



COUNTRY POLICY PROFILE

Croatia

December 2015

**LOG FILE OF CHANGES IN SUPPORT
POLICIES AS COMPARED TO LATEST
MEMBER STATES PROGRESS REPORT**

The EurObserv'ER project

The EurObserv'ER Barometers monitor the renewable energy progress in each Member State of the European Union. Every two months a barometer dedicated to one particular renewable energy technology is published. Moreover, once a year an [Overview Barometer](#) collects the main indicators published during the year and completes these with additional renewable sectors which have not been detailed in the individual Barometers. Finally, the Overview Barometer also reports on socio-economic aspects: employment and turnover in the field of renewables, and the renewable energy investment climate. The country policy reports monitor policy developments by providing an overview of policy changes compared to the Member State Progress Reports (updated until December 2015).

All Barometers are available for download at <http://www.eurobserv-er.org/>. An overview of direct links to Barometers is available in the Annex.

New Barometer releases are announced on Twitter (https://twitter.com/eurobserv_er).



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Abstract

Promotion of renewable energy sources has an important place in the national energy policy of Croatia.

The energy policy is set in an Energy Act where a basis for exploitation of renewable energy sources is set. The objectives for 2020 are set in Energy Strategy adopted in 2009. It obliges the Croatia to encourage the future use of RES and to achieve a higher percentage of primary use of RES in the heating sector.

The production of electricity from renewable energy sources is promoted through a feed-in tariff and loans. The Croatian Bank for Development and Reconstruction and the Fund for Environmental Protection and Energy Efficiency operate a loan scheme for RES-E projects.

In past renewable energy sources for heating hadn't been promoted by the state so far. Currently, a support scheme for RES heating from biomass is in progress.

The main promotion scheme in the field of RES-T is a biofuel quota obligation. Additionally, the state provides a subsidy for producers of biofuels as well as a tax regulation mechanism to encourage the usage of biofuels.

Abbreviations

BTL	Biomass-to-Liquids
CHP	Combined heat and power plant
EEAG	Environmental and energy aid guidelines
EU-27	European Union, 27 Member States (excludes Croatia)
EU-28	European Union, 28 Member States (includes Croatia)
FiP	Feed-in premium (scheme)
FiT	Feed-in tariff (scheme)
GHG	Greenhouse gas(es)
GHG	Greenhouse gas
ktoe	Kiloton oil equivalent
MSW	Municipal solid waste
NREAP	National Renewable Energy Action Plan
PV	Photovoltaic energy
RE	Renewable energy
RED	Renewable Energy Directive
RES	Renewable energy sources
RMSW	Renewable Municipal solid waste (renewable fraction in MSW)
RQS	Renewable quota scheme
TSO	Transmission system operator

Renewable energy mix

According to the [EurObserv'ER Bridging Report \(2015\)](#) the amount of renewable energy in Croatia for the year 2013 was 1251.1 ktoe, +275.1 ktoe (+28.2%) compared to 2012. The 2012 share of renewable energy in Croatia amounted to 16.9%, and for 2013 this share amounted to 18.0%. According to its National Action Plan for RES Croatia has a target of 20 % in 2020.

In this total amount, the 2013 contribution from renewable electricity amounted to 753.1 ktoe (8759 GWh), +303.9 ktoe (+67.6%) compared to 2012, for renewable heat the amount was 458.2 ktoe, -24.2 ktoe (-5.0%) compared to 2012 and for renewable energy in transport the 2013 realisation was 39.8 ktoe, -4.5 ktoe (-10.2%) compared to 2012.

The most important technology in Croatia (2013) is hydropower (697.0 ktoe). Second technology is heat from biomass (443.3 ktoe). Third comes wind power (44.5 ktoe). The growth rates range from -11.8% (for biodiesel) to 450.0% (for solar power (photovoltaics and concentration solar power)).

Table Renewable energy production in Croatia. Data have been expressed in ktoe and refer to the years 2012 and 2013

Croatia		2012	2013	Difference	
			ktoe		Growth
Renewable Electricity	Hydropower	412.7	697.0	+284.3	+68.9%
	Geothermal	0.0	0.0	0.0	0.0%
	Solar	0.2	0.9	+0.8	+450.0%
	Tidal & wave	0.0	0.0	0.0	0.0%
	Wind	28.3	44.5	+16.2	+57.1%
	Biomass	8.1	10.7	+2.7	+33.0%
	Total	449.3	753.1	+303.9	+67.6%
Renewable Heat	Geothermal	7.0	6.8	-0.2	-2.9%
	Solar	7.1	8.1	+1.0	+14.1%
	Biomass	468.3	443.3	-25.0	-5.3%
	Ambient heat	0.0	0.0	0.0	0.0%
	Total	482.4	458.2	-24.2	-5.0%
Renewable Transport	Bioethanol/bio-ETBE	1.3	1.3	0.0	0.0%
	Biodiesel	35.7	31.5	-4.2	-11.8%
	Renewable hydrogen	0.0	0.0	0.0	0.0%
	Renewable electricity	7.3	7.0	-0.3	-4.4%
	Other biofuels	0.0	0.0	0.0	0.0%
	Total	44.3	39.8	-4.5	-10.2%
Total Renewable (calculated)		976.0	1251.1	+275.1	+28.2%

Source: EurObserv'ER 2015

Recent RES Policy Developments

The current EurObserv'ER policy profile is listing recent policy changes in the EU Member States. Starting point for this monitoring is the situation as it has been described in the country's Progress Report (which were due end of 2013). All Renewable Energy Progress Reports are available in English language from www.eurobserv-er.org (translated versions).

Date	Technology	Policy change
January 2014	PV	The cup for PV lowered from 15 MW to 5 MW of building-integrated PV capacity on private buildings and to 2 MW on public buildings. The cup for ground-mounted PV installations moved from 10 MW to 5 MW.
March 2014		<i>No change to be reported</i>
May 2014		
July 2014		
September 2014	Biofuels, all, R&D&D	September: The change in The Tariff System for Electricity Production from Renewable Energy Sources and CHP: the obligation for investors of providing bank guarantees is abolished September: For 2014 the government should provide on budget incentives of 130 million kunas supporting a production of 58.8 million liters of biodiesel. However, the revised budget lowered the quota for incentives to 50 million kunas. September: A public call for co-financing of educational, research and development studies, projects, programs and other activities in the fields of energy efficiency and renewable energy
November 2014	Wind, all	The director of HROTE indicates some changes in RES policy: a cup for wind electricity might be expected, introduction of FIP as possible move towards the market with a creation of new RES balance group November 1 st : HROTE sets up issuing system for certification of RES origin. December 31 st : "The Law on renewable energy sources" - planned
December 2015		<i>No change to be reported</i>
January 2015	All, PV, wind	The Law on renewable energy sources is in the public hearing. HROTE will no longer enter into signing contracts for the purchase of electricity produced from PV and wind.
March 2015		<i>No change to be reported</i>
May 2015		The end of public hearing on proposed law on renewable energy sources and highly effective CHP
July 2015		<i>No change to be reported</i>
September 2015		

November 2015		
December 2015		The government announced that in 2016 it will start to develop a program for electrification for low-income households in rural area. There is a plan that 100 solar systems will be installed, and the value of the project is estimated at 6 million kunas.

Note to the reader: the above overview had been compiled with care. However, in case you miss recent developments please be invited to inform EurObserv'ER on policy changes in a Member State. For communication use e-mail (policy@eurobserv-er.org) or Twitter (https://twitter.com/eurobserv_er).

Glossary

Auctions for granting renewable energy support	An auction is a process, organised by a governmental renewable energy implementation agency, of granting production or investment support to a specified volume of eligible renewable energy (or renewable energy generation capacity) based on the lowest bids per unit of renewable energy (or renewable energy generation capacity) by eligible renewable project developers.
Degression rate	See under 'Sliding feed-in tariff'
Feed-in tariff (FiT)	A technology-specific support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers, typically for a period of 10-20 years. The FiT level is set <i>ex ante</i> by the National Regulatory Agency (NRA). It is to cover all future production costs including a <i>normal</i> rate of return to capital invested. In many schemes priority network access is offered to eligible renewable electricity generators, whilst a designated third party - e.g. the transmission or distribution network operator concerned - is being mandated to pay the FiT remuneration due. 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.
Feed-in premium (FiP)	A technology-specific support scheme which provides for a technology-specific subsidy 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 (see under 'Floating FiP') rate, projected by the National Regulatory Agency (NRA) to enable renewable energy generation investments deemed commercially attractive by project developers without yielding supra-normal profits.
Floating FiP	A feed-in premium, which is periodically adjusted to exactly offset the 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)
NRA	National Regulatory Agency

Renewable quota scheme (RQS)	A renewable quota scheme 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. Typically the renewable quota target is increased gradually over time. Renewable quota systems are also known under terms such as quota (obligation) schemes or renewable portfolio standards.
Request for tenders (RFT)	A request for tenders (RFT) is a formal, structured invitation to suppliers, to bid, to supply products or services. In the public sector an official fee is needed to fortify and secure the tender bid engagement/win documents, such a process may be required and determined in detail by law to ensure that such competition for the use of public is open, fair and free from bribery and nepotism. For example, a government may put a certain level of MW of offshore wind energy at a pre-defined location 'out to tender'; that is, publish an invitation for other parties to make a proposal for the construction of offshore wind farms, on the understanding that any competition for the relevant government contract must be conducted in response to the tender, no parties having the unfair advantage of separate, prior, closed-door negotiations for the contract. An evaluation team will go through the tenders and decide who will get the contract. (source: adapted from Wikipedia.org)
RD&D funding	The funding of research, development and demonstration activities and programmes. For technologies far remote from commercial maturity, government grants or subsidies might be considered. For technologies close to commercial maturity which are not taken up for commercial research any way, instruments such as fiscal instruments (tax credits, accelerated depreciation, etc.) and public-private partnerships may be considered, based on shared public and private RD&D funding.
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 depression 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.
Tenders	See 'Request for tenders'

References

EurObserv'ER, 2014, www.eurobserv-er.org

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<http://www.fzoeu.hr/hrv/pdf/JP%20OIRIS%202014.pdf>

Annex

EurObserv'ER Barometers published are all available for download. Direct links to all EurObserv'ER publications:

Wind Energy Barometer

(February 2015, PDF, English language, 16 pages):

http://www.energies-renouvelables.org/observ-er/stat_baro/observ/baroide16_WindEnergy_EN.pdf

'The State of Renewable Energies in Europe', 2014 edition

(January 2015, PDF, English language, 218 pages)

http://www.energies-renouvelables.org/observ-er/stat_baro/barobilan/barobilan14_EN.pdf

Solid Biomass Barometer

(December 2014, PDF, English language, 14 pages)

http://www.energies-renouvelables.org/observ-er/stat_baro/observ/baro225_en.pdf

Biogas Barometer

(November 2014, PDF, English language, 14 pages)

http://www.energies-renouvelables.org/observ-er/stat_baro/observ/baro224_Biogas_en.pdf

Renewable Municipal Waste Barometer

(November 2014, PDF, English language, 12 pages)

http://www.energies-renouvelables.org/observ-er/stat_baro/observ/baro224_Dechets_en.pdf

Biofuels Barometer

(July 2014, PDF, English language, 16 pages)

http://www.eurobserv-er.org/pdf/baro216_en.asp

Solar Thermal Barometer

(June 2014, PDF, 27 pages, English/French language):

<http://www.eurobserv-er.org/pdf/baro215.asp>

Photovoltaic Barometer

(April 2014, PDF, 24 pages, English/French language):

<http://www.eurobserv-er.org/pdf/baro-jdp9.asp>

Heat Pump Barometer

(October 2013, PDF, English/French language, 18 pages)

<http://www.eurobserv-er.org/pdf/baro218.asp>