RENEWABLE ENERGY SNAPSHOT:

Turkmenistan



General Country Information

 Population:
 5,172,931

 Surface Area:
 488,100 km²

 Capital City:
 Ashgabat

 GDP (2012):
 \$ 33.7 billion

 GDP Per Capita (2012):
 \$ 6,511

WB Ease of Doing Business: -

Electricity Generating Capacity 2012





Installed Renewable Electricity Capacity 2012 in MW
Technical Potential for Installed Renewable Electricity Capacity in MW

Biomass	Solar PV	Wind	Small Hydro
0	0	0	5
Not significant	655,000	10,000	1,300

Sources: GTZ (2009); Renewable Facts (2013); SRS NET & EEE (2008); EIA (2010); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); FAO (2012); Ren21 (2013); INOGATE (2012); World Bank (2014); and UNDP calculations.

Key information about renewable energy in Turkmenistan

Turkmenistan's continental and dry desert climate offers tremendous potential for solar power plants. Especially in the regions Kuli, Gasan and the capital, Ashgabat, the surface receives the most usable sunlight in the CIS region (GTZ, 2009). In 2010, Turkmenistan had the world's fourth largest proven gas reserves, giving it the region's second largest GDP per capita and foreign direct investment (World Bank, 2014). Due to natural gas being almost the only source for power generation, very low subsidized retail electricity tariffs and the absence of a legislative framework, the share of renewable energy in the overall installed capacity is only 0.18 percent – the lowest in the region. The electricity market is managed by the vertically integrated and

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state-owned Turkmenenergo, which owns and operates the grid. Turkmenenergo also generates the electricity and distributes the electricity to the end consumers.

Legislation and policy

In policy documents on climate change mitigation, the Turkmen Government aims to increase renewable energy generation, but a legislative framework to promote and support investment in renewable energy does not yet exist. The Second National Communication of Turkmenistan under the United Nations Framework Convention on Climate Change calls for a National Development Programme for Renewable Energy Sources in Turkmenistan until 2010 (Ministry of Nature Protection et al., 2010). The programme will increase the utilization of renewable energy sources. In June 2012, the President approved the National Strategy on Climate Change, which was presented at the World Sustainable Development Summit: Rio+20. The strategy outlines the country's long-term vision for promoting renewable energy and low-emission development of the economy. The government is now preparing two actions plans on mitigation and adaptation in support of the strategy implementation. These plans were expected to be approved and launched in 2014. In line with the strategy, the government decided to create a National Climate Change Fund to finance climate change mitigation and adaptation projects, including renewable energy generation. UNDP supports the Government of Turkmenistan through several environment and energy projects (UNDP Turkmenistan, 2013).

Institutions

Organization	Responsibility	Website
Ministry of Finance	- Shapes tariff policy and sets tariffs	www.minfin.gov.tm/
Ministry of Power and Energy	- Manages the country's electricity sector with Turkmenenergo	www.minenergo.gov.tm
Turkmenenergo	- Vertically integrated state-owned electricity company responsible for managing and operating the national grid as well as generating and distributing the electricity	www.minenergo.gov.tm

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Opportunities to finance renewable energy projects in Turkmenistan

Financing organization	Details	Website
Asian Development Bank (ADB)	Provides equity, loans and guarantees for the projects in the private sector that have clear development impacts as well as a sound rate of return.	www.adb.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/pro jects.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/

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