

RENEWABLE ENERGY SNAPSHOT:



# Uzbekistan

*Empowered lives.  
Resilient nations.*



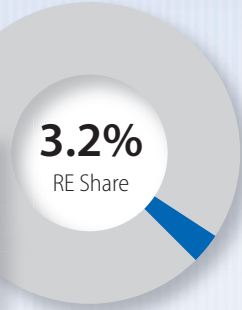
### General Country Information

Population: 29,776,850  
 Surface Area: 447,400 km<sup>2</sup>  
 Capital City: Tashkent  
 GDP (2012): \$ 51.1 billion  
 GDP Per Capita (2012): \$ 1,717  
 WB Ease of Doing Business: 146

### Electricity Generating Capacity 2012

**12,517 MW**  
Total Installed Capacity

**396 MW**  
Installed RE Capacity



- Biomass**
- Solar PV**
- Wind**
- Small Hydro**

### Installed Renewable Electricity Capacity 2012 in MW

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

<b>1.5</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>394</b>
<b>800</b>	<b>593,000</b>	<b>1,600</b>	<b>1,800</b>

*Sources: GTZ (2009); AUCC (2012); UNDP (2007); World Bank (2014); Governmental Portal of the Republic of Uzbekistan (2010); UNDP (2013); Renewable Facts (2013); EIA (2010); EIA (2013); SRS NET & EEE (2008); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); SJSJ Uzbekenergo (2013); CER (2011); and UNDP calculations.*

### Key information about renewable energy in Uzbekistan

With its abundance of natural gas and oil resources, the energy sector of Uzbekistan is heavily dependent on non-renewable resources. Although the technical potential for renewable energy sources, particularly solar power, is very high, dependence on non-renewable sources, along with very low energy tariffs, aggravates the process of energy diversification (Eshchanov et al., 2013). The high upfront capital investment required for renewable energy projects and an absence of a legislative support scheme make renewable energy unfavourable compared to investments in oil or gas (UNDP, 2007). The Law on Rational Energy Utilization introduces project-specific feed-in tariffs by allowing a sufficient return on the capital invested, the future operation costs and other technical costs for renewable energy facilities. But the vertically integrated,

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state-owned electricity company UzbekEnergo generates 97.5 percent of the country's electricity. The remaining 2.5 percent is the entire installed small hydropower capacity, of which 2.1 percent is operated by state owned Uzsuvenego and 0.4 percent is operated by small block-stations enterprises (SJS Uzbekenergo, 2013). The law has not yet been applied to private investors. Around half of Uzbekistan's population lives in rural areas that experience significant problems with electricity shortages and cut-offs due to high distribution losses, illegal energy tapping and the poor condition of the infrastructure in remote areas generally. A 2013 study by Eshchanov et al. suggests a high degree of acceptance and interest in renewable energy by rural populations. This makes investment in off-grid renewable energy power plants in remote areas interesting. The World Bank's Ease of Doing Business indicator ranks Uzbekistan at 146 (IFC& World Bank, 2014), although Uzbekistan is currently liberalizing its energy sector.

### Legislation and policy

One of the government's intentions in its development of the electricity sector is the diversification of power generation. The Law on Electric-Power Industry, adopted in 2009, aims to increase private investment in the energy sector. The Law on Rational Energy Utilization provides more benefits for renewable energy power plants. Priority grid access is granted if in line with the grid's optimal operation, and energy suppliers are obliged to purchase the energy from renewable energy sources at agreed prices (Article 20). Despite those incentives, the Government of Uzbekistan wants to attract foreign investment by exempting newly established renewable energy enterprises from profit tax, property tax, and unified tax payments for small and medium enterprises. Renewable energy producers are also exempt from payments to the country's road fund. Those tax privileges are granted for three years if the foreign investment is between \$300,000 and \$3 million, or for five and seven years respectively for investments up to and exceeding \$10 million respectively. The government also ensures legislation security of 10 years (UNDP et al., 2013). It should be noted that those investment incentives do have conditions. For example, the share of the foreign investor's capital should not be less than 33 percent for the incentives to apply.

## Institutions:

Organization	Responsibility	Website
<b>Cabinet of Ministers</b>	- Responsible for the country's energy policy	<a href="http://www.gov.uz/">www.gov.uz/</a>
<b>Ministry of Economy</b>	- Responsible for development programmes on modernization of sectors, and introduction of advanced and resource-saving technologies	<a href="http://www.mineconomy.uz">www.mineconomy.uz</a>
<b>Ministry of Finance</b>	- Regulates and sets tariffs	<a href="http://www.mf.uz/">www.mf.uz/</a>
<b>Ministry of Agriculture and Water Recourses</b>	- Manages the Uzsuvenergo company, responsible for the operation of small hydropower plants in the country	<a href="http://www.agro.uz/">www.agro.uz/</a>
<b>Uzbekenergo</b>	- Vertically integrated and state electricity company owning over 97 percent of the country's generating capacity and responsible for distribution and transmission	<a href="http://www.uzbekenergo.uz">www.uzbekenergo.uz</a>
<b>UZINFOINVEST</b>	- Investment agency responsible for consulting and attracting foreign investors	<a href="http://www.uzinfoinvest.uz/">www.uzinfoinvest.uz/</a>

## Opportunities to finance renewable energy projects in Uzbekistan

Financing organization	Details	Website
<b>European Bank for Reconstruction and Development (EBRD)</b>	Provides renewable energy developers with equity, loans and loan guarantees for projects with good commercial prospects of up to 15 years' duration.	<a href="http://www.ebrd.com/pages/workingwithus/projects.shtml">www.ebrd.com/pages/workingwithus/projects.shtml</a>
<b>International Finance Corporation (IFC)</b>	Provides loans and equity to eligible private and technically sound and profitable projects either via direct capital or financial intermediaries	<a href="http://www.ifc.org/">www.ifc.org/</a>
<b>Asian Development Bank (ADB)</b>	Provides equity, loans and guarantees for private sector projects with clear development impacts as well as a sound rate of return.	<a href="http://www.adb.org/">www.adb.org/</a>

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## Recent projects

Company	Project	Status
<b>Joint venture of Suntech Power Holdings (China) and Uzbekenergo (Uzbekistan)</b>	Solar panel production, which aims to produce 50 MW of solar panels.	<b>Under development</b>
<b>Uzbekenergo (Uzbekistan)</b>	The company intended to hold a tender in late-2013 for a \$240-million 100-MW solar power station in the Samarkand region	<b>Under development</b>

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