RENEWABLE ENERGY SNAPSHOT:

Georgia

Empowered lives.
Resilient nations.

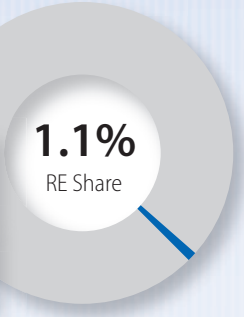
General Country Information

Population:	4,511,800
Surface Area:	69,700 km^2
Capital City:	Tbilisi
GDP (2012):	$ 15.8 billion
GDP Per Capita (2012):	$ 3,508
WB Ease of Doing Business:	8

Electricity Generating Capacity 2012

4,538 MW
Total Installed Capacity

50 MW
Installed RE Capacity



	Biomass	Solar PV	Wind	Small Hydro
Installed Renewable Electricity Capacity 2012 in MW	0	< 1	< 1	50[1]
Technical Potential for Installed Renewable Electricity Capacity in MW	1,700	96,900	2,300	4,500

Source: USAID (2008); EBRD (2009); MESD (2013); SHYCA (2010); ECS (2012); World Bank (2014); EIA (2010); EIA (2013); SRS NET & EEE (2008); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); and UNDP calculations.

Key information about renewable energy in Georgia

Georgia has tremendous potential for the utilization of renewable energy. Currently, 1.1 percent of the installed capacity consists of renewable energy sources. Small hydropower represents the greatest source of renewable energy. This is because the Government of Georgia has so far promoted hydropower as the only renewable energy source. The Renewable Energy State Program offers hydropower plants of up to 100 MW power purchase obligations with Georgia's Energy System Commercial Operator for 10 years. For each project, the tariff is negotiated by the Georgian National Energy Regulatory Commission and the individual investor

1 Value is from 2010

before the project is officially agreed, ensuring cost recovery and a fair rate of return (ECS, 2012). Although legislative support for renewable energy is currently lacking (other than for small hydropower), support for small hydropower plants is very investor friendly. The Government of Georgia streamlined permit procedures and application processes, producing a clear set of licences required for potential small hydropower developers. Since hydropower plants up to 13 MW are exempt from the licence for power generation, the commission of a small hydropower plant requires only a land lease or purchase licences obtained from local authorities, a water usage permit issued by the Ministry of Environment and Natural Resources Protection and a construction permit issued by the Ministry of Economy and Sustainable Development. The average generation tariff in Georgia is approximately $0.028/kW-h with variation of $0.007/kW-h for older and $0.068/kW-h for newer hydropower plants (ECS, 2012). The investor friendly environment is reflected in the World Bank's Ease of Doing Business index, which ranks Georgia in eighth position globally. For some sub-indicators, Georgia performs better still. Dealing with construction permits (2nd position) and getting credit (3rd position) is very easy and property registration is the least complex in the world (IFC & World Bank, 2014). The reform package increased the number of foreign investors from 368 in 2004 to 2,000 in 2010 (MESD, 2013).

Legislation and policy

The Renewable Energy State Program was adopted in 2008 and determines the rules for renewable energy power plants, particularly for the construction of hydropower plants. As well as the project-specific feed-in tariffs for hydropower plants up to 100 MW, developers of hydropower plants up to 10 MW are granted more benefits. Small hydropower plants are not required to sell their electricity to the national grid, but directly to consumers at bilaterally negotiated tariffs. Small hydropower plant developers are allowed to export their electricity without an export licence, except for the three winter months, when the Government of Georgia offers a power purchase guarantee to ensure domestic energy supply (MESD, 2013). In addition, distribution companies are obliged to provide free grid connection (ECS, 2012). To reduce potential investors' information costs, the Ministry of Energy has published a manual for small hydropower developers, and a list of possible small hydropower plant grounds open for investment with detailed pre-feasibility studies.[2]

2 The manual for small hydropower developers can be found at: http://smallhydrogeorgia.org/en/;
The list of investments can be found at: www.energy.gov.ge/investor.php?id_pages=18&lang=eng;
An interactive map visualizing the list of investment: http://hpp.minenergy.gov.ge/index.php?lang=eng;
An example of a pre-feasibility study can be found at: http://hydropower.ge/user_upload/Stori_0_Pre-Feasibility_Report_07-04-2011_final_new.pdf.

Institutions

Organization	Responsibility	Website
Ministry of Energy	- Responsible for drafting the national energy policy	www.minenergy.gov.ge/
Georgian National Energy Regulatory Commission (Independent Regulator)	- Sets tariffs for the generation, transmission dispatch and distribution of electricity - Grants generation licences for power producers (except for small hydropower plants up to 13 MW, which are exempt from licencing)	www.gnerc.org/
Georgian State Electrosystem and Srenergo	- State-owned GSE and partly privatized Srenergo are the two transmission companies in Georgia	www.gse.com.ge/ www.srenergo.ge/
Energy System Commercial Operator	- Responsible for the purchase and disposal of power balance	www.esco.ge/
Georgian National Investment Agency	- Responsible for the consultation of foreign investors	www.investingeorgia.org/

Opportunities to finance renewable energy projects in Georgia

Financing organization	Details	Website
Asian Development Bank (ADB)	Provides equity, loans and guarantees for the private sector initiatives with clear development impacts as well as a sound rate of return.	www.adb.org/
Green Growth Fund	Provides direct and indirect financing (through financial intermediaries) for small renewable energy projects usually no larger than €50 million.	www.ggf.lu/
International Finance Corporation (IFC)	With investment (equity, loans and other financial instruments) and advisory services, IFC supports investment in renewable energy power plants. With its InfraVenture programme, IFC support sand proactively develops renewable private and public- private partnership infrastructure projects.	www.ifc.org/
European Bank for Reconstruction and Development (EBRD)	Provides renewable energy developers with equity, loans and loan guarantees for projects with good commercial prospects of up to 15 years' duration.	www.ebrd.com/pages/workingwithus/projects.shtml

Georgia

Recent projects

Company	Project	Status
Clean Energy Invest (Norway), Tata Power (India) and International Finance Corporation	Construction of several small and medium sized hydropower plants is planned, with a total capacity of 400 MW. The estimated investment costs are $400 million, of which IFC InfraVentures contributed 20 percent, and Tata and Clean Energy Invest 40 percent each. It is planned to export some of the energy to Turkey and the first phase is planned to be commissioned in 2016.	**Under construction**
Georgia Urban Energy LLC (Georgia) as a subsidiary of Anadolu Group (Turkey)	European Bank for Reconstruction and Development invested $5 million in Georgia Urban Energy LLC as an equity stake and granted $63.5 million as a loan. International Finance Corporation provided a $37.5 million loan for the 87-MW hydropower plant on Georgia's Paravani River.	**Under construction**

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