

Green Bond Allocation and Impact Report 2021

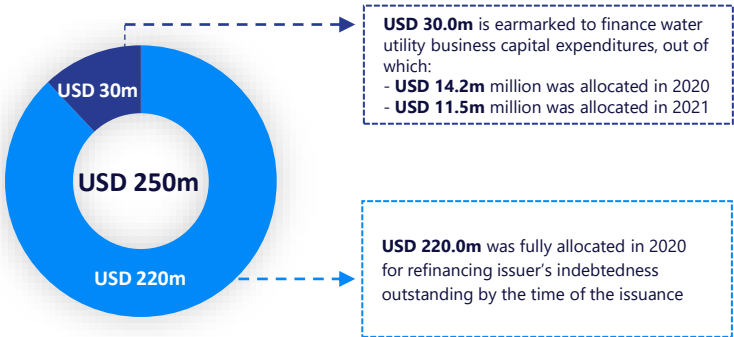
In July 2020, GGU issued USD 250 million debut green bonds from Georgia and aligned its [Green Bond Framework](#) with International Capital Market Association Green Bond Principles. Proceeds from the bonds were used to refinance outstanding indebtedness of the issuer, as well as finance future capital expenditures in water utility business. Given green bond impact report provides an update to investors on both the allocation of funds, as well as environmental and social benefits of GGU’s eligible green project categories.

Our sustainability areas:

GGU believes its business model has an important role to play in the transition toward a more sustainable and lower-carbon economy in Georgia, both through the current investment portfolio and future investments. The environmental objectives of GGU are part of its overall strategy, and are implemented in two main areas:

- Water quality and water resource management
- Climate and energy

Green bond use of proceeds & 2021 allocation



Project	2021 allocation amount	Deliverables
Water and wastewater network rehabilitation	USD 3,698,967	- Upgrade of 121.6 kilometer of water network - Upgrade of 46.1 kilometer of wastewater network - Annual water loss reduction of 1.7 million m³
New connections	USD 7,839,873	- 3,875 additional new customers connected to uninterrupted water supply and wastewater treatment services
Total allocation	USD 11,538,840	

Allocation type	Business	Eligible Categories	Bond use of proceeds	2020 allocation	2021 allocation	Status
Refinancing	Renewable energy	Renewable energy Climate change adaptation	USD 95,000,000	USD 95,000,000	-	Fully allocated
	Water utility	Sustainable water & wastewater management Pollution prevention and control Energy efficiency	USD 125,000,000	USD 125,000,000	-	Fully allocated
Financing	Water utility	Sustainable water & wastewater management Pollution prevention and control	USD 30,000,000	USD 14,159,652	USD 11,538,840	Partially allocated
Total allocation amount			USD 250,000,000			

Green Bond Allocation and Impact Report 2021

Impact and allocation reporting by eligibility criteria

	Use of proceeds category	Green project descriptions	Total allocation amount	2021 environmental impact reported by eligibility criteria
	Renewable energy	(i) Construction and development of hydro and wind power plants	USD 94 million	<ul style="list-style-type: none"> ✓ 220 MW of installed capacity ✓ 598 GWh of clean energy generation ✓ 120,822 CO2 eq. emission avoided in tones ✓ Over 180,000 households served with clean energy
	Energy efficiency	<ul style="list-style-type: none"> (i) Installation of water flow meters and zoning of water supply area (ii) Installation of smart water infrastructural assets (iii) Introduction of GIS and SCADA systems and other support programs 	USD 10 million	<ul style="list-style-type: none"> ✓ 179.5 GWh of self-produced electricity consumption ✓ 0.37 KWh of electricity used per one m³ of water production
	Pollution prevention and control	(i) Modernization of Gardabani Wastewater Treatment Plant	USD 21 million	<ul style="list-style-type: none"> ✓ The treatment of on average 165 million m³ of wastewater and 11,162 m³ sludge. ✓ The concentrations of key parameters of treated wastewater comply with the maximum permissible concentration limits, which are: <ul style="list-style-type: none"> • Suspended particles – 35 mg/l • BOD – 25 mg O₂/l • Total nitrogen 10 mg/l • Total phosphorus – 1 mg/l • COD – 125 mg O₂/l
 	Sustainable water and wastewater management	<ul style="list-style-type: none"> (i) Rehabilitation and development of the water and wastewater network (ii) Installation of customer water meters (iii) Refurbishment of pumping stations, reservoirs and water treatment plants (iv) New customer connections (v) Replacement of liquid chlorine systems with sodium hypochlorite systems 	USD 120 million	<ul style="list-style-type: none"> ✓ Upgrade of 121.6 kilometer of water network ✓ Upgrade of 46.1 kilometer of wastewater network ✓ Annual water loss reduction of 1.7 million m³ ✓ 3,875 additional new customers connected to uninterrupted water supply and wastewater treatment services ✓ 28,438 water meters installed including 1,413 smart meters
	Climate change adaptation	<ul style="list-style-type: none"> (i) Installation of early warning system in Zhinvali HPP (ii) Riverbank protection 	USD 1 million	<ul style="list-style-type: none"> ✓ Protection of up to 50,000 people as a result of pre-notification system installed

Total allocation of USD 246 million

Georgia Global Utilities JSC
Medea (Mzia) Jugheli street #10
0179 Tbilisi, Georgia
lr@ggu.ge