

**Avosetta meeting in Oslo**  
**Legal issues related to the promotion and regulation of renewable energy**  
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**Report from Croatia**

Lana Ofak

**Introduction to the country**

In June 2004 European Council granted the status of candidate country to Croatia. Accession negotiations with Croatia were opened in October 2005 and are now entering their final phase. Negotiations have been provisionally closed on 28 out of 35 chapters. The negotiations on Chapter 15 - Energy were provisionally closed in November 2009. Croatia is still in the process of alignment with the third energy liberalisation package which was adopted by the Council in June 2009. Full alignment is expected to take place in the course of 2011.

The Draft of the National Renewable Energy Action Plan (NREAP) was prepared and submitted to the European Commission on 30 June 2010. Further alignment of the NREAP with comments of the Commission is still in progress, after which it will be forwarded for adoption to the Croatian Government.

Croatia adopted a new Energy Development Strategy for the period up to 2020 in October 2009.

**Answers to the questionnaire**

*1. What is the share of renewable energies in overall final energy consumption in your country? From what sources is this renewable energy? How will / should the proportion and composition of renewable energy develop in your country? Can the requirements of the Directive 2009/28/EC be met or exceeded?*

Croatia has a great natural potential for the use of renewable energy sources, especially regarding biomass, wind and solar energy. However, this potential is not sufficiently used. The total share of renewable energy sources in primary energy production in Croatia is less than 1% (excluding large hydro power plants and fire wood traditionally used as a way of heating).

In 2009, renewable energy sources accounted for approximately 11 percent of total energy consumption (according to the EUROSTAT method). Total production of electricity in 2009 was 12777.1 GWh, where the output of electricity from renewable energy sources, hydro power plants included, made 54 percent of total production: 52.6 percent from large hydro power plants and 1.4 percent from other renewable energy sources (small hydro power plants, wind energy, landfill gas and biogas). In terms of total primary energy supply in Croatia, electricity from renewable energy sources accounted for 37.4 percent: the share of electricity from large hydro power plants was 36.4 percent, while electricity from other renewable energy sources accounted for 1 percent.<sup>1</sup>

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<sup>1</sup> Annual Energy Report: Energy in Croatia 2009, [http://www.eihp.hr/hrvatski/prilozi\\_novosti/energija09.pdf](http://www.eihp.hr/hrvatski/prilozi_novosti/energija09.pdf)

In its new Energy Development Strategy, Croatia accepted the targets set in the Directive 2009/28/EC. The share of renewable energy sources (RES) in gross final energy in 2020 shall be 20%. The goal is to use around 84 PJ of renewable energy sources in 2020. The projection of RES shares in gross final energy consumption in 2020 is as follows:

RES	Biomass	Biofuels	Hydropower Large HPP	Hydropower Small HPP	Wind energy	Solar energy	Biogas	Geothermal energy	Other energy (air, water)
%	31.5	10.8	28.2	1.2	12.2	5.9	3.1	1.3	5.8

The projection is achievable, but only with significant efforts on the part of Croatian institutions. The targets which Croatia set for the implementation of the Directive 2001/77/EC weren't even remotely feasible. Croatia set the target that the minimum share of electricity produced from plants using renewable sources whose production is incentivised (excluding hydro power plants exceeding 10 MW of capacity) shall amount to 5.8 % of the total electricity consumption by the end of 2010. In 2009 RES (excluding large hydro) made 179 GWh. The 2010 national target amounted to 1080 GWh. Although the relevant data for 2010 are still not available, we can conclude with certainty that the target was not reached.

Croatian NGOs and experts criticise the lack of ambition and underestimation regarding the use of RES which is envisaged in the Energy Development Strategy. The experts are continuously pointing out this fact, especially in the context of solar and biomass energy.

## 2. Describe the key national legislation to promote renewable energies.

The promotion of RES is covered by great number of laws and implementing regulations. In the Progress Report for 2010, European Commission stated that administrative procedures related to RES need to be simplified in Croatia. Ministry of Economy, Labour and Entrepreneurship is currently in the process of drafting the Act on RES which is expected to be adopted by the Croatian Parliament in the course of this year. The Act on RES would replace provisions regarding the RES which are scattered across various laws and bylaws.

### a. Subsidies and other financial support?

Ministry of Economy, Labour and Entrepreneurship supports development and production of the equipment for use of RES. State aid for energy sufficiency and RES can be obtained through application in the public contest. There are also different forms of financing through Environmental Protection and Energy Efficiency Fund (EPEEF), Croatian Bank for Reconstruction and Development, European Bank for Reconstruction and Development (EBRD) and local and regional self-government. On the regional level, there is a positive process of establishing Regional Energy Agencies which provide financial and other support for RES utilization. The public opinion is that there is a need for cooperation between relevant institutions (municipality – city – region – EPEEF) and for a more systematic support rather than mere support from one public contest to another. In May 2010 EBRD stated that Croatia is the only country in South East Europe without EBRD's investments in energy field despite its interests in projects which promote RES. Some possible reasons are lack of interest on the part of Croatian institutions and slow bureaucracy. There is a general opinion in the public that Croatian Government is still more oriented to conventional sources of energy.

Subsidies for biofuels were introduced in May 2009, when Croatian parliament adopted the Act on Biofuels for Transport in order to harmonise with Directive 2003/30/EC. The Act was amended in December 2010 due to alignment with Directive 2009/28/EC. However, all the necessary implementing regulations are still not adopted. Full implementation of the Act on Biofuels for Transport is, thus, delayed. There is also a possibility of state support (incentive for rapeseed production) from Ministry of Agriculture.

*b. Purchase guarantees? (example: feed-in tariffs?)*

In July 2007, Croatia has introduced the feed-in tariff system for supporting renewable electricity generation. All electricity customers, through usual electricity payments, have to pay additional fee for incentivizing electricity production from renewable energy sources and cogeneration. The collected fees are used by Croatian Energy Market Operator (HROTE) for payment of incentive price to eligible producers for electricity delivered to the power system, in compliance with the tariff system. Incentive prices are determined by the type of facility and range from a minimal price for landfill gas power plants and power plants using gas from water treatment plants (cca. 0.05 Euros/kWh) to a maximal price for solar power plants with installed capacity up to 10 kW (cca. 0.5 Euros/kWh). The tariff system is adjusted every year according to inflation, as well as dependant of the share of domestic component within the project.

An eligible producer is an energy entity producing both electrical and thermal energy in a single production facility, using waste or renewable energy sources in an economically appropriate manner harmonized with environmental protection. An eligible producer, apart from hydropower plants larger than 10 MW, can acquire the right to the incentive price prescribed by the tariff system. Croatian Power Company (HEP Group) shall take the entire amount of generated electricity from any eligible producer. On the other hand, the energy entity responsible for electricity supply shall off-take a minimal share of electricity generated by incentivized eligible producers in accordance with the conditions prescribed in the relevant Ordinance.<sup>2</sup>

The status of eligible producer is acquired by the decision of the Croatian Energy Regulatory Agency (HERA) in accordance with the relevant rules prescribed by the Minister of Economy, Labour and Entrepreneurship. HROTE enters into electricity purchase contracts, with incentivized eligible producers, for electricity produced from renewable energy sources and cogeneration. The duration of the contract is 12 years.

*c. Quota system? (example: “green certificates”?)*

Croatia has not introduced the quota system. In experts’ opinion (RELEEL project<sup>3</sup>), introduction of tradable green certificates scheme is not recommended for Croatia. Namely, it is considered that current feed-in tariff system will be more efficient in achieving targets related to the increase of RES share in electricity production.

*d. A special legal framework for the installation of facilities for the production of renewable energy sources? (short description)*

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<sup>2</sup> <http://www.hrote.hr/hrote/en/about/default.aspx>

<sup>3</sup> <http://releel.mingorp.hr/default.aspx?id=39>

Administrative procedure for construction of renewable energy sources and combined heat and power plants and for acquiring status of eligible producer can be summarised as follows: (1) registration of energy activity, (2) preliminary energy approval for plant construction, (3) decision on environmental acceptability of the project (EIA) or/and decision on integrated environmental protection requirements (IPPC procedure), (4) location permit and/or preliminary electroenergy approval and/or contract for grid connection, (5) energy approval for plant construction, (6) decision on concession and contract, (7) construction permit, (8) preliminary decision on acquiring electricity producer status, (9) contract on electricity purchase (takes effect after legal validity of decision on acquiring electricity producer status), (10) electroenergy approval, (11) grid usage contract, (12) usage permit, (13) water permit, (14) licence for energy activity, (15) decision on acquiring electricity producer status.<sup>4</sup> The complex, lengthy administrative procedure is perceived as a disincentive to increasing investment in RES.

*e. Sustainability requirements for biomass / biofuels production? (art. 17-19 of 2009/28/EC)*

The necessary implementing regulation is still not adopted.

*3. Describe mayor legal instruments, arguments, and court decisions concerning environmental protection issues of renewables.*

Since Croatian legislation regarding RES is still developing and necessary implementing regulations are in the process of drafting, there are no reported cases of court decisions concerning these issues. The public and parties concerned mostly try to resolve their issues with the authorities in informal ways (e. g. meetings, round tables, media, public protests), and not by using any legal instruments which they generally perceive as inefficient.

*4. Is there a national debate about the sense and nonsense of renewable energies, and if so, has this lead to changes or corrections of the regulatory framework?*

The national debate is mostly dominated by the developers. Three years of experience regarding the implementation of RES projects in Croatia have shown many barriers in the administrative procedures (e. g. procedures are very lengthy; procedure is the same for large and small power plants; conflicts with implementing regulations from other competences (spatial planning, building, environmental protection, water management); difficulties in proving land ownership due to unreliable Land Registry; lack of cooperation between competent authorities etc.). The competent authorities are taking the criticism concerning the regulatory framework and administrative obstacles into account in preparing new legislation. However, the outcome of this is yet to be seen, after the new legislation is adopted.

The negative aspects of RES, in my opinion, are not sufficiently addressed in the national debate. A possible reason for this is the relative “novelty” of RES projects in Croatia.

*5. How well do the public accept renewable energy proposals (eg new on- shore and off-shore windfarms, biomass plants etc.)?*

According to a survey of public attitudes and knowledge of renewable energy sources and energy efficiency which was conducted in 2003,<sup>5</sup> Croatian public unequivocally supports the

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<sup>4</sup> <http://releel.mingorp.hr/UserDocsImages/publikacija%20eng.pdf>

<sup>5</sup> [http://bib.irb.hr/datoteka/145936.Zavrno\\_izvjesce\\_anketa\\_final.pdf](http://bib.irb.hr/datoteka/145936.Zavrno_izvjesce_anketa_final.pdf)

use of those energy technologies and sources of energy which lessen the negative environmental impact, even in the case of higher costs. However, the citizens are relatively poorly informed about aspects related to the use of renewable energy sources. Public participation in environmental decision making in principle occurs too late when no alternative option is available. All of this leads to public reactions “not in my backyard”.

Despite the fact that hydro power plants produce a great amount of electricity in Croatia, there is still some unused hydro potential available in Croatian rivers. There are plans for building hydro power plants with dams and accumulations in the future. Such plants can cause resettlement of villages and the submerging of fertile lands, as well as destruction of plant and animal habitats. Additional problem is that these projects are often based on EIA studies which were conducted in the 1980-ies.

In 2006 national electricity company HEP started with implementation of its plan to construct a hydro power plant in the canyon of karst river Dobra. Competent authorities issued necessary building permit based on an EIA conducted in 1986. Many NGOs and experts requested the authorities not to allow the construction, or at least order a development of a new EIA study. Public campaign against the construction of the hydro power plant was without success. The main explanation given by the authorities was that the law, at that time, did not prescribe any time limits for using an EIA study.

Environmental NGOs oppose the construction of hydro power plants, especially not before extensive measures of energy efficiency are implemented, the distribution network loss is reduced and other sustainable sources of energy are used.

*6. How does Strategic Environmental Assessment and Environmental Assessment apply to renewables in your country? Have any particular legal/procedural issues emerged? How does Natura 2000 influence the promotion of renewables?*

The investors are concerned with the fact that Croatian legislation is continuously being amended due to harmonisation with the EU acquis. This causes additional delays in the procedures of obtaining necessary permits which are already complicated and lengthy. On the other hand, the public is usually unsatisfied with the process of decision making in environmental matters, especially when final decision is taken without taking due account of the outcome of the public participation.

Practice of Strategic Environmental Assessment (SEA) is underdeveloped, since this is a relatively new instrument in Croatian legal system which was introduced in 2008. SEA could potentially cover many issues concerning RES, but in the absence of relevant practice one cannot make any remarks. Strategic assessment is mandatory for: (1) a plan or programme, with the exception of amendments thereto, which is adopted at the state and regional level in the following sectors: agriculture, forestry, fisheries, energy, industry, mining, transport, telecommunications, tourism, waste management and water management; (2) the spatial plan of a county and Spatial Plan of the City of Zagreb, with the exception of amendments thereto. In the case of amendments to the plan and programme subject to the strategic assessment, the evaluation of the need for strategic assessment shall be carried out.

The public concerned has the right to participate in the procedure of the adoption of plans and programmes for which strategic assessment is not performed, but the adoption of which is prescribed by the law and which concern the environment. Again, this could potentially relate

to many issues concerning RES, however, to my knowledge, there is still no significant application of this obligation.

There are many RES projects which fall under the mandatory EIA or under the evaluation of the need for EIA. For the full list of projects which fall under these procedures please see Annexes of the Regulation on Amendments to the Regulation on Environmental Impact Assessment, <http://www.mvpei.hr/zakoni/pdf/773.pdf> (in English).

Even in the Progress Report for 2010, European Commission pointed out that efforts to implement EIA and SEA need to be increased. Implementation of provisions on public participation and access to justice in environmental matters remains insufficient.

Croatian Nature Protection Act has already implemented many mechanisms that transpose Habitats Directive provisions. The main mechanisms are National Ecological Network and Nature Impact Assessment (NIA) procedure. The new Croatian legislation in the field of environmental protection integrates EIA or SEA and NIA procedure for plans and projects that require EIA or SEA. NATURA 2000 will be implemented in Croatia before the accession to the EU.<sup>6</sup>

7. *Do the existing or planned national legal instruments promoting renewables already comply with EU law or are important adaptations required?  
What is the status of adoption of the new pieces of legislation necessary to transpose into domestic law the new provisions of Directive 2009/28/EC?  
Were there already court decisions or infringement procedures taken by the Commission concerning this question?*

Ministry of Economy, Labour and Entrepreneurship plans to put all the necessary legislation in the legislative process in 2011. It is then left to competent authorities to adopt it or not.

8. *Is there anything like a general framework act on climate change issues, and if so, what is its main content? If no, is such an act being considered?*

Climate change issues are regulated in several pieces of legislation (mostly bylaws) and, to my knowledge, there is currently no plan for adopting a general framework act.

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<sup>6</sup> <http://www.natura2000.hr/home.aspx?langID=2>