

RENEWABLE ENERGY SNAPSHOT:



Kyrgyzstan

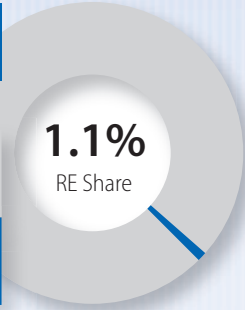
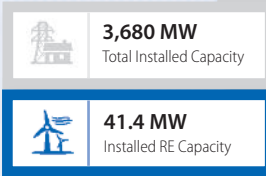


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General Country Information

Population: 5,582,100
 Surface Area: 199,949 km²
 Capital City: Bishkek
 GDP (2012): \$ 6.5 billion
 GDP Per Capita (2012): \$ 1,160
 WB Ease of Doing Business: 68

Electricity Generating Capacity 2012



- 
Biomass
- 
Solar PV
- 
Wind
- 
Small Hydro

Installed Renewable Electricity Capacity 2012 in MW

Technical Potential for Installed Renewable Electricity Capacity in MW

	Biomass	Solar PV	Wind	Small Hydro
Installed Capacity (MW)	0	0	0	41.4
Technical Potential (MW)	200	267,000	1,500	1,800

Sources: EBRD (2009); Botpaev et al. (2012); Ministry of Energy of the Kyrgyz Republic (2010); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); SRS NET & EEE (2008); EIA (2013); Renewable Facts (2013); EIA (2010); World Bank (2014); DESERTEC (2012); and UNDP calculations.

Key information about renewable energy sources in Kyrgyzstan

The renewable energy potential for Kyrgyzstan, one of the poorest countries in the region, remains mainly untapped. If large hydropower plants are defined as renewable energy sources, the share of installed renewable energy electricity capacity would be around 80 percent. But if only small hydropower plants are defined as renewable energy sources, the installed renewable energy capacity falls to 1.1 percent. The Law of the Kyrgyz Republic on Renewable Energy Sources, which was adopted in 2009, created a legislative framework for renewable energy feed-in tariffs. The tariffs are designed to ensure reimbursement and coverage of investment costs for up to eight years. However, the law is yet to be fully implemented, and several bylaws, for example the definition of tariff calculation and determination, are still under development. The

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government is currently reviewing drafts of the bylaws. A 2011 UNDP study estimated the generation costs of renewable energy to be \$0.19 per kWh for small hydropower plants, \$0.20 per kWh for wind and biomass, and \$0.32 per kWh for solar power (UNDP, 2011). To make electricity production from renewable sources competitive, technology-specific tariffs are required to increase private investment, because the current electricity tariff (c. \$0.1/kWh) is significantly below the estimated investment costs (OJSC *Elektricheskije Stantsii*, 2013). Kyrgyzstan is ranked 68 in the World Bank's Ease of Doing Business ranking. But a sub-indicator, 'Starting a Business', Kyrgyzstan is in 12th spot – higher than the United States of America in 20th (IFC & World Bank, 2014).

Legislation and policy

Although the laws on Energy and on Electrical Power created the legislative framework for the transition of a state-owned to a liberalized energy sector, OJSC *Elektricheskije Stantsii* remains the country's major generating company, producing 98 percent of Kyrgyzstan's electricity (OJSC *Elektricheskije Stantsii*, 2013). Kyrgyzstan's National Energy Programme officially recognizes environmental protection in the energy sector and the promotion of a new tariff policy, but no specific targets are set by the government (Kyrgyz Republic, 2008). There are other incentives for investors in renewable energy. The Law on Renewable Energy Sources exempts imported and exported equipment and materials for the use of renewable energy power plants from custom duties. Transmission companies are obliged to purchase renewable electricity. The Law on Energy makes energy generation subject to licencing, which is issued by the State Department for Regulation of Fuel and Energy.

Institutions

Organization	Responsibility	Website
Ministry of Energy	- Plans, develops and drafts energy strategy and laws.	www.energo.gov.kg/
State Department for Regulation of the Fuel and Energy	- As a Ministry of Energy department, it grants energy production licences and sets energy tariffs by means of generation costs.	www.energo.gov.kg
OJSC Elektricheskije Stantsii	- Produces 98% of the generating electricity output and offers several cooperation projects for foreign investors.	www.energo-es.kg/
NEGK	- Manages and operates the national wholesale grid and transfers energy from the producers to the four regional distribution companies.	www.energo.kg
Hydro Invest	- Non-profit website to attract, consult and facilitate investment in small hydropower plants.	www.hydroinvest.biz/
CREED	- Non-profit NGO service centre to attract, consult and facilitate investment in renewable energy sources.	www.greenenergy.kg

Opportunities to finance renewable energy projects in Kyrgyzstan

Financing organization	Details	Website
KyrSEFF (European Bank for Reconstruction and Development)	Has funds of \$20 million from the European Bank for Reconstruction and Development and provides loans up to \$300,000 and grants of up to 20 percent of the loan for private investments in renewable energy.	www.kyrseff.kg/en/
Asian Development Bank (ADB)	Asian Development Bank 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 (EDB)	Prioritizes investment in power generating renewable energy projects through loans of between \$30 and \$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
RusHydro (Russia)	Construction of several small hydropower plants on the Naryn River.	Under Construction

Kyrgyzstan

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