

### **Renewable Energy Policy Factsheet**

#### Summary

In Slovenia, electricity from renewable sources is promoted through a feed-in tariff (so called "guaranteed purchase") and a premium tariff (so called "operating premium"), both granted through a tender procedure. Renewable energy sources for heating purposes are promoted mainly through loans on concessional terms and subsidies. The main incentive for renewable energy use in transport are a biofuels quota scheme, tax exemptions and subsidies.



June 2018



#### 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:** Overall RES 2020 target: Share RES-E in electricity: Share RES-T in transport: Share RES-H/C in heating:

21.3% 25.0% 32.1% 1.6%

Avoided fuel expenses: **RES Turnover: RES Employment:** 

2.4 [Mtoe] 0.8 [billion euro] 310 [MEUR]





Avoided fossil fuels:

4800 [jobs]



□ Gap towards 2016

Source: Eurostat, 2018.

	2005		2016	
	Energy	Energy	Employment	Turnover
Hydropower	354.7 ktoe	367.3 ktoe	900 Jobs	60 MEUR
Wind power	0.0 ktoe	0.6 ktoe	< 100 Jobs	< 10 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	23.0 ktoe	< 500 Jobs	< 30 MEUR
Solid biomass	7.0 ktoe	11.7 ktoe	2300 Jobs	130 MEUR
Biofuels in transport	0.0 ktoe	18.2 ktoe	< 100 Jobs	< 10 MEUR
Renewable heat consumed	439.6 ktoe	612.3 ktoe		
Renewable heat derived	9.4 ktoe	35.4 ktoe		
Heat pumps	0.0 ktoe	0.0 ktoe	500 Jobs	30 MEUR
All other renewables	2.8 ktoe	12.2 ktoe		
Gap towards 2016	267.2 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).



## **CURRENT RENEWABLE ENERGY POLICY**

Electricity from renewable sources is promoted through a two-round tender process, which determines the recipient and the level of support. All production facilities connected to the grid after 22nd September 2014, can take part in the annually published public call, while the operators of renewable energy plants connected to the grid before 22nd September 2014 may sell their electricity to the Slovenian power market operator Borzen at a "uniform annual price", i.e. the feed-in tariff (alternatively, they can opt for a premium tariff). Furthermore, in Slovenia public calls for subsidy applications are organised and loans are provided for projects in the field of renewable energy.

The most substantial support for RES heating and cooling in Slovenia is a financial incentive from the Ministry of Infrastructure via public (state owned) energy companies and a (soft) loan scheme financed by the Eco Fund.

The main support mechanisms for RES in transport are a biofuels quota scheme, a tax regulation mechanism (excise duty relief) and investment subsidies provided by the Slovenian Eco Fund in the form of non-repayable grants. The companies importing and producing petrol, gas or diesel fuels are therefore obliged to ensure that biofuels are offered at their petrol stations.

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

Policies and measures promoting the use of renewables for producing electricity:

- The Slovenian Energy Agency publishes annually an open call for *tenders* for plants producing electricity from renewable energy sources and high efficient cogeneration for admission to the support scheme. All production facilities connected to the grid after 22nd September 2014, could take part in the currently open public tender published by the Energy Agency. The operators of renewable energy plants connected to the grid before 22nd September 2014 may sell their electricity to the Slovenian power market operator Borzen at a "uniform annual price", i.e. the feed-in tariff (alternatively, they can opt for a premium tariff).
- The Slovenian Environmental Fund (Eko sklad) invites applications for *tenders* and publish public calls on a regular basis. The Ministry of Infrastructure (Directorate for Energy, Energy Efficiency and Renewable Energy Sources Division) also publishes specific calls and tenders (Currently there are no public calls of the Ministry open in the field of RES).
- The Slovenian Environmental Fund (Eko sklad) invites applications for *soft loans*.

Policies and measures promoting the use of renewables for producing final heating and cooling energy:

- The Eco Fund provides *investment grants* for the use of RES-H in one-family and multi-family houses by residents, for environmental investments and projects by legal entities and environmental investments of local communities. At the moment there are 5 public calls open covering a loan and subsidy scheme in the field of RES-H in Slovenia. Subsidies may also be competed for in tendering processes organised by state owned energy companies who publish public calls and tenders on a regular basis.
- There is a *training programme for installers of RES-installations*, which is offered as a course for any interested installers on some schools in Slovenia either as part of the normal curriculum for installers or a special course.

- The public authorities show their exemplary role with the so called "green public procurement" when procuring the authorities need to prioritise less environmentally burdensome goods, services or constructions, and when awarding a contract the basic environmental requirements need to be taken into account. Among others the electricity from RES is prioritised.
- A *certification scheme* is governed in the Energy Act and is foreseen for all types of power plants hence also for RES power plants. The Energy Agency grants these certificates.
- A *RES-H building obligation* obliges owners of new or renovated buildings to build energy efficient buildings and also to use RES as their main source of energy.
- A *RES-H infrastructure* is promoted by the Ministry of Infrastructure and Spatial Planning via tenders.

Policies and measures promoting the use of renewables in the transport sector:

- A biofuels quota scheme obliges companies importing or producing petrol or diesel to ensure that biofuels make up a pre-defined percentage of their annual fuel sales.
- Companies producing, processing, holding, receiving or dispatching energy products are obliged to pay a defined amount of tax (excise duty). This amount is reduced or need not be paid at all when the fuel is mixed with biofuels.
- The Slovenian Environmental Fund invites biofuels production projects for applications for non-repayable grants.

During the period 2014-2016 the number of electric charging points in Slovenia has more than tripled, from 151 units in 2014 to 474 units in 2016. National Policy Frameworks under Directive 2014/94/EU on alternative fuels infrastructure have to establish targets, objective and measures for the development of the market of alternative fuels in the transport sector and the deployment of the relevant infrastructure. Slovenia has submitted its National Policy Framework as requested under article 3 of the Directive 2014/94/EU.

Table 1: Overview of support schemes to promote renewable energy

		REGULATORY POLICIES			FISCAL INCENTIVE AND PUBLIC FINANCES					
	Feed-in tariffs	Feed-in premiums	Tenders	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Net-metering/ net-billing	Investment subsidies	Tax credits mechanism l	Tax credits mechanism II	Soft loans
RES-E										
- Offshore wind										
- Onshore wind	х	x	х				x			
- Solar	х	x	х				x			
- Hydro	х	x	x				x			
- Geothermal	х	x	x				x			
- Solid biomass	х	x	x				x			
- Biogas	х	х	х				х			
RES-H/C										
- Solar thermal					х		x			x
- Geothermal					х		x			x
- Biomass					х		x			x
- Biogas					х		x			x
<ul> <li>Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves</li> </ul>					x		x			x
<ul> <li>Others, i.e. aerothermal, hydrothermal</li> </ul>					х		x			x
RES-T										
- Bio gasoline					х		x	x		
- Biodiesel				(2017)	х		х	х		

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

#### Table 2: Overview of instruments used at present

Instrument	Description
Feed-in tariffs	Guaranteed sale of electricity at a pre-set preferential price during the support contract
	period. Applicable to old renewables-sourced electricity generation plants and recent

	medium and large-scale ones.
Feed-in premiums	Guaranteed floating premium on the average electricity benchmark price up to the pre- set reference price, updated ex-post for subsequent reference periods during the support contract period. Applies to recent medium and large-scale electricity generation plants.
Tenders	Feed-in tariffs and premiums are granted to successful tenderers.
Investment subsidies	Renewables-sourced electricity generators ,heat producers and biofuels producers are eligible to a case-specific grant from the (Slovenian) Eco Fund
Soft loans	Heat producers are eligible to a case-specific loan at concessional terms from the (Slovenian) Eco Fund
Tax credits scheme	Partial or full exemption of a certain excise duty for biofuels producers.
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/2</u> 017/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. <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=Slovenia

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/slovenia/

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

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

## 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.					



This project is funded by the European Union under contract n° ENER/C2/2016-487/SI2.742173

#### 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.