RENEWABLE ENERGY SNAPSHOT:

Tajikistan

Empowered lives.
Resilient nations.

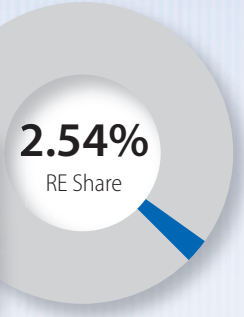
General Country Information

Population:	8,008,990
Surface Area:	142,550 km^2
Capital City:	Dushanbe
GDP (2012):	$ 7 billion
GDP Per Capita (2012):	$ 872
WB Ease of Doing Business:	143

Electricity Generating Capacity 2012

5,190 MW
Total Installed Capacity

132 MW
Installed RE Capacity



	Biomass	Solar PV	Wind	Small Hydro
Installed Renewable Electricity Capacity 2012 in MW	0	< 1	0	132
Technical Potential for Installed Renewable Electricity Capacity in MW	300	195,000	2,000	23,000

Sources: ECS (2010); UNDP (2012); Renewable Facts (2013); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); SRS NET & EEE (2008); EIA (2013); EIA (2010); Douglas et al. (2013); EBRD (2009); USEA (2013); EDB (2011); World Bank (2014); Ministry of Energy and Industry (2013); and UNDP calculations.

Key information about renewable energy sources in Tajikistan

Of Tajikistan's total generation capacity, just 2.54 percent comes from renewable energy, although the technical potential for electricity from small hydropower plants is the highest in the region. The significant potential of small hydropower can increase the quality of life of remote populations who often face energy shortages (Karimov et al., 2013). The Government of Tajikistan promotes renewable energy with project-specific feed-in tariffs. The tariffs are based on the project's costs and guaranteed for 15 years (UNDP, 2012). Electricity produced from wind, solar, geothermal, biomass and hydropower (up to 30 MW) plants are eligible when plant operators receive approval from the government's Antimonopoly Service. The feed-in tariffs are necessary, because investment costs of small hydropower plants are estimated at $2,500 - $3,000 per 1 kW

of installed capacity. In the World Bank's Doing Business indicator Tajikistan (143) faces difficulties in obtaining construction permits (184). But legislation is favourable for the protection of investors (22) (IFC & World Bank, 2014). State owned electricity company, Bargi Tajik, owns most electricity generation capacity. However, since the country adopted a programme for the construction of small hydropower plants, several mini and small plants, with a total capacity of 47 MW, were commissioned in 2010 and 2011. Some are privately owned and operated (UNDP, 2012). The country also adopted a plan to restructure Bargi Tajik until 2018 and to create an independent regulator in the electricity sector. Energy sector liberalization in combination with tariff policy reforms will attract and increase private investment in the future.

Legislation and policy

The basic strategic and legislative framework for renewable energy is defined in the Long-term Programme for Building Small Hydropower Plants 2009 – 2020, in the Target Programme for the Widespread Use of Renewable Energy Sources and in the Law on the Use of Renewable Energy Sources, adopted in 2010. The first envisages the construction of some 190 small hydropower plants with a total capacity of 100 MW. The latter gives renewable energy producers more investment incentives. Electricity transmission losses have to be covered by the supply organization. Most small hydropower plants are constructed in remote areas. Connection to the grid is therefore possible, but not compulsory. Power plant connection to the grid is free of charge for the plant operator and connection has to take place before the plant is commissioned. Power supply organizations are punished if payment is delayed. Independent small hydropower plants are exempt from the water royalty tax. Tajikistan's Customs and Tax Codex ensures exemption from customs duties and VAT on imported materials and equipment, along with (under the Tax Codex) exemption from profit tax, land tax, capital facility tax and social tax for employees during the construction process.

Institutions

Organization	Responsibility	Website
Ministry of Energy and Industry	- Approves and grants renewable energy licences	www.minenergoprom.tj
Ministry of Economic Development and Trade	- The Ministry's Anti-Monopoly Department approves and sets tariffs - The President approves and amends final customer tariffs	www.medt.tj
Barqi Tajik	- Transfers, distributes and generates most of the country's electricity - Is responsible for the practical implementation of state-funded projects for promoting renewable energy	www.barkitojik.tj/
State Investment Agency	- Provides investment information and advisory for foreign investors	www.tajikinvest.com/
State Committee on Investment	- Provides investment information and a list of available small hydropower projects available for investment	www.gki.tj

Opportunities to finance renewable energy projects in Tajikistan

Financing organization	Details	Website
Asian Development Bank (ADB)	Provides equity, loans and guarantees for private sector with clear development impacts as well as a sound rate of return.	www.adb.org/
Eurasian Development Bank	Prioritizes investment in power generating renewable energy projects through loans of $30 to $100 million.	www.eabr.org/e/
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
International Finance Corporation (IFC)	Provides loans and equity to eligible private technically sound and profitable projects either via direct capital or financial intermediaries.	www.ifc.org/

Recent projects

Company	Project	Status
Asian Development Bank (ADB)	Funded two small hydropower plants in Rash Valley.	**Commissioned**
Sangob (Iran)	Sangtuda-2" HPP (220 MW), which will remain the property of Sangob until 2025.	**Commissioned**
Kyocera (Japan)	Installed a 120kW solar panel on a hospital roof.	**Commissioned**

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