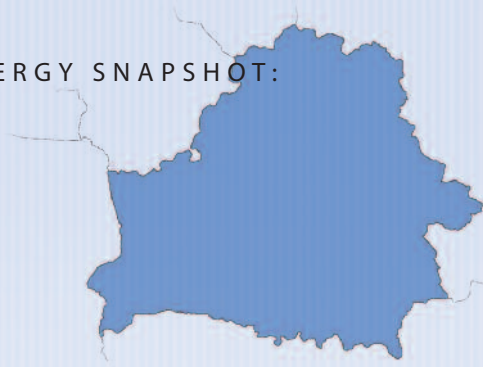


RENEWABLE ENERGY SNAPSHOT:



Empowered lives.
Resilient nations.

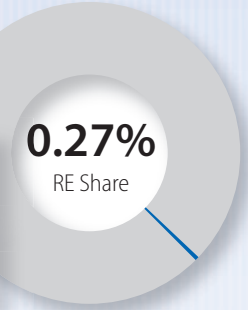
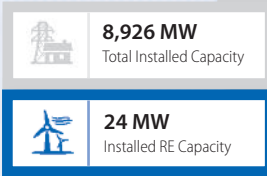
Belarus



General Country Information

Population: 9,464,000
 Surface Area: 207,600 km²
 Capital City: Minsk
 GDP (2012): \$ 63.3 billion
 GDP Per Capita (2012): \$ 6,685
 WB Ease of Doing Business: 63

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

6	< 1	1.9	16.1
2,400	283,000	96,800	300

Sources: Raslavicius (2012); WWEA (2013); Ministry of Energy of the Republic of Belarus (2013); ECS (2013); EBRD (2002); World Bank (2014); Renewable Facts (2013); EIA (2013); SRS NET & EEE (2008); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); and UNDP calculations

Key information about renewable energy in Belarus

Insufficient availability of primary energy sources means that the Republic of Belarus (RB) depends greatly on oil and gas imports (ECS, 2013). The government therefore seeks to ensure energy security through a range of policies. These include a diversification of the energy mix by increasing the use of renewable energy sources and local fuels (ECS, 2013). The Law of RB on Renewable Energy Sources defines energy producers' rights and sets prices for power produced from renewable sources. Individual entrepreneurs and legal entities that do not belong to Belenergo SPA, the major state owned energy company, are eligible for feed-in tariffs. The tariffs are determined by coefficients on the tariffs for industrial and equivalent consumers with connected capacity of up to 750 kVA. They are also subject to the exchange rate between the US dollar and the Belarusian ruble.

RENEWABLE ENERGY SNAPSHOT:

Eligible technologies	Multiplying ratios		Feed-in-tariff in \$/Mw-h	
	First 10 years	After 10 years	First 10 years	After 10 years
Electricity from biogas, wood, hydro, wind, and geothermal sources	1.3	0.85	184	122
Electricity from solar sources	3	0.85	422	122

Source: ECS (2013) and UNDP calculations

It is estimated that, until 2020, \$45.5 billion in capital investment will be required for the energy sector (Raslavicius, 2012). Despite a wide range of existing incentive schemes for renewable energy, interest from foreign and local investors has so far been moderate. But according to the World Bank's Ease of Doing Business, starting a business (RB is ranked in 15th position) and property registration (3rd) is relatively cheap and uncomplicated (IFC & World Bank, 2014).

Legislation and policy

There are several strategic policy documents on renewable energy. The Strategy for Energy Potential Development states that local fuels and renewable energy shall have a share of not less than 30 percent and 32 percent in renewable heat energy production by 2015 and 2020 respectively (ECS, 2013). There are also other investment incentives in addition to the feed-in tariffs. The state guarantees complimentary access for renewable energy producers to the power grid. Purchase of produced energy is ensured by the state-owned supplying organizations. Imported equipment required for the implementation of renewable energy production plants is exempt from value added tax. There are also exemptions from land taxes. Investment in one of Belarus' six Free Economic Zones offers further incentives, such as no custom duties for imported raw materials and equipment, a guarantee for a fixed legislation of seven years and tax exemption on real estate. Cooperation with the state in investment has additional benefits, because investors often have scope to recommend and economically justify the terms of the investment contracts.

Institutions

Organization	Responsibility	Website
Ministry of Energy	- Shapes legislation for electricity generated by legal entities and individual entrepreneurs from renewable sources	www.minenergo.gov.by/en
Ministry of Natural Resources and Environment	- Issues certificates confirming the origin of energy - Identifies suitable locations for power plants	www.minpriroda.gov.by/en/
Ministry of Economy	- Sets tariffs for energy produced from renewable sources - Protects producers from unfair competition	www.economy.gov.by/en
Belenergo SPA	- Owns 95 percent of the installed capacity - Operates Belarusian energy system, generates distributes and sells electricity	www.energo.by/news/p11.htm
Department for Energy Efficiency of the State Standardization Committee	- Initiates, elaborates, coordinates and supervises the State and Local Energy Efficiency and Renewable Energy Development Programmes - Represents Belarus at the IRENA	www.energoeffekt.gov.by/
National Agency of Investment and Privatization	- Assists foreign investors in market information acquisition and consolidates with local key stakeholders and authorities	www.investinbelarus.by/en/

Opportunities to finance renewable energy projects in Belarus

Financing organization	Details	Website
BelSEFF	\$50 million credit line is available for private and public Belarusian companies investing in renewable energy projects which have a positive net present value over a 10-year period by using an 8 percent discount rate in hard currency cash flows.	www.belseff.by/en
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
Nordic Environment Finance Corporation (NEFCO)	Funds private investors of projects that, for example, cooperate with municipalities and other authorities in: - Subscriptions of equity and shares, facilitating mobilization of the necessary equity base for a project. - Medium and long-term loans and guarantees.	www.nefco.org
Eurasian Development Bank (EDB)	Prioritizes investment in power generating renewable energy projects by granting debt from \$30 to \$100 million.	www.eabr.org/e/

Belarus

Recent projects

Company	Project	Status
MWH Global (Italy)	EBRD-funded project to strengthen international cooperation by raising awareness of the Belarus market potential and attracting foreign investors.	Under development
HEAG (China)	Constructed a 1.5MW wind power station in Grabniki, Novogrudok region.	Commissioned
TRIPLE (Belarus)	Construction of a 25 MW wind farm (2015). Wind measurements completed.	Under development
GrodnoEnergo (Belarus)	17 MW hydropower plant constructed and operational since 2013.	Commissioned

References

Energy Charter Secretariat (ECS), 2013: In-Depth Review of the Energy Efficiency Policy of the Republic of Belarus. Available at: www.encharter.org/fileadmin/user_upload/Publications/Belarus_EE_2013_ENG.pdf

European Bank for Reconstruction and Development (EBRD), 2002: Renewable Energy Resource Assessment - Renewable Energy Country Profile Belarus. Available at: <http://ws2-23.mylodspring.com/sites/renew/Shared%20Documents/Country%20Notes/old%20website%20country%20profiles/Belarus.pdf>

Hoogwijk, M., 2004: On the global and regional potential of renewable energy sources. Utrecht: Universiteit Utrecht, Faculteit Scheikunde. Dissertation. Available at: <http://igitur-archive.library.uu.nl/dissertations/2004-0309-123617/full.pdf>

Hoogwijk, M. and W. Graus, 2008: Global Potential of Renewable Energy Sources: A Literature Assessment. Available at: www.ecofys.com/files/

[report_global_potential_of_renewable_energy_sources_a_literature_assessment.pdf](#)

International Finance Corporation (IFC) and World Bank, 2014: Doing Business – Measuring Business Regulations. Available at: www.doingbusiness.org/data/exploreeconomies/belarus/

Joint Research Centre of the European Commission (JRC), 2011: Technical Assessment of the Renewable Energy Action Plans. Available at: http://ec.europa.eu/dgs/jrc/downloads/jrc_reference_report_2011_reap.pdf

Ministry of Energy, Republic of Belarus, 2013: Belarusian Energy System Installed Capacity. Available at: www.odu.by/index.php?lang=rus&link=basics2007 (Russian)

Raslavicius, L., 2012: Renewable Energy Sector in Belarus – A review, in: Renewable and Sustainable Energy Reviews (16): 5399-5413

Renewable Facts, 2013: Belarus. Available at: www.renewablefacts.com/country/belarus

Scientific Reference System on New Energy Technologies, Energy End-use Efficiency and Energy (SRS NET & EEE), 2008: WP3-Technology data - Executive Summary on Small Hydro. Available at: <http://sis.epu.ntua.gr/Portals/SRS/material/technologyreview/Small%20Hydro.pdf>

World Bank, 2014: Data Catalog. Available at: <http://datacatalog.worldbank.org/>

World Wind Energy Association (WWEA), 2013: 2012 Annual Report. Available at: www.indea.org/webimages/WorldWindEnergyReport2012_final.pdf

U.S. Energy Information Administration (EIA), 2013: Levelized Cost of New Generation Resources in the Annual Energy Outlook 2013. Available at: www.eia.gov/forecasts/aeo/electricity_generation.cfm