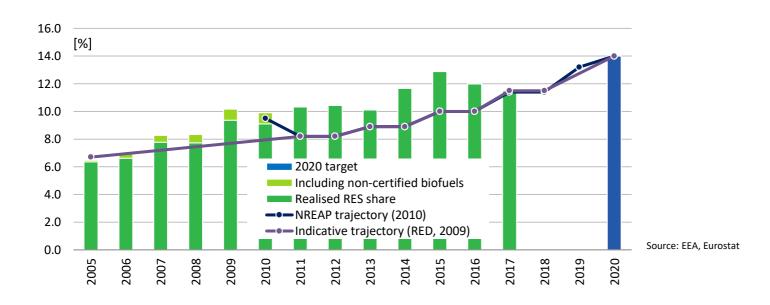
Slovakia

Summary

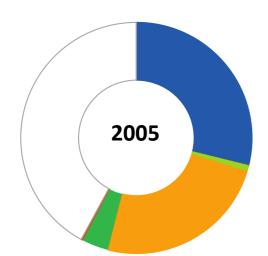
Since 1 January 2019 the main support scheme for electricity from renewable energy sources generated through new installations ≥ 500 kW is an auction based feed-in premiums scheme, whilst for "local energy installations" < 500 kW subsidies are available. Before 1 January 2019 a feed-in tariffs scheme was the main support scheme for new renewable electricity plants. For operators of photovoltaics (PV) and onshore wind installations an investment subsidy instrument is available as well. Besides, the sale of produced renewable electricity is incentivized by an exemption from excise duty. Also renewable heat production installations are eligible for an investment subsidy instrument. For renewable transport fuels a biofuels quota scheme is in place. Moreover, producers/suppliers of biofuels and petroleum fuels blended with biofuels benefit from a mineral oil tax exemption.





Abbreviations used:

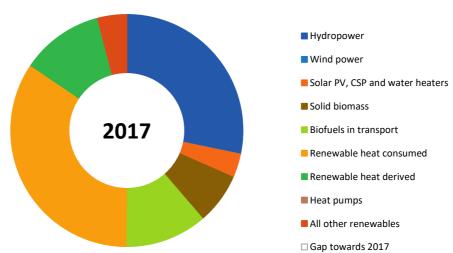
RES: renewable energy sources RES-E: renewable electricity RES-H/C: renewable heating/cooling RES-T: renewable transport fuels



Data for 2017

Overall RES share: 11.5%
Overall RES 2020 target: 14.0%
Share RES-E in electricity: 21.3%
Share RES-T in transport: 7.0%
Share RES-H/C in heating: 9.8%

Avoided fossil fuels: 2.2 [Mtoe]
Avoided fuel expenses: 0.7 [billion euro]
RES Turnover: 900 [MEUR]
RES Employment: 15900 [jobs]



Source: Eurostat, 2019.

	2005			
	Energy	Energy	Employment	Turnover
Hydropower	376.7 ktoe	369.3 ktoe	1200 Jobs	90 MEUR
Wind power	0.6 ktoe	0.5 ktoe	<100 Jobs	<10 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	43.5 ktoe	300 Jobs	30 MEUR
Solid biomass	0.3 ktoe	92.9 ktoe	9000 Jobs	350 MEUR
Biofuels in transport	11.2 ktoe	149.5 ktoe	3800 Jobs	300 MEUR
Renewable heat consumed	317.3 ktoe	449.4 ktoe		
Renewable heat derived	49.1 ktoe	150.1 ktoe		
Heat pumps	0.0 ktoe	0.0 ktoe	200 Jobs	20 MEUR
All other renewables	2.4 ktoe	53.0 ktoe		
Gap towards 2017	550.5 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

The main support scheme for *electricity from renewable energy sources* is a feed-in tariff scheme. The sale of generated renewable electricity is incentivised by an exemption from excise duty. For operators of PV and onshore wind installations an investment subsidy instrument is available from the Operational Programme Quality of Environment funded by the European Regional Development Fund (ERDF).

Since 1 January 2019 the main support scheme for *electricity from renewable energy sources* generated through new installations ≥ 500 kW is an auction based feed-in premiums scheme, whilst for "local energy installations" < 500 kW subsidies are available.¹ Before 1 January 2019 a feed-in tariff (FiT) scheme was the main support scheme for new renewable electricity plants. Distribution system operators have to procure the electricity from operators of FiT-eligible plants and to arrange to bring it to the market. In principle all renewable generation technologies are eligible, if with source-specific capacity upper limits. For operators of photovoltaics (PV) and onshore wind installations < 10 MW capacity, an investment subsidy instrument is available as well from the Operational Programme Quality of Environment. This programme is co-funded for 85% by the European Regional Development Fund (ERDF). Besides, the sale of produced renewable electricity is incentivized by an exemption from the excise duty on electricity consumption to the tune of € 1. 32 / MWh. Renewable power plants ≥ 10 MW are reported to face great difficulties in obtaining a grid connection (Melichar, 2018).

Also for the promotion of *renewable heat* successfully applying developers of renewable heat producing projects an investment subsidy instrument is available from the Operational Programme Quality of Environment, 85% co-funded by the ERDF. RES-H building obligations foster renewable heat and roof-top PV. A professional training programme is available to RES-installers.

The main support scheme for *renewable transport fuels* is 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 transport fuel sales volume. Furthermore, biofuels are fully exempted and the biofuels part of blended transport fuels are partially exempted (proportionate to the share of biofuels component) of the mineral oil tax.

For battery and plug-in electric vehicles purchase subsidies have been phased out since 1 January 2019. Battery electric vehicles are exempt to the annual ciculation (road) tax and registration tax for a BEV is as little as $\leqslant 33$. In several cities parking discounts apply for these type of cars.

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¹ So far, no details are available on these schemes.

OVERVIEW OF MAIN SUPPORTING POLICIES

The main RES support measures applied in the Slovak Republic are epitomized in Table 1 below. 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 Slovak Republic

	NON-FISCAL SUPPORT SCHEMES				FISCAL AND OTHER STATE FUNDED INCENTIVES					
	Feed-in tariffs	Feed-in premium 1)	Tenders 1)	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Net-metering/ net-billing	Investment subsidies 2)	Exempt from excise duty on electricity consumption	Exempt from mineral oil tax	Soft loans
RES-E										
- Offshore wind										
- Onshore wind	Х	х	х				Х	х		
- Solar	Х	Х	Х				Х	Х		
- Hydro	Х	Х	Х					Х		
- Geothermal	Х	Х	х					Х		
- Solid biomass	Х	х	Х					Х		
- Biogas	Х	Х	х					х		
RES-H/C										
- Solar thermal							Х			
- Geothermal							Х			
- Biomass							х			
- Biogas						_	х			
Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves							х			
- Others, i.e. aerothermal, hydrothermal							х			
RES-T										
- Bio gasoline					Х				Х	
- Biodiesel					х				х	

- 1) With effect of 1 January 2019
- 2) Granted by the Operational Programme Quality of Environment, co-funded for 85% by the European Regional Development Fund (ERDF)
- 3) Exception from excise duty for generators of renewable electricity from renewable energy sources
- 3) Biofuels are fully exempted and the biofuels part of blended transport fuels are partially exempted (proportionate to the share of biofuels component) of the mineral oil tax

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

Table 2: Overview of main instruments used at present in the Slovak Republic

Instrument	Description
Feed-in premiums	Since 2019: a production subsidy on top of sales into the power market during the
	support contract period for operators of new renewable electricity plants who made a
	successful tender bid
Tenders	Since 2019, for allocation of feed-in premium support contracts
Feed-in tariffs	For renewable power plants commissioned before 2019: a guaranteed electricity price
	during the support contract period.
Investment subsidies	Available for successful applicants among project developers of wind power and PV
	projects and renewable heat production projects from the Operational Programme
	Quality of Environment funded by the ERDF.
Quota schemes	Importers/suppliers of transport fuels are subject to a renewable quota scheme for
without certificates	biofuels. Compliance based on sample testing rather than certificates-based.
Tax credits (1)	RES-E producers are exempt from excise duty.
Tax credits (2)	Biofuels are fully exempted and the biofuels part of blended transport fuels are partially
	exempted (proportionate to the share of biofuels component) of the mineral oil tax
Soft loans	Granted by the National Fund for Environmental Protection and Water Management

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/2 017/C16-SDE-56-03%20Status%20Review%20RES%20Support%20Schemes.pdf

EEA, 2017. [1] 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

REN21, Global Status Report 2017 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=Slovakia

Melichar, Juraj, 2018. In Slovakia, a shining example of EU funds for renewables and families. CEE Bankwatch network. 11 December

https://bankwatch.org/blog/in-slovakia-a-shining-example-of-eu-funds-for-renewables-and-families

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/slovakia/

https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-slovakia_en.pdf (European Commission/ DG ENER, Energy Union Factsheet Slovenia, November 2017)

European Alternative Fuels Observatory, http://www.eafo.eu/content/slovakia; http://www.eafo.eu/eu

What is meant by ...?

Auctions for granting renewable energy support Feed-in tariff (FiT) An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.

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-intariff 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.