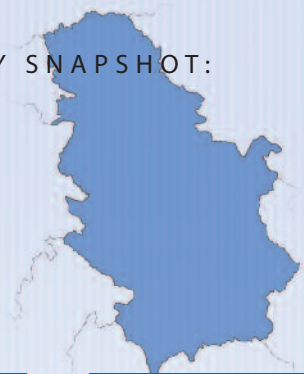


RENEWABLE ENERGY SNAPSHOT:



Empowered lives.
Resilient nations.

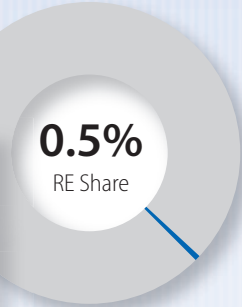
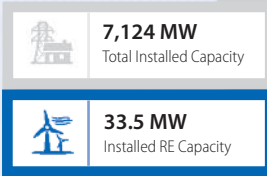
Serbia



General Country Information

Population: 7,223,887
 Surface Area: 88,360 km²
 Capital City: Belgrade
 GDP (2012): \$ 37.5 billion
 GDP Per Capita (2012): \$ 5,190
 WB Ease of Doing Business: 93

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

0	2.2	0	31.3
5,400	1,000	400	4,500

Sources: Benkovic et al. (2013); Karakosta et al. (2012); Tesic et al. (2011); SIEPA (2013); Panic et al. (2013); Katic et al. (2013); EWEA (2013); EBRD (2009); World Bank (2014); EIA (2010); Renewable Facts (2013); Republic of Serbia(2013); EIA (2013); SRS NET & EEE (2008); EPS (2012); and UNDP calculations.

Key information about renewable energy in Serbia

The Republic of Serbia's carbon intensity per GDP is over ten times higher than the OECD average (Karakosta et al., 2012). To increase its share of renewable energy in power production, the Government of the Republic of Serbia introduced secondary legislation that laid down requirements and the amount of feed-in tariffs for renewable energy producers. Privileged power producers enter into power purchase agreements with public suppliers over a period of 12 years (subject to annual correction due to the Eurozone's inflation rate) beginning in February 2014 (Ministry of Energy, Development, and Environmental Protection, 2013). The feed-in tariffs are set for three years (until 31 December 2015). Experts believe that feed-in tariffs will likely bring an increase in investment in renewable energy sources, for example in wind power plants (EWEA, 2013). The World Bank's Ease of Doing Business ranks Serbia in 93rd position (IFC & World Bank, 2014).

RENEWABLE ENERGY SNAPSHOT:

Feed-in tariff in Serbia			
Eligible technologies	Infrastructure	Installed capacity in MW (P)	Tariff granted in €/MW-h valid until 31 December 2015
Wind	-	-	92
Solar	Roof Roof Ground	up to 0.03 MW 0.03 - 0.5 MW	206.6 209.41 - (P*93.8) 162.5
Hydro (up to 30 MW)	New New New New New Existing	up to 0.2 MW 0.2 - 0.5 MW 0.5 - 1 MW 1 - 10 MW 10 - 30 MW up to 30 MW	124 137.27 - (P*66.33) 104.1 107.47 - (P*33.7) 73.8 59
Biomass	-	up to 1 MW 1 - 10 MW exceeding 10 MW	132.6 138.2 - (P*56) 82.2

Source: Ministry of Energy, Development, and Environmental Protection of Republic of Serbia (2013)¹

Legislation and policy

In 2012, the Energy Community Ministerial Council adopted the EU Directive 2009/28/EC on the promotion of renewable energy. In line with that, Serbia developed a National Renewable Energy Action Plan, which created a national binding target of 27 percent share of renewable energy in gross final energy consumption by 2020 (Republic of Serbia, 2013). The Energy Law together with the AERS (Serbian energy agency) Decree on Incentive Measures for Privileged Power Producers provides the legislative foundation for renewable energy promotion. In addition to the feed-in tariffs and purchase obligations, renewable energy developers are given prioritized grid access. Power production (except power plants less than 1 MW of installed capacity) is subject to licencing. The licence for Engaging in Energy Related Activities is obtained from AERS. Eligibility to receive the feed-in tariffs has to be obtained from the Ministry of Energy, Development and Environment Protection, while temporary eligibility for wind and solar power plants can be granted (Energy Law, Article 53 (6)). The total installed wind and solar capacity required to be a privileged producer is capped. Eligible wind capacity cannot exceed 500 MW until 2020, eligible solar capacity cannot exceed 10 MW, a figure that is re-established annually (Republic of Serbia, 2012). In a joint project, the Ministry of Energy, Development and Environment Protection and UNDP published investor guides for renewable energy technologies. The guides offer detailed explanations of the construction processes for small hydro, wind, solar, geothermal, or biomass power plants and include information of, for example, the licences and permits required and which authorities are involved (UNDP, 2013).

¹ Biogas, waste-fired power plants and geothermal power plants are also eligible for feed-in tariffs (MERZ, 2013).

Institutions

Organization	Responsibility	Website
Ministry of Energy, Development and Environmental Protection	<ul style="list-style-type: none"> - Responsible for shaping the national energy strategy and policy - Grants operators renewable energy producer status, which gives entitlement to the feed-in tariff 	www.merz.gov.rs/
Energy Agency of the Republic of Serbia (AERS)	<ul style="list-style-type: none"> - Responsible for setting tariffs - Authority to issue licence in the energy sector 	www.aers.rs/Index.asp?l=2&a=100
Elektromreža Srbije (EMS)	<ul style="list-style-type: none"> - State-owned and largest energy cooperation functioning as transmission system operator and electricity market operator - Responsible for issuing guarantees of origin certifying energy produced from renewable sources 	www.ems.rs/
EPS	<ul style="list-style-type: none"> - Largest energy producer which had the monopoly on energy production until 1 January 2013 	www.eps.rs/

Opportunities to finance renewable energy projects in Serbia

Financing organization	Details	Website
EU Means <ul style="list-style-type: none"> - European Investment Fund (EIF) - European Investment Bank (EIB) - Structural funds 	Loans and guarantees through commercial banks as intermediaries (e.g. Banca Intesa a.d. Beograd, Erste Bank a.d. Novi Sad) and private equity/venture capital available.	www.europa.eu/youreurope/business/finance-support/access-to-finance/
Western Balkans Sustainable Energy Direct Financing Facility	Local small and medium enterprises with a sound financial and economic structure and sufficient means of equity capital can apply for direct loans from the European Bank for Reconstruction and Development's Western Balkan Sustainable Energy Direct Financing Facility of between €2 million and €6 million.	www.websedff.com
Western Balkans Sustainable Energy Financing Facility	Provides loans of between €2 million and €5 million through local banks (UniCredit Bank Srbija a.d. or Banca Intesa a.d. Beograd) for private investments in energy efficiency or renewable energy projects. Loans can cover 100 percent of the investment costs.	www.webseff.com/
Green Growth Fund	Provides direct and indirect (through financial intermediaries) financing for small scale renewable energy projects usually not larger than €50 million.	www.ggf.lu/
International Finance Corporation (IFC)	Through investment (equity, loans and other financial instruments) and advisory services, IFC support focuses on climate change, including investments in infrastructure and energy sectors.	www.ifc.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/projects.shtml

Serbia

Recent projects

Company	Project	Status
Wind Alliance Group (Spain)	Intends to invest around €420 million in the construction of a wind farm in Pancevo, northern Serbia. 350 MW of the planned wind farm has already all of the necessary permits to start construction.	Under development
AB Energy Srbija (subsidy of Italian Gruppo AB)	Plans to build three biomass power plants in the northern Serbian province of Vojvodina with a total installed capacity of 6 MW, and with estimated construction costs of €3.5 million.	Under development
Electrawinds (Belgium)	In February 2013, the animal waste biomass plant Energo Zelena, a joint venture between Electrawinds and Serbian investment partners, was commissioned. Construction started in September 2011 with a total investment of €21 million.	Commissioned

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