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Republika Kosova - Republic of Kosovo
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Ministria e Zhvillimit Ekonomik

Ministarstvo Ekonomskog Razvoja - Ministry of Economic Development

NATIONAL RENEWABLE ENERGY ACTION PLAN (NREAP) 2011 - 2020

KOSOVO, 2013

TABLE OF CONTENTS

ABBREVIATIONS

AI	Administrative Instruction
Co	Cooling
EC	European Commission
EE	Energy Efficiency
EnCT	Energy Community Treaty
EnCS	Energy Community Secretariat
ERO	Energy Regulatory Office
FIT	Feed-in-Tariff
HPP	Hydro Power Plant
Ht	Heating
KEEP	Kosovo Energy Efficiency Plan
KDSO	Kosovo Energy Distribution System Operator
KOSTT	Transmission System Operator (TSO) and Market Operator (MO)
KPEERES	Kosovo Program on Energy Efficiency and Renewable Energy Sources
ktoe	Kilo tone of oil equivalent
LPTAP	Lignite Power Technical Assistance Project
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MED	Ministry of Economic Development
MEM	Ministry of Energy and Mining
MESP	Ministry of Environment and Spatial Planning
MF	Ministry of Finance
MTI	Ministry of Trade and Industry
MTEF	Mid-Term Expenditure Framework
NAP	National Action Plan
NREAP	National Renewable Energy Action Plan
PS	Public supplier
RES	Renewable Energy Sources
SHPP	Small Hydro Power Plant
Tr	Transport
WB	World Bank
CHP	Cogeneration Heat and Power

1. SUMMARY OF THE RENEWABLE ENERGY POLICY IN THE REPUBLIC OF KOSOVO

Strategic framework

Renewable Energy Sources (RES) comprise a significant component of the energy sector in Kosovo. They are addressed in a separate chapter of the Kosovo Energy Strategy 2009-2018. The achievement of assumptions related to RES energy production comprises a long-term objective for the realization of three main objectives of the country's energy policies, including: support to the overall economic development; increased security of energy supply and environmental protection. This Strategy aims to strengthen further fiscal and financial measures for all the use of all RES, as well as the system of green certificates. Pursuant to the Energy Strategy of the Republic of Kosovo 2009-2018 and the applicable legal framework, Kosovo has adopted a system of feed-in tariffs aimed at stimulating electricity generation from water, wind and biomass (including biogas). The Energy Strategy pays special attention to the full adaption of European Union RES policies, through the implementation of all obligations deriving from the Energy Community Treaty (EnCT). The strategy places special emphasis on the development of Hydro Power Plant Zhur and other smaller hydro power plants.

Kosovo has also adopted *District Heating Strategy 2011-2018,* which also specifically address issues related to renewable energy sources. It specifies that use of wet lignite and unsustainable use of fuel wood for heating purposes needs to be minimized. Use of solar energy, communal waste and wood waste are seen as the most promising RES based heating supply options. However, it is emphasized that waste technologies are still too expensive for utilization on the larger scale. Financial incentives for these uses are envisaged by the *Heating Strategy*, but they are still not in place.

In 2009, *Policy and Strategy Paper on Forestry Sector Development 2010-2020* was prepared by the Ministry of Agriculture, Forestry and Rural Development. It states that especially in rural areas wood will remain the most important source of energy for heating. For this reason the Strategy on Forestry Sector Development (2010-2020) will support the introduction of systems and methods leading to improved use of forest resources for energy production purposes.

Legal and regulatory framework

The primary and secondary legislation regulating production of energy from renewable sources is summarized below:

PRIMARY ENERGY LEGISLATION	
Legal act	**Main provisions**
Law No.03/L-184 on Energy (OG No. 86/15 November 2010).	The Law on Energy No. 03/L-184 determines that RES have to be an integral part of Energy Strategy, which shall promote their optimal use consistent with adopted targets. To support RES use in Kosovo, the Ministry of Economic Development shall draft long-term and mid-term RES plans in accordance with obligations deriving from the Energy Community Treaty. MED is further responsible for setting up RES targets, for monitoring of implementation and annual reporting on achievement of targets and measures undertaken for this purpose. MED may adopt secondary legislation containing measures for promoting RES.

	The transmission and distribution system operators shall, as needed, give priority to generation from renewable energy sources as per the limits specified in the Grid Code. System operators shall establish and publish rules on who will bear the costs for technical adaptations necessary for RES integration into the system. Such rules have to be approved by Energy Regulatory Office (ERO). ERO shall ensure that transmission and distribution charges for RES producers are non-discriminatory, in particular those from peripheral regions. ERO is also designated body for issuing guarantees of origin for electricity produced from RES.
Law No.3/L-201 on Electricity (OG. No. 86/15 November 2010)	Law No.3/L-201 on Electricity determines the form of certificates of origin and ERO as the competent body for their issuance. Public electricity suppliers are obliged to purchase the whole amount of RES electricity generated at regulated tariffs, determined by ERO through the pre-set methodology that takes into account compensation for the public supplier for the additional cost of purchasing electricity from renewable sources.
Law No.03/L-185 on the Energy Regulator (OG. No. 86/15 November 2010).	Law No.03/L-185 on the Energy Regulator sets tasks and responsibilities of the ERO, which issues certificates of origin, develops regulated tariff methodologies and issues licenses for energy activities and authorizations for the development of new generation capacities.
Law No.03/L-116 on District Heating (OG. No.45/12 January 2009)	Law No.03/L-116 on District Heating provides heating enterprises that utilized unused heat, or heat from renewable sources, waste or cogeneration with certificates of origin, which are issued by Energy Regulatory Office. Heat for which certificates of origin have been issued has priority over other public supplier heat purchases. On the basis of certificates of origin the producer of heat will be entitled to issue and sell green certificates.
SECONDARY ENERGY LEGISLATION	
Administrative Instruction No. 01/2013 on Indicative Targets of Renewable Energy Sources	This Administrative Instruction determines annual and long-term targets for energy generated from renewable energy sources and consumed in the electricity, heating and transport sectors by 2020.
Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme	This Rule contains provisions on the level of generation capacity required to meet the indicative targets for electricity consumption from renewable energy sources; criteria and procedures for admission to the support scheme; rights and obligations of producers of electricity from renewable energy sources for which a certificate of origin has been issued admitted to the support scheme; rights and obligations of producers of electricity for which a certificate of origin has been issued but not admitted to the support scheme; rights and obligations of the public supplier in relation to electricity for which a certificate of origin has been issued; rights and obligations of the TSMO (independent transmission, system and market operator); the funding of the support scheme; the integration of electricity produced from renewable energy sources in the electricity system.
ERO Decision_V_359_2011 to set FIT for the production of electricity from Renewable Energy	Decision _V_359_2011 determines feed-in tariffs for the generation of electricity generated from Renewable Energy Sources; feed-in tariffs for generation capacities using new technologies and other equipment. Primary Renewable Energy Sources used for generation of electricity admitted in the support scheme: water, wind, biogas and biomass.

Sources	
Rule for the establishment of a system of certificates of origin for electricity produced from renewable energy sources, waste and co-generation combined with heating in a sole generation unit.	This Rule set out the provisions concerning the establishment, operation and maintenance of a system managed by ERO for the issuance, transfer, redemption and revocation/cancellation of certificates of origins with reference to electricity produced from renewable energy sources, from waste and in combination with heat.
LEGISLATION AND REGULATION IN OTHER POLICY FIELDS	
Policy field	**Main legal acts and their provisions**
Environmental protection	Law No. 03/L-025 on Environmental Protection (OG. No. 50/06 April 2009) and Law No. 03/L-230 on Strategic Environmental Assessment (OG.No.49/25 March 2009), require that environmental impact assessment and environmental strategic assessment is performed for plans or programs that are likely to have a significant environmental impact, especially in the sector of mining, energy, forestry and water management projects. According to Law No. 03/L-025 on Environmental Protection, private entities are obliged to use energy resources rationally. Those which use renewable energy sources may be entitled to tax, custom and other reliefs or exemptions. Awards may be given to the best solution for production process in relation to environmental protection and energy use, which have to be clearly reformulated. Annex 1 of Law No. 03/L-214 on Environmental Impact Assessment (OG. No. 50/06 April 2009), determines energy industry projects for which Environmental Impact Assessment should be conducted. Annex 1 of the Law No. 03/L-043 on Integrated Prevention Pollution Control (OG. No.52/08 May 2009) in Annex 1 determines the energy industry installations that should undertake activities for integrated pollution control.
Waste	Law No. 04/L-060 on Waste (OG. No.17/29 June 2012) includes provisions on protection of the environment and human health from pollution by prevention and reduction of waste production and its harmfulness by using waste as an energy source among other measures.

Primary legislation:

With the aim of harmonizing current legislation with provisions of the third package of EU Directives on Energy, MED is in the process of drafting the following draft-laws, which will be included in the 2014 Legislative Program:

1. Law on amendment and supplementation of Law No. 03/L-184 on Energy.

2. Law on amendment and supplementation of Law No. 03/L-185 on Energy Regulator.

3. Law on amendment and supplementation of Law No. 03/L-201 on Electricity.

4. Law on amendment and supplementation of Law No. 03/L-133 on Natural Gas.

5. Law on amendment and supplementation of Law No. 03/L-116 on District Heating.

Institutional framework

Overall energy policy, hence RES policy as well, is in competencies of the Ministry of Economic Development (MED). In implementing the renewable energy sources policies, MED drafts mid-term and long-term action plans, sets annual and long-term RES targets and approves secondary legislation containing measures for the achievement of such targets. In addition, it is obliged to report about on annual basis on the progress in achievement of annual and long-term RES targets.

Another key institution in supporting RES in Kosovo is Energy Regulatory Office (ERO). ERO's responsibilities relevant to RES utilization are as follows: it defines procedures and issues authorizations for construction of new energy production capacities; it is responsible for setting conditions and criteria for issuing licenses to carry out activities in energy sector; it defines simulative tariffs for purchase of renewable energy and is responsible for managing the guarantees of origin system.

Kosovo Energy Corporation (KEK) was a vertically integrated public company, responsible for mining activities and generation, distribution and supply of electricity. In 2013, Kosovo's electricity distribution system was transformed into an operator that is new managed by a private company. The Transmission, System and Market Operator was unbundled from KEK in 2006. Its main responsibilities are planning, developing, maintaining and operating the electricity transmission system; operating electricity market and promote market competition; providing non-discriminatory open access. Distribution System Operator (DSO) and Transmission System Operator (TSO) have the obligation to receive all electricity produced from RES to the national electric grid, to give priority to RES generators in dispatching in accordance to conditions set in the Grid Code and to provide potential RES producers technical conditions and cost estimations for grid connection.

Local authorities are responsible for issuing construction permits for energy generation facilities below 20 MW installed capacity. They should cooperate with MED, TSO and DSO on the issues related to the land use for energy facilities. Local authorities are responsible for providing servitudes or other property rights. In case of disputes between local authorities and energy companies requiring servitude or other related rights, the final decision is issued by ERO.

Ministry of Environmental and Spatial Planning is responsible for issuing construction permits for facilities exceeding 20 MW in installed capacities. They also issue concessions for water use and manage the system of environmental impact assessments and issuance of environmental permits.

The Ministry of Agriculture, Forestry and Rural Development is responsible for policymaking in the forestry sector. It oversees forestry activities such as protection, reforestation and sustainable exploitation including those related to fuel wood.

The jurisdiction for placing bio fuels into the market rests on the Ministry of Industry and Trade (MIT) as the competent ministry for management of the petroleum products market.

Up-to-date results and conclusion

From the above information, it is evident that Kosovo has recognized the importance of RES for its future energy development. Strategic, legal and institutional frameworks serving as a support for individual decisions on investing in RES energy production are established and operating. This framework enabled undertaking of many studies and demonstration projects to prove the feasibility of RES use in Kosovo. Summary of main past activities is given below.

Type of action	**Description of action**
Development of new large HPPs	As part of the Lignite Power Technical Assistance Project (LPTAP), the World Bank (WB) funded the revision of the existing feasibility study for the HPP Zhur. In compliance with WB policies, the preliminary assessment study for environmental and social impacts was also compiled. According to these studies, the HPP Zhur is feasible and able to provide the Kosovo electricity system with 305 MW generation capacities, at an annual average generation of 398 GWh.
New small HPPs	During 2006. 2009 and 2010, MED (former MEM) conducted preliminary assessment studies on the countries' potential for small HPPs. Development of new small HPPs is expected through private capital investments. Potentials are estimated to approximately 130 MW of new installed capacities with an annual average generation of 621 GWh.
Revitalization of existing HPPs	Four HPPs operate as part of Kosovo Energy Corporation (KEK): HPP Dikanc, HPP Lumbardhi, HPP Radavci and HPP Burimi. These HPP's were rehabilitated in the recent years and increased their production. HPP Lumbardhi was rehabilitated and commissioned in 2005 by a company that leased it for a period of 20+20 years. The installed capacity of this HPP is 8.08 MW. HPP Dikanc was leased and functionalized in 2010 while its installed capacities were increased to 1 MW during its refurbishment. HPP Radavci was rehabilitated in 2010 by the company that leased it. This HPP's installed capacities were also enhanced from 0.35 MW to 0.9 MW. HPP Burimi was leased and its capacities were increased from 0.56 MW to 0.86 MW. HPP Ujmani also contributes to Kosovo's electricity system with installed capacities of 35MW and an annual generation of around 88 GWh (in 2010). This HPP is owned of the Iber-Lepenci Hydro-System.[1]
Estimate on other RES potential	In 2008, the potentials for solar, wind, biomass and geothermal energy were assessed, assisted by the advisory services of Danish COWI.
Development of wind power plants	In 2009, first wind power plant with capacity 3 x 0.45 MW in Golesh hill in Prishtina suburbs was installed. In 2010 four more requests for authorization were submitted to ERO by private companies in Artana, Dardana and Shtime. During the 2013 are submitted to ERO other three applications for locations in Rahovec (Zatriçi), Suharekë (Budakova), and Drenas.[2]
Solar water heating	Solar collectors were installed in a number of premises of the Kosovo Clinical University Centre and the Student Centre in Prishtina, funded by the national budget (during 2008-2009), and in three other public premises – part of the

[1] Reference: KOSST; ERO; Long Term Energy Balance (2013-2022) (MED)
[2] ERO

	project for the implementation of energy efficiency measures, funded by the European Commission (during 2010).

Kosovo is on the right track to significantly increase its use of RES. This National Renewable Energy Action Plan (NREAP), with established targets and measures to be undertaken to achieve them until 2020, comprises a comprehensive Government policy for stimulating RES use in Kosovo.

The NREAP is prepared based on the Template prepared by European Commission (EC) and given in the Commission Decision 2009/584/EC. It fulfills all requirements of the Directive 2009/28/EC adapted according to the Ministerial Council of the Energy Community D/2012/04/MC-EnC on implementation of the Directive 2009/28/EC and amending Article 20 of the Energy Community Treaty.

MED was responsible for drafting the NREAP according to long-term RES targets set by Administrative Instruction No. 01/2013 on Renewable Energy Targets by 2020 for the use of RES in electricity and heat consumption and in transport.

Other institutions actively contributed to the NREAP with information from their jurisdiction:

- Energy Regulatory Office (ERO) with description of authorizations for construction of new energy production capacities, tariff system for purchase of renewable energy and system of guarantees of origin;
- Transmission System and Market Operator (KOSTT) and Distribution system operator (DSO) with description of electricity infrastructure development and electricity network operation;
- Ministry of Environment and Spatial Planning (MESP) with descriptions of RES energy use in the building sector;
- Ministry of Trade and Industry (MTI) with description of regulatory framework for biofuels (and other bio-liquids) and support schemes to promote the use of biofuels in transport;
- Ministry of Agriculture, Forestry and Rural Development (MAFRD) with descriptions from the field of use of energy from biomass;
- Ministry of Finance (MF) with suggestions on fiscal measures.

2. EXPECTED FINAL ENERGY CONSUMPTION 2010-2020

The estimates of gross final energy consumption in the period up to 2020 are presented in the Table 1 and based on the document entitled *Forecast of Energy Demand, which covers the period 2013-2022.* Data given in this document represent final energy consumption, hence needed to be reviewed in order to comply with the definition of gross final energy consumption given in the Directive 2009/28/EC. For that purpose data about electricity consumption provided by the TSO were used.

Table 1 contains two scenarios of gross final energy consumption: the ' *baseline scenario*' and '*energy efficient scenario'*. Figure 1 presents the difference between two scenarios. The difference between these two scenarios in year 2018 comprises the envisaged amount of energy savings as given in the Kosovo Energy Efficiency Action Plan prepared in accordance with the Directive 2006/32/EC on energy end-use efficiency and energy services amounting to 130ktoe.Further energy consumption growth in both scenarios is assumed to be the same as a growth achieved in the period 2017-2018. Average annual growth rate of energy consumption in the reference scenario in period 2010-2020 is 3.88%, while in the additional energy efficiency scenario is 2.89%.

The elaboration of other parts of the NREAP is based on the energy efficient scenario.

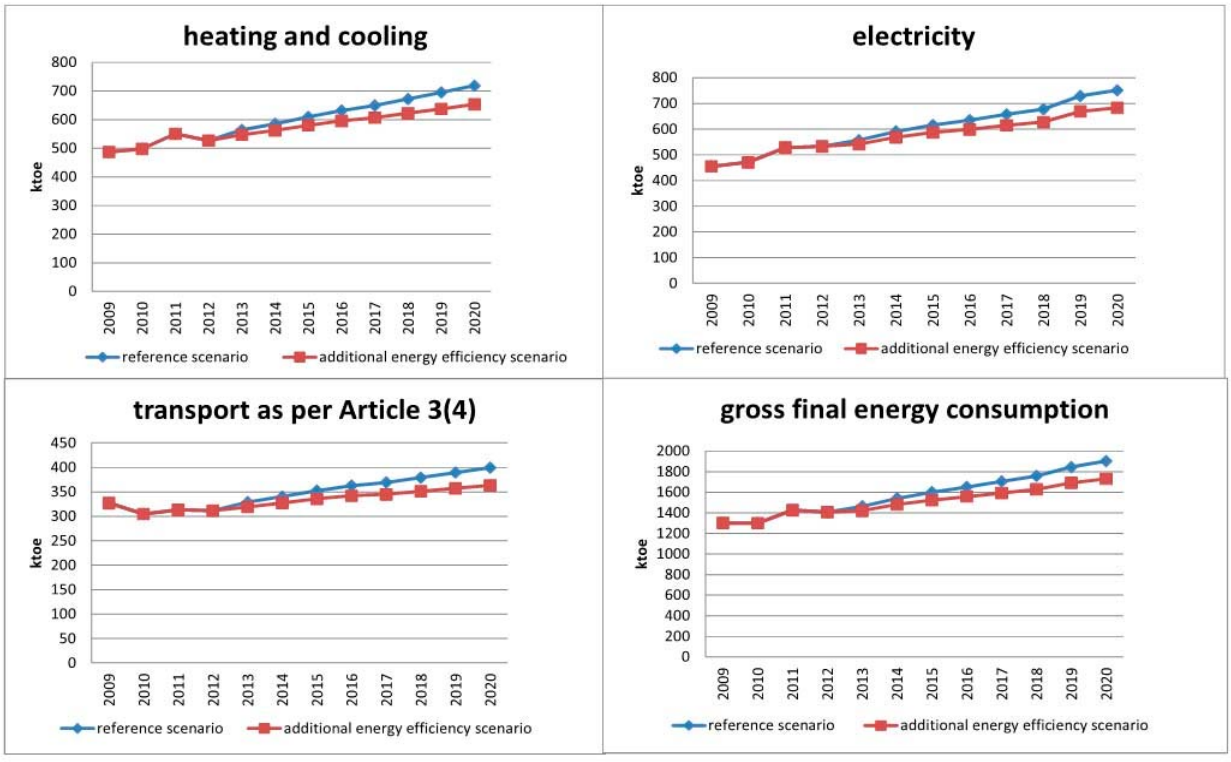


Figure 1 – Gross final energy consumption estimates in reference and additional energy efficiency scenarios until 2020

In both scenarios the distinction is made according to energy uses: electricity, heating and cooling and transport. It has to be emphasized, however, that electricity used for heating and cooling purposes is contained under the electricity use, while heating and cooling refers only

to heat sold from central (district) heating systems and energy content of other fuels (logwood, lignite, liquefied petrol gas and other petroleum products) used in energy end-use sectors.

The part of Table 1 pertaining to energy consumption in airline transport as given by the template was not completed, since the final gross energy consumption in this subsector does not exceed 6.18%.

As evident from the Table 1, estimated gross final energy consumption in 2020 is equal to 1.729,82 ktoe and will be further used in this NREAP for calculation of overall national target, sectorial targets and trajectories.

Table 1 - Expected gross final energy consumption in heating and cooling, electricity and transport up to 2020 taking into account the effects of energy efficiency and energy saving measures[3] 2010-2020 (ktoe)

	2009	2010		2011		2012		2013		2014	
	base year	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency
(1) heating and cooling[4]	486,48		497,36		550,36		526,04	564,13	547,70	584,92	562,43
(2) electricity[5]	455,23		470,97		528,16		533,07	557,78	541,53	590,82	568,10
(3) transport as in Art. 3(4)a[6]	327,35		304,67		313,32		311,58	328,75	319,17	340,58	327,48
(4) Gross final energy consumption[7]	1301,10		1300,65		1426,12		1407,11	1.462,78	1420,17	1540,68	1481,42
The following calculation is needed only if final energy consumption for aviation is expected to be higher than 6,18%											
Final consumption in aviation											
Reduction for aviation limit[8] Art. 5(6)											
TOTAL consumption after reduction for aviation limit											

[3] These estimates on energy efficiency and energy savings shall be consistent with other such estimates that Contracting Parties notify in the Action Plans under the Energy Services Directive and the Energy Performance of Buildings Directive. If different units are used in those Action Plans the conversion factors applied should be indicated.

[4] It is the final energy consumption of all energy commodities except electricity for purposes other than transport, plus the consumption of heat for own use at electricity and heat plants and heat losses in networks (items '2. Own use by plant' and '11.Transmission and distribution losses in page 23 and 24 of the energy Statistics Regulation, OJ L304 of 14.11.2008).

[5] The gross electricity consumption is national gross electricity production, including auto-production, plus imports, minus exports.

[6] Transport consumption as defined in Art. 3(4)a) of Directive 2009/28/EC. Renewable electricity in road transport for this figure should be multiplied by a factor of 2,5, as indicated by Article 3(4)c) of Directive 2009/28/EC.

[7] As defined in Article (2)f) of Directive 2009/28/EC. This comprises final energy consumption plus network losses and own use of heat and electricity at electricity and heating plants (NB: this does not include consumption of electricity for pumped hydro storage or for transformation in electrical boilers or heat pumps at district heating plants).

[8] According to Article 5(6) consumption for aviation has to be considered only up to 6.18% of gross final energy consumption.

	2015		2016		2017		2018		2019		2020	
	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency
(1)heating -cooling[9]	609,18	580,17	631,25	595,52	649,39	606,90	672,05	622,27	694,78	637,41	718,65	653,32
(2) electricity[10]	616,19	586,84	634,81	598,88	658,19	615,13	677,90	627,69	729,17	668,96	751,37	683,06
(3) transport as in Art. 3(4)a[11]	352,45	335,66	362,76	342,23	369,17	345,02	379,36	351,26	389,50	357,34	399,65	363,32
(4) Gross final energy consumption[12]	1599,54	1523,37	1651,08	1557,63	1704,19	1592,70	1758,18	1627,95	1844,20	1691,93	1902,81	1729,82 [13]
The following calculation is needed only if final energy consumption for aviation is expected to be higher than 6,18% (4,12% for Malta and Cyprus):												
Final consumption in aviation												
Reduction for aviation limit[14] Art. 5(6)												
TOTAL consumption after reduction for aviation limit												

[9] See footnote 4.
[10] See footnote 5.
[11] See footnote 6.
[12] See footnote 7.
[13] Gross final energy consumption is estimate based on Long Term Energy Balance (2013-2022) (MED)
[14] See footnote 8.

3. RENEWABLE ENERGY TARGETS AND TRAJECTORIES

3.1. National overall target

National mandatory overall target for the share of energy from RES in gross final energy consumption in the year 2020 is 25% as determined in the Ministerial Council of the Energy Community Decision D/2012/04/MC-EnC on implementation of the Directive 2009/28/EC and amending Article 20 of the Energy Community Treaty.

However, Kosovo will aim at higher target which corresponds to 29.47% of expected gross final energy consumption in 2020.

Due to limited timeframe for the achievement of targets, lack of prepared joint projects and lack of experience in the matters related to statistical transfers and joint support schemes, Kosovo will not use, at least for the time being, flexibility mechanisms stipulated in articles 6 to 11 of the Directive 2009/28/EC and in articles 8 and 9 of the above mentioned Ministerial Council Decision. However, amendments of existing legislation, especially of the Energy Law, which are envisaged to be adopted by the end of 2013, use of flexible mechanisms will be enabled and subject to the rules prescribed by the Government.

Since Kosovo plans to reach and surpass its national mandatory target through national measures for the production of energy from renewable sources, there is potential for the transfer of excess amounts above the indicative trajectory by means of the various flexible mechanisms for cooperation, but at the moment this is not planned. On the other hand, if the regular report on implementation of this NREAP and progress in achievement of targets suggest that Kosovo is not able to fulfill mandatory targets by domestic production solely, adequate steps will be undertaken to investigate possibilities for use of these mechanisms.

Table 2 - National overall target for the share of energy from renewable sources in gross final consumption of energy in 2009 and 2020

A. Share of energy from renewable sources in gross final consumption of energy in 2009 (S_{2009}) (%)	18,90	18,90
B. Target of energy from renewable sources in gross final consumption of energy in 2020 (S_{2020}) (%)	**25,00 (mandatory)**	**29,47 (voluntary)**
C. Expected total adjusted energy consumption in 2020 (from Table 1, last cell) (ktoe)	1729,82	1729,82
D. Expected amount of energy from renewable sources corresponding to the 2020 target (calculated as B x C) (ktoe)	432,46	**509,70**

3.2. Sectorial indicative objectives

The NREAP defines targets for three sectors: electricity generation, transport and heating and cooling sector (Table 3).

- 25.64 % of RES in gross final consumption of electricity
- 10 % of RES in final consumption of energy in transport
- 45.65 % of RES in gross final consumption for heating and cooling

Manner of achieving indicative renewable energy targets by 2020

The achievement of annual RES energy targets is envisaged to come from the development of new energy generation capacities that use different RES technologies, in all three sectors: electricity; thermal energy for cooling and heating, and transport. The following new generation capacities are also envisaged to support the fulfillment of the RES energy target for 2020:

- 25.64 % of RES in gross final electricity consumption shall be achieved through the construction of the following generation capacities:

In the electricity sector, RES generation increases are based on the development of small and large hydro power plants: 240 MW from small hydro power plants; 305 MW from HPP Zhuri, 150 MW from wind, 14 MW from Biomass, and 10 MW from photovoltaic plants. The electricity sector contributes to the overall RES target with 10.1 %.

- 10 % of RES in the final consumption in transport shall be achieved through the use of bio-fuels, as determined in the AI on the use of biofuels in transport.

The sectorial RES target in transport is calculated in accordance with Article 3(4) of the Directive 2009/28/EC is 10 %. However, the actual rate in the overall energy consumption in transport (which is higher than the amount calculated in Accordance with Article 3 (4), due to the use of kerosene, jet fuel and transport oil), is at the level of 9.24 %. The contribution of this sector in the overall target is set at 2.1 %.

- 45.65 % of RES in the final consumption for heating and cooling shall be achieved through the development of the new generation capacities, as follows:

Solar energy of 70 MW_{th}, 10 MW_{th} from thermal pumps.

Heating and cooling sector contribute to overall RES target in 2020 with 17.2 percent points. The main contribution is from use of biomass in the form of traditional logwood, which will continue to be the most important heating source in Kosovo.

Kosovo is planning to achieve the overall target with domestic sources; hence the usage of cooperation mechanisms is not envisaged.

Table 3 - National target for 2020 and estimated trajectory of energy from renewable sources in heating and cooling, electricity and transport

As Part B of Annex I to the Directive

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES-H&C[15] (%)	48.37%	47.64%	44.07%	46.45%	45.22%	44.91%	44.77%	44.84%	45.24%	45.37%	45.53%	45.65%
RES-E[16] (%)	2.26% 2.26%	2.85% 2.85%	1.71% 1.71%	2.16% 2.16%	2.12% 2.12%	5.13% 7.34%	5.62% 13.78%	6.58% 15.00%	13.20% 21.60%	14.42% 23.18%	14.10% 23.39%	14.33%* 25,64%**
RES-T[17] (%)	0,03%	0,02%	0,04%	0,00%	0,00%	1,00%	2,00%	3,00%	4,00%	6,00%	8,00%	10,00%
Overall RES share[18] (%)	18.90% 18.90%	19.26% 19.26%	17.65% 17.65%	18.18% 18.18%	18.25% 18.25%	19.29% 20.14%	19.66% 22.80%	20.33% 23.57%	23.20% 26.45%	24.20% 27.58%	24.42% 28.09%	25.00%* 29.47%**
Of which from coop. mechanisms[19]												
Surplus for cooperation mechanisms[17]												

	2011-2012	*2013-2014*	*2015-2016*	*2017-2018*	*2020*
	S2009 +20% (S_{2020}-S_{2009})	*S2009 +30%* (S_{2020}-S_{2009})	*S2009 +45%* (S_{2020}-S_{2009})	*S2009 +65%* (S_{2020}-S_{2009})	S_{2020}
RES minimum trajectory (%)	20.12	20.73	21.65	22.87	25
RES minimum trajectory (ktoe)	348.04	358.59	374.42	395.52	432.46

*) RES targets in compliance with MC Decision No. 2/2012/04 MC. date 18 October 2012

**) RES targets based on AI for RES targets, No. 01/2013

The trajectory of RES deployment is falling short of minimum RES trajectory for achieving mandatory targets as defined by REAP template, with the base year being 2009 instead of 2005. This appears due to the late start of Kosovo RES policy and only for the period up to 2015, therefore it is not relevant.

15 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. Line (A) from table 4a divided by line (1) of table 1.

16 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/EC divided by total gross final consumption of electricity. Row (B) from Table 4a divided by row (2) of Table 1.

17 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). Line (J) from Table 4b divided by row (3) of Table 1.

18 Share of renewable energy in gross final energy consumption. Row (G) from Table 4a divided by row (4) of Table 1.

19 In percentage point of overall RES share

Table 4a - 2020 Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)

	2009	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
(A) Expected gross final consumption of RES for heating and cooling	235.30	236.96	242.56	244.34	247.68	253.32	259.74	267.06	274.55	282.32	290.21	298.24
(B) Expected gross final consumption of electricity from RES	10.30 10.30	13.42 13.42	9.02 9.02	11.53 11.53	11.49 11.49	29.12 41.72	32.99 80.84	39.41 89.82	81.17 132.84	90.49 145.51	94.36 156.45	97.89* 175.13**
(C) Expected final consumption of energy from RES in transport	0.10	0.07	0.13	0.00	0.00	3.27	6.71	10.27	13.80	21.08	28.59	36.33
(D) Expected total RES consumption[20]	245.70 245.70	250.45 250.45	251.71 251.71	255.87 255.87	259.17 259.17	285.71 298.32	299.44 347.29	316.73 367.14	369.52 421.19	393.88 448.91	413.16 475.25	432.46* 509.70**
(E)Expected transfer of RES to other Member States	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(F)Expected transfer of RES from other Member States and 3rd countries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(G)Expected RES consumption adjusted for target (D) - (E) + (F)	245.70 245.70	250.45 250.45	251.71 251.71	255.87 255.87	259.17 259.17	285.71 298.32	299.44 347.29	316.73 367.14	369.52 421.19	393.88 448.91	413.16 475.25	**432.46*** **509.70****

*)RES targets in compliance with MC Decision No. 2/2012/04 MC. date 18 October 2012

**)RES targets based on AI for RES targets, No.01/2013

[20] 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 4b - 2020 Calculation table for the renewable energy in transport share (ktoe)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
(C) Expected RES consumption in transport [21]	0,10	0,07	0,13	0,00	0,00	3,27	6,71	10,27	13,80	21,08	28,59	36,33[22]
(H) Expected RES electricity in road transport [23]	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
(I) Expected consumption of biofuels from wastes, residues, non- food cellulosic and lingo-cellulosic material in transport[24]	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
(J) Expected RES contribution to transport for the RES-T share : (C)+(2,5-1)x(H)+(2-1)x(I)	0,10	0,07	0,13	0,00	0,00[25]	3,27	6,71	10,27	13,80	21,08	28,59	**36,33**

[21] Containing all RES used in transport including electricity, hydrogen and gas from renewable energy sources, and excluding biofuels that do not comply with the sustainability criteria (cf. Article 5(1) last subparagraph). Specify here actual values without using the multiplication factors.

[22] Long Term Energy Balance (2013-2022) (MED)

[23] Specify here actual values without using the multiplication factors.

[24] Specify here actual values without using the multiplication factors.

[25] Reference: Long Term Energy Balance (2013-2022) (MED)

4. MEASURES FOR ACHIEVING THE TARGETS

4.1. Overview of all policies and measures to promote the use of energy from renewable resources

Existing measures are presented in table 5, whereas planned measures are presented in table 6, disaggregated by energy product: electricity, heating and cooling, transport and cross-sector measures.

Action **(Name and reference of the measure)**	**Type of measure***	**indicators of success** **(Expected result **)**	**Targeted group and/or activity *****	**Responsible institutions**	**The financial cost and source of funding**	**Start and end dates of the measure**
ELECTRICY						
1. Support scheme for electricity generated from RES (wind, biomass, hydro) Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme	Regulatory Financial	Increased generation of electricity from RES	Investors, Installers	ERO	_____	2011
2. Certificate of Origin Rule for the establishment of a system of certificates of origin for electricity produced from renewable energy sources, from waste and co-generation in combination with heat in a single generating unit	Regulatory	Transparency of electricity generation from RES.	Producers of energy and energy users	ERO	____	2010

3. Pre-feasibility study for the identification of hydro resources for small hydro power plants (SHPP) in Kosovo	Assessment study	Identification of possibilities for the development of 63 MW in SHPP	SHPP investors	MED	50,000.00 DANIDA	May 2006
3. Further assessment of energy hydro-potentials for SHPPs in Kosovo	Assessment study	Further identification of new locations for additional 22 MW SHPP	SHPP investors	MED	60,000.00	November-December 2009
4. Further assessment of energy hydro-potentials for SHPPs in Kosovo	Assessment study	Further identification of new locations for additional 22 MW SHPP	SHPP investors	MED	140,000.00	March- July 2010
5. Compilation of the tendering package for the development of SHPPs	Regulatory	Acceleration of the completion of the necessary documentation for tendering procedures for construction of SHPPs	Support to Energy Regulator's Office and investors	MED	50,000.00 BRK	May-October 2008
HEATING AND COOLING						

1. Study on the preparation of projection data for solar energy system use in Kosovo.	Study	Establishment of a data-base for projection needs for solar energy utilization	Investors and institutions relevant to the energy sphere	MED	60,000.00 BRK	Decembar 2010
CROSS SECTORAL						
1. Kosovo Program for Energy Efficiency and Renewable Energy Sources	Promotional	Stimulation of better utilization of energy from RES, through pilot projects and awareness raising campaigns	Public institutions, consumers, investors	MED	———	2007
2. Public awareness raising campaign on energy efficiency and renewable energy sources	Information campaign	Public information, stimulation of interest on use of RES	General public	European Commission	300,000.00	2009/2010

Table 5- Overview of existing policies and measures

Action (name and reference of the measure)	**Type of measure ***	**Indicators of success (expected result)****	**Targeted group and/or activity *****	**Responsible institutions**	**The financial cost and source of funding**	**Start and end dates of the measure**
ELECTRICITY						
1. Support scheme for electricity generated from small (building integrated photovoltaic BIPV) solar systems Decision on feed-in tariffs for solar PV energy	Regulatory Financial	Increased generation of electricity from RES, Increase of public interest in investment in RES	Investors, Installers	ERO	No assessment Consumer	from 2014–
2. Simplified procedures for RES projects	Regulatory	Increased generation of electricity from small RES projects	Investors, Installers	ERO	_____	from 2014 –
3.						
HEATING AND COOLING						
1. Promotion of the use of renewable energy for heating/cooling (investment grants / capacity payment)	Financial	Increased generation from renewable thermal energy sources (solar thermal, biomass, geothermal) and construction of DH using RES	Investor Installers	ERO	No assessment Consumer	2014 -

2. Obligatory quotas for district heat supplier for share of RES in its supply	Regulatory	Increase of use of RES heat in district heating	District heating supplier	MED	No assessment Consumer	2016 -
3. FIT bonus for the use of heat from renewable CHP	Regulatory Financial	Increase of use of heat from RES CHP	Investor Installers	ERO	No assessment Consumer	2016 -
4. Formation of clusters for increased use of biomass, solar thermal, geothermal	Financial support	Formation of clusters dealing with all aspects of RES heat project deployment	Producers of pellets, wood chips, equipment producers, installers, architects, ESCO providers, financing institutions, investors	MED		2015
5. Minimum RES requirements in buildings	Regulatory	Increase of RES use in new buildings and building undergoing major renovation	Investor Installers	MESP	_____	2018 -
6. Higher standard of RES use in public buildings Government Decision	Promotional	Increase of RES use in new public buildings and public building undergoing major renovation, RES promotion	Public authorities Public	MESP		2014 -
BIOFUELS AND OTHER BIOLIQUIDS						

1. Introduction of biofuels Administrative Instruction on Bio-fuel use	Regulatory	10% share of biofuels in fuel mix in 2020, sustainability certification schemes and certification body	Distributors, Producers of biofuels	MTI	_____	2014 -
2. Excise tax exemption for biofuels	Fiscal	Increase of biofuel consumption	Consumers	MTI	No assessment	2014 -
3. Share of RES in public transport	Regulatory, Promotional	Greater share of RES in public transport	Public transport	MTI	_____	2014 -
CROSS SECTORAL						
2. Customs exemption for components and equipment for RES use	Fiscal	Lowering CAPEX of RES projects	Investors	MF	No assessment	2015. -
3. Profit tax credits or exemptions for investments in RES (with emphasise on projects creating regional employment)	Fiscal	Increasing profitability of RES projects, attracting investment	Investors	MF	No assessment	2015 -
4. Establishment of Regional Energy Agencies	Regulative	Establishment and operationalization of energy agencies with the purpose of support to municipalities and developers with RES projects	Central and municipal authorities, and other stakeholders (investors)	MED	_____	2015

5. RES promotional campaign	Information campaign	Stimulation of public interest on RES utilization	Consumers, generators, public	MED	150,000.00 BRK	2012 - 2014 MTEF
6. Soft loans program for the financing of renewable energy projects	Financial	Attracting investment	Investors	MF	_____	2015-2020

Table 6- Overview of planned policies and measures

* Indicate if the measure is (predominantly) regulatory, financial or soft (i.e. information campaign).

**Is the expected result behavioral 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.?

4.2. Specific measures to fulfill the requirements under Articles 13, 14, 16 and Articles 17 to 21 of Directive 2009/28/EC

4.2.1. Administrative procedures and spatial planning (Article 13(1) of Directive 2009/28/EC)

(a) Existing legislation related to procedures for authorization, certification, licensing and spatial planning, applied for applied to plants and associated transmission and distribution network infrastructure encompasses the following:

- Law No. 03/L-185 on Energy Regulator (OG/No. 86/15 November 2010);
- Law No. 03/L-184 on Energy (OG/No. 86/15 November 2010).
- Law No. 03/L-201 on Electricity (OG/No. 86/15 November 2010).;
- Administrative Instruction on Renewable Energy Source Targets No. 01/2013.
- Rule on Authorization for Construction of New Generation Capacities, adopted on 29.08.2011
- Rule for the Establishment of a System of Certificates of Origin for Electricity Produced from RES, adopted on 29.12.2010
- Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme, adopted on 29.12.2010
- Rule on Licensing of Energy Activities in Kosovo, adopted on 29.08.2011
- Rule on Transmission System Operator and Market Operator Pricing (TSO/MO Pricing Rule)
- Law No. 04/L-147 on Kosovo Waters (OG/No.10/29 April 2013).
- Law No. 04/L-144 on Allocation for use and Exchange of Immovable Property of Municipality (OG No. 35/17 December 2012).
- Law No. 04/L – 110 on Construction (OG/No.18/03 July 2013).
- Law No. 03/L- on Environmental Impact Assessment (OG/No. 83/29 October 2010).
- Law No. 03/L-025 on Environmental Protection (OG/No.06 April 2009).
- Law No. 2004/29 on the Forests of Kosovo (OG/No.34; 01 August 2008).
- Law No. 03/L-043 on Integrated Prevention Pollution and Control (OG/No. 52 08 May 2009).
- Administrative Instruction on Environmental Permits No. 25/2012
- Grid Code
- Transmission connection charging methodology/ KOSTT
- Distribution connection charging methodology/ KEK
- Technical rules for connection.

(b) Responsible institutions and their competencies in this sphere:

Ministry of Economic Development (MED)

- The MED is responsible for drafting and implementing policies which encourage economic growth and cooperation, business development and which ensure competitiveness and sustainable development of the energy and mining sector.
- Within this Ministry's organizational structure, the responsible department is the Department of Energy and Mining (DEM), more precisely the Energy Division that deals with RES, energy efficiency and cogeneration.

The main responsibilities of this division are:

- Proposing, drafting and enforcing the implementation of policy documents and strategies in the field of RES, energy efficiency and cogeneration.
- Proposing, drafting and enforcing the implementation of legislation in force in the field of RES, EE and cogeneration.
- Monitoring and drafting reports on the implementation of policy documents and strategies in the field of renewables, energy efficiency and cogeneration.
- Coordination and reporting the process of implementation of obligations deriving from commitments under the Energy Treaty related to renewables, energy efficiency and cogeneration.

Energy Regulatory Office (ERO)

- Authorizes the construction of new generation capacities (Preliminary authorization, Final authorization);
- Determines the tariff system for electricity generation from RES;
- Responsible for system of certificates of origin.

Ministry of Environment and Spatial Planning (MESP)

- Issues water conditions, water compliance, water permit and water order or carries the procedure of granting concession for water use;
- Issues Environmental Permit;
- Is responsible for issuing Construction Permit (for generators above 20 MW of installed capacity).

Municipal Authorities

- Responsible for allocation of land for RES project use;
- Responsible for issuing Construction Permits for generators below 20 MW of installed capacity.

Kosovo Forestry Agency

- Permit to use the forest.

KOSTT

- Connection to Transmission Network;
- Market Operation.

KEDS

- Connection to Distribution Network;
- Conclusion of Power Purchase Agreements (PPA), as public supplier.

In certain occasions, prior to the construction additional permits are necessary depending on the type and location of RES plants:

Ministry of Infrastructure

- Connection to existing road infrastructure permit.

Ministry of Culture, Youth and Sport

- Permit in case of special interest or archaeological zone.

c) Categorization of procedures for the initiation of RES energy projects will be regulated through a special AI. Procedures are drafted by ERO. The process will conclude by end-2013.

d) Eventual discrepancies between Law No. 03/L-185 on Energy Regulator, Law No. 04/L-144 on Allocation for Use and Exchange of Immovable Municipal Property and Law No. 04/L-147 on Waters shall be analyzed and avoided.

Currently, the right for use of land and forests may be granted for periods of only up to 5 years, which does not comprise sufficient guarantee for investors, however, these provisions shall be harmonized with provisions of the Law on Energy Regulator. Permit for the use of waters are granted for a 40-year period.

There are problems in the level of local authorities, in which municipalities sign Memorandums of Understanding with two investors on the use of land, whereas according to the Law No. 04/L-147 on Allocation for Use and Exchange of Immovable Municipal Property this competency is held by the Municipal Assembly. In such cases, the problem of legal compliance at the local authorities' level shall be avoided.

Municipalities need to have urban and regulatory plans (with details on construction requirements for a micro location) and if the request from investor is in line with that plan, municipalities permit construction. Although most of the municipalities have urban plans, micro-planning is still missing to large extent. The response period is prescribed at 30 days and if the municipality does not respond in that time the

investor is allowed to start construction as if Construction permit was issued. The intention of this provision by the Law was aimed at reducing time and corruption in the sector, but since the municipalities are lacking in capacity these provisions could become counterproductive.

Sample Power Purchase Agreement (PPA) drafted by the Public Supplier should be approved from ERO. The approval of this sample agreement is expected to increase security for investors. According to the current scheme, PPAs are signed only after the construction of RES plants, at the time of their commissioning, which makes project funding difficult.

e) Energy Regulatory Office of Kosovo is responsible for issuing Authorizations for construction of new generation capacities. Between the Preliminary Authorization and the Authorization (final) from ERO the procedure involves other abovementioned (point b) national and local institutions. After the issuance of the authorization, the plant construction may commence.

Better coordination between institutions of different levels responsible for RES projects shall be achieved through the harmonization of relevant laws and procedures.

f) Support to applicants for authorization, certification and licensing is provided in the ERO web-page. The ERO web-page provides information on applicants and for preliminary authorizations issued and final authorizations on RES energy projects. Currently the web-page holds information on the following projects:

Final authorizations for (1.3 MW and 0.9 MW WPP and HPP 23.1 MW); there are also 7 preliminary authorizations (1 for wind 30 MW, 6 for HPP with total 102 MW) and 8 preliminary authorizations (2 for wind, with a total of 51 MW, 6 for HPP with a total of 36 MW). For hydro power plants, authorizations can be granted for more than one HPP through ERO's decisions for authorization. Also, the Ministry of Economic Development periodically publishes leaflets with the necessary information on procedural steps to be followed by investors in RES projects.

g) Horizontal coordination between various government/administrative bodies related to the procedure for development of RES energy projects is performed as follows:

The procedure of granting Authorization is initiated with the submission of the application with required evidences and documentation. ERO is responsible for initial review of application and communication with applicant until completion of evidence and documentation. Afterwards, ERO Working Group reviews the application and makes the final evaluation. When Working Group considers the application complete, it will be presented on the next Board meeting for decision. The same process applies for first step Preliminary Authorization and for final step Authorization.

For every project the first step includes application in MESP for environmental permits. Procedure for reviewing and responding to such applications covers 70 days from the date of application.

After the construction of the plant, depending on its capacity, the legal entity shall apply at MEST for an Environmental Permit, and for larger capacities for an Integrated Environmental Permit.

Regarding the use of water resources, the new Law was passed and substituted one Water permit with a three step authorization procedure. At first step after Preliminary Authorization guaranteed by ERO investor applies for water conditions which describe the type of documentation needed for the next step.

As soon as the documentation is ready, and shortly prior to the obtainment of the construction permit, the investors apply for obtaining water use permits. After the construction of hydro power plants and obtainment of the water use permit, the permit can over periods of up to 40 years for energy generation purposes (as per the administrative instruction on administration and management of water resources in the period of water permit validity).

Three projects, of which two wind-powered plants of 1.3 MW and 0.9 MW and one SHPP of 23.1 MW, have successfully passed the Authorization phase. ERO usually issues its decisions within 3 months, however, there are cases when such decisions are issued at shorter timeframes – by the following Board meeting.

The Preliminary Authorization has a validity term of two years and during that time all the necessary permits for Authorization should be acquired. In practice, it is proven that even 18 months suffice for this undertaking.

Preliminary Authorizations issued by ERO confirm that the investor meets financial and technical qualification requirements and has adequate staff to develop, construct and manage the generation facility (RES plant).

Final Authorizations issued by ERO open the way for initiating the construction of the plant and confirm that the investor has been provided with all necessary contracts and permits (land use, water use, grid connection, environmental permit, construction permit, etc.) required for such purposes.

Information on procedures and steps for the development of RES plants are obtained from the ERO, however, the ERO can’t be deemed a one-stop-shop for investor support.

h) In relation to various technological specifics for the implementation of projects in the RES sphere, steps between preliminary and final authorizations differ by type of technology used, capacity of the plant and location in which the project is to be developed. An example of different steps and procedures to be followed is found in the procedures to be followed in projects that use logwood and projects that use water.

Adjustment of authorization procedure according to specificities of the different renewable energy technologies will be done through implementation of the planned

Administrative Instruction on use and support to RES generation and review of Rule on Authorization for Construction of New Generation Capacities and Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme.

i) In relation to specific procedures, no such procedures are applied for small scale project facilities and decentralized energy generation from RES (solar panels in buildings or biomass boilers in buildings).

The implementation of simplified procedures is envisage in accordance with the Administrative Instruction on use and support to RES generation.

j) Tariffs pertaining to application for authorization/license/permit for installation of new RES energy generation capacities are published in ERO's web-page. Such tariffs are related to the administrative costs of the approval of such permits. Currently, there are no plans to review tariffs.

k) No official guidance is currently provided to local and regional administrative bodies on planning, designing, building and refurbishing industrial and residential areas to install equipment and systems using renewable energy sources in electricity and heating and cooling, including in district heating and cooling. In this aspect, support to local and regional bodies is expected to be provided through newly established institutions, such as municipal/regional energy offices.

l) Responsible ERO officers which deal with procedures related to authorization, certification and licensing of the installation of equipment using renewable energy sources benefit from occasional training provided on these matters. These officials have superior university qualifications in these spheres.

4.2.2. Technical specifications (Articles 13(2) of Directive 2009/28/EC)

The technical specifications which must be met by renewable energy equipment and systems in order to benefit from support schemes will be introduced by Administrative Instruction on use and support of generation from renewable energy sources.

4.2.3. Buildings (Article 13(3) of Directive 2009/28/EC)

(a) In relation to the Article related to the increased share of energy from renewable sources in the building sector, the following legislation regulates certain aspects thereof:

- Law No. 04/L – 110 on Construction (OG/No.18/03 July 2013).
- Law No. 2011/04-L-016 on Energy Efficiency (OG. No. 6/22 July 2011);
- Technical regulation on Thermal Energy Savings and Thermal Protection in Building No.03/2009
- Regulation No. 01/2012 on Establishment and Functioning of The Commission of Certification of Energy Auditors and Managers
- Draft Unified Construction Code of Republic of Kosovo

(b) The institution responsible for implementation of legislation on use of RES in buildings is the Ministry of Environment and Spatial Planning.

(c) Transposition of Directive 2010/3/EC on Energy Performance of Buildings (EPBD) is conducted through the Law on Construction and the Construction Code, which is planned to be approved within 2013.

(d) There are no existing or planned measures at the local/regional level on the use of RES energy in buildings.

(e) The applicable legislation and construction codes hold no provisions on use of energy from renewable sources; these will be formulated in the Administrative Instruction on Use of RES in Buildings, the adoption of which is planned by end-2013.

(f) The projected increase of renewable energy use in buildings until 2020, in both public and private sectors and disaggregated by relevant year, is presented in Table 7 below. Data is provided on annual basis. (Consumption of renewable energy sources in heating, cooling, and electricity should also be included.)

Table 7 - Estimated share of renewable energy in the building sector (%)

	2009	2010	2015	2020
Household sector	48,4%	46,6%	49,8%	54,1%
Service	6,6%	7,2%	14,3%	21,9%
Total	40,2%	38,9%	43,2%	48,0%

g) No minimum levels of renewable energy use in new and refurbished buildings are set. Currently, the compilation of an AI that takes into consideration minimum levels of renewable energy use in new and refurbished buildings is under way.

h) Regarding to Plans for ensuring the exemplary role of public buildings at national, regional and local level by using renewable energy installations or becoming zero energy buildings from 2012 onwards, the revision of the Law No. 04/L-110 on Construction (OG No. 18/03 July 2013) shall determine provisions prescribed by EPBD.

i) Energy efficient renewable energy technologies in buildings are planned to be promoted in accordance with the support scheme for RES heating energy, set in the AI for use and support of generation of energy from RES, which is currently in the adoption procedure.

4.2.4. Information provisions (Articles 14(1), 14(2) and 14(4) of Directive 2009/28/EC)

(a) There are no explicit provisions in the existing legislation related to the requirements of Article 14 of Directive 2009/28/EC. This issue will be regulated in the AI for use and support of generation of energy from RES, which is currently in the adoption procedure.

(b) The institution responsible for dissemination of information at the national level is MED. There are no such bodies at local and regional level.

(c) Existing and planned measures at regional and local level for the provision of information include public awareness raising campaigns for EE and RES. These campaigns are implemented and continue to be implemented by means of television spots, schools competitions, leaflets, billboards, workshops, training, information brochures, and radio commercials.

d) Information provided for relevant stakeholders (consumers, developers, installers, architects, suppliers of relevant equipment and vehicles) in relation to support measures for use of energy from renewables (electricity, heating, cooling and transport) is disseminated through: the MED web-page, leaflets, brochures, MED progress reports, campaign implementation contractors, etc. Similar activities are also planned in the future.

e) Awareness raising and training programs for citizens on the benefits and practicalities of developing and using energy from renewable sources are conducted constantly. Such campaigns are also envisaged in the future. All campaigns on promotion and information on RES are planned and implemented in cooperation with local level officials.

4.2.5. Certification of installers (Article 14(3) of Directive 2009/28/EC)

Certification of installers following the principles described in Annex IV of Directive 2009/28/EC will be introduced with new Administrative Instruction on use and support of energy from RES.

4.2.6. Electricity infrastructure development (Article 16(1), 16(3) to 16(6) of Directive 2009/28/EC)

(a) The main legislation related to energy grids and network operation includes:

- Law on Energy No. 03/L-184
- Law on Energy Regulator No. 03/L-185
- Law on Electricity No. 03/L-201
- Rule on Authorization for Construction of New Generation Capacities adapted on 29.08.2011
- Rule on Licensing of Energy Activities in Kosovo no number adapted on 29.08.2011
- Rule on Transmission System Operator and Market Operator Pricing (TSO/MO Pricing Rule)
- Rule on Distribution System Operator Pricing (DSO Pricing Rule)
- Rules on the General Conditions of Energy Supply
- Grid Code
- Grid Code - Code for Wind Powered Generating Stations
- Transmission connection charging methodology/ KOSTT
- Distribution connection charging methodology/ KEK
- Technical rules for connection
- Metering Code
- Electrical Equipment Code
- Electrical Standards Code
- Code of Practice for Access to Land and Premises
- Distribution Code
- DSO Metering Code

Obligations that deriving from Law No. 03/L-184 on Energy in relation to the integration of renewable energy sources are set in Article 12, paragraphs 2, 3 and 4.

Transmission and distribution system operators shall establish and publish standard rules on who bears the costs of technical adaptations, such as grid connections and grid reinforcements, necessary to integrate new electricity generation feeding electricity produced from renewable energy sources into the interconnected system. Such rules shall be submitted for approval to the Energy Regulatory Office, shall be consistent with the Energy Strategy and shall be based on objective, transparent and non-discriminatory criteria, taking particular account of all the costs and benefits associated with the connection of these producers to the system.

Transmission and distribution system operators shall provide any new electricity generator using renewable energy sources or co-generation wishing to be connected to the system with a comprehensive and detailed estimate of the costs associated with the connection for which estimate the system operator may levy a charge that reflects its reasonable costs.

Transmission and distribution system operators shall establish and publish standard rules relating to the sharing of costs of system installations, such as grid connections and reinforcements, between all electricity producers benefiting from them. Such rules shall be submitted for approval to the Energy Regulatory Office, and shall be consistent with the Energy Strategy and any applicable secondary legislation, rules or codes.

Responsibility for network operation, maintenance, construction and development are under authorities Transmission System Operator (KOSTT) and Distribution System Operator (KEK).

Based on and Law of Energy and its license obligation KOSTT developed e number of technical codes that are publicly available published in KOSTT's web-page in three languages.

(b) From the perspective of integration of the energy generated from renewable energy sources transmission and distribution network development plans, KOSTT prepares the following long term planning documents which are revised every year and submitted to ERO for approval:

- Transmission development Plan for 10 years
- Generation Adequacy Plan for 10 years
- Long Term Electricity Balance for 10 Years

These documents take into consideration the integration of energy generated from renewable energy sources in the network. All documents are published in the official web-pages.

With the help of consulting services provided through the framework of Western Balkans Sustainable Energy Direct Financing Facility, a Wind penetration study will be developed.

c) The electricity network is continuous development according to development plans. The plans also include provisions on the increase of the use of information technology tools such as SCADA/EMS from KOSTT. At the moment, there are no plans so far for storage facilities.

At the moment there is no activity regarding the use of Smart Grid concept.

(d) In relation to inter-connection capacities with neighboring countries, KOSTT is still not member of European Network of Transmission System Operators for Electricity ENTSO/E and at the moment EMS (Serbian TSO) allocates capacities for Kosovo interconnectors. There are problems due to allocations of interconnection capacities and no compensation for transit flows. It is expected that the situation will be discussed and resolved by the end of June 2013.

- 400 kV line to Montenegro,

- 400 kV line to Macedonia,

- 220 kV line to Albania.

400 kV line to Serbia is still not considered as interconnector.

- Based on TNDP and relevant studies related to the transmission system development some very important projects are foreseen with internal and regional impact on security and reliability of Transmission Systems:
- 400 kV line Kosovo – Albania with 1300 MVA capacity planned to be finished by 2015
- 400 kV line Kosovo – Macedonia with 1300 MVA capacity planned to be finished by 2022

(e) Regarding the authorizations procedure for network infrastructure, the current state and average time for obtaining approvals, the situation is the following: After finishing preliminary authorization with ERO, developers of future renewable generation capacity apply to either transmission network operator or DSO depending on their assessment of the possibilities for connection.

The application document consists of all relevant data of the project that are needed for computer modeling, planned time of the commissioning etc. Based on those data, the planning engineers analyze the impact of the project and propose the best solution for connection. The procedures (time schedules until signing connection agreement) are described in Connection Charging Methodology. The average time of 2-3 months is normal and there are at the moment no plans for changing the procedure.

The construction of the grid connection is done by developer according to designs approved by system operator. After successful construction, supervised by system operator, the grid connection installation is handed over to system operator for operation and maintenance. Technical adaptations of the grid necessary for the connection are going in grid development plan and are executed before the construction of RES generator.

(f) Coordination between network infrastructure approve and other procedures of administrative planning is conducted through ERO, since this entity issues the preliminary authorization valid for two years and also approve all annual updates of energy network development plans. Application for Connection approval follows ERO's preliminary approval and final ERO approval is possible only upon Connection approval.

(g) Priority connection rights or reserved capacities provided for new installations that generate electricity from renewable energy sources are founded on the list of applicants registered in the ERO and submitted by the network operator, in line with the grid plan and RES procedures.

h) There are no cases of renewable installations ready to come online but not connected due to capacity limitations of the grid.

(i) Regarding cost sharing and bearing of network technical adaptations set up and published by transmission and distribution system operators, rules are described in Connection Charging Methodology which is approved by ERO and so objective, transparent and non-discriminatory criteria are ensured. The rules are available on KOSTT web page.

(j) Based on Connection Charging Methodology all costs of connection and technical adaptation are borne by the generators and the rules are equal for all types of generators. The methodology also includes charges for deep connections.

There are plans of possible changes of the methodology for connection to the distribution network.

(k) According to Connection Charging Methodology the subsequently connected generators will share the cost of connection with the initially connected generators, proportional to the installed capacity.

(l) Transmission and distribution system operators provide new generators with information on costs, precise timetable for processing their requests and the indicative timetable for their grid connection, in the following manner:

The processing of requests is described in the Connection Charging Methodology approved by ERO.

TSO (KOSTT) provides detailed cost estimation to potential investors. Usually 1-2 months after completion of the application, the interested generator is provided with the cost estimate of the connection costs.

DSO (KEDS) does not provide such explicit information. Their involvement is strictly limited to giving technical conditions for connection. They form a commission that

goes out in the field, examines the location of the new facility and determines connection point and technical conditions for approving the connection, in accordance with the standard technical rules.

4.2.7. Electricity network operation (Article 16(2) and Article 16(7) and (8) of Directive 2009/28/EC)

The obligations regarding RES generators derive from Law No. 03/L-184 on Energy, respectively in Article 12 paragraphs 1 and 5.

When dispatching electricity generation, the transmission system operator, or the distribution system operator where appropriate, shall give priority to electricity generation from renewable energy sources and co-generation, subject only to any limits specified for purposes of system security by the Grid Code and other rules and codes.

The Energy Regulatory Office shall ensure that transmission and distribution fees for connection and for use of the transmission and distribution systems do not discriminate against electricity from renewable energy sources, including in particular electricity from renewable energy sources produced in peripheral regions, such as regions of low population density.

(a) Transmission and distribution of electricity generated from renewable sources is dispatched with priority by transmission and distribution system operators. Exceptions to this rule are made in critical cases in the grid, when energy generated from such generators may be diminished to ensure grid safety and reliability.

(b) Priority that transmission system operator grants to electricity generators that utilize renewable energy sources is prescribed in the second paragraph of section 4.2.7.

(c) With the aim of minimizing the curtailment of electricity from renewable energy sources, and determining planned measures for diminishing such curtailment from wind-powered plants, a study on wind penetration shall be commissioned. In addition, if necessary, a model of wind-powered electricity generation could be developed.

d) ERO is not informed on the planned measures and has no authority to monitor them.

e) Regarding the integration of RES facilities in the electricity grid and obligations of generators of such energy to participate in the electricity market, in Kosovo the said model is still in a transition model. The RES generators do not participate in the

market during the term of their PPAs according to FIT scheme since the Public Supplier is obliged to buy all the electricity generated. Discussions are waged on whether RES generators will, after the termination of their PPAs, participate in the market or be granted the right to another PPA with PS under different conditions.

f) The rules on transmission and distribution system charging are described in Connection Charging Methodology approved by ERO, and tariffs are calculated according to those rules.

4.2.8. Biogas integration into the natural gas network (Article 16(7) and Article 16(9) and (10) of Directive 2009/28/EC)

No gas infrastructure exists in Kosovo, and there in no short-term plan for the development of a gas distribution network.

However, the Law No. 03/L-133 on Natural Gas provides several provisions that ensure non-discriminatory treatment for biogas and gas from biomass, namely:

- Paragraph 3 of Article 1, specifies that provisions of the Law No. 03/L-133 on Natural Gas shall equally apply also for the biogas and the gas obtained from biomass.

- Paragraphs 1.2 and 3 of the Article 3 Law No. 03/L-133 on Natural Gas, stipulate that: transmission system users should not be discriminated, rules for system services shall contain non-discriminatory terms and conditions as well as cost reflective tariffs for the use of services.

- Similar to the above, paragraphs 1.2 and 3 of Article 11 of Law No. 03/L-133 on Natural Gas contains identical provisions which relates to the distribution system.

- Also the article 17 of the Law No. 03/L-133 on Natural Gas: (Third Party Access), paragraph 1, ensures non-discriminatory tariffs for access to transmission and distribution systems.

a) Non-discrimination of gas produced from renewable energy sources through transmission and distribution tariffs is provided by the legal framework, which provides sufficient means for integration of the gas from renewable sources into the natural gas network. In addition to the articles / paragraphs above, the Law No.03/L-133 on Natural Gas contains also the article elaborating new infrastructure (article 19) aimed to provide means to facilitate investments in new infrastructure including network expansions, modifications and capacity increase.

b) As regards the assessment of gas infrastructure needs and expansion of such infrastructure, in the event that the development of the gas grid will be assessed adequate or whenever so required, the process shall include an assessment of the possibility for integrating gas from renewable sources.

c) Technical rules for connection to the natural gas networks and related connection tariffs are not prepared.

4.2.9. District heating and cooling infrastructure development (Article 16(11) of Directive 2009/28/EC)

District heating systems and the infrastructure (network) are not developed to a satisfactory level, and currently DH systems do not use renewable energy.

Kosovo has also adopted its *District Heating Strategy 2011-2018,* where renewables are also specifically addressed. It specifies that the use of wet lignite and unsustainable use of fuel wood for heating purposes needs to be minimized. Use of solar energy, communal waste and wood waste is considered the most promising RES-based heating supply option. Financial incentives for these uses are envisaged by the Heating Strategy, but they do not exist as of yet.

Introduction of obligatory quotas for RES shares for district heat suppliers in its supply will be considered.

The heating generators that export heat to the DH network will in the future benefit from either additional bonus for the production/use of heat from RES CHP or from RES heat scheme.

The possibility of subsidizing the development of DH networks using RES will be considered during drafting of Administrative Instruction on use and support to RES that will formulate a support scheme (RES heat scheme).

4.2.10. Biofuels and other bioliquids – sustainability criteria and verification of compliance (Articles 17 to 21 of Directive 2009/28/EC)

The policy of the Ministry of Agriculture, Forestry and Rural Development is to stimulate land use for human and animal food production, in order to reduce import dependency. Use of land for energy production (energy crops, or plants for biofuels production) are not considered at all.

Therefore, Kosovo has no immediate plans for producing agricultural raw materials for production of biofuels and the following questions are only partly applicable. Planned sustainability criteria and verification of compliance will be implemented for the import of biofuels and production of biofuels from imported raw material.

a) Regarding sustainability criteria for biofuels and bio-liquids at the national level, The draft Law on petroleum and petroleum products market in Kosovo deals with biofuel-related issues in general, while the targets for consumption of biofuels in transport and sustainability criteria will be set by Administrative Instruction on Biofuel use in transport.

The enactment of the draft-law is expected in the second part of 2013, whereas the AI on use of biofuels in transport will be adopted within 2013 and enter into force in January 2014.

b) In relation to the provision of financial support for bio-fuels, as per sustainability criteria set in Article 17(2) to (5) of Directive 2009/28/EC, The AI on Biofuels will set up a scheme complying with sustainability criteria at first for import and thereafter for domestic production. However it is envisaged that sustainability criteria will be implemented in second part of 2014.

c) MTI is responsible for monitoring the fulfillment of the criteria. Sustainability criteria assessment body will be appointed during first part of 2014 as will be defined through AI on biofuels.

d) Regarding Article 17(3, 4 and 5) of Directive 2009/28/EC, Status of Protected areas is based on the Law on Nature Protection no.03/L-233 (OG No. 85/09 November 2010). The Authority who monitors land and changes in land status is the Institute for Nature Protection under Ministry of Environment and Spatial Planning.

National legislation on administration land (registration) comprises the Law No.04/L-013 on Cadastre,(OG. No. 13/1 September 2011). Changes in the status of land areas which are protected biodiversity areas or declaring a land (area) with high biodiversity value or protected area, is within the responsibility of Ministry of Environment and Spatial Planning. Competent national authority that monitors land register and changes in land status is the Kosovo Cadastral Agency.

e) Based on the law on Nature Protection no.03/L-233 (chapter 2, article 8) categorization of protected area is done according to the International Union for Nature Protection (IUCN).

f) Procedures for changing the status of land from agricultural land to non-agricultural purposes are regulated by Law No.04/L-174 on Spatial Planning (OG. No. 30/23 August 2013), Law No. 02/L-26 on Agricultural Land, and Administrative Instruction No. 10/2010 on Amendment and Supplementation of Administrative Instruction No. 41/2006 for Change of use of agricultural land, of 27 December 2006.

Based on paragraph 8.2 of Article 8 of the Law No. 02/L-26 on Agricultural Land, "Municipal body competent for agriculture is obliged to keep evidence of land without working, and for given land use, and records of land which has been changed by the destination of user."

MAFRD is currently developing a project on the establishment of a registry of agricultural lands.

g) Laws in force in the environment and agriculture sector do not take into consideration good agro-environmental practices and other general compliance requirements (as required by Article 17(6) of Directive 2009/28/EC). In assuming raw material requirements in Kosovo, harmonization of relevant laws will be performed in order to take into consideration such agro-environment practices.

h) In the future, possibilities of establishing a voluntary 'certification' scheme for biofuel and bio-liquid sustainability shall be analyzed, as prescribed in the second paragraph of Article 18(4) of Directive 2009/28/EC, in line with the country's possibilities and circumstances.

4.3. Support schemes to promote the use of energy from renewable resources in electricity applied by the Contracting Party or a group of Contracting Parties

According to the Law No. 03/L-184 on Energy Article 13 the Ministry shall establish annual and long-term (10 years) targets of the share of electricity or heat generated from renewable energy sources or cogeneration. First RES energy production targets were set by Administrative Instruction on Indicative Targets for Generation of Electrical and Thermal Energy from Renewable Energy and Co-Generation No. 6/2007. In 2013, this Administrative Instruction was repealed by Administrative Instruction on RES targets No. 01/2013.

At the moment FIT schemes exist only for the production of electricity from RES exists for biomass, wind and small hydro capacities. This scheme will be supplemented with FIT for small integrated photovoltaic solar systems.

The Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme is being implemented and monitored by ERO. The scheme does not have an expiry determination.

Additionally, in the future, the possibility of development of the following schemes will also be considered:

- Customs reductions or exemptions for RES equipment (within jurisdiction of MF);
- Profit tax credits or exemptions, for investments in RES that provide for regional employment (within jurisdiction of MF);
- Establishment of low interest credit lines for RES projects (through expected cooperation with development banks)
- Tendering procedures for small hydro power plants and wind-powered projects.

Feed-in tariffs

a) Feed-in tariffs, as voluntary support schemes for electricity produced from hydro, wind and biomass power plants, are introduced in accordance with the Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme, adapted on 29.12.2010.

b) ERO drafts the scheme, identifies the players in the market that implements the scheme and monitors scheme operation and performance in accomplishing the indicative trajectory and RES targets.

c) KOSTT accumulates the revenues required to purchase electricity from RES, through the charge for energy from renewable energy sources. The collected revenues are used to supplement the difference between the market price of electricity and FIT for the PS. Public supplier is obliged to purchase at first-priority all electricity produced by RES and admitted in the scheme.

d) Unified FIT support is provided for 10 years. Support is set by the ERO methodology at the level which ensures adequate return on capital. The FIT scheme has tariff annual adjustment according to inflation, for each RES technology. Feed-in Tariffs differ for each technology, however, all other provisions remain unchanged for each technology type.

If the tariffs are reviewed in the future, the revision does not affect generators which have been previously admitted to the scheme but only generators that may apply after the date of the revision.

e) No periodical revision of provisions of the scheme is prescribed; however ERO has the right to amend the tariffs whenever appropriate. The revision has not been done so far but is expected in the near future. With this revision, tariffs for solar PV systems will be added following the Administrative Instruction on RES targets No. 01/2013 which includes solar power plants

f) The level of the FIT is technology-specific, but there are no other criteria differentiating tariffs (size, efficiency etc.): The level of feed-in tariffs is set as follows:

- Hydro plants 63.3 €/MWh,
- Wind generators 85.0 €/MWh,
- Biomass/Biogas power plants 71.3 €/MWh.

a. Based on FIT, in accordance with RES energy targets set in Administrative Instruction No. 01/2013, by 2020 the development of the following new electricity generation capacities will be supported: 20.56 GWh photovoltaic energy, 105 GWh

from biomass, 302.22 GWh from wind and 436.5 GWh from water. These capacities don't include small hydro power plants and HPP Zhuri.

b. Support through FIT of electricity generation from RES is not conditioned by any energy efficiency criteria.

c. The existing support scheme was started by Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme, adapted on 29.12.2010.

d. The existing FIT scheme is functional for certain technologies.

e. The existing support scheme was started by Rule on the Support of Electricity for which a Certificate of Origin has been Issued and Procedures of Admission to the Support Scheme, adapted on 29.12.2010 and has no specific end date.

f. The maximum allowed size of small hydro power plants is the only maximum or minimum size set for systems that may benefit from support schemes – at 10MW. No other capacity level is set for other systems that may benefit from the support scheme.

g. Currently, FIT comprises the only support scheme used for achieving RES energy targets, hence, it is not possible for one project to be supported by more than one support measure.

h. There are no local/regional RES energy generation support schemes.

i. Attainment of a fixed tariff in accordance with the FIT system, and admission of generation capacities in the support scheme is possible, if:

- It was commissioned by 30 June 2004;
- Is located in the territory of Kosovo;
- Generates electricity using new equipment and generation capacities;
- Generates electricity for which Certificates of Origin are issued;

In addition, in order to be admitted in the support scheme, RES generators need to utilize one of the technologies determined in Administrative Instruction No. 01/2013 on Targets for Renewable Energy Sources.

Administrative Instruction No. 01/2013 on Targets for Renewable Energy Sources sets the volume and size of RES capacities that will benefit from the support scheme.

The cap is determined by Administrative Instruction on RES targets No. 01/2013 where a Capacity Factor is assumed for each RES technology and targets are set by both produced electricity and installed capacity. Quantities that exceed the installed capacity limits as defined by Administrative Instruction the producers will not be included in the FIT scheme.

4.4. Support schemes to promote the use of energy from renewable resources in heating and cooling applied by the Contracting Party or a group of Contracting Parties

To date no support scheme for use of energy from renewable resources in heating and cooling exists.

Draft Administrative Instruction on Use and Support of RES energy proposes the application of the support scheme for RES thermal energy as well (heating and cooling). One of the proposed forms of support is the application of investment grants, or capacity payments for the construction of RES heating and cooling capacities, using biomass, solar-thermal and geothermal energy, with specific determinations on the technologies and size of such plants.

The introduction of additional schemes will be considered in the future, including:

- Customs and VAT exemptions or decreases for RES equipment (under MF jurisdiction);
- Establishment of low interest credit lines for RES project (envisaging possible cooperation with development banks);
- Encouragement of cooperation with interest groups to ensure greater biomass, solar and geothermal energy utilization.

a) To date, no support schemes exist on cogeneration from RES. In reviewing the FIT system, the application of an additional bonus shall be proposed for generation/utilization of heating and cooling in cogeneration from RES.

b) To date, no such support schemes exist. What support schemes are in place to encourage the use of district heating and cooling using renewable energy sources?

Heating energy generation and its distribution using the DH network in the future could be supported from additional bonuses applied for generation/utilization of heating from RES cogeneration, or from support schemes for RES heating energy.

In addition, the obligatory RES energy quota set for the public supplier of RES energy will be proposed to be supported in accordance through the support schemes for heating generation from RES.

c) To date, no support schemes exist to encourage the use of small-scale heating and cooling from RES.

d) To date, no support schemes exist to encourage the use of heating and cooling from renewable energy sources in industrial applications.

4.5. Support schemes to promote the use of energy from renewable resources in transport applied by the Contracting Party or a group of Contracting Parties

To date, no support scheme for use of energy from renewable resources in transport exists.

The main measures to promote the use of energy from renewable resources will be the quota obligation for the use of biofuels in transport.

Additionally in the future following scheme will be considered and developed:

- Excise tax exemptions for biofuels put on the market (within jurisdiction of MF)

Quota obligation scheme

(a) The draft Law on petroleum and petroleum products market in Kosovo will deal with biofuel issues in general, while the targets for consumption of biofuels in transport and sustainability criteria will be set by Administrative Instruction on Biofuel use in Transport.

The said AI will specify the targets of biofuel use for each year starting from 2014. and reaching 10% in 2020. These targets will be obligatory for all petroleum product suppliers.

b) The AI on Use of Biofuels in Transport will contain indicative targets for Bioethanol and Biodiesel but the obligation will be set by the percentage of biofuel in the total fuels put to the market by particular petroleum product supplier.

(c) AI on use of biofuels in transport will specify the concrete obligations on biofuel use.

(d) The obligation will be put to all suppliers (possibly also distributors - retailers) of petroleum products.

(e) Penalty provisions are foreseen in the draft Law for Petroleum and Petroleum Product market in Kosovo.

(f) According to AI 07/2012 on quality of petroleum-derived liquid fuels all suppliers of petroleum and petroleum products must send report to Ministry of Trade and Industry on the amount of each fuel that they put to the market.

(g) No mechanism for modification of targets is envisaged, but according to the annual reports, the MTI possesses information about the market development. Since the targets will be regulated through AI on biofuel use in transport, the AI may be amended if so required.

4.6. Specific measures for the promotion of the use of energy from biomass

The only biomass use currently assumed originates from forests. In 2003- 2004 the inventory of Kosovo forests was conducted and it represents the basis for statistical data on forests. Similar inventory was performed in 2012, but the final data from this inventory is as of yet not available.

According to inventory the total area of forest is 464.800 ha of which 278.000 ha (or 60%) classified as public forest land and 185.920 ha (or 40%) of private forests.

The total standing volume of wood in public forests is estimated at 33.5 million m^3 (of which 25.9 mil m^3 with diameter >7 cm in chest height) and in private forests 19.5 million m3 (of which 14.5 mil m^3 with diameter >7 cm in chest height).

Annual increment of volume of trees with diameter >7 cm in chest height is 1.165 million m^3. There is also the potential of bared land 20.000 to 30.000 ha of which considerable part is suitable for a forestation.

One of the biggest problems is the fact that 40% of public forests and 29% of private forests are subject to uncontrolled and illegal activities of use.

4.6.1. Biomass supply: both domestic and trade

Table 8 - Biomass supply in 2009

Sector of origin		Amount of domestic resource[26]	Imported		Exported	Net amount	Primary energy production (ktoe)
			EU	Non-EU	EU/non-EU		
A) Biomass from forestry[27]:	*Of which:*						
	1. direct supply of wood biomass from forests and other wooded land for energy generation	295008 (stacked m^3)	-	7000 (stacked m^3)	-	302008 (stacked m^3)	40.1 ktoe
	Optional - if information is available you can further detail the amount of feedstock belonging to this category:: a) fellings b) residues from fellings (tops, branches, bark, stumps) c) landscape management residues (woody biomass from parks, gardens, tree rows, bushes) d) other (please define)	 242568 (s. m^3) 26220 (s. m^3) 26220 (s. m^3)	-	-	-		 35.6 ktoe 2.25 ktoe 2.25 ktoe
	2. indirect supply of wood biomass for energy generation						
	Optional - if information is available you can further detail: a) residues from sawmilling, woodworking, furniture industry (bark, sawdust) b) by products of the pulp and paper industry (black liquor, tall oil) c) processed wood-fuel d) post-consumer recycled wood (recycled wood for energy generation, household waste wood) e) other (please define)						
B) Biomass	*Of which:*						

[26] Amount of the resource in m^3 (if possible, otherwise in appropriate alternative units) for category A and its subcategories and in tonnes for categories B and C and their subcategories.

[27] Biomass from forestry should also include biomass from forest-based industries. Under the category of biomass from forestry processed solid fuels, such as chips, pellets and briquettes should be included in the corresponding subcategories of origin.

from agriculture and fisheries:	**1. agricultural crops and fishery products directly provided for energy generation**						
	Optional - if information is available you can further detail: a) arable crops (cereals, oilseeds, sugar beet, silage maize) b) plantations c) short rotation trees c) other energy crops (grasses) d) algae e) other (please define)						
	2. Agricultural by-products / processed residues and fishery by-products for energy generation						
	Optional - if information is available you can further detail: a) straw b) manure c) animal fat d) meat and bone meal e) cake by–products (incl. oil seed and olive oil cake for energy) f) fruit biomass (including shell, kernel) g) fishery by product g) clippings form vines, olives, fruit trees h) other (please define)						
C) Biomass from waste:	*Of which:*						
	1. Biodegradable fraction of municipal solid waste including biowaste (biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants) **and landfill gas**						
	2. Biodegradable fraction of industrial waste (including paper, cardboard, pallets)						
	3. Sewage sludge						

The following converting factor was used to convert the wood biomass into primary energy: for stacked m^3 - caloric value of 6.168 GJ/m^3; for all other types of wood residues – the caloric value of 3.511 GJ/m^3.

Other than wood, Kosovo has not used different types of biomass for energy generation, such as industrial paper remains, recycled wood, fishing or other degradable remains of rural or urban origin (hay, straws, food remains, etc.).

The assumption on biomass utilization for energy generation in years 2015 and 2020 is presented below (based on the biomass categorization as per table 8).

What is the estimated role of imported biomass up to 2020? Please specify the quantities expected (ktoe) and indicate possible import countries.

Table 8a - Estimated biomass domestic supply in 2015 and 2020

Sector of origin		2015		2020	
		Expected amount of domestic resource	**Primary energy production (ktoe)**	**Expected amount of domestic resource**	**Primary energy production (ktoe)**
A) Biomass from forestry:	**1. direct supply of wood biomass from forests and other wooded land for energy generation**	Total amount of wood is assumed to be 660574.62 stacked m3	80.6 ktoe	Total amount of wood is assumed to be 689213.26 stacked m3	83.96 ktoe
	2. indirect supply of wood biomass for energy generation				
B) Biomass from agriculture and fisheries:	**1. agricultural crops and fishery products directly provided for energy generation**				
	2. Agricultural by-products / processed residues and fishery by-products for energy generation				
C) Biomass from waste:	**1. Biodegradable fraction of municipal solid waste including biowaste** (biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants) **and landfill gas**				
	2. Biodegradable fraction of industrial waste (including paper, cardboard, pallets)				
	3. Sewage sludge				

Currently, Kosovo does not cultivate agricultural cultures for the purposes of energy production. It should be noted that Kosovo's possibilities for the cultivation of agricultural products for energy generation purposes are very limited.

Table 9 - Current agricultural land use for production of crops dedicated to energy

Agricultural land use for production of dedicated energy crops	Surface (ha)
1) Land used for short rotation trees (willows, poplars)	0
2) Land used for other energy crops such as grasses (reed canary grass, switch grass, Miscanthus), sorghum	0

4.6.2. Measures to increase biomass availability, taking into account other biomass users (agriculture and forest-based sectors)

Mobilization of new biomass sources

(a) No data is available on the level of degradation of agricultural and forest lands.

(b) No data is available on the surface of unused arable land.

(c) No measures are yet proposed for the encouragement of use of non-arable land, degraded land, etc. for purposes of energy culture cultivation.

(d) No use of primary materials is planned (such as animal fertilizer) for energy uses.

(e) The encouragement of production and use of biogas is leveraged through state policies – the feed-in tariff for biogas.

(f) In relation to the planning of measures for the improvement of techniques for forest management, the Forestry Development Strategy 2010-2020 foresees a project for forest management advancement.

Impact on other sectors:

(a) At the moment no monitoring scheme exists for the impact of biomass used in energy generation on agriculture and forestry sector.

(b) No information is available regarding the developments expected in other sectors based on agriculture and forestry that may have an impact on energy-related utilization.

4.7. Planned use of statistical transfers between Contracting Parties and planned participation in joint projects with other Contracting Parties and thirds countries

Due to the limited timeframe for the achievement of targets, lack of prepared joint projects and lack of experience in matters related to statistical transfers and joint support schemes, Kosovo will not use, at least for the time being, flexibility mechanisms stipulated in articles 6 to 11 of the Directive 2009/28/EC and in articles 8 and 9 of the Ministerial Council of the Energy Community Decision D/2012/04/MC-EnC on implementation of the Directive 2009/28/EC and amending Article 20 of the Energy Community Treaty. However, with amendments of existing legislation, especially in the energy sector, use of flexible mechanisms will be enabled subject to rules prescribed by the Government.

Since Kosovo plans to reach and surpass its national mandatory target through national measures for the production of energy from renewable sources there is potential for the transfer of excess amounts above the indicative trajectory by means of the various flexible mechanisms for cooperation, but at the moment this is not planned. On the other hand, if the regular report on implementation of this NREAP and progress in achievement of targets suggest that Kosovo is not able to fulfill mandatory targets by domestic production solely, adequate steps will be undertaken to investigate possibilities for use of these mechanisms.

5. ASSESSMENTS

5.1. Total contribution expected of each renewable energy technology to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity, heating and cooling and transport

The contribution and indicative trajectories of RES energy are shown in the respective tables 10 to 12 below. The difference between the voluntary target set by AI for RES targets No.01/2013 and RES targets in compliance with MC Decision No. 2/2012/04 MC date 18 October 2012 stands in RES electricity production and is represented with two sets of data in the table 10.

Electricity sector

According to RES targets set by the AI, main renewable sources for electricity generation the will be hydro, onshore wind and smaller portion will from solid biomass and solar sources. In 2020, the planned RES in electricity comprises of 79% of hydro (<1 MW size accounting for 4.3% in, 1-10 MW size accounting for 51.3% and 23.4% for > 10 MW), 14.8% of onshore wind, 5.2% of solid biomass and only 1% of solar photovoltaic, as shown in Figure 2.

Additional planned capacities in small hydro <10 MW are 240 MW. Hydro plant Zhur 305 MW is expected to be the only new bigger hydro and operational in 2017. The cost of developing these energy generation capacities is expected to be borne by the private sector.

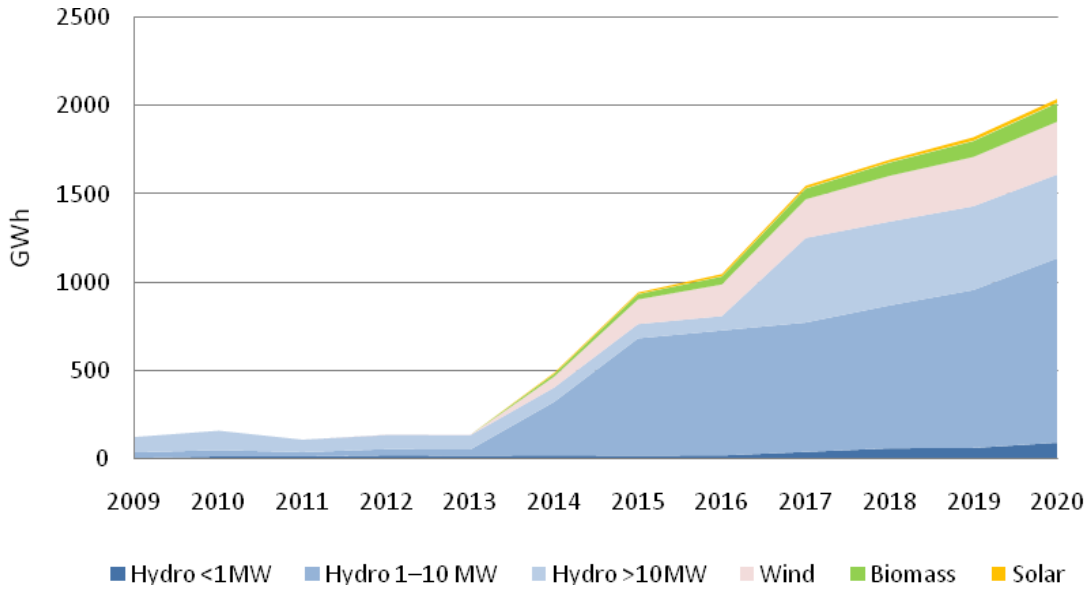


Figure 2 – Share of different RES technologies in the electricity sector

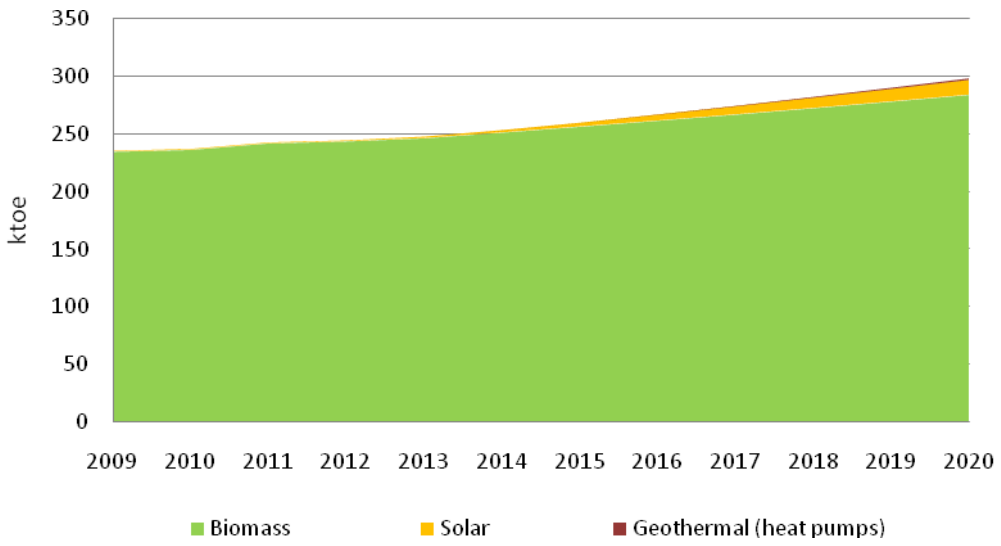
Heating and cooling

Similar to current situation, the use of biomass for heating will keep its dominating role for achieving RES targets in heating and cooling by 2020 followed by some use of solar energy and heat pumps.

In the year 2020, the planned RES share in the gross final consumption in heating and cooling will comprise 95.2% solid biomass, 4.3% solar and only 0.4% heat pumps using aero-thermal, geothermal and hydrothermal energy, as shown in Figure 3.

The cost for the development of these energy generation capacities is expected to be borne by the private sector.

Figure 3 – Share of different RES technologies in the heating and cooling sector



Transport

Energy from renewable energy sources expected to be used in transport until 2020 is planned to consist solely of biofuels. In the transport sector energy consumption forecast in the Long-Term Energy Balance 2013 – 2022, electricity consumption in the transport sector is not taken into account. In 2020, the planned RES consumption in transport will amount to 36,33 ktoe, with planned use shares of biodiesel (77%) and bioethanol (23%) which correspond do current market percentages of diesel and petrol, as shown in Figure 4.

Figure 4 – Share of different RES technologies in transport

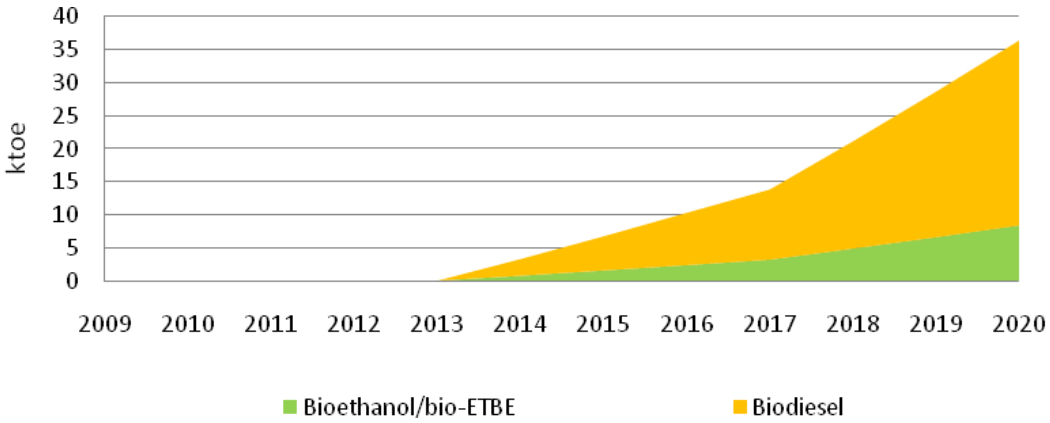


Table 10.a: Estimation of the available potential in Kosovo for each renewable energy technology in electricity 2010-2014

	2009		2010		2011		2012		2013		2014	
	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh
Hydro:												
<1MW	1.76		1.76 1.76	9.14 9.14	1.76 1.76	9.14 9.14	1.76 1.76	14.86 14.86	1.76 1.76	13.84 13.84	1.76 1.76	14.73 14.73
1MW–10 MW	9.08 9.08	31.9 31.9	9.08 9.08	36.29 36.29	9.08 9.08	24.49 24.49	9.08 9.08	35.64 35.64	9.08 9.08	35.06 35.06	39.08 69.08	169.17 304.13
>10MW	35	87.9	35	110.2	35	71	35	81	35	82	35	82
Of which pumping												
Geothermal												
Solar:												
photovoltaic											1 3	2.06 6.18
concentrated solar power												
Tide, wave, ocean												
Wind:												
onshore			1.35 1.35	0.45 0.45	1.35 1.35	0.28 0.28	1.35 1.35	2.56 2.56	1.35 1.35	2.72 2.72	31.35 31.35	63.2 63.2
offshore												
Biomass:												
solid											1 2	7.5 15
biogas												
bioliquids[28]												
TOTAL	45.84 45.84	119.8 119.80	47.19 47.19	156.08 156.08	47.19 47.19	104.91 104.91	47.19 47.19	134.06 134.06	47.19 47.19	133.62 133.62	109.19* 142.19**	338.66* 485.24**
of which in CHP												

*)Installed capacity and energy which correspond to target of 25 %

**) Installed capacity and energy which correspond to target of 29.47 %

[28]Take into account only those complying with the sustainability criteria, cf. Article 5(1) of Directive 2009/28/EC last subparagraph.

Table 10.b: Estimation of the available potential in Kosovo for each renewable energy technology in electricity 2015-2020

	2015		2016		2017		2018		2019		2020	
	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh
Hydro:												
<1MW	1.76 1.76	13.84 13.84	1.76 1.76	14.73 14.73	1.76 4	13.84 34.95	1.76 6	16.39 55.61	6.76 10.00	38.89 57.53	8.76 16.00	47.89 87.47
1MW-10 MW	49.08 149.08	215.06 665.06	59.08 159.08	259.06 709.16	74.08 166.84	305.06 733.95	89.08 184.84	396.51 810.29	94.08 200.84	419.01 895.37	99.08 234.84	441.51 1045.43
>10MW	35	82	35	82	340	480	340	476	340	476	340	476
Of which pumping												
Geothermal												
Solar:												
Photovoltaic	1 4	2.06 8.24	2 6	4.12 12.35	2 7	4.12 14.41	4 8	8.24 13.47	4 9	8.24 18.53	5 10	10.3 20.59
Concentrated solar power												
Tide, wave, ocean												
Wind:												
Onshore	31.35 70	63.2 141.04	41.35 90	83.31 181.33	51.35 110	103.46 221.63	62.15 130	125.22 261.92	62.15 140	125.22 282.07	62.15 150	125.22 302.22
Offshore												
Biomass												
Solid	1 4	7.5 30	2 6	15 45	2 8	15 60	4 10	30 75	4 12	30 90	5 14	37.5 105
Biogas												
bioliquids[29]												
TOTAL	119.19 263.84	383.66 940.17	141.19 297.84	458.22 1044.58	471.19 635.84	921.48 1544.941	500.99 678.84	1052.36 1692.296	510.99 711.84	1097.36 1819.503	519.99* 764.84**	1138.42* 2036.71**
of which in CHP												

*)Installed capacity and energy which correspond targets of 25 %

**) Installed capacity and energy which correspond targets of 29.47 %

[29]Take into account only those complying with the sustainability criteria, cf. Article 5(1) of Directive 2009/28/EC last subparagraph.

Table 11: Estimation of the available potential in Kosovo for each renewable energy technology in heating-cooling2010-2020

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Geothermal (excluding low temperature geothermal heat in heat pump applications)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Solar	0,60	0,61	0,63	0,64	1,29	1,93	3,22	5,16	7,09	9,03	10,96	12,90
Biomass:	234,70	236,35	241,93	243,70	246,39	251,37	256,45	261,64	266,94	272,52	278,22	284,05
Solid	234,70	236,35	241,93	243,70	246,39	251,37	256,45	261,64	266,94	272,52	278,22	284,05
Biogas	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Bioliquids[30]	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Renewable energy from heat pumps: - of which aerothermal - of which geothermal - of which hydrothermal	0,0	0,0	0,0	0,0	0,0	0,01	0,06	0,26	0,52	0,77	1,03	1,29
Total	**235,30**	**236,96**	**242,56**	**244,34**	**247,68**	**253,32**	**259,74**	**267,06**	**274,55**	**282,32**	**290,21**	**298,24**
Of which DH[31]												
Of which biomass in households[32]	216,53	217,57	222,36		226,13	230,65	235,26	239,97	244,77	249,66	254,65	259,75

30 Take into account only those complying with the sustainability criteria (cf. Article 5(1) last subparagraph of Directive 2009/28/EC)
31 District heating and/or cooling from total renewable heating and cooling consumption (RES-DH).
32 From the total renewable heating and cooling consumption the whole amount of biodiesel

Table 12: Estimation of the available potential in Kosovo for each renewable energy technology in transport 2010-2020 (ktoe)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bioethanol/bio-ETBE	0,0	0,0	0,0	0,0	0,0	0.75	1.54	2.36	3.17	4.85	6.57	8.35
Of which Biofuels[33] Article 21(2)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Of which imported [34]	0,0	0,0	0,0	0,0	0,0	0.75	1.54	2.36	3.17	1.62	1.64	1.67
Biodiesel	0,0	0,0	0,0	0,0	0,0	2.52	5.17	7.91	10.63	16.23	22.01	27.97
Of which Biofuels[29] Article 21(2)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Of which imported[35]	0,0	0,0	0,0	0,0	0,0	2.52	5.17	7.91	10.63	5.41	5.50	5.59
Hydrogen from renewables	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Renewable electricity	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Of which road transport	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Of which non-road transport	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Others (as biogas, vegetable oils, etc.) – please specify	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Of which Biofuels[29] Article 21(2)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Total	**0,10**	**0,07**	**0,13**	**0,00**	**0,00**	**3,27**	**6,71**	**10,27**	**13,80**	**21,08**	**28,59**	**36,33**

33 Biofuels that are included in Article 21(2) of Directive 2009/28/EC
34 From the whole amount of bioethanol/bio-ETBE
35 From the whole amount of biodiesel

5.2. Total contribution expected from energy efficiency and energy saving measures to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity, heating and cooling and transport

The contribution expected from energy efficiency and energy saving measures considered in this NREAP was extracted from Kosovo Energy Efficiency Action Plan, approved by the Ministry of Economic Development. Kosovo's NEEAP (2010 – 2018) foresees the indicative target of 9% of 1021.08 ktoe to be achieved at the end of the period (2010 – 2018). Therefore, the amount of energy that Kosovo aims to save by the end of 2018 is 91.89 ktoe.

Table 1 in chapter 2 contains two scenarios of gross final energy consumption: the 'reference scenario' and 'additional energy efficiency scenario' and difference between these two scenarios in year 2018 contains the envisaged amount of final energy savings as given in the Kosovo Energy Efficiency Action Plan.

Final energy consumption by consumption sector presented in percentages, as per the preliminary data in 2010, is extracted from the Kosovo Energy Balance prepared by the Ministry of Economic Development, and is presented in Figure 4.

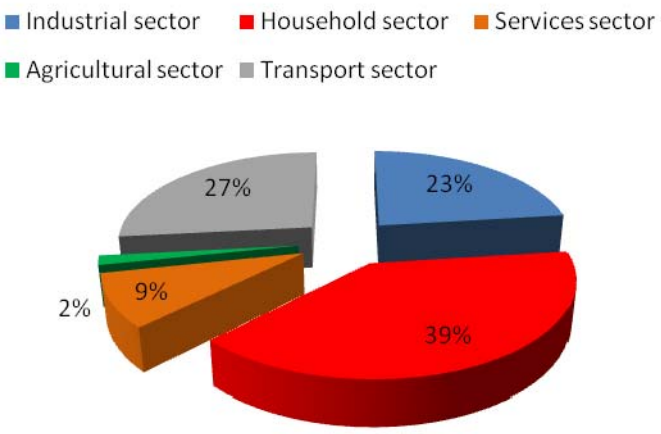


Figure 5 – Energy end-use by sector for year 2012

Household (residential) sector

The residential sector is the largest energy end-use sector in Kosovo. In 2012, energy end-use in residential sector was 498.71 ktoe or 39.53 % of total energy end-use consumption.

There are two strategic objectives that address issues related to establishment of legal and institutional framework for promotion of energy efficiency:

- increasing the standard of living in the residential sector;
- regulating the construction field, by engineering technical regulations in compliance with EU standards.

Promotion of energy efficiency in multi-apartment buildings will be the main priority of the Ministry of Environment and Spatial Planning for the coming years.

The following 4 measures in residential sector have been included in the 2nd NEEAP:

- Improving of EE through implementation of energy efficiency measures in residential buildings,
- Improving of EE through implementation of energy efficiency measures in residential sector,
- Improving of EE through implementation of energy efficiency measures in multi-apartment buildings,
- Improving of EE through continuing information campaign on energy efficiency.

Transport sector

Transport sector is the second largest energy end-use sector in Kosovo. In 2012, energy end-use in transport sector was 336.47 ktoe or 26.67 % of total energy end-use consumption.

There are two main policy planning documents in the transport sector:

- Strategy of Multimodal Transport and Action Plan;
- Strategy of the Ministry of Infrastructure (2011 – 2014).

Main goal of the Ministry of Infrastructure is to contribute in economic growth through the establishment of an efficient and integrated multimodal system – road, railway, air transport.

The following 3 measures have been included for the transport sector in the 2nd NEEAP:

- Improving of EE through continuing information campaign on promotion of eco-driving;
- Systematic inspections of the technical condition of vehicles;
- Improving of public transport system in Pristina city.

Industry and SME's sector

Industry is the third largest energy end-use sector in Kosovo. In 2012, energy end-use in industry sector was 290.68 ktoe or 23.04%, of total energy end-uses consumption.

The following 2 measures have been included in the 2nd NEEAP:

- Improving of EE through implementation of energy efficiency measures in SMEs,
- Improving of EE through implementation of energy efficiency measures in industrial enterprises.

Tertiary (services) sector

In 2012, energy end-use in services sector was115,19 ktoe or 9.13%, of total energy end-uses consumption.

Energy efficiency measures in tertiary sector that includes public administration, healthcare etc. institutions will be in the central investment projects to be implemented in the 2nd NEEAP. The 2nd NEEAP contains five measures for implementation of which financing from the national budget of Kosovo, local municipal budgets and IFIs have been mostly committed. More than 200 buildings will be renovated implementing investment projects in the above mentioned activity.

The following 5 measures have been included for the tertiary sector in the 2nd NEEAP:

- Improving of EE through renovation of public buildings in municipalities,
- Improving of EE through renovation of governmental buildings,
- Improving of EE through renovation of public buildings (municipal buildings),
- Improving of EE through renovation of municipal buildings and street lighting,
- Promotion of energy efficiency measures preparing energy audits.

5.3. Assessment of the impacts (Optional)

Since most of the measures are only discussed based on the rough proposal and there is still no actual experience with the only support measure that is in place (FIT) there is no relevant data to determine the impact of the measures.

5.4. Preparation of the NREAP and the follow-up of its implementation

a) In the development of the National Action Plan for Renewable Energy Sources, local authorities have played their role through public discussions and participation in the workshops organized for such purposes.

Besides MED, as the responsible ministry, the following stakeholders were actively involved in the preparation of this action plan, by providing information in the scope of their responsibilities:

- Energy Regulatory Office (ERO), with description of authorizations for construction of new energy production capacities, tariff system for purchase of renewable energy and system of guarantees of origin;
- Transmission System and Market Operator (KOSTT) and Distribution system operator (DSO), with description of electricity infrastructure development and electricity network operation;
- Ministry of Environment and Spatial Planning (MESP), with descriptions of RES energy use in the building sector;
- Ministry of Environment and Spatial Planning (MESP) with descriptions of RES energy use in the building sector;
- Ministry of Trade and Industry (MTI), with description of regulatory framework for biofuels (and other bioliquids) and support schemes to promote the use of biofuels in transport;
- Ministry of Agriculture, Forestry and Rural Development (MAFRD), with descriptions from the field of use of energy from biomass;
- Ministry of Finance (MF), with suggestions on fiscal measures.

(b) Regarding regional and local strategies on RES energy their compilation is not envisaged at the municipal level, however one of the proposed measures for achieving the RES targets is establishment and operationalization of energy agencies with the purpose of support to municipalities also in possible introduction of regional/local renewable energy strategies. The responsibility for the achievement NREAP targets will rest with the MED and it will be coordinating the all the regional agencies in ensuring compliance with national target compliance. The European Commission has established five regional development agencies, however, their establishment does not have a legal basis.

(c) Public consultation was done at the final phase of NREAP preparation in April and May 2013. For this purpose the draft of the Plan was sent to all stakeholders, and afterwards a Workshop was held with the stakeholders: representatives of responsible institutions and civil society.

(d) National authority responsible for the follow-up of the Renewable Energy Action Plan is Ministry of Economic Development.

(e) The Government will approve the NREAP 2011-2020, drafted by the Ministry in line with the Law on Energy.

Regular monitoring and annual reporting on achievements in RES use is already prescribed Article 11 paragraph 1.2 and Article 13 paragraph 4 of Energy Law No. 03/L-184 on Energy.

The amendment of the Law no. 03/L-184 on Energy is expected to clarify certain provisions related to monitoring. MED will be obliged to monitor the implementation of the NREAP and together with other institutions prepare an annual report on the implementation of NREAP. MED will develop a system of monitoring including indicators for individual measures and instruments.

The report on NREAP will contain: an analysis of achievements against national target by sector (electricity, heating and cooling and transport) and in aggregate, information about measures undertaken to promote use of RES and analysis of their efficiency, progress in removal of administrative barriers for renewable energy development, measures for improving transmission and distribution within the electricity system to enable greater integration of facilities using renewable energy sources, assessment of greenhouse gasses saving resulting from increased renewable energy use and all other pertinent data required by the article 22 of the Directive 2009/28/EC. If the report finds that targets in the period covered by the report have not been achieved, the Government shall amend NREAP with new or stronger measures to achieve the determined targets.