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MINISTRIA E ZHVILLIMIT EKONOMIK
MINISTARSTVO EKONOMSKOG RAZVOJA
MINISTRY OF ECONOMIC DEVELOPMENT

RENEWABLE ENERGY PROGRESS REPORT OF THE REPUBLIC OF KOSOVO 2014-2015

According to the Renewable Energy Directive 2009/28/EC as adapted by the Ministerial Council Decision 2012/04/MC-EnC

Pristina

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Contents

1. INTRODUCTION

Article 15 of Ministerial Council Decision 2012/04/MC-EnC requires Contracting Parties, including Kosovo, to submit a report, each two years, to the Energy Community Secretariat on progress in the promotion and use of energy from renewable sources. The points covered refer to in Article 22 of Directive 2009/28/EC.

This report is important for monitoring overall renewable energy policy developments and compliance with the measures set out in the Directive 2009/28/EC and the National Renewable Energy Action Plans of both Kosovo as well as other Contracting Parties. The data included in these reports will also serve to measure the impacts referred to in Article 23 of Directive 2009/28/EC.

2. RES POLICY IN KOSOVO

Renewable Energy Sources (RES) represent an important energy source available in Kosovo, with a potential that is still untapped sufficiently. The use of such sources for energy production represents a long term objective for implementation of three objectives of energy policies of the country, such as: support for the overall economic development; increase of the security of energy supply and protection of environment.
The energy sector laws, especially the Law on Energy, constantly treated Renewable Energy Sources with respect to its promotion, optimization and use, including determination of annual and long-term goals of energy generation from such resources. With the view in supporting and promoting the use of Renewable Energy Sources, the Ministry of Economic Development drafted a ten-year action plan for RES, as a policy document for this important energy sector. In line with the legal obligations, and those deriving from the Energy Community Treaty (ECT), the MED has determined the RES goals for period covering 2011-2020, by taking into consideration the opportunities and potentials of Renewable Energy Sources available in Kosovo.
In order to meet the objectives for energy from renewable energy sources, the Energy Regulatory Office issues special regulation to determine the level of necessary energy capacities, as well as other requirements and procedures for acceptance of the support scheme, the rights and obligations of producers of electric energy from renewable sources for which the certificate of origin was issued and accepted under the support scheme, including the rights and obligations of the public supplier in relation to electric energy for which certificate of origin was issued, rights and obligations of KOSTT, financing of the support scheme, integration of electric energy produced from renewable energy sources into the electric energy system

3. RES PROGRESS REPORT ACCORDING TO MODEL REPORT EC

Below, the questions are answered according to Model Report of the EC, by using the provided questions and table structure.

1. Sectorial and overall shares and actual consumption of energy from renewable sources in 2014 and 2015

***Reference**: Article 22 (1) a of Directive 2009/28/EC*

The data for the overall share of renewables in the energy consumption of Kosovo can be found in the table below.

Table 1: The sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources[1]

	2015	2014
RES-H&C[2] (%)	**48.14**	**47.23**
RES-E[3] (%)	**2.37**	**2.55**
RES-T[4] (%)	**0**	**0**
Overall RES share[5] (%)	**19.07**	**19.44**
Of which from cooperation mechanism[6] (%)	**0**	**0**
Surplus for cooperation mechanism[7] (%)	**0**	**0**

The share of RES in the overall energy mix of Kosovo is largely determined by the use of household use of fuelwood.
The reported share has decreased somewhat between the reporting years, although moderately. This can largely be explained by a substantial growth in electricity consumption in the country between 2014 and 2015. A much smaller factor is that smaller electricity production by the largest hydropower stations was reported between reporting years, due to worsened hydrological conditions.

As the feed-in tariff scheme has been introduced at the end of this reporting period, it is expected that the share of energy from renewable sources will grow towards the target set for 2020 (25%).

[1] Facilitates comparison with Table 3 and Table 4a of the NREAPs.
[2] Share of renewable energy in heating and cooling: gross final consumption of energy from renewable sources for heating and cooling (as defined in Articles 5(1)b) and 5(4) of Directive 2009/28/EC divided by gross final consumption of energy for heating and cooling. The same methodology as in Table 3 of NREAPs applies.
[3] Share of renewable energy in electricity: gross final consumption of electricity from renewable sources for electricity (as defined in Articles 5(1)a) and 5(3) of Directive 2009/28/ECdivided by total gross final consumption of electricity. The same methodology as in Table 3 of NREAPs applies.
[4] Share of renewable energy in transport: final energy from renewable sources consumed in transport (cf. Article 5(1)c) and 5(5)of Directive 2009/28/EC divided by the consumption in transport of 1) petrol; 2) diesel; 3) biofuels used in road and rail transport and 4) electricity in land transport (as reflected in row 3 of Table 1). The same methodology as in Table 3 of NREAPs applies.
[5] Share of renewable energy in gross final energy consumption. The same methodology as in Table 3 of NREAPs applies.
[6] In percentage point of overall RES share.
[7] In percentage point of overall RES share.

Table 1a: **Renewable energy contribution of each sector to final energy consumption (ktoe)[8]**

	2015	2014
(A) Gross final consumption of RES for heating and cooling	265.54	253.57
(B) Gross final consumption of electricity from RES	12.3	13.02
(C) Gross final consumption of energy from RES in transport	0	0
(D) Gross total RES consumption[9]	277.89	266.59
(E) Transfer of RES to other Contracting Parties or Member States	0	0
(F) Transfer of RES from other Contracting Parties and 3rd countries	0	0
(G) RES consumption adjusted for target (D)-(E)+(F)	277.89	266.59

The contribution of renewable energy to the final energy consumption has, in absolute terms, grown slightly between the reporting years, largely caused by a growth in fuelwood use by households. Electricity production from renewable sources has fallen between reporting years due to hydrological differences.

There are no transfers to and from Kosovo from other Energy Community Contracting parties, nor from/to EU member states, as this is not yet relevant as with most Energy Community Contracting Parties (and EU member states).

[8] Facilitates comparison with Table 4a of the NREAPs

[9]According to Art.5(1)of Directive 2009/28/EC gas, electricity and hydrogen from renewable energy sources shall only be considered once. No double counting is allowed.

***Table 1.b*: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in Kosovo to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity[10]**

	2015		2014	
	MW	**GWh**	**MW**	**GWh**
Hydro[11]:				
non pumped				
<1MW	1.76	5.369	1.76	7.257
1MW–10 MW	15.72	32.475	11.42	42.212
>10MW	35	103.305	35	101.517
pumped	0	0	0	0
mixed[12]	0	0	0	0
Geothermal	0	0	0	0
Solar:	0	0	0	0
photovoltaic	0.466	0.856	0.079	0.16
concentrated solar power	0	0	0	0
Tide, wave, ocean	0	0	0	0
Wind:	0	0	0	0
onshore	1.35	0.35	1.35	0.38
offshore	0	0	0	0
Biomass[13]:	0	0	0	0
solid biomass	0	0	0	0
biogas	0	0	0	0
bioliquids	0	0	0	0
TOTAL	54.29	142.34	49.60	151.52
of which in CHP	0	0	0	0

In terms of installed capacity, Kosovo has seen some extra capacity added in its hydropower production park in the last reporting year. Furthermore, the first solar PV projects with total installed capacity of 102.4 kilowatt were brought online (2014) and started delivering power to the national grid of Kosovo, although in modest quantities overall.

A large part of the new solar PV capacity was financially supported under the Ministry of Agriculture (MAFRD), with investment grants in the annual Rural Development Plan, This resulted in 2014, in 101 farms which were provided with a total installed capacity of 79 kilowatt of solar PV, and another 135 farms that receive a total installed capacity 364 kW in 2015 under the same programme.

At the end of the reporting period, the first results were visible on the implementation of RES capacity under the Feed-in Tariff scheme, for which the legislative framework was fully approved. The first wind turbines were already in place before the reporting period, supported by a specific Power Purchase Agreement for the project.

[10] Facilitates comparison with Table 10a of the NREAPs.
[11] Normalised in accordance with Directive2009/28/EC and Eurostat methodology.
[12] In accordance with new Eurostat methodology.
[13] Take into account only those complying with applicable sustainability criteria, cf. Article 5(1) of Directive 2009/28/EC last subparagraph.

***Table 1c*: Total actual contribution (final energy consumption[14]) from each renewable energy technology in Kosovo to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources <u>in heating and cooling</u> (ktoe)[15]**

	2015	2014
Geothermal (excluding low temperature geothermal heat in heat pump applications)		
Solar	0.36	0.33
Biomass[16]:		
solid biomass	265.23	253.24
biogas	0	0
bioliquids	0	0
Renewable energy from heat pumps: - of which aerothermal - of which geothermal - of which hydrothermal	0	0
TOTAL	265.59	253.57
Of which DH[17]	0	0
Of which biomass in households[18]	265.23	253.24

Solid biomass, harvested by households, provides the largest contribution to heating from renewable energy, as well the largest contributor to renewable energy overall. The number for household biomass use is estimated for rural and urban household as 2.05 million cubic meters per year (source: ministry of Agriculture, through the FAO[27)].

There is a growing market for pellets and briquettes and products as biomass boilers and stoves. The consumption of wood pellets and wood briquettes is estimated at ca. 50,000 tons/year (source: EMPOWER).
Customs data show that a net of import of 12.332 tonnes in 2014 and 29.421 tonnes in 2015 respectively took place, showing a growth of over 100% between the reporting years.
Local production capacities were small with only small productions till 2015, but new production companies with larger production capacities have become operational, even more so after the reporting period (2016).

The contribution of solar thermal is still small, but growing somewhat, while other forms of renewable heating and cooling can hardly be found in import statistics.

[14] Direct use and district heat as defined in Article 5.4 of Directive 2009/28/EC.
[15] Facilitates comparison with Table 11 of the NREAPs.
[16] Take into account only those complying with applicable sustainability criteria, cf. Article 5(1) last subparagraph of Directive 2009/28/EC.
[17] District heating and / or cooling from total renewable heating and cooling consumption (RES- DH).
[18] From the total renewable heating and cooling consumption.
[27]Wood biomass sector in Kosovo-WISDOM, Pristina 2015

Table 1d: **Total actual contribution from each renewable energy technology in Kosovo to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources <u>in the transport sector</u> (ktoe)[19],[20]**

	2015	2014
Bioethanol/ bio-ETBE	0	0
Of which Biofuels[21] Article 21.2	0	0
Of which imported[22]	0	0
Biodiesel	0	0
Of which Biofuels[23] Article 21.2	0	0
Of which imported[24]	0	0
Hydrogen from renewables	0	0
Renewable electricity	0	0
Of which road transport	0	0
Of which non-road transport	0	0
Others (as biogas, vegetable oils, etc.) – please specify	0	0
Of which Biofuels[25] Article 21.2	0	0
TOTAL	0	0

For now, there is no special support for biofuels meeting the criteria referred to in Article 22(1) of the Directive.

The details regarding obligation of biofuel usage and meeting of sustainability criteria will be regulated through and Administrative Instruction on biofuels and bioliquid use which will be in place after the Law on Trade with Petroleum Products and Renewable Fuels passed in Parliament.

Based on this, the Ministry of Trade & Industry will elaborate secondary legislation following EU RES and Biofuels directives.

Although there is no official reporting on the import of biofuels, custom statistics show small volumes of imported biodiesel, corresponding with local offerings at selected petrol stations in the country.

[19] For biofuels take into account only those compliant with the sustainability criteria, cf. Article 5(1) last subparagraph.
[20] Facilitates comparison with Table 12 of the NREAPs.
[21] Biofuels that are included in Article 21(2) of Directive 2009/28/EC.
[22] From the whole amount of bioethanol / bio-ETBE.
[23] Biofuels that are included in Article 21(2) of Directive 2009/28/EC.
[24] From the whole amount of biodiesel.
[25] Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

2. Measures taken and/or planned at national level to promote the growth of energy from renewable sources

***Article** 22(1)a) of Directive 2009/28/EC)*

Table 2: Overview of all policies and measures

Name and reference of the measure	Type of measure*	Expected result**	Targeted group and or activity***	Existing or planned****	Start and end dates of the measure
1. Law on Energy nr.05/L-081	Regulatory	Promotion, optimisation and use, including determination of annual and long-term goals of energy generation from such resources	Investors, end users, public administration,	Existing	13 July 2016- continue
2. Law on Electricity nr.05/L-085,	Regulatory	Creating Certificate of Origin for RE and cogeneration. Power certified to originate from RE is entitled to priority dispatch under the terms stated in the Grid Code and Market Rules. TSO and DSO are obliged to provide priority to electricity generated from RE power plants and co-generation	Investors, end users, public administration,	Existing	21 July 2016- continue
3. Law on Energy Regulatory nr.05/L-084, article 43	Regulatory	Establish specific procedures "for the authorization of construction of small decentralized and/or distributed generation". It is important for small size generators to have a specific regulation applicable to them, since such procedure will reduce the administrative burden for investment in small scale RE projects and make their procedures faster and easier. Therefore, the absence of such procedures is a barrier for small RE generators, which can be considered to be of high importance to them.	Investors, end users, public administration,	Existing	14 July 2016- continue
Rule on Authorization Procedure for Construction of New Generation		Describes the procedure for authorization of power generation Projects. The authorization is a right issued by ERO that enables applicants "to commence with construction of generation capacities (....) within specified period Of time	Investors, planners,	Existing	November 2014 , but will be revised latest 31 March 2017

Capacities (“the Rule on Authorization”)					
Rule on support scheme (On Support of Generation of Electricity from Renewable Energy Sources	Regulatory	The Rule on Support Scheme aims at supporting the generation of electricity from renewable energy sources, in order to meet the set out Indicative Targets of Renewable Energy Sources.	Investors, planners	Existing	November 2014 — but will be revised and restructured by March 2017
Decision on the Feed-in Tariffs for generation of electricity from Renewable Energy Sources,	Regulatory	Increased generation of electricity from RES, Increase of public interest in investment in RES	Investors, planners	Existing	19 May 2016- continue
Development of Renewable Energy FiT Scheme and Financial Model for Biomass	Regulatory	Increased generation of electricity from biomass , Increase of public interest in investment in biomass sector	Investors, planners	Planned	March 2017
Procedure for the authorization of construction of small decentralized and/or distributed generation.	Regulatory	Increased generation of electricity from small decentralised PV system and the possibility to connect to the grid	Investors, planners	Planned	Will be added to the existing Rule on Authorization which is in process of harmonization and will be finalized until 31 March 2017
4. Establishment and functioning of One Stop Shop for RES	Institutional	Facilitate of the RES projects between information and coordination activities	The state central and local institutions; Private investors	Planned	March 2017
Law on energy performance	Regulatory	Increase of RES use in new buildings and building undergoing major renovation	Increase of RES use in new buildings and building undergoing major renovation	Investor, Installers	December 2016- continue

Formation of clusters for increased use of biomass (pellets) and solar	Financial support	Formation of clusters dealing with all aspects of producing pellets and deployment of project with solar energy	Producers of pellets, wood equipment producers, installers of solar panel and PV system	Private company	2014 –continue
RES promotional campaign	Soft measure	Stimulation of public interest on RES utilization	Consumers, generators, public		2012- continue
Agriculture and Rural Development Program- Grant support scheme for farmers	Financial support	Sustainability of the sector and work jointly to increase production, establish new processing lines and upgrade farm machineries and equipment, as well as work conditions at the farm level .	Farmers	Existing	2014-continue

Table 2, continued: non-governmental measures to promote the growth of energy from renewable sources

Name and reference of the measure	Type of measure*	Expected result**	Targeted group and or activity***	Existing or planned****	Start and end dates of the measure
KOSEP credit line	Financial support	Increase of RES capacity with private consumers, SME companies	SME companies, households	Existing	2013 - continue

* Indicate if the measure is (predominantly) regulatory, financial or soft (i.e. information campaign).
**Is the expected result behavioural change, installed capacity (MW; t/year), energy generated (ktoe)?
***Who are the targeted persons: investors, end users, public administration, planners, architects, installers, etc? or what is the targeted activity / sector: biofuel production, energetic use of animal manure, etc)?
**** Does this measure replace or complement measures contained in Table 5 of the NREAP?

2.a The progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of renewable energy

***Reference**: Article 22(1)e) of Directive 2009/28/EC).*

In July 2016, the Kosovo parliament has approved updated energy laws which also include provisions to further facilitate the promotion of renewable energy sources in the energy mix:

Law on Energy nr.05/L-081:

- Article 16. Administrative procedures, regulations and codes for renewable energy-requires that simplified and less burdensome authorization procedures are established for smaller projects and for decentralized devices for producing energy from RE.
- Article 17, Promotion of Investments in the Energy Sector -establish a One Stop Shop for RES.
- Article 28, Right of Access to Property-ensures, for generation, transmission and distribution facilities, the right to access to the property through the right to servitude, right of use or other property rights in accordance with the provisions of the Law on Expropriation of Immovable Property .

Law on Energy Regulatory nr.05/L-084:

- Article 43 Authorization Procedure for Construction of New Capacity, also authorization of construction of small decentralized and/or distributed generation.

Based on these laws, secondary legislation had to be revised (within 9 months from July 2016). The technical specification which must be met by renewable energy equipment and systems in order to benefit from support schemes are set on Rule on support scheme (On Support of Generation of Electricity from Renewable Energy Sources provides the legal basis and the steps to be undertaken. ERO informs the developer at the time of application whether there is still sufficient capacity uncovered in the target to allow for accommodating the new capacity. In this case, admission to the REFIT is granted automatically. The admission gets effective only when the project starts commercial operation. RE developers have asked for establishing the PPA already after authorization is finally approved to ease finance.

Since 2010, Energy Regulatory Office (ERO) applies The Rule on Authorization Procedure for Construction of new generation capacities (from RES). This Rule was amended in November 2014, and applies to all RES technologies. The time limit for completion of RES projects is the same for all technologies. The period for construction of RES generator is 2 years and may be extended for another year. In extraordinary cases, the period for construction may be extended for additional 12 months.The Rule is designed in two stages.

Preliminary Authorization and Final Authorization.
The time limits are set by a Rule and are as follows:

- After ERO receives and register application it review it and if it is not complete there are 60 days to be completed.
- When ERO considers application completed it has to decide within 90 days and to issues Decision on Preliminary Authorization.
- Within 1 year + 6 months extension applicant has to bring evidences in order to receive Final Authorization. There is a possibility for investor to apply directly for Final Authorization, but it has happened only once up to now.

There is no automatic authorization (permission). The process has to go as described above (two stages) and there is automatic entry into support scheme and it is stated (determined) in the Decision on Preliminary Authorization.

In order to improve the investment climate for RES projects, an inter-ministerial group led by the ministry of Economic development has agreed to establish a One-Stop Shop (OSS) for RES.

The OSS will act as an 'information and coordinating bureau providing potential applicants and interested parties with up-to-date, clear information about how to apply, application requirements, timescales etc. Coordination will be harmonized across all responsible authorities so that it is presented as a cohesive process. Information should also assist developers in avoiding overlapping permitting procedures. The Administrative Instruction to establish the OSS for RES is prepared and will be approved by Minister by the end of the March.

The latest progress is approval of The Law on Energy Performance of Buildings by Parliament. Following this legislation, the Ministry of Environmental and Spatial Planning will draft the necessary regulations to encourage local and regional administrative bodies to include heating and cooling from renewable energy sources in the planning of city infrastructure and to introduce minimum requirements of integrating RES in planning infrastructure.

A study commissioned by the Ministry of Economic Development[26], has concluded that "legal and regulatory framework in energy sector are well prepared and advanced and thus constitutes a decent framework for developers in the renewable energy sector that does not distract potential investors per se".

Still, this study has identified some important barriers, in relation to the implementation of capacity using renewable energy technologies:

- Limited access to capital both, equity and loans, and poor experiences of developers concerning banking procedure and requirements, perceived lack of financial reliability of power off-taker by financer
- Complex, sometimes confusing authorization procedures and requirements, combined with the limited knowledge at local authorities about RE specific procedures and lack of coordination of the authorization process
- Terms of authorization documents and contracts are substantially shorter than PPA and the period that feed in tariff is granted
- No simplified authorization regime for small generators
- Lack of conducive investment environment

[26] "Streamlining the Regulatory Framework for RES', August 2016 by Fichtner Management Consulting AG

2.b Measures in ensuring the transmission and distribution of electricity produced from renewable energy sources and in improving the framework or rules for bearing and sharing of costs related to grid connections and grid reinforcements.

***Reference**: Article 22(1)f) of Directive 2009/28/EC).*

The Kosovo Transmission, System and Market Operator (KOSTT) has developed two documents which ensure the transmission and distribution of electricity from RES:

1. Transmission Connection Charging Methodology[27]
2. Procedures for Connection to the Transmission Network[28]

Those documents regulate the estimation of the costs of grid connection associated with generator (including RES) connection in transmission network. Also in the latest version of the Electricity Law, so called Market design and Market Rules were developed by KOSTT (the transmission system and market operator) and approved by ERO, providing dispatching priority to RES.

Depending to "Procedures for Connection to the Transmission network" and ''Transmission Connection Charging Methodology "the time from Connection Application until signing of Transmission Connection Agreement is like this:

Day 0

The applicant submits the Connection Application to the transmission network together a proof of payment via mail or directly to the Archive Office in KOSTT, (if the application is submitted by mail the counting of days begins when KOSTT accepts the application).

Days 1-30

KOSTT reviews and draws conclusions if the connection planned by the Connection Application is (or isn't) technically and economically possible and in accordance with the provisions of the Grid Code, meets the conditions and doesn't represent a problem for the safe operation of the transmission system. KOSTT, based on the analysis of the review, will prepare and submit to the Applicant, a notice of the possibility for connection to the Transmission Network, or lack thereof.

Days 31-90

KOSTT prepares a Connection Offer which it sends to the Applicant together with the draft Transmission Network Connection Agreement.

Days 91-120

The Applicant reviews the Connection Offer for the transmission network submitted by KOSTT, which can then be signed.

Days 121-150

The Applicant and KOSTT review/negotiate and sign the Transmission Network Connection Agreement.

[27]http://www.kostt.com/website/images/stories/dokumente/tjera/Transmission_Connection_Charging_Methodology_ver_2.7.pdf

[28]http://www.kostt.com/website/images/stories/dokumente/tjera/Procedures_for_Connection_to_the_Transmission_Network.pdf

It is dependent from the project complexity, but the maximum term for getting approval for connection is 150 days. Transmission grid is well developed and in regard with power flow, N-1 criterion voltage quality, system security and reliability can support connection of significant RES capacities to the transmission network. Based on RES potential, the most probability connection of the RES (usually wind and HPP) will be 110 kV network.
Based on already signed agreement for connection with HPP and Wind Project the duration from date of application since the date of signed agreement between KOSTT and applicants, was 90 days.
For several plants generating electricity from renewable is expected to be integrated soon in electricity market. All licensed Parties for generating electricity from renewable energy sources will be subject to Market Rules.
Regarding the legislation there are no barriers for integration in the electricity market

3. Support schemes and other measures currently in place that are applied to promote energy from renewable sources …. and report on any developments in the measures used with respect to those set out in your National Renewable Energy Action Plan.

***Reference**: Article 22(1)b) of Directive 2009/28/EC).*

Table 3: Support schemes for renewable energy

RES support schemes year 2015			**Per unit support**	**Total (M€)***
[(sub) category of specific technology or fuel]				
Instrument (provide data as relevant)	Obligation/quota (%)			
	Penalty/Buy out option/ Buy out price (€/unit)			
	Average certificate price			
	Tax exemption/refund			
	Investment subsidies (capital grants or loans) (€/unit)		509.30€/kW*[1]	0.185
	Production incentives			
		Feed-in tariff	136.4 €/MWh	0.012
		Feed-in premiums		
		Tendering		
Total annual estimated support in the electricity sector				
Total annual estimated support in the heating sector				
Total annual estimated support in the transport sector				

***** The quantity of energy supported by the per unit support gives an indication of the effectiveness of the support for each type of technology

RES support schemes year 2014			**Per unit support**	**Total (M€)***
[(sub) category of specific technology or fuel]				
Instrument (provide data as relevant)	Obligation/quota (%)			
	Penalty/Buy out option/ Buy out price (€/unit)			
	Average certificate price			
	Tax exemption/refund			
	Investment subsidies (capital grants or loans) (€/unit)		328€/kW*[1]	0.026
	Production incentives			
		Feed-in tariff		
		Feed-in premiums		
		Tendering		
Total annual estimated support in the electricity sector				
Total annual estimated support in the heating sector				
Total annual estimated support in the transport sector				

***** The quantity of energy supported by the per unit support gives an indication of the effectiveness of the support for each type of technology

The main support scheme is a feed-in tariff scheme for electricity produced from the renewable sources of water, wind, biomass and photovoltaic.

RES projects with capacities within the level of planned targets are based on the scheme of Feed-in tariff which are determined by the Energy Regulatory Office. Feed-in tariffs vary from different technologies as follows: - Hydro power (small hydro) 67.3 Euro / MWh; - wind energy: 85 Euro / MWh; - Energy from biomass 71.3 Euro / MWh and photovoltaic 136,4 Euro / MWh.

Upon the review of the incentive feed-in tariff scheme for hydropower and wind power, in 2016, the Energy Regulatory Office has increased the feed-in tariff for electricity from water, from previous 63.3 to 67. 3 Euros / MWh, whereas for wind energy the deadline for the sale of energy has been extended from 10 to 12 years. The 12-year deadline of the power purchase agreement also applies for photovoltaic energy, while for HCV energy it is 10 years. Rule on Support Scheme provides the legal basis and the steps to be undertaken. ERO informs the developer at the time of application whether there is still sufficient capacity uncovered in the target to allow for accommodating the new capacity. In this case, admission to the REFIT is granted automatically. The admission gets effective only when the project starts commercial operation.

Article 5 of the Rule stipulates the maximum size of a single plant eligible for the scheme as 3 MW for PV, 14 MW for biomass, 35 MW for wind and 10 MW for hydro power. Any plant that exceeds these limits shall not be considered as eligible for the support scheme. Maximum size is estimated based on Administrative Instruction No.1/2013 on Targets of RE.
The first project that has started to generated under the support scheme feed in tariff is PV system with total installed capacity 102 kW, now there are 26. MW capacity from hydro that are the part to support scheme feed in tariff system.

*[1] In addition to the Feed-in tariff, a grant scheme for farmers, under the Ministry of Agriculture Forestry and Rural Development (MAFRD), was introduced in the annual Rural Development Programme. Farmers were -after successful implementation- reimbursed 50% of the total sum of the investment costs with this scheme.

3.1. Information on how supported electricity is allocated to final customers

***Reference**: Article 22(1)b) of Directive 2009/28/EC), for purposes of Article 3 (6) of Directive 2003/54/EC.*

Based on the new Law on Electricity nr. 05/L-085, Article 8, Electricity generation from renewable energy sources and cogeneration:

1. Compensation, payments of energy generated from renewable sources is done according to compensation fees for electricity generated from renewable energy sources, collected by the Market Operator by the end customer supplier, with the exception of the quantity for which the producers have signed a contract for sale under the provisions of this law.
2. The Regulatory shall make arrangements to compensate the additional costs to the suppliers from purchasing electricity under the terms of this article by means of a specific charge on the services of the system operators, which shall be applied in a transparent and non-discriminatory manner to all suppliers connected to the respective system, proportionate to the purchased energy from renewable sources.
3. In compliance with the Law on Energy Regulator, the Regulatory shall draft the Methodology of tariffs to be paid by suppliers for electricity generated from renewable energy sources. This Methodology shall include provisions for compensation of suppliers for the additional cost of purchasing electricity generated from renewable energy sources.

The Market Operator is responsible for conclusion of sale and purchase agreements for the obligatory portion of electricity generated from renewable energy sources and cogeneration and collection of payments for supporting electricity generation from renewable energy sources and cogeneration, from all suppliers, including suppliers with public service obligations.

Until the market has only one supplier compensation, payment of electricity produced from renewable energy sources becomes compensation fees for electricity production from these sources which collects the supplier with the exception of the amount for which manufacturers have connected contract for sale, under the provisions of this law.

4. Information on how the support schemes have been structured to take into account RES applications that give additional benefits

***Reference**: Article 22 (1)c of Directive 2009/28/EC).*

Support schemes for the promotion of renewable energy sources have so far been structured primarily to enable production and provide grid access for renewable electricity and heating, not for secondary purposes or benefits. We have not observed (unintentional) higher costs.

5. Information on the functioning of the system of guarantees of origin for electricity and heating and cooling from RES …and the measures taken to ensure reliability and protection against fraud of the system.

***Reference**: Article 22(1)d of Directive 2009/28/EC).*

The Kosovo Energy Regulatory Office (ERO) has developed and approved the Rule on Guarantees of Origin for electricity produced from RE, waste incineration and combined heat & power plants on 29 December 2010. A framework for Guarantees of Origin will be further developed and implemented under an EU supported programed with final implementation date of 2019.

The Law on Electricity No. 05/L-085 adopted recently by the Parliament is dealing with Certificate of Origin for RE and cogeneration (Article 8 of the Law on Electricity)
Power certified to originate from RE is entitled to priority dispatch under the terms stated in the Grid Code and Market Rules. TSO and DSO are obliged to provide priority to electricity generated from RE power plants and co-generation.

Public electricity suppliers are obliged to purchase the whole amount of RE electricity generated at regulated tariffs, determined by ERO through a methodology that takes into account compensation for the public supplier for the additional cost of purchasing electricity from RE. ERO adopted Rule for Establishment of a System of Certificate of Origin for Electricity generated from RE, waste incineration plants and combined-heat-power plants on 29 December 2010. The register of Certificates is still not in place. Up to now ERO has not received any application for issuance of Certificate of Origin.

As long as the REFIT scheme, which provides priority dispatch anyway, evokes the targeted amounts of RE, the absence of the system of Certificates of Origin does not pose a barrier for RE deployment. However, once these targets are fulfilled or the REFIT is not delivering results, a workable system of Certificate of Origins would be an important means to promote RE. A lack of such system would thus not create a barrier but would be a missed opportunity to promote RE. The lack of a system of Certificate of Origin may also impede investors' confidence that Kosovo is following the rules of the Energy Community and thus constitute a minor barrier.

6. Developments in 2014 and 2015 in the availability and use of biomass resources for energy purposes.

***Reference**: Article 22(1)g) of Directive 2009/28/EC).*

Table 4: Biomass supply for energy use

	Amount of domestic raw material (*)		**Primary energy in domestic raw material (ktoe)**		**Amount of imported raw material from EU (*)**		**Primary energy in amount of imported raw material from EU (ktoe)**		**Amount of imported raw material from non EU(*)**		**Primary energy in amount of imported raw material from non EU (ktoe)**	
	2015 *Year*	**2014** *Year*	**2015** *Year*	**2014** *Year*	**2015** *Year*	**2014** *Year*	**2015** *Year*	**2014** *Year*	**2015** *Year*	**2014** *Year*	**2015** *Year*	**2014** *Year*
Biomass supply for heating and electricity:												
Direct supply of wood biomass from forests and other wooded land energy generation (fellings etc.)**	209,824.44 m3***	163,887.77m3***	30.84	24.09								
Indirect supply of wood biomass (residues and co-products from wood industry etc.)**									All import: 25.390 tonnes of pellets plus 4.238 tonnes of briquettes (or pellets)			
Energy crops (grasses, etc.) and short rotation trees												
Agricultural by-products / processed residues and fishery by-products **												
Biomass from waste (municipal, industrial etc.) **												
Others (please specify)												
Biomass supply for transport:												
Common arable crops for biofuels												

Energy crops (grasses,etc.) and short rotation trees for biofuels												
Others												

The forests of Kosovo are an important national resource for renewable sources of energy as well. As this resource is currently very important for reaching the national RES objective, we elaborate here the estimation of fuelwood consumption.

Of Kosovo's official land area, ca. 45% (481 000 ha) is covered by forests. A total of 180 800 ha (38 percent) of this is privately owned, and 209 200 ha (62 percent) is public forest.

According to the NFI data, the growing stock of trees with diameter at breast height that is greater or equal to 7 cm, stands at 40.5 million m3, which is approximately the same size as ten years ago. Annual increment over bark (NFI 2013) of trees with diameter (dbh) greater or equal to 7 cm is estimated at 1.55 million m3 – 1.32 million for the broadleaves category and 0.23 million for coniferous trees. In comparison, the average growing stock in Kosovo is 84 m3 per ha. The average increment in Kosovo is 3.2 m3 per ha. Within the NFI project, the maximum long-term annual harvest, strictly from a productivity point of view, is approximately 1.45 million m3.

The net maximum long-term annual harvest level for Kosovo is determined at 1.2 million m3. It is recommended that this estimate be further reduced due to areas unavailable for wood supply, including National Parks (NFI2013).The actual cut in the forests was estimated to affect 60 percent of the forest area from the NFI project. Consequently, the real annual harvest was roughly estimated to be 1.6 million m3 annually. Only a small fraction of the harvesting (7 percent) was carried out in compliance with the current forest legislation (i.e. illegal).

The data about the biomass resources used in the reporting period are shown in Table 4. Wood biomass, supplied both directly and indirectly, is mainly used in heating, in the form of 'firewood'.

* Amount of raw material if possible in m3 for biomass from forestry and in tonnes for biomass from agriculture and fishery and biomass from waste

** The definition of this biomass category should be understood in line with table 7 of part 4.6.1 of Commission Decision C (2009) 5174 final establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC

***This data are taken from Kosovo Forest Agency, the data are official based on registration for cutting of wood from forests for energy supply. Mismatch between direct supplies of wood biomass from forests with

biomass consumption is the result that 40 % of forests public and 30% of private forests are subject to uncontrolled and illegal activities of use

Table 4a. Current domestic agricultural land use for production of crops dedicated to energy production (ha)

Land use	Crop	Surface (*ha*)	
	Overall/**not** specific to energy production	**2015**	**2014**
1. Land used for common arable crops (wheat, sugar beet etc.) and oil seeds (rapeseed, sunflower etc.)	Wheat Corn Barley/beer Rye Oat Other Cereal grain Sunflower Mixture of grass Green corn Green wheat Green oat Green barley Green rye Other green fodder	89942,05 41491,76 1.141,29 395,63 170,46 125,15 154,15 9.809,32 2.256,19 63,80 458,50 11,90 23,05 215,21	
2. Land used for short rotation trees (willows, poplars).	*Not reported*	0	0
3. Land used for other energy crops such as grasses (reed canary grass, switch grass, Miscanthus), sorghum. (Please specify main types)	*Not reported*	0	0

The Kosovo Agency for Statistics has not (yet) reported on energy crops or agricultural crops that could or are specifically produced for energy purposes (incl. for biogas purposes, productions of pellets or for biofuels).

It cannot be excluded that smaller portions of the data presented in the table are used for local energy purposes.

7. Information on any changes in commodity prices and land use in 2014 and 2015 associated with increased use of biomass and other forms of energy from renewable sources.

***Reference**: Article 22(1) h) of Directive 2009/28/EC).*

Because of the limited and lack of reporting data, as well as small scale harvesting of fuelwood, the effect of increased use of biomass cannot be observed in commodity prices.

This is likely to change as a growth in production and import of biomass pellets is already observed. The prices for such products should be included in fuel price reporting.

8. Development and share of biofuels made from wastes, residues, non-food cellulosic material, and lingo cellulosic material.

***Reference**: Article 22(1) i) of Directive 2009/28/EC).*

Table 5: Production and consumption of Art.21(2) biofuels (Ktoe)

Article 21(2) biofuels[29]	2015	2014
Production – by Fuel type	0	0
Consumption – by Fuel type	0	0
Total production Art.21.2.biofuels	0	0
Total consumption Art.21.2. biofuels	0	0
% share of 21.2. fuels from total RES-T	0	0

As there is no legislation in place for the production of biofuels in Kosovo, there are no reports on the production of biofuels, both so called 1st and 2nd generation biofuels.

It cannot be fully excluded that such biofuels are imported into Kosovo but customs statistics only show very moderate volumes of imports, with which it is not clear which production method has been used.

[29] Biofuels made from wastes, residues, non-food cellulosic material, and lignocellulosic material.

9. Information on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality

***Reference**: Article 22 (1) j) of Directive 2009/28/EC.*

As there is no legislation in place for the production of biofuels in Kosovo, there are no reports on the production of biofuels. Therefore, (environmental) impacts of such production is non-existing in Kosovo for the reporting period. This may change when secondary legislation will be in place, expected at the end of the next reporting period (2016-2017).

10. Estimation of net greenhouse gas emission savings due to the use of energy from renewable sources

***Reference**: Article 22 (1) k) of Directive 2009/28/EC).*

Table 6: Estimated GHG emission savings from the use of renewable energy (t CO2eq)

Environmental aspects	2015	2014
Total estimated net GHG emission saving from using renewable energy[30]		
- Estimated net GHG saving from the use of renewable electricity	148 010	196 510
- Estimated net GHG saving from the use of renewable energy in heating and cooling	PM	PM
- Estimated net GHG saving from the use of renewable energy in transport	0	0

The GHG savings from the production of electricity from renewable sources has been estimated using a so called marginal approach, i.e. calculating the emission factor for the generation of energy by the fossil production park (power stations Kosovo A and Kosovo B).

An estimation for the GHG savings for heating and cooling has been assessed as too complicated (especially the baseline, were heating takes place both with electricity and with fuelwood, with growing numbers of 'modern' biomass as pellets) and with lignite as solid fuel as well.

[30] The contribution of gas, electricity and hydrogen from renewable energy sources should be reported depending on the final use (electricity, heating and cooling or transport) and only be counted once towards the total estimated net GHG savings.

11. Excess/deficit production of energy from renewable sources compared to the indicative trajectory which could be transferred to/imported from other Contracting Parties, Member States and/or third countries, as well as estimated potential for joint projects until 2020

Reference: *Article 22 (1) l, m) of Directive 2009/28/EC).*

Table 7: Actual and estimated excess and/or deficit (-) production of renewable energy compared to the indicative trajectory which could be transferred to/from other Contracting Parties, Member States and/or third countries with Kosovo (ktoe)[31],[32]

	2014	2015	2016	2017	2018	2019	2020
Actual/estimated excess or deficit production (Please distinguish per type of renewable energy and per origin/destination of import/export)	[deficit]	[deficit]	[deficit]	[deficit]	[deficit]	[deficit]	[+/-]

There is not excess production of energy from renewable sources for the reporting period.

[31] Please use actual figures to report on the excess production in the two years preceding submission of the report, and estimates for the following years up 2020. In each report Contracting Party may correct the data of the previous reports.
[32] When filling in the table, for deficit production please mark the shortage of production using negative numbers (e.g. –x ktoe).

11.1. Statistical transfers, joint projects and joint support scheme decision rules.

Kosovo has included in its energy legislation (governmental instruction, 2013) a provision to participate in statistical transfer and/or joint support schemes between Energy Community Contracting Parties. This legislation can, after Kosovo has attained its targets or in order to reach such targets, provide actual cooperation with other Contracting Parties under the Energy Community. Provisions to do the same with EU member states after accession, should still be implemented[33].

The revised draft of Administrative Instruction on Promotion and Use of RES has included the new article that regulate the independent external audit, in accordance with Article 13 of Ministerial Council Decision.

For the reporting years, no statistical transfers, joint projects and joint support scheme decision rules have been implemented.

[33] Energy Community Secretariat Annual Implementation Report Aug 2014

12. The share for biodegradable waste in waste used for producing energy

***Reference**: Article 22(1)(n) of Directive 2009/28/EC.*

Waste processing practices in Kosovo are still based on landfilling methodologies. The (publicly owned) waste processing industry in Kosovo has so far not been able to produce energy from biodegradable waste.

The most recent national Waste Action Plan does not proved implementation activities to convert the biodegradable portion of waste into useful energy.