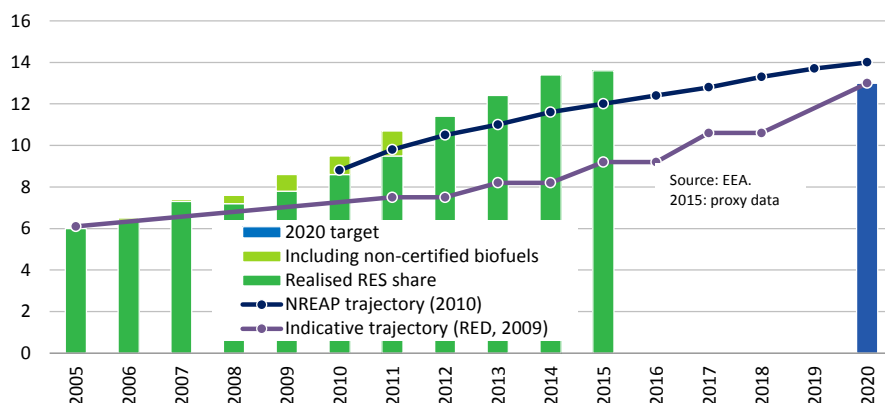


## Summary

For electricity from renewable sources of energy main support instruments are feed-in tariffs (FiTs) and feed-in premiums (FiPs). Operators of renewable energy installation have to make a choice for either the applicable FiT or the corresponding FiP. Except for hydro installations with a capacity of  $\geq 10$  MW, the FiT/FiP scheme has been closed for new installations generating electricity from renewables. Hydro power installations with a size  $\geq 10$  MW are also eligible for subsidies. Installations for production of renewable heat can apply for subsidies, granted by the European Regional Development Fund (ERDF) and are exempt from real estate tax. A renewable heating obligation for buildings is in place and a regulation on the use of renewable heating by public authorities. The main support scheme for renewable transport fuels is a renewable transport quota scheme. This scheme obliges companies importing or producing gasoline or automotive diesel to ensure that biofuels [%] p a defined percentage of their overall annual sales volume of automotive fuels. Besides, biofuels are exempt from a consumption tax.

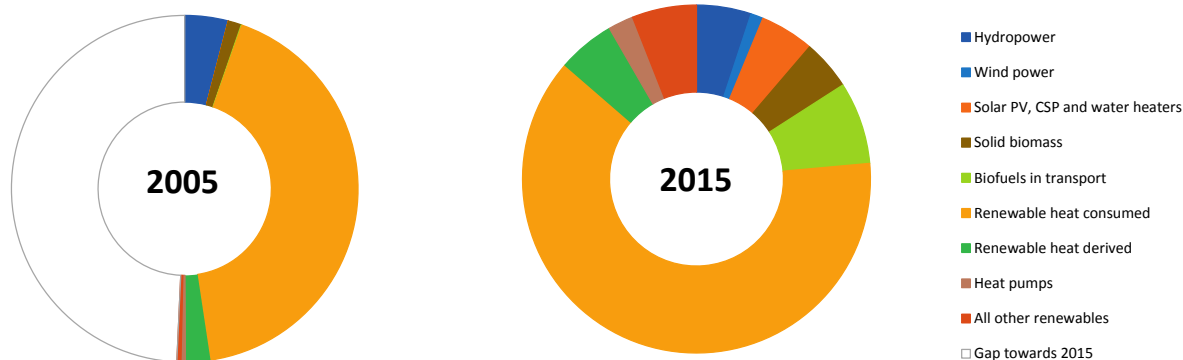


## Abbreviations used:

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

## Data for 2015

Overall RES share:	15.1%	Avoided fossil fuels:	5.0 [Mtoe]
Overall RES 2020 target:	13.0%	Avoided fuel expenses:	1.2 [billion euro]
Share RES-E in electricity:	14.1%	RES Turnover:	1595 [MEUR]
Share RES-T in transport:	6.5%	RES Employment:	16300 [jobs]
Share RES-H/C in heating:	19.8%		



Source: Eurostat, 2017.

	2005	2015		
	Energy	Energy	Employment	Turnover
Hydropower	155.4 ktoe	197.0 ktoe	1750 Jobs	70 MEUR
Wind power	1.4 ktoe	44.8 ktoe	100 Jobs	15 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	194.7 ktoe	2300 Jobs	110 MEUR
Solid biomass	48.2 ktoe	179.8 ktoe	8900 Jobs	860 MEUR
Biofuels in transport	2.7 ktoe	296.5 ktoe	1400 Jobs	330 MEUR
Renewable heat consumed	1636.9 ktoe	2432.3 ktoe		
Renewable heat derived	90.2 ktoe	205.4 ktoe		
Heat pumps	15.5 ktoe	91.0 ktoe	650 Jobs	55 MEUR
All other renewables	14.7 ktoe	232.0 ktoe	2950 Jobs	225 MEUR
Gap towards 2015	1908.5 ktoe			

Source: Eurostat, EurObserv'ER, 2017.

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* is promoted mainly through either a guaranteed feed-in tariff or a feed-in premium paid on top of the market price. Plant operators are free to choose either option. Eligible installations are hydro  $\leq 10$  MW; PV rooftop  $\leq 30$  kW; PV ground-mounted wind power, biogas, biomass, geothermal: all  $\leq 100$  kW. However, from January 2014 the support for new (as against pre-existing) plants generating renewable electricity has been stopped. The only exemption is encompassed by hydropower plants with an installed capacity up to 10 MW. Contingent on meeting certain requirements, these plants may also be eligible for subsidies from the OP PIK programme, funded by the European Regional Development Fund (ERDF).

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

*Renewable transport fuels* are promoted by way of a renewable fuels 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 exempted from a consumption tax.

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

The main RES support measures applied in the Czech Republic are epitomized in Table 1 below. Note that all these measures, either applicable to pre-existing or to all installations including new ones, are currently in place. See the previous section and the notes to Table 1 for more details.

Table 1: Overview of support schemes to promote renewable energy

	REGULATORY POLICIES									
	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
<b>RES-E</b>										
- Offshore wind										
- Onshore wind	x	x								
- Solar	x	x								
- Hydro	x	x					x			
- Geothermal	x	x								
- Solid biomass	x	x								
- Biogas	x	x								
<b>RES-H/C</b>										
- Solar thermal							x	x		
- Geothermal							x	x		
- Biomass							x	x		
- Biogas							x	x		
- Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves							x	x		
- Others, i.e. aerothermal, hydrothermal							x	x		
<b>RES-T</b>										
- Bio gasoline					x				x	
- Biodiesel					x				x	

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. Except for eligible hydro power installations, 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-H installations are exempted from real estate tax

4) Biofuels are exempted from a consumption tax

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

Table 2: Overview of instruments used at present

<i>Instrument</i>	<i>Description</i>
Feed-in tariffs or premiums	Guaranteed sale of electricity at a pre-set preferential price or a premium on top of the 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 exempted 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.

[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 <http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2>

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

REN21, Global Status Report 2017 [http://www.ren21.net/wp-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=Czech Republic>

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/czech republic/>

## ***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 depression", 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.



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