



COUNTRY POLICY PROFILE

Croatia

October 2014

LOG FILE OF CHANGES IN SUPPORT POLICIES AS COMPARED TO LATEST MEMBER STATE 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 a EurObserv'ER Overview Barometer¹ 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.

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

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



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¹ Free download at http://www.eurobserv-er.org/pdf/bilan13-gb.asp, latest edition is 2013.

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 and 2020 target

Source: Croatian RES action plan

(October2013;http://ec.europa.eu/energy/renewables/transparency_platform/doc/dir_2009_0028_action_plan_croatia.zip) and Progress report 2013

(January2014,http://ec.europa.eu/energy/renewables/reports/doc/2013_article_22_progress_reports_orignal_language.zip)

According to its National Action Plan for RES Croatia has a target of 20 % in 2020. In 2005 share of RES amounted to 12.6 % and in 2012 Croatia reached a share of 15.1 %. Main renewable source is Hydro representing 51 % of total renewable energy consumption that in 2012 amounted to 1009 ktoe. Second most important source is solid biomass representing almost 36 %. Next source is biogas 5 % share and other sources have shares smaller than 5 % (wind, geothermal and biofuels each 3 % and solar thermal 1 %).

Table Renewable energy production in the 27 Member States of the European Union (EU-27) and the corresponding figures for Croatia. Data have been expressed in ktoe and refer to the year 2012

	European Union		Contribution of
[ktoe, 2012]	(27 countries)	Croatia	Croatia to EU-27
Hydro*	29408		
Wind*	17089		
Solar PV	5732		
Solar thermal**	2116		
Solid Biomass***	74804		
Biogas	6212		
MSW***	4426		
Geothermal	7825		
Biofuels	11711		
Ocean energy	44		

^{*} Normalised electricity generation

Source: EurObserv'ER, 2014 (<u>www.eurobserv-er.org</u>)

^{**} Including electricity generation from Concentrated Solar Power

^{***} Including liquid biomass

^{****} Municipal Solid Waste only regards the renewable fraction in the waste

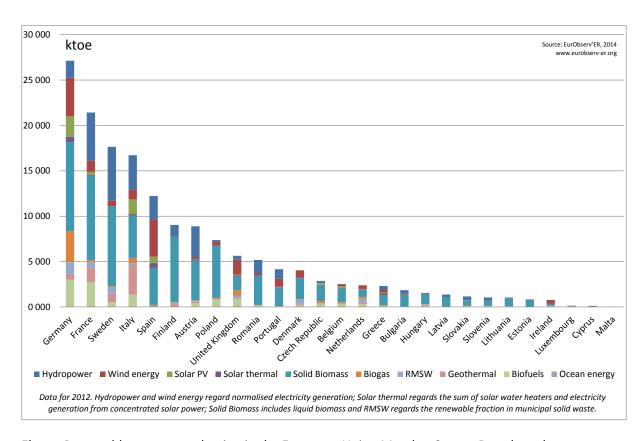


Figure Renewable energy production in the European Union Member States. Data have been expressed in ktoe and refer to the year 2012. Source: EurObserv'ER, 2014 (www.eurobserv-er.org)

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 cap 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 cap for ground-mounted PV installations changed from 10 MW to 5 MW.
March 2014		
May 2014		The European Commission released the Progress Report for the Croatia in May 2014. See Section 2 (page 6) to Section 4 (page 27) for a description of policy measures and support schemes.
July 2014		
September 2014	Biofuels, all, R&D&D	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 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. 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
November 2014	Wind, all	energy The director of HROTE indicated some projected changes in RES policy: a cap for wind electricity might be expected, introduction of FiP as a possible move towards the market with a creation of new RES balance group. November 1 st : HROTE is expected to set up an issuing system for certification of RES origin.
December 2014	All renewables	For December 31 st "The Law on renewable energy sources" has been planned.

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 tarif'

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 *ex ante* by the National Regulatory Agency (NRA). It is to cover all future production costs including a *normal* 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 supranormal 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 prespecified 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-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 submarket-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:

Biofuels Barometer (July 2014, PDF, English language, 14 pages) http://www.eurobserv-er.org/pdf/baro222_en.asp

Solar Thermal Barometer (CSP and solar water heaters) (May 2014, PDF, 18 pages, English language, 3.6 MB) http://www.eurobserv-er.org/pdf/baro221 en.asp

Solar Photovoltaic Barometer (April 2014, PDF, 16 pages, English language, 2.9 MB) http://www.eurobserv-er.org/pdf/baro-jdp11 en.asp

Wind Power Barometer (February 2014, PDF, English, 14 pages, 2.8 MB) http://www.eurobserv-er.org/pdf/baro-jde14_en.asp

'The State of Renewable Energies in Europe', 2013 edition (January 2014, PDF, English language, 200 pages, 12 MB) http://www.eurobserv-er.org/pdf/bilan13-gb.asp

Solid Biomass Barometer (December 2013, PDF, English language, 14 pages, 2.9 MB) http://www.eurobserv-er.org/pdf/baro219 en.asp

Heat Pump Barometer (October 2013, PDF, English language, 18 pages, 2.5 MB) http://www.eurobserv-er.org/pdf/baro218.asp

Biogas Barometer (December 2012, PDF, English/French language, 14 pages, 2.0 MB) http://www.eurobserv-er.org/pdf/baro212biogasEu.asp

Renewable Municipal Waste Barometer (December 2012, PDF, English/French language, 12 pages, 1.9 MB) http://www.eurobserv-er.org/pdf/baro212mswEu.asp