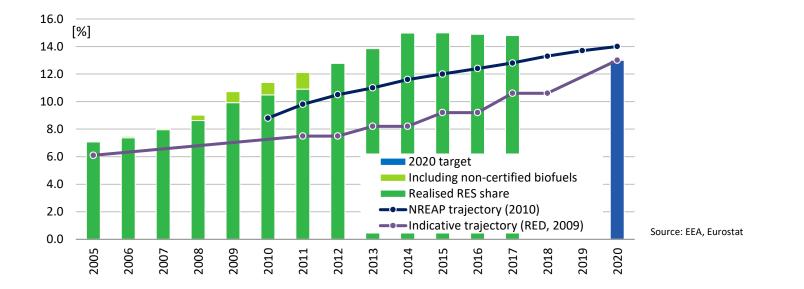
**Czech Republic** 

# **Renewable Energy Policy Factsheet**

### Summary

Operators of renewable electricity plants are exempt from real estate tax. For operators of a renewable electricity plant, commissioned before 2014, the technology-specific main support instrument is either a feedin tariff or a feed-in premium. Operators of (also new) small hydro power plants are eligible to subsidies under the Operational Programme "Entrepreneurship and Innovation for Competitiveness". Renewable heat is supported through subsidies under two Operational Programmes funded by the European Regional Development Fund (ERDF). Also renewable heat plants are exempt from real estate tax. Moreover, a building obligation is in place for new buildings to meet the criterion of near-zero-energy buildings. Biofuels are supported by a biofuels quota scheme and a consumption tax exemption.





Abbreviations used:	D	ata for 2017		
RES: renewable energy sources	Overall RES share:	14.8%	Avoided fossil fuels:	5.7 [Mtoe]
RES-E: renewable electricity	Overall RES 2020 target:	13.0%	Avoided fuel expenses:	1.3 [billion euro]
RES-H/C: renewable heating/cooling	Share RES-E in electricity:	13.7%	RES Turnover:	2090 [MEUR]
RES-T: renewable transport fuels	Share RES-T in transport:	6.6%	<b>RES Employment:</b>	32500 [jobs]
	Share RES-H/C in heating:	19.7%		
2005	20	017	<ul> <li>Hydropower</li> <li>Wind power</li> <li>Solar PV, CSP and</li> <li>Solid biomass</li> <li>Biofuels in transpo</li> <li>Renewable heat co</li> <li>Renewable heat do</li> <li>Heat pumps</li> <li>All other renewable</li> <li>Gap towards 2017</li> </ul>	ort onsumed erived les

Source: Eurostat, 2019.

	2005		2017	
	Energy	Energy	Employment	Turnover
Hydropower	161.0 ktoe	191.6 ktoe	1500 Jobs	110 MEUR
Wind power	1.4 ktoe	47.9 ktoe	900 Jobs	70 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	188.6 ktoe	1500 Jobs	110 MEUR
Solid biomass	48.2 ktoe	190.3 ktoe	12300 Jobs	840 MEUR
Biofuels in transport	2.7 ktoe	313.8 ktoe	8400 Jobs	450 MEUR
Renewable heat consumed	1636.9 ktoe	2475.1 ktoe		
Renewable heat derived	90.2 ktoe	228.8 ktoe		
Heat pumps	15.5 ktoe	124.8 ktoe	2600 Jobs	180 MEUR
All other renewables	14.7 ktoe	236.8 ktoe		
Gap towards 2017	2027.1 ktoe			Source: Eurostat, EurObserv'ER, 2019

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).



### CURRENT RENEWABLE ENERGY POLICY

Electricity from renewable sources produced by installations commissioned before 2014 is promoted mainly through either a guaranteed feed-in tariff or alternatively a feed-in premium paid on top of the market price. In principle, plant operators can choose either option. However, a feed-in tariff can only be granted to operators of RES plants with an installed capacity up to 100 kW (30 kW in case of rooftop or façade PV installations or 10 MW in case of hydro power). PV and biogas plants are only eligible if put into operation before 31 December 2013. Wind, hydro, geothermal or biomass plants up to 100 kW are eligible only if they were put into operation before 31 December 2015 and the building permit was issued before 2 October 2013. In principle, all renewable electricity producers (including prosumers) can opt for a feed-in premium. However, only PV and biogas plants commissioned before 31 December 2013 are only eligible for a feed-in premium. Wind, hydro, geothermal or biomass plants are eligible only if the building permit was issued before 2 October 2013 and commissioned before 31 December 2015. The feed-in premium is paid on top of the (average) market price, calculated either on an annual basis (installations ≤100 MW) or hourly basis (installations > 100MW). Operators of hydro as well as biogas and biomass fired, power plants up to 10 MW can apply for investment subsidies under the Operational Programme "Entrepreneurship and Innovation for Competitiveness 2014-2020" which is funded by the ERDF. Additionally, the Operational Programme "Environment 2014-2020" supports the installation of photovoltaic systems by the owners of public buildings. All renewable electricity plants based on wind energy, biogas, biomass and hydropower are exempt from real estate tax.

*Installations producing renewable heat* are supported through subsidies, funded by the ERDF. Besides, these installations are exempt from real estate tax.

*Renewable transport fuels* are promoted by way of a biofuels quota scheme. This scheme obliges companies importing or producing petrol or diesel to ensure that biofuels make up a defined percentage of their annual fuel sales volume. Besides, biofuels as well as the biofuels component of mixed transport fuels are exempt from a consumption tax. Electric vehicles are exempt from the vehicles purchase tax. Electric, hybrid and other alternative fuel vehicles are exempt from the road tax, a tax applying to cars used for business purposes only.

## **OVERVIEW OF MAIN SUPPORTING POLICIES**

The main RES support measures applied in the Czech Republic are epitomized in Table 1 below. Note that the measures in this table are either applicable to either installations commissioned (broadly) before 2014 or to all installations (including new ones). See the previous section and the notes to Table 1 for more details.

Table 1: Overview of support schemes to promote renewable energy in the Czech Republic

	NON-FISCAL SUPPORT SCHEMES			FISCAL AND OTHER STATE FUNDED INCENTIVES						
	Feed-in tariffs 1)	Feed-in premium 1)	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 4)	Soft loans
RES-E										
- Offshore wind										
- Onshore wind	х	х						х		
- Solar	х	x						х		
- Hydro	х	х					х	x		
- Geothermal	х	х								
- Solid biomass	х	х					х	х		
- Biogas	х	х					х	х		
RES-H/C										
- Solar thermal							х	х		
- Geothermal							х	х		
- Biomass							х	х		
- Biogas							х	х		
<ul> <li>Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves</li> </ul>							x	x		
<ul> <li>Others, i.e. aerothermal, hydrothermal</li> </ul>							x	x		
RES-T										
- Bio gasoline					х				x	ļ
- Biodiesel					х				х	

1) Operators of eligible plants have to choose for FiT or FiP support. Eligibility depends, among other requirements, on meeting technology-specific maximum capacity levels. Since 1 January 2014 only pre-existing (other) eligible RES-E installations can benefit from FiT or FiP support.

2) Funded by the ERDF.

3) RES-E (except for geothermal) and RES-H installations are exempt from real estate tax

4) Biofuels are exempt from a consumption tax

Sources: RES-Legal Europe (2019), EurObserv'ER

#### Table 2: Overview of instruments used at present in the Czech Republic

Instrument	Description
Feed-in tariffs or	Guaranteed sale of electricity at a pre-set preferential price or a premium on top of the
premiums	revenues from electricity sold, during the support contract period. For RES-E
	installations not larger than a technology-specific generating capacity. Only installations
	commissioned before January 2014 fall under this scheme. The exception is formed by
	eligible hydropower installations: also new ones can benefit for the FIT/FiP scheme.For
	eligible hydropower installations. Apart from small-scale projects, new projects do not
	get feed-in support.
Investment subsidies	Certain hydropower installations as well as RES-H installations can benefit from
	subsidies, financed by the ERDF
Tax credits schemes	Renewable heating & cooling installations in buildings are eligible for an exemption
	from property tax for building owners. Biofuels are exempt from a consumption tax.
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. <u>http://www.ceer.eu/portal/page/portal/EER\_HOME/EER\_PUBLICATIONS/CEER\_PAPERS/Electricity/2017</u> <u>/C16-SDE-56-03%20Status%20Review%20RES%20Support%20Schemes.pdf</u>

EEA, 2017 http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2

Eurostat, 2017. Energy from renewable sources. <u>http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy\_from\_renewable\_sources</u>

REN21, Global Status Report 2017 <u>http://www.ren21.net/wp-</u> content/uploads/2017/06/170607 GSR 2017 Full Report.pdf

IEA/IRENA Joint Policies and Measures database https://www.iea.org/policiesandmeasures/renewableenergy/?country=Czech Republic

Member State Progress Report, available at the Renewable Energy pages of the European Commission, <u>http://ec.europa.eu/energy/en/topics/renewable-energy</u>

RES Legal database, http://www.res-legal.eu/search-by-country/czech republic/

<u>https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-czech</u> <u>republic\_en.pdf</u> (European Commission/ DG ENER, Energy Union Factsheet Czech republic, November 2017)

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

European Commission, National Energy and Climate Plans, https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energyunion/national-energy-climate-plans

### What is meant by ...?

Auctions for granting renewable energy support	An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.
Feed-in tariff (FiT)	A support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers. A proper, periodic review of FiT rates is often undertaken with the aim to prevent both too high FiTs so as to minimise regulatory rents, i.e. supra-normal returns and too low FiTs to preclude below-target market uptake because of FiT levels that are perceived by market participants to be less attractive. In addition, feed-in tariffs often include "tariff degression", a mechanism according to which the price (or tariff) ratchets down over time.
Feed-in premium (FiP)	A scheme which provides for a support level per unit of renewable energy to eligible renewable energy producers, typically for a period of 10-20 years, at a pre-set fixed or floating rate. The premium is typically adjusted periodically to exactly offset change in the average energy wholesale market price, based on a pre-specified benchmark market price. A floating FiP may move freely or may only be allowed to move within a pre-set interval.
Grants	Grants are non-repayable funds disbursed by one party (grant makers), often a government department, corporation, foundation or trust, to a recipient, often (but not always) a non-profit entity, educational institution, business or an individual. (Source: Wikipedia.org)
Green public procurement	In Green public procurement contracting authorities take environmental issues into account when tendering for goods or services. The goal is to reduce the impact of the procurement on human health and the environment. (Source: Wikipedia.org)
Renewable quota scheme (RQS)	A RQS mandates certain market actors (typically retail suppliers or large energy end-users) to respect a pre-set minimum share or amount of their total energy procurements from renewable sources of energy. Typically a tradable green certificate (TGC) scheme is operated to enable the obligated parties to prove their compliance with the prevailing renewable quota target by means of TGCs.
Sliding feed-in- tariff	A FiT scheme which pre-sets technology-specific declining feed-in tariffs for certain prospective vintages in line with the technology-specific learning curve, as projected by the National Regulatory Agency (NRA). Often a degression rate is used indicating the %/annum decrease in the rate level.
Soft loans	Loans at concessional (below market-based) terms, for example at sub-market-conform interest rates, made available in several Member States to stimulate certain renewable energy technologies.
Tax credits	These are amounts a tax paying entity is allowed to deduct when declaring payable taxes, for example company tax or income tax, to the tax authorities , for example the producer tax credits (PTCs) used in the United States to stimulate among others wind energy deployment.



#### Disclaimer

This document was prepared by the EurObserv'ER consortium, which groups together Observ'ER (FR), the Energy research Centre of the Netherlands (ECN, NL), the Renewables Academy (RENAC, DE), Frankfurt School of Finance and Management (DE), Fraunhofer-ISI (DE) and Statistics Netherlands (CBS, NL). The information and views set out in this publication are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.