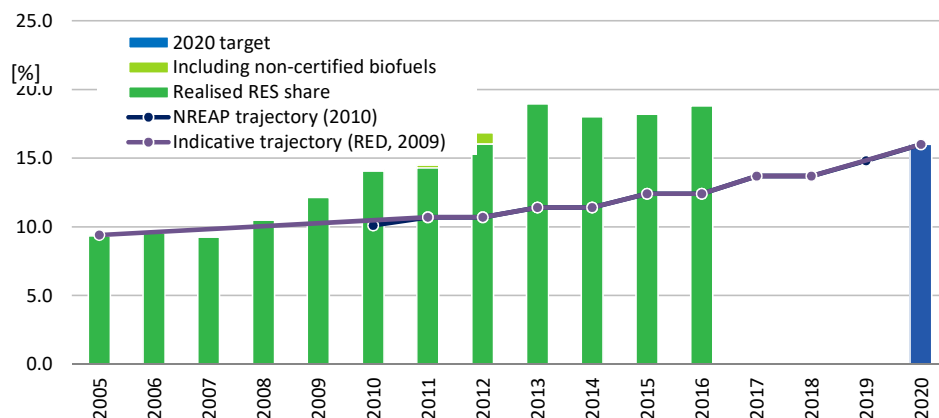


## Summary

Main support policy: Renewable electricity in Bulgaria is promoted primarily through a feed-in tariffs scheme. For new projects this scheme is only open for installations up to 30 kW. The grid operator is mandated to the purchase and dispatch electricity at a guaranteed price for eligible generators. The use of renewable energy for heating and cooling is promoted through a subsidy from the European Regional Development Fund and through an exemption for building owners from property tax. Main Bulgarian support scheme for renewable energy in transport is a quota system. There is a professional training programme for RES-installers as well as a building obligation for the use of renewable heating and for the exemplary role of public authorities.

Description of RE policy in this country.



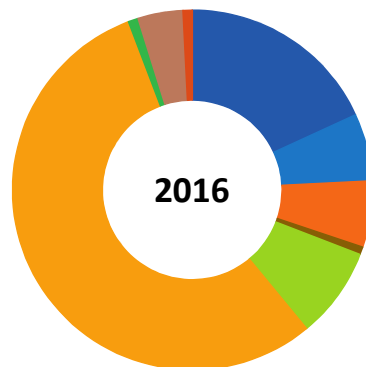
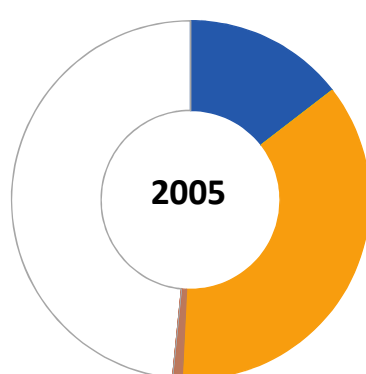
Source: EEA, Eurostat

## Abbreviations used:

RES: renewable energy sources  
 RES-E: renewable electricity  
 RES-H/C: renewable heating/cooling  
 RES-T: renewable transport fuels

## Data for 2016

Overall RES share:	18.8%	Avoided fossil fuels:	3.2 [Mtoe]
Overall RES 2020 target:	16.0%	Avoided fuel expenses:	0.6 [billion euro]
Share RES-E in electricity:	19.2%	RES Turnover:	780 [MEUR]
Share RES-T in transport:	7.3%	RES Employment:	23200 [jobs]
Share RES-H/C in heating:	30.0%		



■ Hydropower  
 ■ Wind power  
 ■ Solar PV, CSP and water heaters  
 ■ Solid biomass  
 ■ Biofuels in transport  
 ■ Renewable heat consumed  
 ■ Renewable heat derived  
 ■ Heat pumps  
 ■ All other renewables  
 □ Gap towards 2016

Source: Eurostat, 2018.

	2005	2016		
	Energy	Energy	Employment	Turnover
Hydropower	290.4 ktoe	362.6 ktoe	2900 Jobs	120 MEUR
Wind power	0.5 ktoe	121.0 ktoe	600 Jobs	30 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	119.2 ktoe	2100 Jobs	70 MEUR
Solid biomass	0.0 ktoe	14.0 ktoe	9600 Jobs	270 MEUR
Biofuels in transport	0.0 ktoe	163.2 ktoe	3000 Jobs	110 MEUR
Renewable heat consumed	723.2 ktoe	1104.0 ktoe		
Renewable heat derived	0.7 ktoe	17.7 ktoe		
Heat pumps	16.7 ktoe	81.2 ktoe	3900 Jobs	130 MEUR
All other renewables	0.0 ktoe	16.4 ktoe	1100 Jobs	50 MEUR
Gap towards 2016	967.9 ktoe			

Source: Eurostat, EurObserv'ER, 2018.

Hydropower jobs & turnover only covers 'small hydropower'. PV=Photovoltaics, CSP=Concentrated Solar Power. Biofuels in transport only covers compliant fuels (employment and turnover additionally cover the non-compliant biofuels). Derived heat includes heat produced in main activity producer plants and heat sold produced in autoproducer plants. Its counterpart is the final heat consumption in the final consumption sectors (such as households).



### ***Renewables policy in a nutshell***

Main support policy: Renewable electricity in Bulgaria is promoted primarily through a feed-in tariff scheme. For new projects this scheme is only open for installations up to 30 kW. The grid operator is mandated to purchase and dispatch electricity at a guaranteed price for eligible generators. The use of renewable energy for heating and cooling is promoted through a subsidy from the European Regional Development Fund, several loan schemes, and through an exemption for building owners from property tax. Main Bulgarian support scheme for renewable energy in transport is a quota system. Furthermore, biofuels are fostered by means of a fiscal regulation mechanism. There is a professional training programme for RES-installers as well as a building obligation for the use of renewable heating and for the exemplary role of public authorities.

## ***CURRENT RENEWABLE ENERGY POLICY***

The feed-in tariff scheme has been revised for new renewable electricity generating installations. As from 1 January 2016 this scheme is only open to certain new projects with a total installed capacity of up to 30 kW inclusive. The country has already reached its 2020 renewable target. Retroactive changes, such as imposition of a fee on electricity from wind power and PV have been revoked. Amendments of the energy law, approved by the parliament, also include one stipulating that the public power provider NEK will not be obliged to buy power at preferential prices from heating and cooling plants that cannot prove to meet set energy efficiency standards.

## ***OVERVIEW OF MAIN SUPPORTING POLICIES***

The Energy from Renewable Sources Act (ERSA) is the statutory basis for the feed-in tariff, which is the main element of the Bulgarian support system. The ERSA also establishes an obligation to purchase and dispatch *electricity from renewable sources* at preferential prices. Feed-in tariffs are eligible for new roof top or facade photovoltaic installations with a maximum installed capacity of 30 KW and to certain installations using combined cycle and indirect use of biomass. The feed-in tariff support to renewable installations that were commissioned earlier has remained unchanged.

The use of *renewable energy for heating and cooling* is promoted through a grant from the Bulgarian Energy Efficiency Fund and through an exemption for building owners from property tax. In general, all heating technologies are eligible for support. Any investment project for a new building with a total floor coverage of over 1000 m<sup>2</sup> must comply with the possibilities of using decentralised systems for the use of renewable energy. In these buildings, at least 15 percent of the total heating and cooling needed for the building shall have to be produced from renewable sources.

The main support scheme for *renewable energy sources used in transport* is a biofuel quota system. This scheme obliges companies importing or producing petrol or diesel to ensure that biofuels make up a pre-defined percentage of their annual fuel sales. Furthermore, biofuels are supported through a tax credits mechanism: a reduced rate of excise duty is applied to unleaded petrol or gas oil if a share of more than 4 % of bioethanol or biodiesel has been added. Bulgaria has currently no incentives for the uptake of electric vehicles.

Table 1: Overview of support schemes to promote renewable energy

		REGULATORY POLICIES					FISCAL INCENTIVE AND PUBLIC FINANCES			
	Feed-in tariffs 1)	Feed-in premium	Tenders	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Net-metering/ net-billing	Investment subsidies 2)	Tax credits mechanism I 3)	Tax credits mechanism II	Soft loans
<b>RES-E</b>										
- Offshore wind										
- Onshore wind										
- Solar	x									
- Hydro										
- Geothermal										
- Solid biomass	x									
- Biogas	x									
<b>RES-H/C</b>										
- Solar thermal	x						x	x		
- Geothermal	x						x	x		
- Biomass	x						x	x		
- Biogas	x						x	x		
- Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves	x						x	x		
- Others, i.e. aerothermal, hydrothermal	x						x	x		
<b>RES-T</b>										
- Bio gasoline					x			x		
- Biodiesel					x			x		

1) Since 1 January 2016 open to new small-scale projects (PV and biomass-based CHP) up to 30 kW only.

2) Grant from the Bulgarian Energy Efficiency Fund.

3) Investments in renewable heating & cooling installations in buildings are tax-deductible from property tax for building owners.

Sources: EurObserv'ER, GSR/REN21, RES-Legal Europe (2017)

Table 2: Overview of instruments used at present

<i><b>Instrument</b></i>	<i><b>Description</b></i>
Feed-in tariffs	Guaranteed sale of electricity at a pre-set preferential price during the support contract period. For RES-E and RES-H&C projects commissioned before February 2015. Apart from certain small-scale projects, new projects do not get feed-in support.
Investment subsidies	RES-H&C projects are eligible for a grant from the Bulgarian Energy Efficiency Fund
Tax credits scheme	Renewable heating & cooling installations in buildings are eligible for an exemption from property tax for building owners.
Tax credits scheme	Investments in renewable heating & cooling installations in buildings are tax-deductible from property tax for building owners.
Biofuels quota scheme	Importers/suppliers of transport fuels are subject to a renewable quota scheme for biofuels. Compliance based on sample testing rather than certificates-based. No (direct) incentives for other alternative transport fuels.

### ***For further information:***

CEER, 2017. Status Review of Renewable Support Schemes in Europe.

[http://www.ceer.eu/portal/page/portal/EER\\_HOME/EER\\_PUBLICATIONS/CEER\\_PAPERS/Electricity/2017/C16-SDE-56-03%20Status%20Review%20RES%20Support%20Schemes.pdf](http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Electricity/2017/C16-SDE-56-03%20Status%20Review%20RES%20Support%20Schemes.pdf)

EEA 2017: Progress of renewable energy sources, European Environmental Agency (EEA),

<https://www.eea.europa.eu/data-and-maps> (European Union), last accessed June 2017

Eurostat, 2017. Energy from renewable sources. [http://ec.europa.eu/eurostat/statistics-](http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_from_renewable_sources)

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REN21, Global Status Report 2017 [http://www.ren21.net/wp-](http://www.ren21.net/wp-content/uploads/2017/06/170607_GSR_2017_Full_Report.pdf)

[content/uploads/2017/06/170607\\_GSR\\_2017\\_Full\\_Report.pdf](http://www.ren21.net/wp-content/uploads/2017/06/170607_GSR_2017_Full_Report.pdf)

IEA/IRENA Joint Policies and Measures database

<https://www.iea.org/policiesandmeasures/renewableenergy/?country=Bulgaria>

Member State Progress Report, available at the Renewable Energy pages of the European

Commission, <http://ec.europa.eu/energy/en/topics/renewable-energy>

RES Legal database, <http://www.res-legal.eu/search-by-country/bulgaria/>

[http://www.cms-lawnow.com/ealerts/2016/08/bulgarian-renewable-energy-support-scheme-approved-by-the-ec-following-5-years-of-application?cc\\_lang=en](http://www.cms-lawnow.com/ealerts/2016/08/bulgarian-renewable-energy-support-scheme-approved-by-the-ec-following-5-years-of-application?cc_lang=en)

[http://europa.eu/rapid/press-release\\_IP-15-6289\\_en.htm](http://europa.eu/rapid/press-release_IP-15-6289_en.htm)

<http://globalcompetitionreview.com/insight/the-european-middle-eastern-and-african-antitrust-review-2017/1067815/eu-energy>

<https://www.iea.org/policiesandmeasures/pams/bulgaria/name-25061-en.php>

[https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-bulgaria\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-bulgaria_en.pdf)

(European Commission/ DG ENER, Energy Union Factsheet Bulgaria, November 2017)

European Alternative Fuels Observatory, <http://www.eafo.eu/content/bulgaria> ;

<http://www.eafo.eu/eu>



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