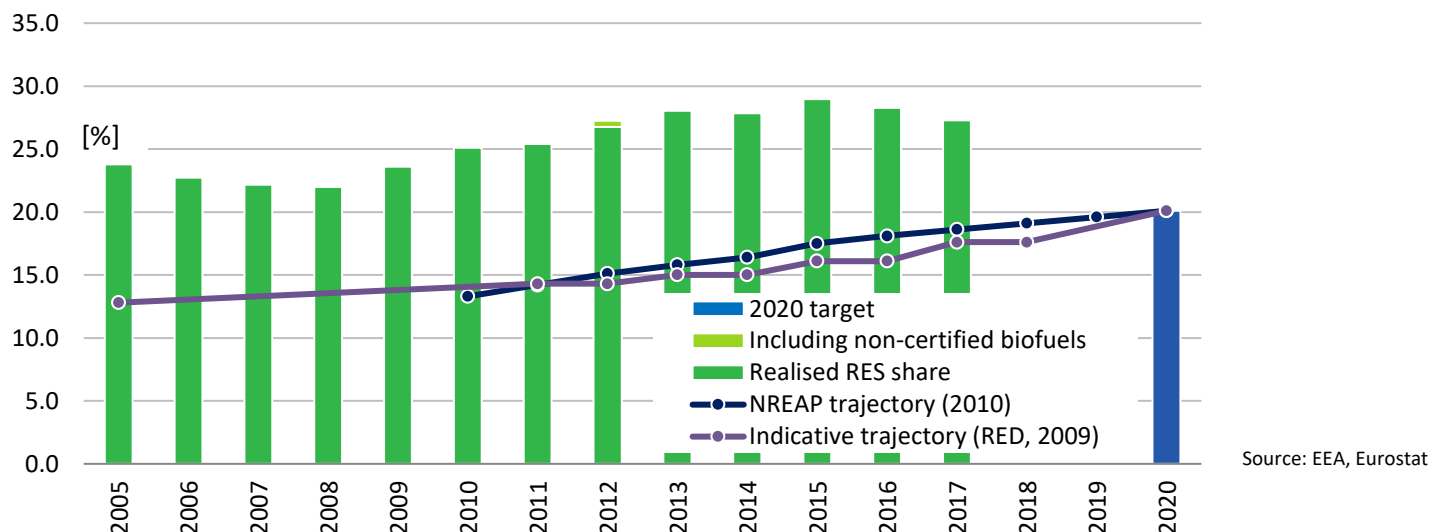


Summary

In Croatia, electricity from renewable sources is promoted through a premium tariff (and a guaranteed feed-in tariff for installations of less than 500 kW), allocated through tenders. So far no tenders have been organised due to the delays in adopting the necessary secondary legislation. Soft loans and subsidies for renewable energy projects are also provided. Renewable energy sources for heating purposes only are not promoted through a national support scheme. The main promotion scheme in the field of renewable transport fuels is a biofuels quota scheme. Additionally, the state provides biofuels incentives taking the form of a tax credits mechanism.

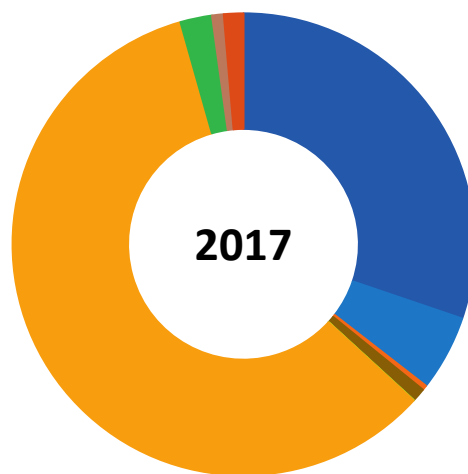
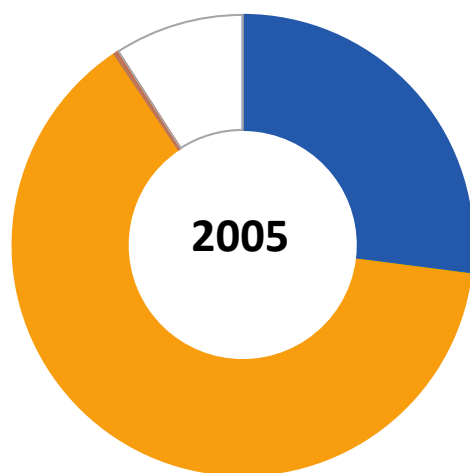


Abbreviations used:

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:	27.3%	Avoided fossil fuels:	3.0 [Mtoe]
Overall RES 2020 target:	20.0%	Avoided fuel expenses:	0.7 [billion euro]
Share RES-E in electricity:	46.4%	RES Turnover:	650 [MEUR]
Share RES-T in transport:	1.2%	RES Employment:	20300 [jobs]
Share RES-H/C in heating:	36.5%		



- Hydropower
- Wind power
- Solar PV, CSP and water heaters
- Solid biomass
- Biofuels in transport
- Renewable heat consumed
- Renewable heat derived
- Heat pumps
- All other renewables
- Gap towards 2017

Source: Eurostat, 2019.

	2005		2017		
	Energy		Energy	Employment	Turnover
Hydropower	528.9 ktoe		592.2 ktoe	1400 Jobs	90 MEUR
Wind power	1.0 ktoe		103.6 ktoe	1100 Jobs	70 MEUR
Solar PV, CSP and water heaters	0.0 ktoe		6.8 ktoe	300 Jobs	20 MEUR
Solid biomass	0.3 ktoe		18.6 ktoe	14400 Jobs	280 MEUR
Biofuels in transport	0.0 ktoe		0.5 ktoe	2000 Jobs	110 MEUR
Renewable heat consumed	1245.4 ktoe		1152.3 ktoe		
Renewable heat derived	0.0 ktoe		43.6 ktoe		
Heat pumps	5.2 ktoe		15.9 ktoe	<100 Jobs	<10 MEUR
All other renewables	0.9 ktoe		26.6 ktoe		
Gap towards 2017	178.3 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

Renewable energy generation is set to be supported mainly through a tender-based feed-in premium scheme. For eligible installations of less than 500 kW a feed-in tariff is allocated through tenders. Additionally, the Croatian Bank for Development and Reconstruction (HBOR) and the Environmental Protection and Energy Efficiency Fund (FZOEU) provide financial incentives for RES-E projects.

The following measures and instruments are in place for *renewable electricity generators*:

- Since 1 January 2016 the designated main support scheme for renewable energy is a tender-based floating feed-in premium scheme for privileged installations with a capacity as from 500 kW. RES-E plant operators, who have obtained the status of privileged producer and have won a public tender carried out by the Croatian Energy Market Operator (HROTE), will receive a floating feed-in premium during a 12-year period. The premium level will be determined by the (positive) difference between the contractual support reference price, which is annually adjusted in line with the Croatian consumer price index, subtracted by the reference electricity market price. The latter is determined ex post annually by HROTE. In principle, HROTE issues a call for tenders at least once a year, if quotas for the support of certain technologies of renewable energies are available. Mid-2019 more details are scheduled to become available through secondary legislation about requirements for becoming a privileged producer, technology quota, etc., needed to organize the first annual tender. The support scheme is funded by a surcharge on the consumer electricity price.
- Privileged producers owning a RES-E installation below a capacity of 500 kW, can conclude a 12-year power selling contract at a guaranteed purchase price, if they have won a public tender carried out by the Croatian Energy Market Operator. Again implementation of tenders is awaiting adoption of secondary legislation on details such as technologies covered. The support scheme is funded by a surcharge on the consumer electricity price.
- Soft loans granted for the implementation of RES-E projects are part of the “environmental protection” loan scheme by the Croatian Bank for Reconstruction and Development (HBOR) in cooperation with commercial banks. In principle, all RES_E technologies are eligible. The costs are borne by state-funded HBOR.
- The Environmental Protection and Energy Efficiency Fund (FZOEU) offers grants and soft loans for the use of renewable energy sources. In principle, all RES_E technologies are eligible. The costs are covered by the state, voluntary national and international donations, and remaining sources of income.

There are currently no support schemes for *renewable heating and cooling*. However, the Energy Strategy adopted in 2009 obliges the Croatian State to encourage the future use of RES and to achieve a higher percentage of primary use of RES in the heating sector (cooling is not mentioned). For the promotion of renewable energy in heating and cooling, the main document is the Programme for usage of the potential for heating and cooling for period between 2016 and 2030 (*Program korištenja potencijala za učinkovitost u grijanju i hlađenju za razdoblje 2016. – 2030.*).

The main promotion scheme in the field of *renewable transport fuels* is a biofuels quota scheme. The quota obligations set an increasing annual %-share of biofuels in marketed transport fuels up to

10.05% the year 2020 as defined in the national goals. Obligated parties, transport fuel distributors, have to present by the end of February an annual report and analyses results of the previous year showing that they did comply with last year's biofuels quota scheme obligations. The costs of the scheme are ultimately borne by the final users of transport fuels. Additionally, biofuels are exempt from excise duty on transport fuels. The costs in terms of excise revenues forgone are borne by the state. Electric vehicles are subject to reduced - or are exempt from – registration tax.

OVERVIEW OF MAIN SUPPORTING POLICIES

Tables 1 and 2 provide an overview of support instruments used to promote the deployment of renewable energy in Croatia.

Table 1: Overview of support schemes to promote renewable energy in Croatia

	NON-FISCAL SUPPORT SCHEMES						FISCAL INCENTIVES AND OTHER STATE FUNDED INCENTIVES			
	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 credit mechanism I	Tax credit mechanism II	Soft loans
RES-E										
- Offshore wind	x	x	x				x			x
- Onshore wind	x	x	x				x			x
- Solar	x	x	x				x			x
- Hydro	x	x	x				x			x
- Geothermal	x	x	x				x			x
- Solid biomass	x	x	x				x			x
- Biogas	x	x	x				x			x
RES-H/C										
- Solar thermal										
- Geothermal										
- Biomass										
- Biogas										
- Small scale installations, e.g. solar thermal collectors, heat pumps, biomass boilers and pellet stoves										
- Others, i.e. aerothermal, hydrothermal heat pumps										
RES-T										
- Bio gasoline					x			x		
- Biodiesel					x			x		

* Tender-based feed-in tariffs are available for installations of less than 500 kW and tender-based, floating feed-in premiums for installation of 500 kW and higher. First annual tenders imminent, awaiting adoption of secondary legislation with details on *inter alia* eligible technologies (technologies covered).

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

Table 2: Overview of instruments used in Croatia, 2019

Instrument	Description
Feed-in tariffs	Guaranteed sale of electricity at a pre-set preferential price during the support contract period. New applications open to small-scale projects (< 500 kW) through tenders.
Feed-in premiums	Floating premiums based on difference between guaranteed reference values and the average benchmark electricity price per reference period during the support contract period. New applications open to large-scale projects (≥ 500 kW) through tenders.
Tenders	Applicable to project developers seeking feed-in tariff or premium support benefits.
Investment subsidies	The Environmental Protection and Energy Efficiency Fund (FZOEU) offers grants and soft loans for the use of renewable energy sources.
Soft loans	Granted for the implementation of RES-E projects are part of the “environmental protection” loan scheme by the Croatian Bank for Reconstruction and Development (HBOR) in cooperation with commercial banks. The Environmental Protection and Energy Efficiency Fund (FZOEU) also offers soft loans for the use of renewable energy sources.
Biofuels quota scheme	Obliges importers and suppliers of transport fuels to deliver a minimum share of biofuels for each year up to the year 2020 as defined in national legislation.
Tax credits mechanism	Sets the excise duty for biofuels to zero.

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

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=Croatia>

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/croatia/>

<http://globalcompetitionreview.com/insight/the-european-middle-eastern-and-african-antitrust-review-2017/1067815/eu-energy> (Croatian renewables support compatible with the EU internal market: DG COMP decision SA.38406 on 1 September 2015)

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

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



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