



RENEWABLE ENERGY POLICY REVIEW

BULGARIA

Due to the lack of support mechanisms in the last years, renewable energy sources (RES) in Bulgaria are not broadly developed. However, good potential exist for biomass, wind and geothermal energy. Solar potential exists in the East and South of Bulgaria. Bulgaria has recently adopted a new feed-in tariff, its effective implementation with measures to non-discriminatory access to the power grid and simplified licensing procedures will be the basis for a market uptake of RES in the country. Currently, the legal framework to allow non-discriminatory access to the power grid for independent renewable energy producers remains too vague to increase investor confidence. However, various wind farms are at planning stage.

KEY FIGURES

- The **share of RES in total primary energy consumption** was of 6.29% in 2007¹.
- The **share of RES in the gross final energy consumption** was 9.4 % in 2005.
- The **share of RES in the gross electricity production** was 11.8% in 2005 (thanks to the contribution of hydropower, currently, almost the only source of RES-e in Bulgaria)².
- The **share of biofuels** in the transport sector in 2006 was 1.5 %.³
- Bulgaria energy dependence on imports amounts to 70 % in 2005.

¹ EurObserver Barometer

² The share of RES in gross electricity consumption in 2007 was 8.38% - EurObserver

³ Biofuel consumption for road transport in the country registered a considerable increase between 2006 and 2007: from 8,223 toe to 112, 496 toe. Furthermore, biofuels production was also enriched by bioethanol that was not yielded in 2006. Source: EurObserver

RES POLICY

A new Renewable and Alternative Energy Sources and Biofuels Act were adopted in June 2007.

RES TARGETS

Mandatory targets set by the Directive on the Promotion of the use of energy from renewable sources

- 16 % share of RES on the final consumption of energy in 2020.
- At least 10% share of renewable energy in final consumption of energy in transport by 2020.

Indicative Target set by the RES- electricity European Directive from 2001⁴

- 11 % share of RES on gross electricity consumption by 2010

Indicative Target set by the European Biofuels Directive from 2003⁵

- Biofuels consumption of 5.75% of petrol and diesel use for transport in 2010.

National Commitments

- The goal of Bulgaria's National Programme on Renewable Energy Sources is to significantly increase the share of non-hydropower RES in the energy mix. The National long-term programme for support of RES utilization 2005-2015 aims at achieving a 6% RES share in 2015.
- There is no national target/commitment for heating and cooling.

Progress towards the Targets

Bulgaria's RES electricity share in gross electricity consumption increased from 7% in 1997 to 8.38 % in 2007. Large-scale hydro power is currently the main source of RES electricity.

⁴ Directive 2007/71/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market. Currently in force, sets targets up to 2010.

⁵ Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport currently in force, sets targets up to 2010, with indicative targets by 2005.

Support for RES Electricity

Feed in tariff

In 2007 Bulgaria introduced new feed in tariff for Renewable Electricity. The State Energy and Water Regulatory Commission has assumed the commitment to purchase alternative energy at a higher tariff and for the duration of 12 years. Suppliers refusing to accept renewably-produced electricity would be fined up to 500 000 (euros) in response to renewable power producers' reports of difficulty in grid connection.

Resource	Technology	Support level [€cents/ kWh]	Feed-in tariff or premium ?	Start year	Duration [years that an investor is entitled to support]	Comments
Wind	onshore	139,96 лв./ MWh.	feed- in	2006	15 years	Installed capacity less then 800kw.
Wind	New wind plants in operation after 01.01.2006 with installed capacity over 800 kW:• With working hours per year up to 2250	185,95 лв./ MWh.			15 years	
Wind	New wind plants in operation after 01.01.2006 with installed capacity over 800 kW:• With working hours per year over to 2250	167,90 лв./ MWh.			15 years	
Solar PV	With installed capacity up to 5kW With installed capacity over 5kW	782 лв./ MWh. 718 лв./ MWh.	feed in	2006	25 years	Depends on the installed capacity (10 MW plant *(any size for plants installed before 31st March 2009). The tariff is regulate every year (by 31st March) based on the following: The FIT rate is derived from a portion of 80% of the average electricity price in the previous year. A variable surcharge is added that cannot be less than 95% of the previous year's level. That means the PV FIT could also increase as electricity prices have raised sharply in Bulgaria in the

						past years. ⁶
Small Hydropower plant up to 10 MW	up to 10 MW	97,12 лв./MWh.	feed in	2006	15 years	
Biomass for producing electricity		between 162 and 215 лв./ MWh, depending on the art of used biomass.			15 years	
Heat power produced by CHP installation		125 – 195лв./MWh, depending on the producer.				

. The exchange rate is following - 1 Euro - 1,9583 Bg leva. VAT is excluded from the above prices. Source: Ministry of Economy

Regarding the new legislation and as mentioned in the above table, there is fixed period of 25 years for buying electricity, produced by solar and geothermal installations and 15 years fixed period for buying electricity, produced by other RES.

Beneficial credit terms of up to 20% of the project investment are granted from the Bulgarian Energy Efficiency and Renewable Energy Credit Line (BEERECL).

Support for RES heating and cooling

Investment subsidies

Bulgarian Energy Efficiency and Renewable Energy Credit Line established investment subsidies for RES H&C technologies.

Resource	Support level [%/total investment]
RES Heating technologies	20 per cent grant

Support for Biofuels

The national long-term programme for the use of biofuels in transport 2007-2020 has been recently drafted.

Quota Obligations

⁶ EPIA

Resource	Quota in % (per year)
Biofuels	2% in 2008 3.5% in 2009 5.75% in 2010 8% in 2015 10 % in 2020

Tax exemption for biofuels

Biofuels, if not blended with other fuels, have been exempt from excise tax since 2005 (note: not all types of bioethanol are included). There are also plans for the compulsory mixing of biofuels with liquid fuels of petroleum origin to be carried out at tax warehouses licensed under the Excise Duties and Tax Warehouses Act.

Support for all RES

In order to promote RES, Bulgaria is currently implementing the Bulgarian Energy Efficiency and Renewable Energy Credit Line (BEERECL). RES projects are eligible for a 20% grant. Loans worth more than EUR 12.8 million have already been granted.

Sources:

European Commission Factsheets by Country

http://ec.europa.eu/energy/energy_policy/facts_en.htm

Member States Reports in the framework of the Directive 2001/77/EC on renewable electricity

http://ec.europa.eu/energy/res/legislation/electricity_member_states_en.htm

Member States Reports in the framework of the Directive 2003/30/EC on biofuels

http://ec.europa.eu/energy/res/legislation/biofuels_members_states_en.htm

Energy Efficiency Agency. Ministry of Economy and Energy

<http://www.seea.government.bg>

Black Sea Regional energy Centre

<http://www.bsrec.bg/>



In the framework of the EU con –funded project: RES 2020: Monitoring and Evaluation of the RES Directives implementation in EU27 and policy recommendations to 2020



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