RENEWABLE ENERGY SNAPSHOT:

Lithuania



General Country Information

Population: 2,985,509
Surface Area: 65,300 km²
Capital City: Vilnius
GDP (2012): \$ 42.1 billion

GDP (2012): \$ 42.1 billion
GDP Per Capita (2012): \$ 14,097

WB Ease of Doing Business: 17

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
29	6.1	225	27
1,400	60,000	2,200	70

Sources: Gaigalis et al. (2013); EurObserv'Er (2013); WWEA (2013); EBRD (2009); ESHA (2013); EC (2013); EIA (2013); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); and UNDP calculations.

Key information about renewable energy in Lithuania

In Lithuania the technical potential for renewable energy is huge, especially for biomass and wind. Renewable energy plants that were acquired after 24 May 2011 receive support through a combination of feed-in tariffs and a tender based auction system. Renewable wind, biomass, hydro and solar energy not exceeding installed capacity of 10kW are eligible for the guaranteed tariff for 12 years. All other renewable energy plants exceeding this capacity have to compete through tenders in each region. Tenders take place quarterly and are organized by the National Control Commission for Prices and Energy, adjusting the maximum prices before every tender. The lowest preferred tariff wins the tender (ResLegal, 2013). The feed-in tariff caused massive investment in wind power plants, resulting in installed wind power capacity rising from 91 MW in 2009 to

Feed-in tariff in Lithuania

Eligible technologies	Installed capacity	Maximum pr	ice in €/MW-h
Wind	<10 kW >10 kW and <350 kW >350 kW	81.10 75.30 63.27	
Biomass	<10 kW >10 kW and <5 MW >5 MW	new commissioned 107.16 92.68 81.10	reconstructed 92.68 78.20 69.51
Hydro	<10 kW >10 kW and <1 MW >1 MW	69	.20 .51 .72
Solar	<10 kW >10 kW and <100 KW > 100 KW	integrated in buildings 199.84 179.56 167.98	not integrated in buildings 156.93 141.91 133.23

Source: NCC (2014) – applicable from 1 April 2014 to 31 June2014 (LTL/€ exchange rate on 2 April 2014)

255 MW at the end of 2012 (WWEA, 2013). In 2014, Lithuania was ranked in 17^{th} position in the World Bank's Ease of Doing Business index, an increase of eight positions over the 2013 level (IFC & World Bank, 2014).

Legislation and policy

EU Directive 2009/28/EC required Lithuania to develop a National Renewable Energy Action Plan. The country established a binding national target of 25 percent share of renewable energy in its gross final energy consumption by 2020 (Republic of Lithuania, 2010). Although the existing feed-in tariff seeks to support the achievement of this target, the government introduced caps for applicable renewable sources until 2020: a maximum installed capacity of 141 MW for hydro, 10 MW for solar and 500 MW for wind power plants (ResLegal, 2013). Other incentives schemes also exist. Priority grid access is available to renewable energy producers and grid operators are required to ensure such access. System operators should only bear 20 percent and 40 percent of the grid connection costs if the installed capacity is up to 350kW and above 350 kW respectively. Electricity generated from renewable sources is exempt from excise tax (ResLegal, 2013).

Lithuania

Institutions

Organization	Responsibility	Website
Ministry of Energy	Responsible for implementing support mechanisms and monitoring the law's implementation Responsible for administering the fund for the Special Programme for Climate Change Mitigation	www.enmin.lt/en/
National Control Commission for Prices and Energy	Independent national regulatory authority approves the methodology for establishing state regulated prices and sets these prices quarterly Manages the tender for renewable energy sources and selects winning tenders	www.regula.lt/en/
Lithuanian Energy Agency	- Drafts the National Energy Strategy and manages its implementation	www.ena.lt/en/
Litgrid	- Responsible for operation of the national electricity grid and provides grid access	www.laaif.lt/

Opportunities to finance		
Financing organization	Details	Website
Lithuanian Environmental Investment Fund	Supports renewable energy investment projects through interest subsidies and soft loans. There are two calls a year that are published in the media or on the Fund's website.	www.laaif.lt/
Fund for the Special Programme for Climate Change Mitigation	Offers loans for applicants not engaged in economic and commercial activities of €1,447,270, and €199,723 for those engaged in such activities. The Ministry of Environment and the applicant have to sign a finance agreement and applications have to be sent to Lithuanian Environmental Investment Funds.	www.laaif.lt/
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
European Investment Fund (EIF)	Gives (micro-) loans and guarantees to small and medium enterprises through 'Progress Microfinance' and JEREMIE initiative through intermediate banks.	www.eif.org/what_we_do/where/ltu/

Lithuania

Recent projects

Company	Project	Status
Nelja Energia (Estonia)	Opened Lithuania's largest wind farm consisting of 17 wind turbines with a total capacity of 39.1MW.	Commissioned
Dalkia (France)	Investment of €145 million announced for a biomass heating plant, with 300 MW installed capacity planned. The World Bank and the European Bank for Reconstruction and Development are slated to invest in this project.	Under development

References

European Bank for Reconstruction and Development (EBRD), 2009: Lithuania — Country Profile. Available at: http://ws2-23.myloadspring.com/sites/renew/countries/Lithuania/default.aspx

EurObserv'Er, 2013: Photovoltaic Barometer 2013. Available at: www.energies-renouvelables.org/observ-er/stat_baro/observ/baro-jdp9.pdf

European Commission (EC), 2013: EU Energy in Figures-Statistical Pocket Book 2013. Available at: http://ec.europa.eu/energy/publications/doc/2013_po cketbook.pdf

European Small Hydropower Association (ESHA), 2013: HYDI Database. Available at: http://streammap.esha.be/

Gaigalis V. Markevicius, A., Katinas, V., Skema, R., and A. Tumosa, 2013: Analysis of energy transition possibilities after the decommission of a nuclear power plant in Ignalina region in Lithuania. In: Renewable and Sustainable Energy Reviews (24): 45-56

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

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

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

National Control Commission for Prices and Energy (NCC), 2014: Tariffs for electricity from renewable energy sources. Available at:

http://www.regula.lt/Docs/nutarimas-66.docx (Lithuanian)

Renewable energy policy database and support (ResLegal), 2013: An initiative of the European Commission – Lithuania. Available at: www.res-legal.eu

Republic of Lithuania, 2010: National Renewable Energy Action Plan. Available at: http://ec.europa.eu/energy/renewables/action _plan_en.htm

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

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

World Wind Energy Association (WWEA), 2013: 2012 Annual Report. Available at: www.wwindea.org/webimages/WorldWindEnergy Report2012 final.pdf