

## **Renewable Energy Policy Factsheet**

#### Summary

In Slovenia, electricity from renewable sources is promoted through feed-in support awarded through annual tenders for renewable power plants commissioned on 22 September 2014 or later. Renewable electricity generating installations, commissioned before that date can sell their electricity to the Slovenian power market operator Borzen at a feed-in tariff or a feed-in premium.. Renewable energy sources for heating purposes are promoted mainly through loans on concessional terms and subsidies. The main incentives for renewable energy use in transport are a biofuels quota scheme, tax exemptions and soft loans.





#### Abbreviations used:

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

#### Data for 2018 **Overall RES share:** 21.1% Overall RES 2020 target: Share RES-E in electricity: Share RES-T in transport: Share RES-H/C in heating: 31.6%

25.0% 32.3% 5.5%

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

2.6 [Mtoe] 1.0 [billion euro] 400 [MEUR] 5100 [jobs]





# Hydropower

- Wind power Solar PV, CSP and water heaters
- Solid biomass
- Biofuels in transport
- Renewable heat consumed
- Renewable heat derived

All other renewables

Heat pumps

□ Gap towards 2018

Source: Eurostat, 2020.

	2005			
	Energy	Energy	Employment	Turnover
Hydropower	354.7 ktoe	389.5 ktoe	2000 Jobs	150 MEUR
Wind power	0.0 ktoe	0.5 ktoe	<100 Jobs	<10 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	21.9 ktoe	200 Jobs	20 MEUR
Solid biomass	7.0 ktoe	12.6 ktoe	1800 Jobs	140 MEUR
Biofuels in transport	0.0 ktoe	72.0 ktoe	100 Jobs	10 MEUR
Renewable heat consumed	439.6 ktoe	553.8 ktoe		
Renewable heat derived	9.4 ktoe	34.4 ktoe		
Heat pumps	0.0 ktoe	0.0 ktoe	400 Jobs	30 MEUR
All other renewables	2.8 ktoe	10.2 ktoe	500 Jobs	40 MEUR
Gap towards 2018	281.4 ktoe			Source: Eurostat, EurObserv'ER, 2020.

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

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

- The Slovenian Energy Agency publishes annually an open call for *tenders* for plants producing electricity from renewable energy sources and high efficient cogeneration with a capacity not exceeding 10 MW<sub>e</sub> (20 MW<sub>e</sub> for renewable CHP plants, 50 MW<sub>e</sub> for wind energy). In principle, all RES-E technologies are eligible. Production facilities connected to the grid after 22nd September 2014, can take part. Through the annual tender, with separate windows for distinct technology groups, project developers can bid in a cost of energy bid for access to floating feed-in premium. Applications that turn out to exceed the technology-specific total reference cost of electricity will be rejected. Ahead of the tender call the reference cost of the variable part of the reference cost of electricity are published. After the deadline for bid applications, the full reference cost of electricity for distinct technology categories are published. Successful bidders will sign a feed-in tariff support contract with the Slovenian market operator Borzen. Ultimately the costs of the feed-in support at preferential prices have to be borne by the final electricity consumers with monthly contributions depending among other factors on voltage connection level and electricity consumption level. The operators of renewable energy plants connected to the grid before 22nd September 2014 may sell their electricity to Borzen at a "uniform annual price", i.e. the feed-in tariff. Alternatively, they can opt for a premium tariff.
- The Slovenian Environmental Fund invites applications for tenders to obtain "de minimis" investment subsidies and soft loans. "De minimis" aid amounts per application fall below the threshold for which prior notification to the European Commission is required. Public calls for tenders and applications are published on a regular basis.
- The Ministry of Infrastructure and Spatial Planning (Directorate for Energy, Energy Efficiency and Renewable Energy Sources Division) also publishes specific calls and tenders for investment subsidies. State-owned energy companies are mandated to grant the subsidy amounts to successful applicants. In principle, all RES-E technologies are eligible.
- The Slovenian Environmental Fund invites applications for soft loans. In principle, all RES-E technologies are eligible.

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

- The Eco Fund provides investment subsidies for the use of RES-H in one-family and multifamily houses by residents, for environmental investments and projects by legal entities and environmental investments of local communities as well as soft loans for citizens, groups of citizens and enterprises through calls for application and tender procedures.
- Subsidies are also competed for in tendering processes, organised by state-owned energy companies who publish public calls and tenders on a regular basis with the Ministry for Infrastructure as competent authority.

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

- 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). Exemption is granted for the biofuel share in automotive fuels.

- The Slovenian Environmental Fund invites electric-vehicles charging stations and biofuels production projects for applications for investment subsidies (electric-vehicles charging infrastructure) and soft loans (biofuels production).
- Purchase subsidies for companies and persons are available for battery and plug-in electric vehicles, ranging from €200 to €7500. Battery electric vehicles are exempt for the annual circulation (road) tax. BEVs pay the lowest (0,5%) rate of motor vehicle tax.

So far, the assessment by the European Commission of draft National Energy and Climate Plans of the Member States is available. The Commission's assessment of the draft integrated National Energy and Climate Plan of Latvia – regarding the targets for year 2030 for the share of renewable energy and gross final energy consumption<sup>1</sup> only – is shown below.

Table 1: Overview of Slovenia's actual performance (2018), targets (2020), proposed contributions (2030) under theGovernance Regulation, Regulation (EU) 2018/1999 and contribution ambition assessment by the European Commission,regarding the share of renewables and the level of gross final energy consumption

National targets and contributions	2018	2020	2030	Assessment of 2030 ambition level
Share of energy from renewable sources in gross final consumption of energy (%)	21.1	25.0	27.0	Below 37% (result of RES formula)
Final energy consumption (Mtoe)	5.0	5.1		(Primary energy consumption: 7.1 Mtoe) Very low

Source: European Commission, (2019); Eurostat (2020a, 2020b)

Based on the formula contained in Annex II of the Governance Regulation, Latvia's renewables share would have to reach the level of 37% in 2030 (European Commission, 2019) against the historical rate of 21.1% in 2018 (eurostat, 2020a). The European Commission (2019) considers the proposed RES share by 2030 of **27%** to be significantly below the share of 37% in 2030 that results from the formula in Annex II of the Regulation. Slovenia proposed as only energy efficiency metric a target for primary energy consumption target in 2030, i.e. 7.1 Mtoe. The Commission deems the ambition level of this level "very low" and asks for the specification in Slovenia's final NECP of a(n ambitious) 2030 target level for gross final energy consumption as well.

Slovenia's final National Energy and Climate Plan (NECP) sticks to the target for the renewables share by year 2030 of **27%**, far below the 37% target share resulting from the formula in Annex II of the Governance Regulation. To achieve this target, existing and additional policies Slovenia sets out to implement include broadly (Government of Slovenia, 2020):

 Improving RES-E support implementation practices (such as: better information for investors; removing obstacles; focus tenders for CHP on woody biomass CHP plants; introduce new forms of incentives e.g. for energy communities; simplify support procedures for smaller RES-E installations)

<sup>&</sup>lt;sup>1</sup> Gross final energy consumption negatively affects the share of renewables: given a certain level of final consumption from renewable sources, the more total final energy consumption can be reduced, the higher share of renewables can be achieved.

- Improving the stimulation of RES-E self-consumption, including by local energy communities
- Improving and reform of large hydropower plant stimulation (integration thereof in water management plans; better siting procedures
- Improving the regulatory framework for RES-E network integration
- Promote appropriate RES integration into buildings, spatial planning and energy system planning
- Set ambitious targets for renewables-based district heating in year 2030
- Mandatory reinvestment of at least 15% of net profits in a financial year in RES-E projects for majority stateowned energy companies.

As for the contribution to the EU energy efficiency target for year 2030, in its final NECP Slovenia sets a target for gross final energy consumption of 54.9 TWh, corresponding to **4.7 Mtoe** and a target for primary energy consumption of 73.9 TWh, i.e. **6.4 Mtoe**. This would mean a moderate reduction in gross final energy consumption by 2030 compared to the most recently recorded level of 5.0 Mtoe in 2018. The 2030 target level for primary energy consumption in Slovenia's final NECP is more ambitious than the corresponding level of 7.4 Mtoe in her draft NECP.

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

The main RES support measures in Slovenia are epitomized in Table 2 and Table 3 below.

	NON-FISCAL SUPPORT SCHEMES			FISCAL AND OTHER STATE FUNDED INCENTIVES				
	Feed-in tariffs	Feed-in premiums	Tenders 1)	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Exemption on automotive fuel excise duty	Investment subsidies	Soft loans
RES-E								
- Offshore wind								
- Onshore wind	х	х	х				х	х
- Solar	х	х	х				х	х
- Hydro	х	х	х				х	х
- Geothermal	х	х	х				х	х
- Solid biomass	х	х	х				х	х
- Biogas	х	х	х				х	х
RES-H/C								
- Solar thermal			х				Х	х
- Geothermal			х				х	х
- Biomass			х				х	х
- Biogas								
<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>			x				x	х
RES-T								
- Bio gasoline					х	х		х
- Biodiesel					х	х		х
<ul> <li>Electric-vehicle charging infrastructure</li> </ul>							х	

## Table 2: Overview of support schemes to promote renewable energy in Slovenia

1) RES-E tenders for floating feed-in premium are organized by the Slovenian Energy Agency with market operator Borzen as obligated party. RES-H tenders for investment subsidies organized by state-owned enterprises under the aegis of the Ministry of infrastructure

Sources: RES Legal, EurObserv'ER

#### Table 3: Overview of instruments used at present in Slovenia

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

European Alternative Fuels Observatory, <u>https://www.eafo.eu/countries/slovenia/1752/incentives</u>

European Commission, 2019. Assessment of the draft National Energy and Climate Plan of Slovenia. SWD(2019) 271. Brussels, 18 June <a href="https://ec.europa.eu/energy/sites/ener/files/documents/si\_swd\_en.pdf">https://ec.europa.eu/energy/sites/ener/files/documents/si\_swd\_en.pdf</a>

EEA, 2019. Progress towards renewable energy source targets at member State and EU-28 levels. Copenhagen, 19 December <u>https://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-9#tab-chart 3</u>

European Union, 2018. Regulation (EU) 2018/1999 on the Governance of the European Union and Climate Action, OJEU L328/1, Brussels, 21 December <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R1999&from=EN</u>

Eurostat, 2020a. Renewable energy statistics; Share of renewable energy almost doubled between 2004 and 2018. Luxembourg, January <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable\_energy\_statistics">https://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable\_energy\_statistics</a>

Eurostat, 2020b. Energy consumption in 2018. Primary and final energy consumption still 5% and 3% away from 2020 targets. Luxembourg, 4 February <a href="https://ec.europa.eu/eurostat/documents/2995521/10341545/8-04022020-BP-EN.pdf/39dcc365-bdaa-e6f6-046d-1b4d241392ad">https://ec.europa.eu/eurostat/documents/2995521/10341545/8-04022020-BP-EN.pdf/39dcc365-bdaa-e6f6-046d-1b4d241392ad</a>

Government of Slovenia, 2020. Integrated National Energy and Climate Plan of the Republic of Slovenia. Ljubljana, 27 February <a href="https://ec.europa.eu/energy/sites/ener/files/documents/si">https://ec.europa.eu/energy/sites/ener/files/documents/si</a> final <a href="https://ec.europa.eu/energy/sites/en

International Energy Agency (IEA) database on policies and measures <u>https://www.iea.org/policies?topic=Renewable%20Energy</u>

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>

REN21, 2020. Global Status Report 2020. Paris, 16 June https://www.ren21.net/wp-content/uploads/2019/05/gsr 2020 full report en.pdf

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

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)

## 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.



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