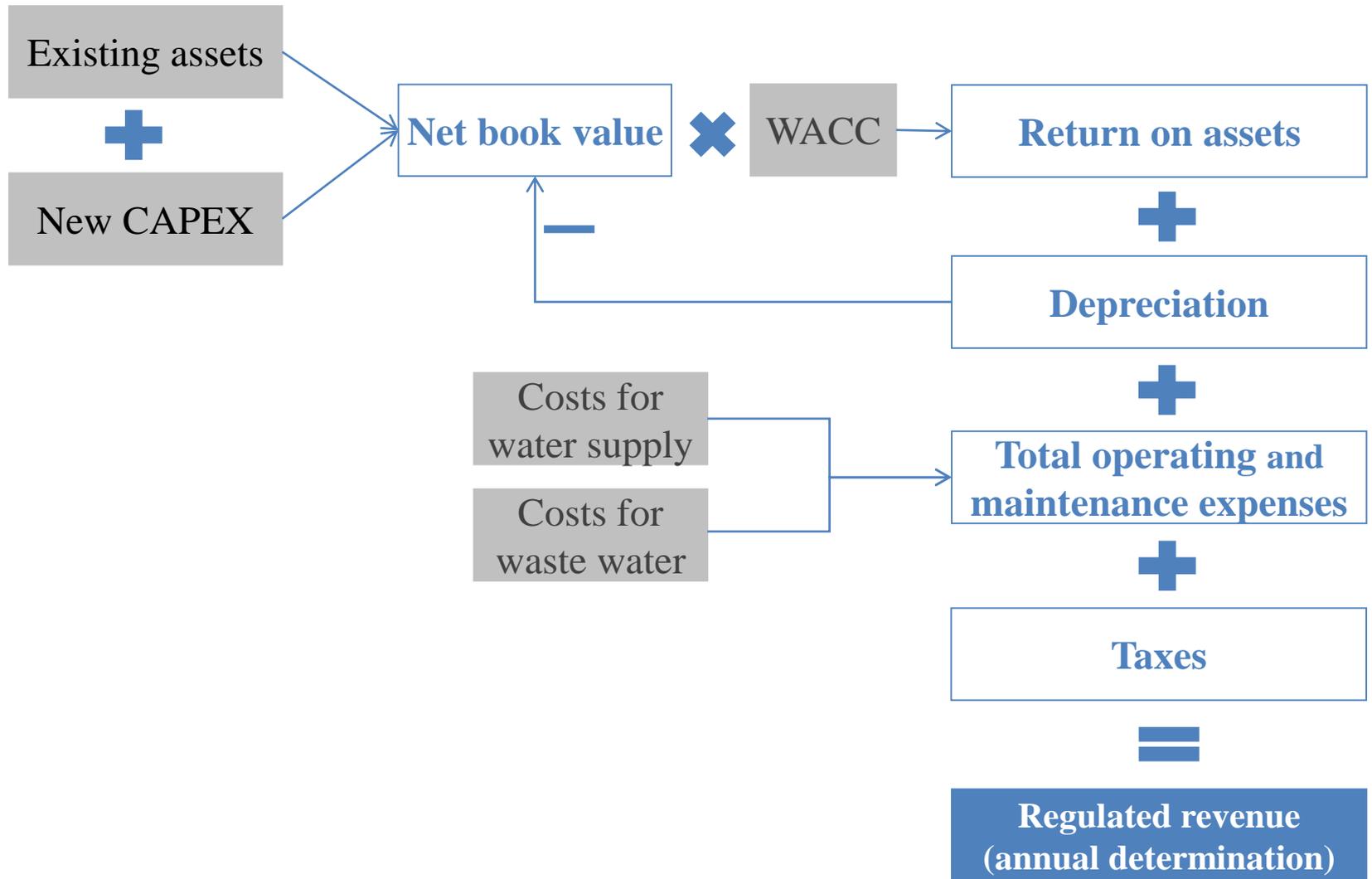
- 6% of the customer base for water utilities in Georgia are commercial entities, the rest are households
- Average collection rates from households in Georgia ~ 50%, while GGU’s average collection rates are around 95%
- Water utilities other than GGU operate on state subsidies due to low collection rates and unauthorized water consumption
- 45.7% of the population gets serviced on the municipal level with bad service quality, frequent and lengthy interruptions and poor coverage

Snapshot of Georgia’s WSS market

Company	Coverage area	Country coverage	Ownership type
GGU	Tbilisi, Rustavi, Mtskheta	28.3%	Private
BWC	Batumi	3.7%	Public
UWSCG	Part of Georgia	20.7%	Public
Other	Rest of Georgia	47.3%	Municipal

Source: GNERC

Water and Energy Tariff Setting Methodology

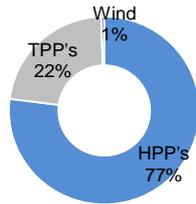


Electricity market update

Current installed capacity by types, MW

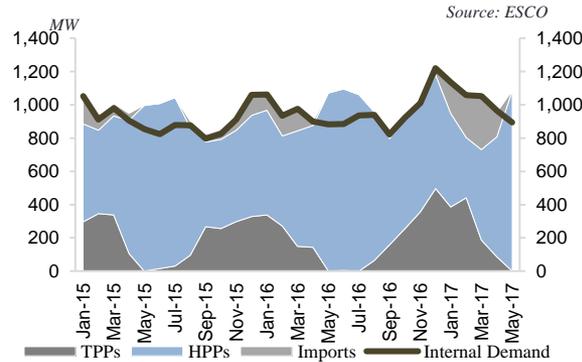
HPP – More than 70 HPPs are under operation currently, with 3,164MW of total installed capacity. 7 conventional dam HPPs make up 68% of installed capacity. Run-of-river plants make up the rest.

TPP – On top of supporting the security of supply, natural gas-fired plants also fill winter deficits. There are six TPPs, with installed capacity of 925MW. 3 TPPs have a remaining average lifetime of 12 years and will need to be replaced in the nearest future.



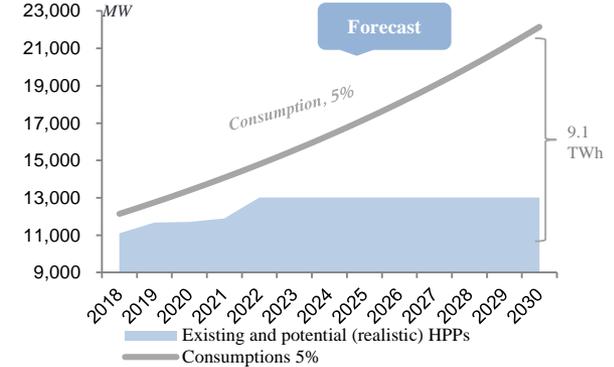
Source: Galt & Taggart Research

Electricity supply and consumption



Demand on electricity in Georgia peaks in winter and the shortage that the country faces is filled by direct imports. Up to 25% of Georgia's electricity needs are imported, with up to 20% natural gas and the rest - direct electricity imports. Supply peaks in summer and the surplus is exported to neighboring countries.

Forecasted consumption

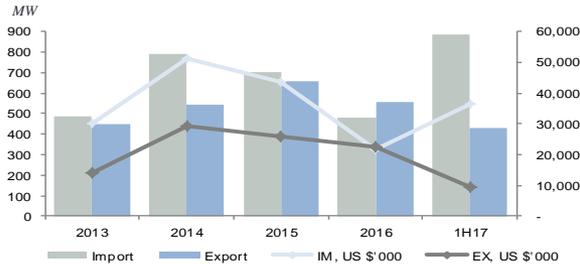


Consumption growth is forecasted to be at 5% CAGR in coming 15 years. If the anticipated growth is realized and current supply does not get upgraded, Georgia will have a deficit of 9.1 tWh (more than 75% of current consumption) left to fill creating an ample room for generation resource development.

Electricity import – export balance

Source: Galt & Taggart Research

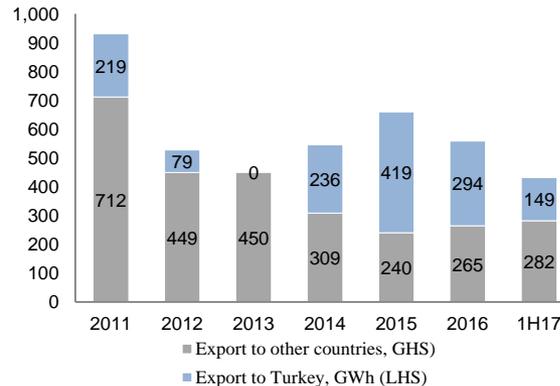
US\$ '000



Favorable weather conditions in 2Q17 resulted in excess power generation and increase in the amount of exported electricity. Notably, the electricity trade balance in US\$ terms remains negative. GGU exported electricity to Turkey for the first time throughout its operations.

Electricity exports and prices, 2011-2017

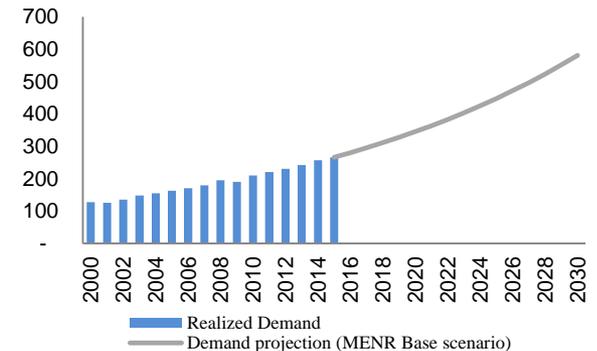
Source: ESCO, Geostat, EPIAS



Gross electricity demand in Turkey, 2000-2030

Source: Turkish market outlook

TWh



Disclaimer – forward looking statements

This presentation contains forward-looking statements that are based on current beliefs or expectations, as well as assumptions about future events. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements often use words such as anticipate, target, expect, estimate, intend, plan, goal, believe, will, may, should, would, could or other words similar meaning. Undue reliance should not be placed on any such statement because, by their very nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results, and GGU and its subsidiaries (the “GGU Group”)’s plans and objectives, to differ materially from those expressed or implied in the forward-looking statements.

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