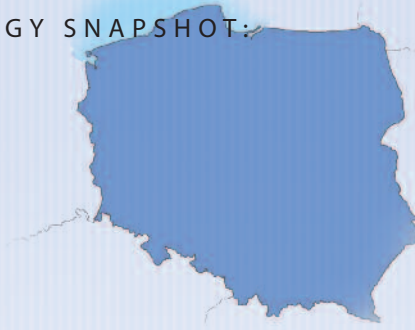


# RENEWABLE ENERGY SNAPSHOT:



Empowered lives.  
Resilient nations.

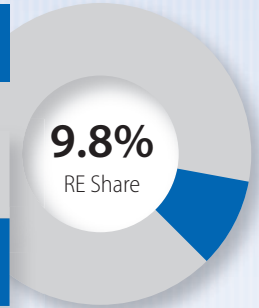
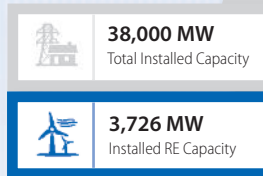
# Poland



## General Country Information

Population: 38,542,737  
 Surface Area: 312,680 km<sup>2</sup>  
 Capital City: Warsaw  
 GDP (2012): \$ 489.8 billion  
 GDP Per Capita (2012): \$ 12,708  
 WB Ease of Doing Business: 58

## 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

<b>941</b>	<b>7</b>	<b>2,497</b>	<b>281<sup>1</sup></b>
<b>28,800</b>	<b>290,300</b>	<b>620,000</b>	<b>1,000</b>

Sources: EBRD (2009); WWEA (2013); Institute for Renewable Energy (2009); EPIA (2013); Polish Information and Foreign Investment Agency et al. (2010); PSO (2011); ERO (2013); ESHA (2011); World Bank (2014); EIA (2013); Hoogwijk and Graus (2008); Hoogwijk (2004); JRC (2011); and UNDP calculations.

## Key information about renewable energy in Poland

Although the share of renewable energy in Poland's total installed capacity stands at almost 10 percent, much technical potential remains untapped, particularly for wind. But Poland's wind power installed capacity alone increased by 37.1 percent (or 880 MW) in 2012 (WWEA, 2013). Renewable energy is promoted by a quota system, requiring electricity generators, suppliers and traders to meet a certain quota of green certificates, reflecting power produced from renewable sources. The quota, a percentage of the total amount of sold electricity, increases every year by 1 percent. It started at 12 percent in 2013 and will reach

<sup>1</sup> Value is from 2011

**Quota system with tradable renewable energy certificates (TREC) in Poland**

Eligible technologies	Substitution fee in €/certificate = maximum price
Wind	70.79
Solar	70.79
Hydro	70.79
Biomass	70.79

Source: Energy Law Article 9 and ERO (2013) (zloty/€ exchange rate as on 4 December 2013)

20 percent by 2021 (ResLegal, 2013). One MW-h of produced electricity equals one tradable green certificate. There is no minimum price set and no technology-specific differences. Due to undersupply in recent years, the price for the tradable certificates was close to the substitution fee (ECS, 2011). However, a new law on renewable energy sources exists in a draft form and was sent by the Ministry of Economics to the Committee of the Council of Ministers. After several delays and revisions, this law is expected to come into force in early 2015. The Ministry of Economy announced that the new promotion scheme will be based on a competitive auction system. Every year, power purchase agreements to a specific price per kW-h are tendered.

**Legislation and policy**

In accordance with EU Directive 2009/28/EC, Poland's national binding target of the share of energy from renewable sources in gross final energy consumption by 2020 is set at 15 percent (Ministry of Economy, 2010). The Energy Law, in combination with the Order on the Quota Obligation 18/10/2012, establishes the legal basis for the quota support scheme. There are also other investment incentives. For suppliers and producers, electricity from renewable sources is exempt from consumption tax (currently 20 zlotys, or €4.73) (Tax Act, Art. 89 [3]). There is non-discriminatory, but unprioritized, grid access and grid connection costs are borne by the plant operator. Renewable energy developers with capacity less than 5 MW only bear 50 percent of the grid connection costs and are exempt from the fees for issuing the certificate of origin and the power generation licence (Energy Law, Art. 7 (8) and Art.9e [18]). The Energy Regulator provides a guide for project developers on how to obtain a power generating licence in Poland (ERO, 2012).

## Institutions

Organization	Responsibility	Website
<b>Minister of Economy</b>	- Responsible for energy policy	<a href="http://www.mg.gov.pl/">www.mg.gov.pl/</a>
<b>Energy Regulatory Office (ERO)</b>	- Grants licences in the energy sector and certificates of origin for electricity generated from renewable sources	<a href="http://www.ure.gov.pl/">www.ure.gov.pl/</a>
<b>Polish Transmission Operator PSE S.A.</b>	- Responsible for maintaining and operating the national grid and electricity transmission	<a href="http://www.pse.pl/">www.pse.pl/</a>
<b>Polish Information and Foreign Investment Agency</b>	- State investment agency, established to attract, consult and facilitate potential investors	<a href="http://www.paiz.gov.pl/en">www.paiz.gov.pl/en</a>

## Opportunities to finance renewable energy projects in Poland

Financing organization	Details	Website
<b>Polish Sustainable Energy Financing Facility</b>	Eligible are private small and medium enterprises investing in renewable energy projects that generate a minimum of 3kW-h are eligible for loan of up to 100 percent of the investment costs per €1 invested annually.	<a href="http://www.polseff.org/">www.polseff.org/</a>
<b>International Finance Corporation (IFC)</b>	Private and environmentally and technically sound projects may apply for loans of up to 35 percent of the estimated projects costs, usually provided through partner intermediaries.	<a href="http://www.ifc.org/">www.ifc.org/</a>
<b>EU Means</b> - European Investment Facility (EIF)/ - European Investment Bank (EIB) - Structural Funds	Loans and guarantees via Polish financial Intermediaries (e.g. Regionalne Towarzystwo Inwestycyjne, Bank BGŻ), and private equity/venture capital are available.	<a href="http://www.europa.eu/youreurope/business/finance-support/access-to-finance/">www.europa.eu/youreurope/business/finance-support/access-to-finance/</a>

## Recent projects

Company	Project	Status
<b>IKEA (Sweden) and Martifer (Portugal)</b>	Opened a 26 MW wind park in Rymanov in June 2013.	<b>Commissioned</b>
<b>Polish Solar (England)</b>	A subsidiary of Stern Energy (Italy) and currently develops 200 MW of photovoltaic systems.	<b>Under development</b>
<b>Tergopower</b>	Plans to construct a 40 MW CHP biomass plant in Lublin for approximately €140 million.	<b>Under development</b>

# Poland

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