Energy Community Regulatory Board

Promotion of Electricity produced from Renewable Energy Sources in the Energy Community

– Status Quo and Framework –

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1 INTRODUCTION

1.1 The Energy Community

On 25 October 2005 the Treaty Establishing the Energy Community (hereinafter: "the Treaty") has been signed by the European Community and the authorities of Albania, Bulgaria, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Romania, Serbia, Montenegro and the United Nations Interim Mission in Kosovo (UNMIK[i])[ii]. Following signature and ratification of the Treaty Moldova and Ukraine joined the Energy Community as of 1 May 2010 and 1 February 2011, respectively.

By signing the Treaty the signatory parties agreed to implement the *acquis communautaire* on electricity, gas, environment, competition and renewables[iii] with a view to realizing the objectives of the Treaty and to create a regional gas and electricity market within South East Europe (SEE).

The Energy Community Regulatory Board (ECRB)[iv] operates based on Article 58 of the Energy Community Treaty. As an institution of the Energy Community the ECRB advises the Energy Community Ministerial Council and Permanent High Level Group on details of statutory, technical and regulatory rules and should make recommendations in the case of cross-border disputes between regulators.

1.2 Scope

The promotion of Renewable Energy Sources (RES) is integral part of the energy policy agenda on European level. Parallel to the entry in force of the first Directives on electricity and gas, the Commission already in 1997 issued a "White Paper on Renewable Sources of Energy"[v]. Following this, Directive 2001/77/EC[vi] set the first legal framework for the promotion of electricity produced from renewable energy sources in the internal electricity market.

Directive 2001/77/EG sets a target of 21 percent for the share of green electricity in the total European electricity consumption by 2010 and requires Member States to fulfil national indicative targets. By definition, renewable energy sources include all renewable non-fossil energy sources, namely wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases. The Directive further envisages the introduction of support schemes which should enable the achievement of the set targets, whereas the decision on the specific scheme is left to each country. Other important issues necessary for the encouragement of electricity production from renewables envisaged in the Directive are grid system related, namely:

- the definition of objective, transparent rules on grid-connection costs as well as on how fixed costs are shared among producers;

- the setting up of Guarantee of Origin schemes;
- the evaluation of the rules and regulations needed to set up and run a production plant for green electricity in order to reduce unnecessary administrative procedures.

For the Energy Community Contracting Parties Article 35 of the Treaty foresees that "*the Energy Community may adopt Measures to foster development in the areas of renewable energy sources and energy efficiency, taking account of their advantages for security of supply, environment protection, social cohesion and regional development"*. Following the launch of the EU Climate Change package in 2008[vii], the renewable energy topic has gained greater ground in the context of the Energy Community process. On 11 Dec 2008, the 5th Ministerial Council decided to follow the European Commission's proposal to launch an impact assessment study on the possible integration of the new European RES Directive[viii] into the Energy Community Treaty. It also agreed to set up a Renewable Energy Task Force in 2009[ix].

Considering the concrete - also network related - tasks and the vice versa impact of the integration of RES on the regulated sector[x] it seems to be obvious that the national regulatory authorities have to play an important role in order to reach the targets.

1.3 Methodology

The present paper is based on data collected via a questionnaire completed by the regulatory authorities of Energy Community Contracting Parties (Albania, Bosnia and Herzegovina-represented by entity regulators, Croatia, former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia, Ukraine and UNMIK) and Slovenia.

Where results for Bosnia and Herzegovina differ for its entities (the Federation of Bosnia and Herzegovina and Republika Srpska), they are displayed separately in this survey.

2 RES IN THE ENERGY COMMUNITY CONTRACTING PARTIES

2.1 ALBANIA

With approximately 98% Albania has the highest share of electricity produced from Hydro Power Plants (HPP). The table below shows the share of the already installed RES generation capacity. The RES share based on consumption is, however, much lower due to high imports.

Table 1 Active RES Generation Capacities in Albania (2010)

Active generation Capacities 2010				
Type	**Generation company**	**Plant No**	**Capacity (MW)**	**Generation 2010 (MWh)**
Hydro Power Plants	***State***	**6**	**1354**	**7552318**
	Private/Concession	**33**	**41**	**159040**
Wind	***Private***	**0**	**0**	**0**
Biomass	***Private***	**0**	**0**	**0**
TOTAL		**39**	**1492**	**7711358**

2.1.1 Strategy on RES

The *Power Sector Law* in force states that the Council of Ministers shall, within six months from the date the Law becomes effective, adopt

- mechanisms promoting the construction of power plants using renewable energy sources, and
- define the related incentive level.

Up to now a regime exists that privileges RES in the electricity market: the wholesale public supplier is obliges to buy electricity produced from RES at a price set by the regulator according to a formula based on a decision of the Council of Ministers.

Currently a new *Draft Law on Renewables,* defining the RES framework as well as a methodology for the calculation of feed-in tariff, is under development.

Electricity production from power plants using RES and being connected to the distribution network shall cover in particular tariff customers' demands. If power plants are not certified as *power plants using RES*, the operators receives a feed in tariff according to a methodology defined by the Council of Ministers in cooperation with the national regulators .

2.1.2 Regulatory Role in Implementation of Strategy on RES

The Role of the Albanian NRA regarding RES includes the following tasks:

- Licensing the RES generation activity;
- Approval of purchase contracts[xi];
- Approval of the market rules for access to transmission and distribution grids;
- Approval of rules for granting the Certificates of Origin and Green Certificates;
- Approval of the feed in tariffs for small HPPs up to 15MW.

2.1.3 Strategic Outlook

The table below provides an overview of the envisaged RES developments in Albania.

Table 2 Current RES Projects in Albania

Type	Generation company	Plant No	Capacity (MW)
Hydro Power Plants	*State*	6	1354
	Private/Concession	92	226
Wind	*Private*	7	1277
Biomass	*Private*	1	230
TOTAL		108	3087

2.2 BOSNIA AND HERZEGOVINA

Compared to other Contracting parties the share of RES in Bosnia and Herzegovina is relatively high with the biggest part produced from to LHPPs. Table 3 provides information in the level of installed RES capacity in 2009.

Table 3 Installed RES Capacity in Bosnia and Herzegovina

	installed capacity
Hydro > 5MW	2027 MW
Hydro < 5 MW	28,973 MW

The amount of energy produced during 2009 from RES is shown in table 4.

Table 4 Energy Produced of RES in Bosnia and Herzegovina

	energy produced
Hydro > 5MW	6219246 kWh
Hydro < 5 MW	102600 kWh

There are no final results for the year 2010, but it is expected that the RES generation will increase by approximately 10% compared to 2009.

2.2.1 Strategy on RES

There is no specific RES strategy at state level. Ministries at entity level are policy makers and responsible for promotion of RES. By defining the energy strategy they are in charge of setting the RES targets.

2.2.2 Regulatory Role in Implementation of Strategy on RES

Regulators at entity level are responsible for defining the secondary legislation dealing with RES. This in particular involves:

- Setting authorization rules: permission process for construction of new generating capacity
- Setting the Certificate of Origin rules;
- Setting the feed in tariff for all types of technologies.

2.2.3 Strategic Outlook

Table 5 summarizes the indicative plan for additional RES capacities by 2020:

Table 5 Additional RES Capacities in Bosnia and Herzegovina by 2020

	installed capacity
Hydro	1941 MW
Wind	3015,5 MW
Biomass	10 MW

2.3 CROATIA

In 2008 the share of renewable energy sources in total primary energy supply - according to an analysis performed by the Energetski Institut Hrvoje Požar – added up to around 15.6 %; the percentage changes to around 8.7 %if the calculation is based on the internationally applied EUROSTAT method. Total electricity production in Croatia in 2008 added up to 12325,6 GWh, out of which 43,7 %t came from renewable energy sources, including large hydro power plants, which accounted for 42,2 % in the RES share of total electricity production. Other renewable sources (small hydro, wind energy, landfill gas and bio gas) accounted for 1,3 % of electricity production.

The consumption of electricity generated from renewable energy sources was about 28,5 % Electricity from large hydro power plants accounted for 27,7 %, while electricity generated from other renewable sources accounted for 0,8 % of total consumption.

The table below shows the total values of installed RES capacities as of 31.12.2010.:

Table 6 Installed RES Capacities in Croatia

Type	Installed Capacity [MW]
Large hydro and old small hydro	2069
Wind	78,75
Biomass	2,74
Biogas	2,00
Solar	0,05286
New small hydro	0,03

2.3.1 Strategy on RES

The Croatian Ministry of Economy, Labour and Entrepreneurship is responsible for defining the strategy on promoting Renewable Energy Sources. The Ministry is also responsible for setting feed-in tariffs and criteria for eligible producers.

2.3.2 Regulatory Role in Implementation of Strategy on RES

As regards the implementation of the RES strategy the Croatian Regulatory Authority HERA performs the following tasks:

- issuing licenses for all power plants above 1MW including renewables and high-efficiency combined heat and power plants (CHP);
- issuing rules on the eligibility status of power plants. Eligibility guarantees dispatch priority and allows participation in the feed-in scheme;
- supervising the eligibility status;
- setting tariff methodologies for connection costs for all types of network users, including RES power plants.

2.3.3 Strategic Outlook

Croatia has already committed to implement the new EU RES Directive 2009/28/EC and to achieve a binding 20% RES share in gross final energy consumption by 2020. Based on this overall target, a 35% RES share in electricity has been set.

The Croatian Energy Strategy has been published in 2009. It defines the following targets:

1. By 2020 electricity production from RES and LHPPs shall add up to 35% in final electricity consumption (end-use of electricity).

- New capacity LHPPs by 2020: 300 MW.
- New capacity SHPPs by 2020: 100 MW.
- New capacity of biomass power plants by 2020: 85 MW.

2. New wind power plant capacities shall by 2020 add up to 1200 MW.

2.4 FORMER YUGOSLAV REPUBLIC OF MACEDONIA

In 2005, having a share of 13,8% of energy from RES in the final energy consumption, the Former Yugoslav Republic of Macedonia has been listed among the countries with relatively high use of renewable energy sources. In 2005, the use of RES in the Former Yugoslav Republic of Macedonia added up to 3016 GWh. Out of this, biomass was used as final energy with a total amount of 1767 GWh and participated with 59% in the total use of RES.

The contribution of hydro energy in 2005 accounted for 1144 GWh, which represents a relative share of 38%. Generation from LHPPs and SHPPs in 2005 accounted for 94% and 6%, respectively. In 2005, geothermal energy accounted for 105 GWh or 3%. In the same year modest use of solar energy was noted (around 0.2% in the total use of RES), but the same was not registered in statistical terms.

2.4.1 Strategy on RES

The Government of the Former Yugoslav Republic of Macedonia creates the policy for improvement of energy efficiency and for the exploitation of renewable energy resources. The policy for renewable energy resources exploitation is established within the *strategy for renewable energy resources exploitation up to 2020*, adopted in 2010.

Taking into consideration the analysis in this strategy, the government in October 2010 adopted a decision on the target share of energy produced from RES in the total energy consumption, as well as the manner and dynamic for reaching the target shares until 2010. The decision sets the target share of RES in 2020 at 21%. According to the decision, the target share will be reached with construction of new energy utilities that use RES, as well with stronger energy efficiency measures in accordance with the s*trategy for utilization of RES until 2020* and s*trategy for energy efficiency until 2020*.

In September 2010 the government adopted the *strategy for utilization of RES until 2020*, as one of the most important strategic document[xii].

In October 2010, the *Law on Ratification of the Statute of International Renewable Energy Agency*[xiii] was adopted by the parliament.

The Former Yugoslav Republic of Macedonia implemented the system on stimulating electricity generation from renewable sources by means of feed-in tariffs and issuance of Guarantees of Origin for the electricity generated. In addition, on two occasions in the last several years, the government provided direct budget subsidies aimed at stimulating installation of solar collectors for hot water. Guarantees of Origin for electricity generated from renewable sources and high efficient cogeneration plants are to be issued by the regulator and generators can use them when selling the electricity they generated.

The Ministry of Economy issued the following by-laws related to RES:

- Rulebook on RES for electricity generation[xiv];
- Rulebook on issuing Guarantees of Origin for electricity generated from RES[xv];
- Rulebook on obtaining the status of preferential electricity producer from RES[xvi].

2.4.1.1 Renewable Energy Sources Action Plan

In accordance with the new Energy Law and taking in consideration Directive 2009/28/EC the government – for the purpose of implementing the strategy on RES – upon proposal from the Ministry, shall adopt a RES Action Plan covering a period of ten years[xvii].

The Action Plan defines measures aimed at promoting the use of RES, in particular: the expected gross final consumption of electricity; fuels for transport, heating and cooling energy; the targets set and annual dynamics for the increased share of energy generated from RES in the energy consumption; the measures aimed at achieving the targets; the overview of relevant policies and measures on the promotion of the use of RES; the funding sources; holders of activities and deadlines for the implementation of anticipated activities and etc.

The government in July 2011 in accordance with the new Energy Law prepared the following by-laws:

- Decision for the targets and annual dynamics for the increased share of energy from RES in the final energy consumption[xviii];
- Decision for total installed capacity of preferential generators for each RES separately[xix];
- Decree for feed in tariffs[xx].

2.4.1.2 Rulebook for Renewable Energy Sources

On 25.08.2011 the Ministry of Economy adopted the *Rulebook on RES*[xxi]. The Rulebook in detail describes the types of power plants for electricity generation from RES; the methodology to calculate the required shares in blends of fossil fuels and biofuels used for transport; the measuring of wind potential for electricity generation and issuing approvals for measuring wind potential for electricity generation; the contents, template and manner of keeping the Register of RES Power Plants; the issuing, transferring and revoking guarantees of origin for RES electricity; the manner, procedure and terms and conditions for recognition of guarantees of origin issued abroad; and the contents, template and manner of keeping the e-Register of issued Guarantees of Origin).[xxii]

2.4.1.3 Study for integration of the wind energy in the electricity system

Under the Global Environment Facility (GEF) Project[xxiii], a study for the integration of wind energy in the electricity system of the Former Yugoslav Republic of Macedonia was prepared. In June 2011 a public debate was organized.

The main objective of this *Wind Integration Study* is to assess the quantity of wind generation that may be connected to the transmission grid at different periods in the future, including the identification of necessary transmission network reinforcements. The study is also expected to propose technical requirements/standards for the connection of wind power generation facilities to the transmission network, which includes analysis of and proposed modifications to the existing technical secondary legislation concerning transmission network operations (Transmission Grid Code).

2.4.1.4 Subsidies for the buyers of thermal solar collector systems appropriately Installed in their households

In 2007 and 2009 subsidies for the buyers of thermal solar collectors - that have been appropriately installed in their household – were realized. Because of the big interest for this successful subsidies and utilization of the solar collectors in households, the Ministry of Economy in March 2011 announced a recovery of costs for purchasing and installing solar collector systems up to 30%, but not more than 300 Euro per household. The procedure for granting the funds to the winning households is already finished.

2.4.2 Regulatory Role in Implementation of Strategy on RES

The Energy Regulatory Commission issues licenses for producing electricity from RES.

According to previous Energy Law[xxiv], the regulator was obligated to set the feed-in tariffs for electricity sold by the preferential producers of electricity and producers of electricity from high-

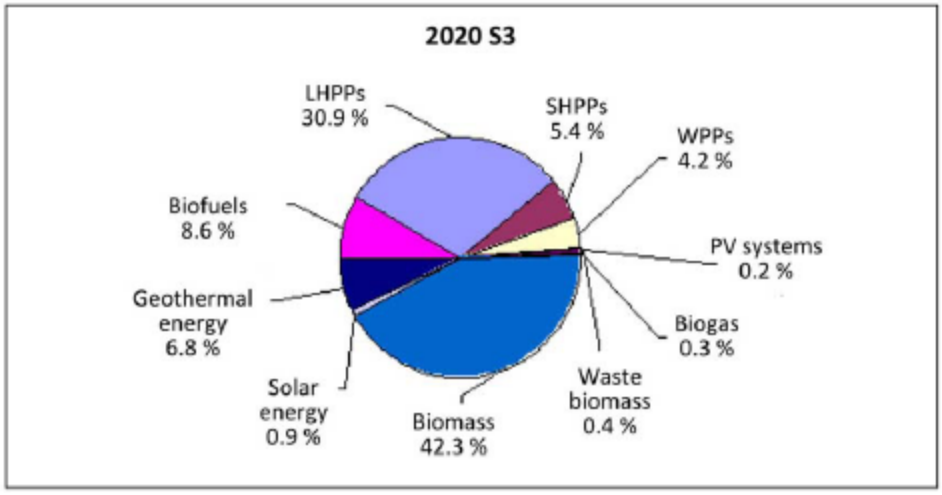
efficiency cogeneration facilities. In the period of 2007 to 2010, the Energy Regulatory Commission issued a number of by-laws and decisions related to RES[xxv].

With the new Energy Law[xxvi] the regulator is no longer in charge of setting the feed-in tariffs for electricity produced from RES, but the government. The regulator, however, is in charge of adopting the Rulebook on Preferential Generators, in which it shall define the procedure for obtaining the status of a preferential generator, the procedure for adopting decisions concerning the application of feed-in tariffs, as well as a template explaining the keeping of the Registry of Preferential Generators[xxvii]. With the new Energy Law the Energy Regulatory Commission shall also issue the decisions on awarding the status of a preferential generator and shall keep the Registry of Preferential Generators[xxviii].

2.4.3 Strategic Outlook

RES targets for EU Member States are calculated based on the 2005 RES share for the country in question plus 5.5% for each Member State and plus a particular percentage calculated in proportion to the country's GDP per capita. Based on this calculation the target for the Former Yugoslav Republic of Macedonia is set at 21% for 2020.

The figure below shows the shares of individual RES types in the total amount of RES for the year 2020. Biomass for combustion has the highest contribution with a share of 42.3%, as well as the hydro energy with a share of 36.3% (30.9+5.4). Following are biofuels (8.6%), geothermal energy (6.8%), WPPs (4.2%) and solar energy as heating energy (0.9%). Electricity from biogas, waste biomass for TPP-HP and electricity from photovoltaic systems contribute with a total of 0.9%.



Figures 1 Share of RES Sources in FYR of Macedonia

Table 7 RES Share in the Final Energy Consumption (GWh)

GWh	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Electricity from RES	**1481**	**1481**	**1513**	**1627**	**1733**	**1835**	**1929**	**1979**	**2144**	**2629**	**2679**
HPPs	1480	1480	1510	1610	1650	1690	1720	1740	1875	2330	2350
LHPPs	1390	1390	1390	1450	1450	1450	1450	1450	1565	2000	2000
SHPPs	90	90	120	160	200	240	270	290	310	330	350
WPPs	0	0	0	0	50	100	150	180	210	240	270
PV Systems	1	1	3	6	10	10	14	14	14	14	14
Biomass (TPP-HP)	0	0	0	6	13	20	25	25	25	25	25
Biogas	0	0	0	5	10	15	20	20	20	20	20
Heat from RES	**2198**	**2369**	**2499**	**2587**	**2686**	**2790**	**2880**	**2962**	**3038**	**3135**	**3240**
Biomass	2063	2220	2340	2420	2500	2580	2645	2680	2690	2710	2740
Solar energy	13	16	19	22	26	30	35	42	48	55	60
Geothermal energy	122	133	140	145	160	180	200	240	300	370	440
Biofuels	**44**	**128**	**153**	**186**	**251**	**312**	**380**	**428**	**480**	**512**	**560**
TOTAL RES	**3723**	**3978**	**4165**	**4400**	**4670**	**4937**	**5189**	**5369**	**5662**	**6276**	**6479**
FEC	**22544**	**23518**	**24252**	**24975**	**25733**	**26622**	**27404**	**28226**	**29057**	**29925**	**30825**
RES share (%)	**16.5**	**16.9**	**17.2**	**17.6**	**18.1**	**18.5**	**18.9**	**19.0**	**19.5**	**21.0**	**21.0**

According to the simplified Renewable Energy Action Plan the RES share for 2020 is determined as described in the following table.

Table 8 RES Targets of the Former Yugoslav Republic of Macedonia by 2020 (ktoe)

	2020
Electricity from RES	230
Hydro Power Plants	202
Large Hydro Power Plants	172
Small Hydro Power Plants	30
Wind Power Plants	23
Photovoltaic Systems	1
Biomass	2
Biogas	2
Heat from RES	279
Biomass	236
Solar energy	5
Geothermal energy	38
Biofuels	51
TOTAL RES	560
Final Energy Consumption	2650
RES share (%)	21.1

According to the strategy there is a possibility for the construction of 400 small hydro power plants [xxix]. The construction of wind power plants would contribute to a decrease of the dependence on imports, increase of electricity supply quality, local and regional development, increase of the RES share in the total electricity generation and lowering the CO_2 emissions in accordance with the Kyoto Protocol[xxx]. Until end of July 2011, 8 photovoltaic systems have been put into operation and 8 photovoltaic systems are in the stage of construction.

In March 2011 the government issued authorization for construction of CHP with total installed capacity of 2 MW for generation of electricity and heat derived from biogas from biomass.

2.5 MOLDOVA

At the moment Moldova has only two hydro power plants (HPP) with an overall capacity of 64 MW (HPP Costesti - 16 MW and HPP Dubasari - 48 MW) as well as one small scale biogas power plant (about 85 kW).

2.5.1 Strategy on RES

The RES sector is regulated by the following legislative acts:

1. PRIMARY LEGISLATION

- Renewable Energy Law[xxxi];
- Energy Efficiency Law[xxxii];
- Law on Electricity[xxxiii];
- Law on Regulating Entrepreneurial Activity through Licensing[xxxiv].

2. SECONDARY LEGISLATION

- The Energy Strategy of the Republic of Moldova[xxxv];
- Regulation on guarantees of origin for electricity produced from renewable energy sources[xxxvi];
- Methodology for the calculation of tariffs for electricity and biofuels produced from renewable energy sources[xxxvii].

The Energy Strategy of Moldova - which has been approved in 2007 - sets the targets and defines the activities related to energy until 2020. Besides assuring security of supply, also increased use of RES is a key target of the strategy.

The Ministry of Economy initiated an amendment to the Energy Strategy, in order to update it and include new measures specifically for the promotion of RES.

In order to implement the Energy Strategy, an Agency for Energy Efficiency was created and launched in 2011. The Agency for Energy Efficiency, which is an administrative body subordinated to the Ministry of Economy, has the following duties in the sector of RES:

- Implement state policy in the field of EE and RES;
- Participate in drafting legislative acts, programs, national action plans and standards in the field of EE and RES;

- Develop pilot projects;
- Consult central and local public authorities and offer technical assistance for developing programs to improve energy efficiency and use of RES;
- Create and maintain a database in the field of EE and RES and provide information to applicants;
- Carry out activities for dissemination of information regarding energy efficiency, including energy efficiency mechanisms, financial and legal framework and regarding the use of RES;
- Organize seminars, conferences and exhibits for the promotion of EE and RES utilization.

2.5.2 Regulatory Role in Implementation of Strategy on RES

As regards RES the National Agency for Energy Regulation (ANRE) has the following duties:

- Regulate the renewable energy market;
- Approve tariffs for renewable energy and biofuels;
- Develop draft contracts for RE and biofuel trade;
- Issue licenses for the production of electricity and biofuels from RES.

2.5.2.1 Tariff Scheme

Tariffs for RES are calculated according to the *Methodology for the calculation of tariffs for electricity and biofuels produced from renewable energy sources*, approved by ANRE. Approved tariffs for renewable energy are calculated for a payback period up to 15 years and revised each year.

When approving tariffs for renewable electricity, prices for similar products on international markets may be taken into consideration.

The rate of return considered for the calculation of the tariff must not exceed more than two times the similar rate applied for traditional energy:

- 1,5 times higher for the first 5 years;
- 1,3 times higher for the next 5 years;
- 1,1 times higher for the last 5 years.

The purchase of electricity from RES by local suppliers is guaranteed by Article 25 *Renewable Energy Law*, which reqiuires the importers of petroleum products and internal suppliers of

electricity to purchase the established volumes of fuels and energy from authorized producers according to the shares established by ANRE and in accordance with their market share.

2.5.3 Strategic Outlook

Plans for additional RES capacities involve:

- the construction of a biogas plant in the industrial park "Bioenergagro" with a production capacity of 16 mio m3 per year was approved by the government last year. Building works are expected to start this year.
- the construction of a wind farm, with a total capacity of 75 MW. The project will be approved by the government by the end of this year.

ANRE received other requests from potential investors in wind energy - capacities ranging from 40 to 90 MW - that expressed interest in building wind farms in Moldova but till now, no comprehensive feasibility studies and project proposals have been submitted.

ANRE, in collaboration with the Ministry of Economy, drafted an amendment to the *Renewable Energy Law*, which will implement feed-in tariffs for electricity produced from renewables, differentiated per technology and capacity levels. Along with feed in tariffs, this amendment will introduce other incentives, as well as transparent procedures regarding licensing, reporting and clear provisions regarding the connection of generating facilities to the grid.

2.6 Montenegro

The percentage of RES in the total energy generation adds up to 76,67%. In addition to these resources, there is a Thermal Power Plant with an installed capacity of 218,5 MW.

Table 9 Installed RES Capacity in Montenegro

	MW
Hydro	649
Small HPP	9
Sum RES	657

Although the share of electricity produced from RES is quite high, the RES share of total consumption is still low due to high imports.

2.6.1 Strategy on RES

According to the Energy Law entered into force in May 2010, development and use of RES is set in the *Program for Development and Use of RES* that is adopted by the government for a period of 10 years in accordance with the *Energy Development Strategy*. The Program contains the national indicative RES target and time schedule for its implementation, together with support schemes.

The national indicative target for RES means the contribution of energy produced from renewable energy sources to the gross final energy consumption, which is expressed as a percentage and shall be calculated based on a methodology set by the Ministry.

2.6.2 Regulatory Role in Implementation of Strategy on RES

The regulator issues Guarantees of Origin for electricity generated from RES or from high-efficiency cogeneration and maintains a register of issued guarantees. The regulator carries out the following activities in the sector of RES and cogeneration:

- annual analysis of contribution of RES and cogeneration to the gross generation and consumption of electricity;

- publication of results of the analysis of contribution of RES and cogeneration to the gross generation and consumption of electricity;
- approval of a status of privileged producer;
- maintaining of register of privileged producers;
- reporting to responsible Ministry, market operator, distribution system operator and transmission system operator about issued decisions on obtaining a status of privileged producers.

The Ministry of Economy (Department for Energy) is responsible for setting of methodology for feed-in-tariffs in Montenegro. The methodology is provided to the Agency for its opinion.

2.6.3 Strategic Outlook

The table below provides an overview about the targeted RES development of Montenegro by 2020.

Table 10 RES Development of Montenegro by 2020

	MW
Hydro	1221,1
Wind	96
Biomass	3
Waste	10
Sum RES	1330,1

2.7 SERBIA

2.7.1 Strategy on RES

The currently installed RES generation capacity is 2872 MW including both large and small hydro power plants.

2.7.2 Regulatory Role in Implementation of Strategy on RES

Aside from the role of licensing electricity generation with an installed capacity over 1MW (RES or not), there is no role of the NRA.

2.7.3 Strategic Outlook

By 2015 about 20% increase of electricity production from RES is envisaged. The main goals of the Program in the RES field are:

- an efficient usage of domestic potential in the production of energy
- decreasing Greenhouse Gasses
- decreasing the import of fossil fuels
- developing local industry
- Creating new jobs.

The goal of the Republic of Serbia is to increase the participation of electric energy produced from renewable energy sources by 2.2% by 2012, compared to the overall consumption of energy in 2007, as well as the representation of biofuels and other renewable fuels on the market by at least 2.2%, compared to the total fuel consumption in transport, worked out on the basis of energy content.

The realization of the set goal will ensure the production of “green electric energy” at 739.1 million kWh in 2012, which is enough to ensure the supply of 179.000 households per year (with an average monthly consumption of 350 kWh), and putting on the market 130.000 tons of biofuels in the period leading up to 2012.

For the completion of the set goal of electric energy participation in the overall consumption by 2012, the plan is to attract and engage private sources of funding for the building of 102 MWe of capacity which would produce electric energy from renewable

energy sources, and also set the conditions for an increase in production of "green electric energy" by 739.1 GWh. A detailed overview and dynamics of the realization are given in table 11.

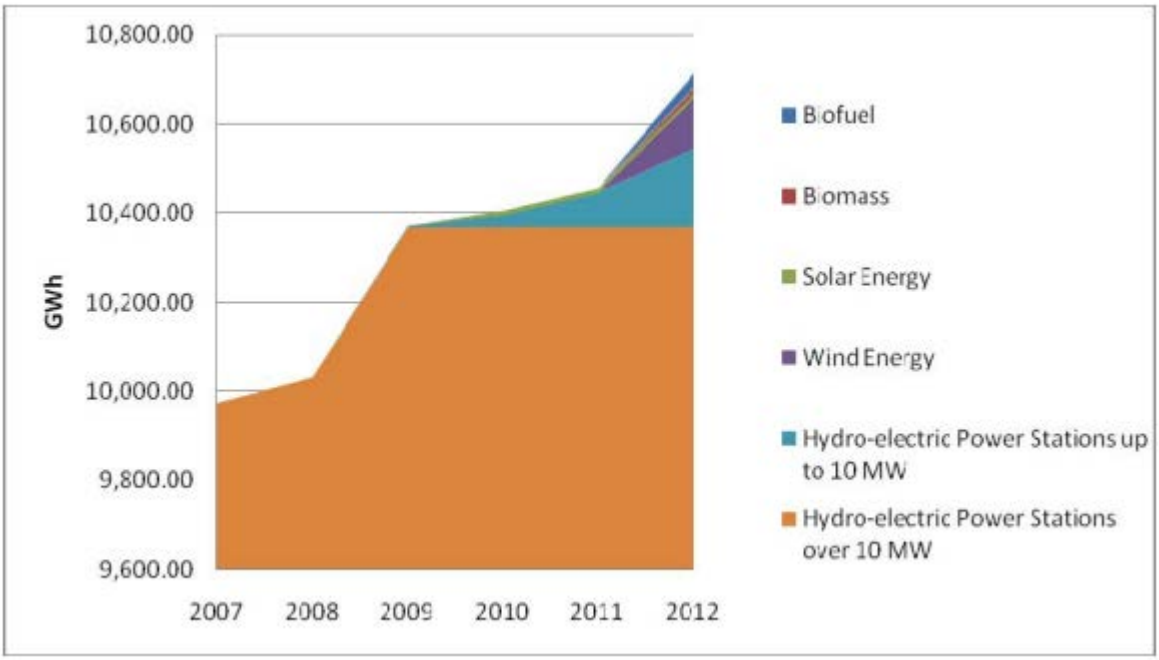
Table 11 Dynamics of the realization of goal participation of electrical energy derived from renewable sources

		2007	2008	2009	2010	2011	2012
Hydro-electric power stations over 10 MW	MWe	2.835,00	2.835,00	2.835,00	2.835,00	2.835,00	2.835,00
	GWh	9.974,00	10.032,00	10.368,00	10.368,00	10.368,00	10.368,00
Hydro-electric power stations up to 10 MW	MWe	0	0	1,0	7,0	20,0	45,0
	GWh	0	0	3,9	27,3	78,0	175,4
Wind Energy	MWe	0	0	0	0	0	45,0
	GWh	0	0	0	0	0	114,7
Solar Energy	MWe	0	0	0	5,0	5,0	5,0
	GWh	0	0	0	10,5	10,5	10,5
Biomass	MWe	0	0	0	0	0	2,0
	GWh	0	0	0	0	0	12,0
Biogas	MWe	0	0	0	0	0	5,0
	GWh	0	0	0	0	0	32,5
TOTAL PRODUCTION	GWh	9,974.0	10,032.0	10,371.9	10,405.8	10,456.5	10,713.1
TOTAL CONSUMPTION	GWh	32,946.0	32,946.0	32,946.0	32,946.0	32,946.0	32,946.0
RES participation in the consumption of electric energy		30,3%	30,4%	31,5%	31,6%	31,7%	32,5%

In the observed period, the production of electric energy from renewable energy sources would increase by 7.4% - from 9.974 GWh in 2007 to 10.713,1 GWh in 2012.

The planned capacity involves the construction of at least 45 MWe small hydro power plants, 45 MWe wind turbines, 5 MWe solar photovoltaic plants, 2 MW biomass plants and 5 MWe biogas plants, with a total investment of around 200 million Euro by 2012.

Table 12 Planned production of electric energy derived from renewable sources in the Republic of Serbia, according to type



Attracting and engaging private sources of funding as well as financing incentives and support to RES development will be realized by implementation of incentives and mechanism policy for the support to RES development.

The planned increase of biofuel participation in the transport of the Republic of Serbia is achievable by using biodiesel, since there are conditions for its production – from raw material to the production capacity (estimated production ranges from 141.750 to 250.00 tons of biodiesel per annum, depending on the structure of the crop harvest).

The realization of the goal participation of biofuels in transportation is 2.2% by 2012 is feasible by allowing the minimum volume content of fatty acid methyl ester (FAME) in diesel fuels, or the compulsory mixing of biodiesel and diesel fuels, under the condition that the overall consumption of crude oil derivates in transport remains on the 2009 level – 586.332 tons of motor oil and 1.909.671 tons of diesel fuels.

Table 13 Dynamics of the realization of the goal participation of biofuels in Transportation

Year	Necessary amounts of biodiesel for blend with diesel fuels (t)	Minimum content of fatty acid methyl ester (FAME) in diesel fuels (compared to v/v)	Biodesel participation in the mixing with diesel fuels (energy content)	Biofuel representation in transport (energy content)
2010.	22.047	1.10%	1.00%	0.76%
2011.	44.093	2.21%	2.00%	1.52%
2012.	66.140	3.31%	3.00%	2.28%
*SRPS EN 590:2005**	*99.873*	*5.00%*	*4.53%*	*3.44%*

**According to the SRPS EN 590:2005 standard, the content of fatty acid methyl ester (FAME) biodiesel is limited to 5% v/v*

2.8 UKRAINE

Installed electricity generation capacity of RES in Ukraine adds up to 304 MW. It has doubled over the past two years due to amendments to Electricity Law establishing feed-in tariffs for RES. The RES generation capacity is concentrated mainly in Wind Power Plants (38% of installed RES capacity) and Small Hydro Power Plants (37% of installed RES capacity). It has to be noticed that according to legislation hydro power plants below the threshold of 10 MW are considered as Small Hydro Power Plants and incentivized through feed-in tariffs. The installed capacity of Large HPPs is 5354,6 MW. Installed capacity of solar and biomass power generation units reach 22,3% and 2,5% of total RES capacity.

Most RES generators sell their electricity to the Wholesale Market (single buyer) at feed-in tariffs. The wholesale electricity market of Ukraine should buy, using a "green" tariff, the electricity generated on electricity sector facilities, which use alternative energy (except of blast-furnace and coke gases and using hydro energy - generated only by Small Hydro Power Plants), and not sold at contractual prices directly to consumers or energy supply companies carrying out economic activity related to supply of electricity at regulated tariff.

However, electricity generated from alternative energy sources can be sold also at "green" tariffs under direct contracts to consumers. Under this option the consumer of energy receives, from the body authorized by the Cabinet of Ministers of Ukraine, the document that proves purchase of energy generated from alternative energy sources.

2.8.1 Strategy on RES

The *Energy Strategy of Ukraine for the period till 2030* which has been adopted in March 2006 foresees also an increase of the installed RES capacity. The main focus, however, is on the development of nuclear energy. The strategy estimates the economic potential of renewable and alternative energy sources at about 58 tce (Tons of Coal Equivalent), including RES – 35,5 tce (19% of total primary energy consumption in 2030).

2.8.2 Regulatory Role in Implementation of Strategy on RES

According to the legislation the regulator has the following responsibilities in the area of RES:

- licensing of electricity producers including electricity producers from RES,
- keeping register of RES;
- setting of feed-in tariffs for electricity produced from different types of RES.

According to the *Law on Electricity* the wholesale electricity market of Ukraine (single buyer) has to purchase electricity generated from RES at feed-in tariffs. These feed-in tariffs are guaranteed untill 2030.

2.8.3 Strategic Outlook

According to the envisaged targets in the *Energy Strategy of Ukraine* planned RES electricity generation capacities are summarized in the table below.

Table 14 RES Development of Ukraine by 2020

	2015	2020
Installed Capacity	800 MW	1600 MW

2.9 UNMIK

The amount of energy produced during 2010 from RES is currently around 3% of total used energy during 2010 (appr. 3,2 TWh)[xxxviii].

2.9.1 Strategy on RES

The government is defining the overall *Strategy for the Promotion of Renewable Energy Sources* and sets the target of RES.

2.9.2 Regulatory Role in Implementation of Strategy on RES

The regulatory authority plays an important role as regards the implementation of RES targets set by the government. In this respect legislation foresees for ERO to issue:

- Rules on authorization;
- Rules on support mechanisms for RES;
- Rules on Certificate of Origin
- Feed-in-tariffs for all types of technologies;
- Connection charging methodology for transmission;
- Grid codes for transmission and distribution systems;
- Grid codes for wind generation.

ERO has approved all mention above legislation.

In addition, ERO still has to approve:

- Market design and market rules. The existing market design, and transitional market rules will be replaced with the new market design and market rules
- Connection charging methodology for distribution
- CHP secondary legislation (Permitting process, certificate of origin, support mechanism).

Table 12 shows the feed in tariff for the various RES sources:

Table 15 Feed-in Tariff applicable for electricity produced from renewable energy sources and admitted to the Support Scheme

Primary renewable energy source	(€/MWh)
HPPs (<10MW)	63.3
Wind	85.0
Solar energy	j/a
Biogas and Biomass	71.3

2.9.3 Strategic Outlook

The tables below describe the indicative targets for the consumption of electricity and heat from RES and co-generation for the period 2007-2016.

Table 16 Energy / Electricity Consumption Targets 2007-2016

No	Total	Energy demand/consumption forecast (ktoe[xxxix])									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Electricity	343,83	367,63	396,34	426,96	456,28	487,33	520,19	554,97	591,76	629,02
2	Total energy	1257,54	1319,7	1389,2	1466,11	1537,42	1613,15	1693,7	1778,9	1869,8	1978,6

Table 17 Renewables and Cogeneration Indicative Consumption Targets Electricity

No	Source of Energy	Indicative targets for electricity consumption produced from RES (ktoe)									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Hydropower	10,82	11,57	12,47	13,44	14,36	15,34	16,38	17,47	18,63	19,81
2	Wind	0	0	0	2,80	5,91	9,33	13,06	17,18	21,68	26,65
3	Solar	0	0	0	0	0	0	0	0	0	0
4	Biomass	0	0	0	0	1	1,50	1,70	2	2,50	2,50
	Total	10,82	11,57	12,47	16,24	21,27	26,17	31,14	36,65	42,81	48,96

Table 18 Renewables and Cogeneration Indicative Consumption Targets Electricity in %

No	Source of Energy	Indicative targets for electricity consumption produced from RES as % of the total electricity consumption forecast									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Hydropower	3,15	3,15	3,15	3,15	3,15	3,15	3,15	3,15	3,15	3,15
2	Wind	0	0	0	0,66	1,30	1,91	2,51	3,10	3,66	4,24
3	Solar	0	0	0	0	0	0	0	0	0	0
4	Biomass	0	0	0	0	0,22	0,31	0,33	0,36	0,42	0,40
	Total	3,15	3,15	3,15	3,81	4,66	5,37	5,99	6,60	7,23	7,78

Table 19 Thermal Energy Consumption Targets

No	Source of Energy	Indicative targets for thermal energy consumption produced from RES and cogeneration (ktoe)						
		2010	2011	2012	2013	2014	2015	2016
1	Solar	0,14	0,16	0,18	0,20	0,22	0,25	0,28
2	Biomass	300,09	315,51	332,08	349,93	369,19	390,02	411,63
3	Cogeneration	0,14	0,17	0,21	0,.27	0,40	0,61	0,79
	Total	300,37	315,84	332,47	350,.4	369,81	390,88	412,7

Table 20 Thermal Energy Consumption in %

No	Source of Energy	Indicative targets for thermal energy consumption produced from renewables and cogeneration, as % of total thermal energy produced from RES and cogeneration						
		2010	2011	2012	2013	2014	2015	2016
1	Solar	0,05	0,05	0,05	0,06	0,06	0,06	0,07
2	Biomass	99,90	99,89	99,.88	99,86	99,83	99,77	99,74
3	Cogeneration	0,04	0,05	0,06	0,07	0,10	0,15	0,19
	Total	100	100	100	100	100	100	100

3 RES IN THE MEMBER STATES OF THE EUROPEAN UNION AS PARTICIPANTS COUNTRIES IN THE ENERGY COMMUNITY

3.1 SLOVENIA

Slovenia has, when deducting 50% of the capacity of the nuclear power plant Krsko, a relatively high share of RES generation. The table below displays data on RES-E installed capacities in 2010.

Table 21 Installed RES Capacities in 2010 in Slovenia

Technology	Installed capacity (MW)
Hydro	**1071**
small (<1 MW)	**118**
medium (1 MW-10 MW)	**37**
Large (>10 MW)	**916**
Solar (photovoltaic)	**12**
Onshore wind	**2**
Biomass	**51**
solid	**22**
biogas	**30**
TOTAL	**1136**

3.1.1 Strategy on RES

The Ministry of Economy defined a *National Action Plan for RES* until the year 2020 as well as tools for promoting RES. Furthermore the Ministry of Economy is responsible for setting feed-in tariffs in Slovenia.

3.1.2 Regulatory Role in Implementation of Strategy on RES

The Slovenian regulator is responsible for the following tasks in the field of RES:

- Issuing of production declarations for all production devices (RES and combined heat and power) that want to enter the national guarantees of origin system. The regulator checks whether the production unit really uses renewable sources or whether it is really a combined heat and power plant),
- Issuing of guarantees of origin for all electricity supported by the national feed-in system. Guarantees of Origin have to be issued, which means that all production units benefiting from feed-in tariffs must enter the national guarantees of origin system,

- Deciding on eligibility of each production unit to access the national feed-in. The regulator checks whether the production unit is eligible for receiving support due to its age – less than 10 years for combined heat and power and less than 15 years for RES – or whether support per kWh should be reduced due to previously obtained investment,
- Development of reports on achieving national RES targets (every 2 years).

3.1.3 Strategic Outlook

The table below contains data from the National Action Plan for RES for the period 2010 – 2020[xl].

Table 22 RES Development by 2020 - Slovenia

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hydro	**1071**	**1071**	**1136**	**1140**	**1193**	**1227**	**1232**	**1318**	**1318**	**1354**
small (<1 MW)	118	118	120	120	120	120	120	120	120	120
medium (1 MW-10 MW)	37	37	37	41	52	52	57	57	57	57
Large (>10 MW)	916	916	979	979	1021	1055	1055	1141	1141	1.176
Solar	**17**	**22**	**27**	**32**	**37**	**49**	**63**	**82**	**107**	**139**
Onshore wind	**2**	**2**	**8**	**8**	**60**	**60**	**60**	**60**	**106**	**106**
Biomass	**59**	**67**	**74**	**78**	**83**	**85**	**93**	**94**	**95**	**95**
solid	22	23	24	24	24	26	33	34	34	34
biogas	36	44	50	54	58	59	60	60	61	61
TOTAL	**1149**	**1162**	**1245**	**1258**	**1373**	**1420**	**1448**	**1555**	**1626**	**1693**

4 SUMMARY OF RESULTS AND CONCLUSIONS

Although the overall potential of RES and in particular the potential for hydro and biomass is very high in South East Europe, the availability of these resources varies within the Region. Nevertheless all Contracting Parties are obliged via the Energy Community Treaty to implement the requirements stemming from Directives 2001/77/EC and 2003/30/EC as part of the renewable energy acquis of the Energy Community Treaty and to develop and implement strategies on the promotion of RES.

The development of these strategies is under the responsibility of the Ministries and the regulators. The later are in most cases responsible for setting market based incentives. In this respect the NRAs are in most Contracting Parties (CPs) responsible for setting the feed-in tariffs as well as for defining the tariff methodology.

Most of regulators are responsible for issuing secondary legislation related to RES and for licensing RES generation units.

The analysis of the existing legal framework on RES within the Contracting Parties and in particular the secondary legislation shows that the support schemes for RES are not harmonized within the Energy Community. This could be easily illustrated by the example of the un-harmonized threshold definitions for small and large hydro power plants. Thus it remains difficult to compare the various regimes for promoting RES within the Energy Community.

[i] Pursuant to United Nations Security Council Resolution 1244.
[ii] Following ratification, the Treaty entered into force on 1 July 2006. For details on the Treaty and the Energy Community see www.energy-community.org.
[iii]For details of the relevant acquis see: http://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/Treaty.
[iv] For details see www.ecrb.eu .
[v] http://europa.eu/documents/comm/white_papers/pdf/com97_599_en.pdf.
[vi] OJ L No 283 p 33 et seqq (27.10.2001).
[vii] In Dec 2008, the European Parliament adopted the Climate Change Package with an aim to achieve the EU climate targets by 2020**: a** 20% reduction in greenhouse gas emissions**, a** 20% improvement in energy efficiency**, and a** 20% share for renewables in the EU energy mix.
[viii] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L No 140 p 16 et seqq (5.6.2009).
[ix] For details on the RES process in the Energy Community see http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/RENEWABLES.
[x] Such as, e.g., need for infrastructure expansion due to typically decentralized RES production; impact on the balancing market ; need for stand by power plant operation especially in the case of electricity production from wind energy.
[xi] Based on the new draft RES law, ERE is responsible for developing and adopting standard PPAs for the purchase of power from RES priority producer by off-taker (KESH or other entities as may be appointed). Initially this PPA will have a term of 15 years, but later this tem may be reduced as the competitive market matures.
[xii] Available in English at www.economy.gov.mk.
[xiii] IRENA, Official Gazette no.135/2011.
[xiv] Official Gazette no.127/2008.
[xv] Official Gazette no.127/2008.
[xvi] Official Gazette no. 29/2009.
[xvii] A draft Action Plan has been prepared with technical support of USAID. In accordance with the Energy Community Treaty obligations, a simplified version of this Action Plan has been submitted to the Energy Community Secretariat in July 2011. Activities for preparing the final version of the Action Plan in accordance with the Energy Law are ongoing; the final AP will be adopted by the Government in the period determined by the Energy Law.
[xviii] Official Gazette no. 100 of 25.07.201. this Decision defines the targets and annual dynamics for the increased share of energy from renewable energy sources in the final energy consumption until 2020. The share of Renewable Energy Sources in the final energy consumption until 2020 should be 21 %. This target shall be reach through the construction of new energy facilities which use renewable energy sources as well as stronger energy efficiency measures in accordance with the strategy for utilization of RES in the Republic of Macedonia until 2020 and Strategy for development of the Energy Efficiency in the Republic of Macedonia until 2020.
[xix] Official Gazette no. 100 of 25.07.2011. This Decision stipulates the total installed capacity of preferential generators for electricity produced from wind power plants, small hydro power plant, photovoltaic system, power plant on biomass and power plants on biogas.
[xx] The Decree still is under governmental procedure but is envisaged to in detail stipulate the specific terms and conditions required from any power plant in order to qualify for obtaining the status of preferential electricity generator, the upper threshold of power plant's installed capacity, the electricity feed-in tariffs and the period of their application. Feed-in tariffs shall aim to stimulate investments for the purpose of optimal use of available renewable energy sources in the Republic of Macedonia and attainment of the target share of renewable energy sources in the total consumption, pursuant to the Strategy on Energy Development of the Republic of Macedonia and the Strategy on Renewable Energy Sources of the Republic of Macedonia; secure conditions for sustained operation of preferential generators, notably by providing average annual revenue to reimburse power plant's investment and operation costs and to provide adequate return of capital and secure conditions related to environmental protection and promotion.
[xxi] Official Gazette of no 113/2011.
[xxii] Pursuant to the Strategy on Energy Development and the *Strategy on Renewable Energy Sources*, the Rulebook aims to secure increased share of renewable energy sources in total energy consumption in the Republic of Macedonia; replacement of fossil fuels with renewable energy sources and long-term reduction of energy import dependency; incentives for new electricity generation technology development; entrepreneurship development in the energy field and job creation; improved reliability of energy supply; and environmental protection from adverse affects of energy activities performance.
[xxiii] For more information see www.thegef.org.
[xxiv] Available in English at www.erc.org.mk.
[xxv] Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from small hydro power plants (Official Gazette no. 63/2006, 36/2007, 106/2008 and 119/2010); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from small hydro power plants, which have qualified as a preferential producer (OGRM, no. 16/2007; February 2007); Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from wind power

plants (OGRM, no. 61/2007; May 2007); Decision for establishment of the feed-in tariff for sale of electricity produced and delivered from wind power plant (OGRM, no. 61/2007; May 2007); Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from power facilities which use biogas got from biomass (OGRM, no. 142/2007; November 2007); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from power facilities which use biogas got from biomass, which have qualified as a preferential producer (OGRM, no. 143/2007; November 2007); Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from photovoltaic power systems (OGRM, no.112/2008; September 2008); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from photovoltaic power systems, which have qualified as a preferential producer (OGRM, no. 112/2008; September 2008); Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from power facilities which use biomass (OGRM, no.44/2010; March 2010); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from power facilities which use biomass (OGRM, no.44/2010; March 2010); Rulebook amending the Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from power facilities which use biogas got from biomass (OGRM, no.44/2010; March 2010); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from power facilities which use biogas got from biomass (OGRM, no.44/2010; March 2010); Rulebook amending the Rulebook on the method and procedure for establishing and approving the use of feed-in tariffs for purchase of electricity produced from photovoltaic power systems (OGRM, no.44/2010; March 2010); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from photovoltaic power systems (OGRM, no.44/2010); March 2010); Decision for establishment of the feed-in tariffs for sale of electricity produced and delivered from photovoltaic power systems (OGRM, no.101/2010); July 2010).

[xxvi] Official Gazette no. 16/2011.

[xxvii] The Registry of Preferential Generators shall be published on the website of the Energy Regulatory Commission.

[xxviii] The power plants can obtain the status of preferential generator if: 1) they generate electricity from renewable energy sources or at high-efficiency cogeneration plants; 2) they fulfill the specific terms and conditions and the installed capacity threshold; 3) the sum of power plant's total installed capacity and the total installed capacity of power plants of same type currently registered in the Registry of Preferential Generators does not exceed the total installed capacity of the relevant type of preferential generators, as stipulated in the decision taken by the Government of the Republic of Macedonia. The Energy Regulatory Commission shall initiate the procedures on issuing electricity generation licenses and awarding the status of preferential generator when the applicant has submitted the documents required for license issuance and obtaining the status of preferential generator. In the procedure on issuing the decision on obtaining the status of preferential generator, the Energy Regulatory Commission shall ask the Energy Agency to confirm that the plant in question has been constructed and fulfills the specific requirements and installed capacity set forth in the relevant acts. When the confirmation issued by the Energy Agency is positive, the Energy Regulatory Commission shall issue a decision on awarding the status of preferential generator and the decision on the application of feed-in tariffs in effect from the day the decision was issued, by means of which the preferential generator acquires all rights stemming from the Energy Law.
The electricity market operator is obliged to purchase the electricity generated by preferential electricity generators. On the request from the preferential generator, the electricity market operator is obliged to sign the electricity purchase contract. The contract should be in compliance with the Energy Law, the decision on the application of feed-in tariff issued by the Energy Regulatory Commission and the Market Code. The Energy Law defines that the electricity transmission or distribution system operators, within their operational possibilities in the relevant system, shall provide priority access to electricity systems for the electricity generated from renewable sources.

[xxix] Until now the government has conducted 4 tenders for granting water concessions for the construction of small hydro power plants and signed 47 Concession Agreements. The total installed capacity of the 47 SHPPs is 34,7 MW and has an envisaged investment volume of 62 mil. Euros. Currently the fifth tender is in the procedure of realization. Also municipalities have signed 6 public private partnership agreements for the construction of small hydro power plants with a total installed capacity of 2,70 MW for water management systems. All SHPPs are eligible for feed-in tariffs.

[xxx] In this sector the most advanced project is the project of JSC ELEM in the area of Bogdanci and Valandovo. Due to the complexity of the project and on order not to violate the systems security, an implementation in two phases is planned. The first phase would include construction of access road, substation and 30-40 MW installed capacity of wind turbines of an individual turbine size from 2.0 MW to 3.0 MW. In this manner, facility would become operative with more than a half of the predicted capacity. In second phase, wind park Bogdanci would be finished with construction and assembly of remaining wind turbines of around 10-20 MW.

[xxxi] 160-XVI/12.07.2007.

[xxxii] 142/02.08.2010.

[xxxiii] 124/23.12.2009.

[xxxiv] 451/30.07.2001.

[xxxv] Approved by Government Decision No 958 of 21.08.2007.

[xxxvi] ANRE Resolution No 330 of 03.04.2009.

[xxxvii] ANRE Resolution No 321 of 22.01.2009.

[xxxviii] Source: UNMIK, http://enrin.grida.no/htmls/kosovo/SoE/energy.htm

[xxxix] kilo tons oil equivalent

[xl] http://www.mg.gov.si/fileadmin/mg.gov.si/pageuploads/Energetika/Porocila/AN_OVE_2010-2020_final.pdf.