Republic of Albania
Ministry of Energy and Industry
National Agency of Natural Resources

Albania Renewable Energy Progress Reports 2014-2015

Introduction

Albania has undertaken a series of steps for the inclusion of in its policies for energy, the requests of the EU Directives about the common rules for the creation and the development of internal energy market and the enhancement of production and energy consumption from renewable resources. In order for Albania to fulfil its international obligations and to achieve pursuant to the legal obligation the objective of 38% renewable energy in the final gross consumption until 2020, the country is undertaking a review of its supporting tools for renewable energy production. The scheme described in the following paragraphs will permit Albania to follow its objectives of RES and more concretely preserving and increasing the security in supply including a variety of RES generation technologies. Albania adopted a National Renewable Energy Action Plan on 27/1/2016. The National Renewable Energy Action Plan " presented in the form of the template adopted by the Commission under the second subparagraph of Article 4(1) of the Directive" as stipulated in Article 5(2) of Decision 2012/04/MC-EnC of the Ministerial Council, and be submitted to the Secretariat under Article 4(2) of Directive 2009/28/EC.

RES Policy

Albania as one of the Contractual Parties of Energy Community Treaty is compelled to transpose and to be in compliance with the EU Directive 2009/28/EC “On the enhancement of energy use from renewable resources and it must amend and then abrogate Directives 2001/77/EC and 2003/30/EC”. This comes even as a request of draft-Law “On Energy Renewable Resources”. One of the requests of draft-law will stipulate the national objectives on renewable energies in the final consumption of domestic energy.

Albanian government has considered the promotion of renewable energy use as an important tool of energy policies for the increase of the security for energy supply, economic development, energy sector sustainability and environment protection. Even though, in Albania, more than 95% of energy and 20-23% of primary total resources have been provided by hydropower stations, the objectives of Albanian Government energy policy intend to increase further more the use of RES. Based on these facts which offer the context for the potential increase of the role of RES in the current energy and economy condition in Albania, based even on the energy security principles and on the added domestic economic value, the potential objectives of RES policies have been approved. The increase of the use of technologies RES is a step of special importance in general towards a more sustainable society and in particular it brings considerable benefits for Albanian industry.

Albania has a considerable potential of RES. Its solar power potential has been assessed in 1,500-1,700 kWh/m2 per year. The country has also unexploited potentials of wind power, especially along the Adriatic coastline. According to the Albanian Agency of Investment Developments a series of zones have been identified with high potential of wind energy, with an average annual wind speed of 6-8 m/s and with energy density of 250-600 W/m2. Albania has also considerable potential of biomass from agricultural waste, which is assessed approximately about 2,300 GWh/year. The heat from renewable resources, which is being offered from the inefficient use of firewood, is promoted mainly through the implementation of solar systems for water heating, industrial biomass and agricultural biomass. As long as energy production system is concerned, despite the hydropower stations, which is the main RES technology, it is expected to expand considerably up to the year 2020. Renewable energy might be the solution for the decrease of this strategic dependence on the imports and the improvement not only of the security for energy supply but even of the macroeconomic and political security of the country decreasing the domestic budget deficit.

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

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

	2015	2014
RES-H&C[2] (%)	*34.55*	*30.98*
RES-E[3] (%)	*79.22*	***70.89***
RES-T[4] (%)	*0*	*0*
Overall RES share[5] (%)	*34.90*	***31.98***
Of which from cooperation mechanism[6] (%)	0	0
Surplus for cooperation mechanism[7] (%)	0	0

***Table 1a:* Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)[8]**

	2015	2014
(A) Gross final consumption of RES for heating and cooling	*216.7*	*205.6*
(B) Gross final consumption of electricity from RES	*496.9*	*475.5*
(C) Gross final consumption of energy from RES in transport	*33*	*29*
(D) Gross total RES consumption[9]	*746.60*	*710.10*
(E) Transfer of RES to other Contracting Parties or Member States	0	0
(F) Transfer of RES from other Contracting Parties and 3rd countries	0	0
(G) RES consumption adjusted for target (D)-(E)+(F)	*746.60*	*710.10*

[1] Facilitates comparison with Table 3 and Table 4a of the NREAPs.
[2] Share of renewable energy in heating and cooling: gross final consumption of energy from renewable sources for heating and cooling (as defined in Articles 5(1)b) and 5(4) of Directive 2009/28/EC divided by gross final consumption of energy for heating and cooling. The same methodology as in Table 3 of NREAPs applies.
[3] Share of renewable energy in electricity: gross final consumption of electricity from renewable sources for electricity (as defined in Articles 5(1)a) and 5(3) of Directive 2009/28/ECdivided by total gross final consumption of electricity. The same methodology as in Table 3 of NREAPs applies.
[4] Share of renewable energy in transport: final energy from renewable sources consumed in transport (cf. Article 5(1)c) and 5(5)of Directive 2009/28/EC divided by the consumption in transport of 1) petrol; 2) diesel; 3) biofuels used in road and rail transport and 4) electricity in land transport (as reflected in row 3 of Table 1). The same methodology as in Table 3 of NREAPs applies.
[5] Share of renewable energy in gross final energy consumption. The same methodology as in Table 3 of NREAPs applies.
[6] In percentage point of overall RES share.
[7] In percentage point of overall RES share.
[8] Facilitates comparison with Table 4a of the NREAPs
[9] According to Art.5(1)of Directive 2009/28/EC gas, electricity and hydrogen from renewable energy sources shall only be considered once. No double counting is allowed.

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

	2015		2014	
	MW	**GWh**	**MW**	**GWh**
Hydro[11]:	**1798**	6959	1725	4725
non pumped				
<1MW	**21**	53	16	40
1MW–10 MW	**247**	575	194	421
>10MW	**1530**	5267	1515	4264
pumped				
mixed[12]				
Geothermal				
Solar:				
photovoltaic				
concentrated solar power				
Tide, wave, ocean				
Wind:				
onshore				
offshore				
Biomass[13]:				
solid biomass				
biogas				
bioliquids				
TOTAL	**1798**	**5895**	1725	**4724**
of which in CHP				

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

	2015	2014
Geothermal (excluding low temperature geothermal heat in heat pump applications)	0	0
Solar	12.38	12.14
Biomass[16]:		
solid biomass	214	202
biogas	0	0
bioliquids	0	0
Renewable energy from heat pumps: - of which aerothermal - of which geothermal - of which hydrothermal		
TOTAL	236.38	214.14
Of which DH[17]		
Of which biomass in households[18]		

[10] Facilitates comparison with Table 10a of the NREAPs.
[11] Normalised in accordance with Directive2009/28/EC and Eurostat methodology.
[12] In accordance with new Eurostat methodology.
[13] Take into account only those complying with applicable sustainability criteria, cf. Article 5(1) of Directive 2009/28/EC last subparagraph.
[14] Direct use and district heat as defined in Article 5.4 of Directive 2009/28/EC.
[15] Facilitates comparison with Table 11 of the NREAPs.
[16] Take into account only those complying with applicable sustainability criteria, cf. Article 5(1) last subparagraph of Directive 2009/28/EC.
[17] District heating and / or cooling from total renewable heating and cooling consumption (RES- DH).
[18] From the total renewable heating and cooling consumption.

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

	2015	2014
Bioethanol/ bio-ETBE	0	0
Of which Biofuels[21] Article 21.2		
Of which imported[22]		
Biodiesel (ton)	33	29
Of which Biofuels[23] Article 21.2		
Of which imported[24]		
Hydrogen from renewables		
Renewable electricity		
Of which road transport		
Of which non-road transport		
Others (as biogas, vegetable oils, etc.) – please specify	33	29
Of which Biofuels[25] Article 21.2		
TOTAL	33	29

2. Measures taken in the preceding 2 years and/or planned at national level to promote the growth of energy from renewable sources taking into account the indicative trajectory for achieving the national RES targets as outlined in your National Renewable Energy Action Plan. ***(Article 22(1)a) of Directive 2009/28/EC))***

***Table 2*: Overview of all policies and measures**

Measure name and reference	Type of measure	Expected results	Targeted group and /or activity	Existing or planned	Starting date/Completion	Financ. effects. mil. ALL/year
MEASURES REGARDING PRIMARY LEGISLATION						
The new draft law on renewable, Support for coordinating the licensing and permission requests	Regulatory	increase in the production of electricity from RES	RES investors, NRNA, MEI	Planned in 2017	2020	n/a
The new draft law on renewable, Grid connection and operation	Regulatory	increase in the production of electricity from RES	RES investors, NRNA, MEI	Planned in 2017	2020	n/a
The new draft law on renewable Obligation to purchase electricity generated from renewable energy sources.	Regulatory	increase in the production of electricity from RES	RES investors, NRNA, MEI	Planned in 2017	2020	n/a

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

The new draft law on renewable Guarantee of origin	Regulatory	increase in the production of electricity from RES	RES investors, NRNA, MEI	Planned in 2017	2020	n/a
MEASURES REGARDING LEGAL AND REGULATORY FRAMEWORK						
2. Drafting the approach for fixed prices of energy from RES at energy market.	Regulatory	RER-E in the energy stock market	ERE/MEI	Planned	Within 2017	25.50
3. Appropriate procedures for the auction of RES as capacities provided for in RRNAP pursuant to MEI proposal	Regulatory	Produced energy (ktoe)	MEI/ERE	Planned	5years	100.00
4. Origin warranty for all RES	Regulatory	Produced energy (ktoe)	Investors	Planned	No specific term	400.0
5. The obligations of the transmission or distribution companies to connect new RES plants in their network; the payment of the direct costs for the connection in the energy transmission and distribution networks	Legal Regulatory	Loss reduction	RER Investors, OST/OSSH.	Planned on 2/4 e 2016	2016-2017	5,200.00
MEASURES WITH FINANCIAL EFFECTS TO PROMOTE RES						
6. Receiver's obligation (Operator) to buy energy produced from small HPPs.	Financial	Produced energy (ktoe)	RER Investors, OSSh,	Existing with improvements in ¼ të 2017	For new projects, the measure will continue beyond	7,400.00
7. Long-term agreements to purchase energy produced by the current energy produces from RER	Legal Finance Regulatory	Produced energy (ktoe) 3,700GWh	RES Investors, OSSh, KESh, OST	Existing	Depending on the existing contracts PPA	5,400.00
8. Fiscal Supporting policy for the promotion of diversified RES systems (HPP, PV and Eolic)	Finance	Produced energy (ktoe)	RES Invesotrs, OSSh, KESh, OST	Existing with improvements ¼ të 2017	PPA Contract	
9. Mandatory purchase of energy therough CfD in the market of energy from RES	Legal finance Regulatory	Produced energy (ktoe)	RES Investors, OSSh, KESh, State Aid	Planned ¾ të 2017	2016-2020	650.00
10. The obligations who introduce in the market, for transport reasons, liquid combustibles originating from oil, to provide fuel for the motors with oil and diesel, which are mixed with biofuels according to the percentages determined in the existing law for biofuels.	Financial	Production and use of biofuels (ktoe)	Investors MEI/MB/MM And the Offices of the assessment of sustainability criteria	Planned	2016-2020	883.00
11. Zero level of the excise tax for clean biodiesel until 2018	Financial	Identical	Trading investors and public administration	Existing	2016-2020	555.00

12. The supervision of biofuels quality from the Technical State Inspectorate and the Offices of the assessment of sustainibility criteria	Administrative	Use of biofuels for transport	Distributors and final users	Planned	2016-2020	15.30
13. The approval of the policies and measures for the increase of solar energy in buildings for water heating	Administrative	Energy produced from NUED systems	Public or private buildings constructed from	Existing	2016-2020	116.00
14. Financing through the grants form RES Fund for the heating and cooling projects in agriculture sector using biomass.	Financial	Enrgy produced from biomass	Agricultural sector	Planned	June 2017	1.352.00
15. Firewood processing	Financial	Thermal	Environment	Planned		
TOTAL in 5 along with 108,500 million ALL				**TOTAL in mil. ALL/year**		**21,696.80**

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

2.a Please describe the progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of renewable energy. *(Article 22(1)e) of Directive 2009/28/EC))*.

A list of the existing legislation and if possible, the regional legislation on the procedures of authorization, certification and licensing and territorial planning applied to plants and their power transmission and distribution to the network infrastructure:

Relevant applicable legislation in the energy sector

- Law No. 138/2013 On renewable energy sources provides for that the Ministry responsible for energy and the agency responsible for renewable energy sources, shall ensure that information on support measures for installations is made available to all relevant stakeholders, such as developers, sponsors, investors, financial institutions, builders, installers, architects, and suppliers of heating, cooling and power equipment and systems compatible with the use of energy from renewable sources. The law on renewables (Article 13) provides for that Grid system operators shall, upon the request of a Priority Producer, as a priority, connect Installations to the point in their Grid System, which is the best and most convenient distance for the Producer having Priority from the location of the Installation satisfying technical requirements, if no other grid system has a technically and economically more favorable grid connection point. In selecting the best and most convenient connection point, the Grid System Operator should take into account the technical constraints and economic efficiency of the selected connection point. The Guarantees of Origin shall be issued based on comprehensive data and information adequate to certify the origin of electricity provided by the Producer as well as certified measurement data from the relevant Grid System Operator. Guarantees of origin shall only be issued if the Producer provides all information requested in paragraph (2) of this Article.

- The same Article (paragraph 2) requires the Ministry responsible for energy and the agency responsible for renewable energy to develop suitable information, awareness-raising campaigns, guidance or training programs in order to inform stakeholders and citizens on the benefits, costs and practicalities of developing and using energy from renewable sources

- Law no. 43/2015, dated 30.04.2015 “On power sector” sets out the main principles for

the energy sector development, including RES power plants and the transmission and distribution networks. Law transposes the EU Directive 2009/72 on electricity and repealing the previous law on electricity (Law no. 40/2015, dated 22.05.2003). This law also includes the requirements and criteria for granting a license to carry out an activity in energy sector. The law also includes a number of specific provisions regulating the construction of a direct line or of a commercial interconnection line.

The Albanian Government and ERE are reviewing bylaws, with the aim of meeting the requirements of the new law on energy sector, including a number of bylaws provided below.

- Decision of Council of Ministers no.1701, dated 12.12.2008 "On approval of the regulation for procedures of granting permits/authorizations for the construction of new power generation plants/facilities not subject to concession" sets out the necessary procedures and documents for application, evaluation and granting of an authorization for building a new power generation capacity that is still not subject to concession.
- ERE decision no. 108, dated 9.09.2008 "On approval of the regulation for procedures of licensing and granting, changing and/or revoking a license", as amended. This decision sets out the procedures and requirements for granting a license to carry out any activities in energy sector.
- Law no.125/2013, dated 25.04.2013 "On concessions and public-private partnership" establishes the legal framework for all concessions. The purpose of this law is to build a favorable framework to promote and facilitate the implementation of concessionary projects, increase transparency, justice, effectiveness, long-term stability for the development of infrastructure-related projects and public services, including the concessions for construction of hydropower plants.
- DCM no. 575, dated 10.07 "On approval of evaluation rules and award of concessions/public- private partnership" defines the detailed procedures and requirements for the evaluation and award of an applicable concession for hydropower plants.
- Law no.111/, dated 15.11.2012 "On integrated management of water resources", establishing the legal framework for the use of local water resources, including their use for power generation.
- Decision of Council of Ministers no. 416, dated 13.05.2015 "On approval of the general and special conditions, accompanying documents, term of validity, application forms for authorization and permit, procedures for the revision of decision-making process and forms of authorization of permit for the use of water resources", which defines the specific conditions and procedures for reviewing and decision-making to grant an authorization or permit of use of water resources, including the use of water for construction of hydropower plants.
- ERE Decision no. 123, dated 24.10.2008, "On approval of the code of transmission network operation", as amended, which defines the planning and connection procedures for the development of transmission system.
- ERE Decision no. 100, dated 26.08.2008, "On approval of the power distribution code", as amended, which defines the planning and connection procedures for the development of distribution system.
- ERE Decision no. 9, dated 21.02.2007, "On rules and procedures of the certification of energy
- production from renewable resources", which defines specific rules and procedures for granting warranties of origin and green certificates for the power generated from renewable resources. Law no. 8734, dated 1.2.2001 "On guaranteeing work safety of electrical equipment and installations".
- DCM no. 646, dated 12.12.2002 "On approval of technical standards and conditions of design and implementation in the fields of industry and energy, to acquire the status of "Technical rules", which are binding for application"
- DCM no. 529, dated 15.08.2007 "On approval of criteria and procedures of application and approval of construction permits of commercial interconnection lines".

Specific applicable legislation in the sector of RES

- Law no.138/2013, dated 2.05.2013 "On renewable energy resources" with special provisions for the connection of RES operated plants to the transmission and/or distribution network.

- Law no. 9876, dated 14.02.2008 amended "On production, transport and trade of bio-fuels and other renewable fuels for transport", as amended, sets out the legal framework for granting permits for the production, wholesale and retail of bio-fuels and other renewable fuels, for the purpose of transport.

Specific applicable legislation on spatial planning

Law no. 107/ , dated 31.07.2014"On territory planning and development", as amended, is the key legislation governing the territory planning and development in Albania, with the aim to define the general principles, rules and procedures, including the responsibilities and powers of the central and local government institutions for territory planning and development. The law on territory planning and development specifies the institutions for bodies responsible for territory planning, including:

a) At central level

- Council of Ministers;
- National Territory Council;
- Ministry responsible for territorial planning and development (Minister of Urban Development)

b) at regional level

- Regional Council

c) at local level

- Municipal councils; the law provides for that National Territory Council (NTC) and the Mayor are two competent authorities to issue construction permits.
- Construction permits for each power plant are issued by the National Territorial Council.

Although the line ministries, including the ministry responsible for energy, have no decision-making power regarding the territory planning and development, they are charged with responsibilities for preparing sector-based development plans and should ensure that each application for construction permit complies with the effective sector-based plans.

Ministry of Energy and Industry (MEI) is fully responsible for the electricity sector. MEI is the responsible institution for the development of energy policies and mid-term and long-term strategies for the energy sector. MEI is also responsible for the assessment and revision of the requirements for the rights to concession for the construction of hydropower plants and for the authorizations of other types of technology for the energy production from renewable resources such as wind, biomass, solar resources etc. The mission of the ministry in energy sector is to promote a solid, sustainable economic development through:

The mission of the ministry in the sector of energy is to promote a rapid and sustainable economic development through:

- Preparation, periodical review and update of the National Strategy on Electrical Power;
- Promotion of energy efficiency and renewable resources, including small hydropower plants;
- Forecast of the demand for various energy resources;
- Promotion of private local or foreign investments in the sector of energy, building an attractive legal climate for these investments;

- Development of market reforms in the power sector to meet the national objectives for the integration in EU and development of a rational electricity market;
- Formulation of the adequate legal framework;
- Preparation for the privatization of state energy companies.

National Agency of Natural Resources, with the scope of its work focusing on the development and supervision of rational use of natural resources, based on governmental policies and monitoring of the phase after their use in mining, hydrocarbons and energy. National Agency of Natural Resources has a number of responsibilities under the law for RES, as the body responsible for RES development.

2.b Please describe the measures in ensuring the transmission and distribution of electricity produced from renewable energy sources and in improving the framework or rules for bearing and sharing of costs related to grid connections and grid reinforcements. *(Article 22(1)f) of Directive 2009/28/EC))*.

The new law on energy sector (Article 29) provides for that operators of transmission and distribution system ensure access to the network for all clients and users of the system, on transparent and non-discriminatory basis and at ERE approved and published tariffs. The same article foresees that producers who produce energy from renewable sources, have priority access to the grids.

The new law on renewable energies (article 11/7) provides for that transmission and distribution of electricity produced from renewable energy resources are guaranteed, except in emergency situations defined in the law on energy sector or in the transmission and distribution codes. In the course of the dispatch of power generation plants, the Transmission System Operator will attach priority to power generation installations to the extent that allows safe operation of the national electricity system and based on transparent and non-discriminatory criteria.

Currently, all existing producers of electricity in Albania rely on hydropower, therefore no priority is attached to the generating installations. Furthermore, the transmission system operation is carried out by an independent operator of the transmission system that dispatches the producers based on market rules.

As for producers connected to the distribution network, existing legislation guarantees their access to the network, unless there is a security problem with the functioning of the network.
Constraints/interruptions of electricity from renewable sources are reported when the distribution system operator has been forced, due to technical reasons, to disconnect a remote area where it is and where the small hydropower manufacturer is connected. The Albanian government has prepared a purchase contract for small hydropower plants based on the principle "take or pay", which will guarantee that in the event of constraint/interruption by the network operator without a technical reason small producers of electricity will be compensated for the decreased product.

Energy Regulatory Entity (ERE) is the responsible institution for monitoring the application and implementation of the measures described above. This regulatory entity is also responsible for the adoption of secondary legislation on the operation of network.

All RES power plants are integrated in the energy market. The energy market is designed in accordance with the Albanian market model adopted by DCM no. 338, dated 19.3.2008. This market model requires that all electricity of the distributed producer ( ) be purchased by the buyer at a regulated promotional fee approved by ERE. At the same time, ERE has approved a standard

agreement for the purchase of electricity (EPA) for these SHPPs. However, the model also foresees that SHPPs sell their electricity in the market at market prices, if they prefer so.

Albania has adopted a new law on the energy sector (lawnNo.43 /2015, dated 30. 04.2015) and secondary legislation should be developed to implement this new law, including a new model of the market and new market rules. Considering that the new law abolishes the concept of Public Wholesale Supplier, a new entity is expected to be designated as a recipient of electricity produced from renewable energy plants.

On the other hand, power producers (IPPs), which do not meet the conditions to receive a promotional fee of selling electricity to the receiver, can sell electricity to DSO at negotiable prices to cover the losses of distribution or to sell in their energy at the competitive domestic market or export it abroad by using the right of access to the transmission system.

All electricity producers are required to be licensed by ERE and be registered with the market operator, and to pay a financial guarantee. These requirements are the same for the participants in the market and no preferential treatment is afforded to RES producers of electricity.

The new law on power sector envisages that energy market should be consolidated in Albania, in order to further increase transparency and competition in the wholesale market. Day-ahead market will create more market opportunities for renewable energy plants, especially for those that are not eligible for a promotional fee.

Based on the transmission and distribution tariff methodologies, and according to market rules approved by ERE, transmission or distribution tariffs in the domestic market are paid as per the load and not by producers. There are no plans to introduce a distribution or transmission fee for electricity producers, including those with RES plants in the near future.
Energy Regulatory Entity (ERE) is the responsible institution for monitoring the enforcement and implementation of measures described above. The regulator is also responsible for adoption of any secondary legislation regarding network operation.

3. Please describe the support schemes and other measures currently in place that are applied to promote energy from renewable sources and report on any developments in the measures used with respect to those set out in your National Renewable Energy Action Plan. ***(Article 22(1)b) of Directive 2009/28/EC))*****.**

Support schemes for new and existing small hydropower plants with a capacity of up to 15 MW are in force since 2007. No support schemes have been adopted for renewable sources other than hydro. The amount of support for new small hydropower plants is calculated every year by ERE based on a methodology which was included in the now suspended Law on Renewable Energy.

For 2014 it entered for the first time in the operation of 14 Small Hydro Power Plants with total power of 37.9 MW generating plant. Production realized by these companies in 2014 was around 39.6 GWh, The revised for electricity generation purchase from Small hydropower plants with installed capacity up to 10 MW has been 53.98 Euro / MWh for the two years 2013 and 2014 and it was approved by Decision of ERE no. 143 dated 26.12.2014. While the revised price of electricity sales from new hydropower plants with installed capacity up to 15 MW it was 56.99 Euro/MWh for 2014 and approved by Decision no. 144 dated 26.12.2014. Electricity production from concession constructed HPP was 919,000 MWh.

It is suggested that **table 3** is used to provide more detailed information on the support schemes in place and the support levels applied to various renewable energy technologies. Contracting Parties are encouraged to provide information on the methodology used to determine the level and design of support schemes for renewable energy.

***Table 3*: Support schemes for renewable energy**

RES support schemes year n (2014)			**Per unit support**	**Total (M€)***
[(sub) category of specific technology or fuel]				
Instrument (provide data as relevant)	Obligation/quota (%)			
	Penalty/Buy out option/ Buy out price (€/unit)			
	Average certificate price			
	Tax exemption/refund			
	Investment subsidies (capital grants or loans) (€/unit)			
	Production incentives			
		Feed-in tariff (only for hydro plant)	53.98 (Euro/MWh)	49.6
		Feed-in premiums		
		Tendering		
Total annual estimated support in the electricity sector				
Total annual estimated support in the heating sector				
Total annual estimated support in the transport sector				
***** The quantity of energy supported by the per unit support gives an indication of the effectiveness of the support for each type of technology				

In February 2015, a Government Decree on the Methodology for the Fixed Tariff for Electricity Purchased by Small Hydropower Producers for 2015 was adopted. The Decree changes the base for calculation of the support from the average import electricity price of the previous year adjusted with an inflation index to the electricity price on the Hungarian Power Exchange. Investors have complained against the new Methodology as the support price for the electricity produced by hydropower plants up to 15 MW has decreased. The appointment of a renewable energy operator to manage the incentive system for new renewable energy producers has not been decided yet. This role had been previously assigned to the wholesale public supplier, a function which is now removed by the Power Sector Law adopted in 2015.

***Table 3/1*: Support schemes for renewable energy**

RES support schemes year n (2015)			**Per unit support**	**Total (M€)***
[(sub) category of specific technology or fuel]				
Instrument (provide data as relevant)	Obligation/quota (%)			
	Penalty/Buy out option/ Buy out price (€/unit)			
	Average certificate price			
	Tax exemption/refund			
	Investment subsidies (capital grants or loans) (€/unit)			
	Production incentives			
		Feed-in tariff (only for hydro plant)	54.7 (Euro/MWh)	77.38
		Feed-in premiums		
		Tendering		
Total annual estimated support in the electricity sector				
Total annual estimated support in the heating sector				
Total annual estimated support in the transport sector				
***** The quantity of energy supported by the per unit support gives an indication of the effectiveness of the support for each type of technology				

It noted that revenues were stable level during 2015 compared to 2014 without causing fluctuations in costs Majority of Public Supplier. This is because the decision nr. 27 dated 16.02.2015 ERE approved a fee of 7636 leke / kWh for electricity generated by hydro power up 15 MW which results approximate weighted average realized in 2014. With this decision, for the first time was unified tariff calculation methodology for the two categories of producers (existing hydropower plants and new hydro concession to 15 MW). For the calculation of this fee is taken for reference market price of electricity (Bursa Hungary) plus an incentive of 24% on the price. Electricity production from concession constructed HPP was 1,413,709 MWh.

Other support for renewable energy producers with an installed capacity higher than 5 MW consists of tax incentives customs duty exemptions for machinery and equipment used for the construction of new capacities and an exemption from excise tax.

Authorizations for new hydropower plants are granted based on the Concession Law and a competitive bidding process. According to the 2015 Power Sector Law, authorizations for Power plants larger than 2 MW not subject to concessions are granted by the Government upon proposal of the Ministry in charge of energy. Power plants below 2 MW which are not subject to the Concession Law are granted an authorization by the Ministry in charge of energy. The Renewable Energy Law provides that the Government shall approve simplified procedures on issuing the necessary authorizations for producers of renewable energy. However, these procedures have not been established yet.

3.1. Please provide the information on how supported electricity is allocated to final customers for purposes of Article 3 (6) of Directive 2003/54/EC. ***(Article 22(1)b) of Directive 2009/28/EC))*****.**

Based upon law 43/2015 “On energy sector”, the new model of energy market is being drafted, providing for the trading of energy from the renewable sources, to the advanced market when the Albanian Energy Stock market is established.

Power Sector Law provides for priority and guaranteed access of renewable energy producers to the electricity networks and also priority dispatch of electricity produced from renewable sources. All market participants including renewable energy producers are required to take balance responsibility.

The Power Sector Law tasks ERE to take measures to facilitate the integration of new capacities to the network, in particular removing barriers that may hinder the entry of new participants and producers of electricity from renewable sources. These measures are still pending.

The new Renewable Energy Law also obliges the network operators to connect with priority all renewable energy producers to the closest point of the grid. As regards connection costs, the Renewable Energy Law provides that these shall be borne by the producer, except for the cases when the connection cost is borne by the grid operator or through private investments, pursuant to the provisions of the Power Sector Law.

The new Law on Renewable Energy guarantees the support schemes for electricity produced from renewable energy source with tariffs, the privileged producers. The low gives the priority in delivery of total electricity generated into the transmission or the distribution system, as well as being exempted from payment of costs for imbalances by the respective system operator.

4. Please provide information on how, where applicable, the support schemes have been structured to take into account RES applications that give additional benefits, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material?) ***(Article 22 (1)c of Directive 2009/28/EC))*****.**

At the moment there is a promoting tariff just for the small HPPs with installed power less than 15 MW and the tariff is calculated according to the average annual price of energy at Energy Stock market in Hungary (HUPX) determined in Euro cent/kWh x 1.24 x average exchange rate Euro/Lek for the previous year. This approach has been based on a simple formula and furthermore takes into consideration the price of energy import and connects it with the tariff to avoid the costs against the customer. The abovementioned formula, pursuant to the Decision of the Council of Ministers, shall be for 2015-2016 for the existing HPPs.

Tax exemptions are provided for by the law no. 8987, date 24.12.2002 "On creation of facilities for construction of new power capacity" and the related Council of Ministers' decree no.839, date 5.12.2007 "On establishing of conditions and procedures for reimbursement of excise tax and creation of facilities for construction of new power capacity" as amended. The law stipulated the exemption of machineries and equipments used for construction of new power capacities using renewable energy from the custom duties and exemption from the excise tax for the fuel used by such power producers. It does worthwhile to underline that the above tax exemptions are applied for all RES power producers despite their installed capacity and for other power producers with installed capacity higher than 5 MW.

The Law for the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport of 2008 deals with functional and organizational aspects of production, transportation and trade in biofuels. The Law also sets annual targets which are now outdated (an indicative target of 15% for 2015) and imposes blending obligations on traders. However, the secondary legislation needed for the implementation of the Law has not even been drafted since its entry into force. The Law is currently under review by a working group with a view to transpose the requirements of Directive 2009/28/EC with regard to sustainability criteria and the certification system and to introduce more adequate incentive measures

The law on biofuels amended to introduce sustainable criteria has presented same objective of 10% to comply with the EU Directive 2009/28/EC. The legislation does not contain any specific objectives about the different kinds of technology. Based upon point 2 article 8 law no. 9876, dated 14.2.2008 "On the production, transport and trading of biofuels and other renewable combustibles for transport", the Council of Ministers, with the proposal of the minister in charge of the transport sector and the Minister in charge for the sector of hydrocarbon/energy determines the minimal annual amount of bio-fuels and other renewable combustibles that shall be used in the following year in transport. However, this determination has not been made by any ministers from the moment the law entered into force.

Financial support might be classified in different ways. Such examples are: financial support for investment, capital grants, loans with low interest, the exclusion from the taxes or their reduction, tax reimbursement, tendering schemes, obligations for renewable tariffs with or without green certificates (tradable green certificates), promoting tariffs (feed in), promoting rewards, voluntary schemes.

Financial support for bio-fuels used for transport is provided through the exclusion from the taxes. Pursuant to article 10 of law on bio fuels, from the period when the law enters into force and until 2018, the excise tax for these products will be zero.

5. Please provide information on the functioning of the system of guarantees of origin for electricity and heating and cooling from RES, and the measures taken to ensure reliability and protection against fraud of the system. *(Article 22(1)d of Directive 2009/28/EC))*.

Currently in Albania there is still no market for warranties/certificates of origin (e.g. as part of the sales of energy green certificates (produced from renewable sources). Detailed promotions of the guarantee /certificate of origin under the new law on RES are set out in Articles 16, 17 and 18.

The establishment of national procedures requires the creation of an updated and well-coordinated register of gross final energy consumption in all sectors of the economy and reliable tracking of the implementation of renewable energy projects. In the sector of electricity, gross production and consumption from renewable energy resources is determined on the basis of guarantees/certificate of origin.

ERE, at the request of a manufacturer that has been supplied by ERE with technical preliminary qualification for the plant with renewable energy under provisions of the regulation referred to in paragraph 10 of the Article 16 of *the new law on RES* , will issue a certificate of origin guarantee for electricity or heat produced by a generating plant. Guarantees of Origin will apply to the standard size of 1 MWh and will specify:

- energy resources from which electricity is produced, classified by type and key components, including the information to what extent the electricity was produced from renewable energy resources;
- exclusive percentage of biomass, in cases where biomass is used;
- name and address of the producer;
- location, capacity and date of commissioning of the plant;
- Period during which energy is produced and to what extent it is paid in accordance with Articles 15 and 16 of *the new law on RES*, and
- Place of issue and unique identification number.

Referred of *the new law on RES*, ERE will supervise the issuance, transfer and cancellation of guarantees of origin in accordance with the provisions of the regulation issued under paragraph 9 of this article.

Guarantees of origin are issued based on comprehensive data and correct information to certify the origin of electricity supplied by the manufacturer and certified measurement data from network system operator. Guarantees of origin are issued only if the producer provides all the information required under paragraph (2) of the Article 16 of *the new law on RES*.

Any use of the guarantee of origin is made within 12 months of production of the corresponding energy unit. The guarantee of origin is canceled after use.

6. Please describe the developments <u>in the preceding 2 years</u> in the availability and use of biomass resources for energy purposes. *(Article 22(1)g) of Directive 2009/28/EC))*.

Biomass is one of the most *used* sources of energy in Albania – mainly in the form of firewood, combined in some cases with shrubs and waste of the plans from the agricultural sector. The consumption of firewood has decreased at about three up to four times more during the period 1990-2002. After this year, firewood consumption has increased a little in the last years, as the result of the increase of the prices of the other combustibles and energy. The processed wood combustibles – woodchips, pallets and briquettes – are not used a lot due to their high price and the underdeveloped supply system.

The remains which have fallen by the trees and the woods of poor quality are mainly used. The waste of biomass from agriculture is not used widely and usually it is destroyed right in the spot. The use of bio-gas is not developed, despite the available resources. It is important to consider that the majority of the heating equipments which are used – the stoves and the chimneys – are old and inefficient, with heat loss up to 40-50%. The heating through the radiators with high efficiency for the local systems is underdeveloped. The assessments of the updated energy strategy indicate a

considerable potential for extraction and exploitation of biomass in Albania from forestry, agriculture and livestock (for bio-gas production).

Biomass might be used for the production of energy only in the cogenerating plants (CHP- Combined Heat and Power), especially in the ones which function with sawdust by different wood processing industries. Its use in the energy centrals with condensation (it is considered as unfavorable from the environmental, economic and technical prospective.
Base on table 6 in the following paragraph it is clear that the information about the available amounts of biomass is insufficient. Of course, the state authorities should make more attempts for the development and the implementation of an information system related to the sources of biomass, which serves to channel the information in the Natural Resources National Agency.

The role of biomass will increase very little in absolute terms, as it is shown above, but at the same time, its relative contribution will decrease. Measures have been predicted in two directions:

- The slight decrease of biomass in the final energy consumption;
- The slight decrease of the heating energy produced by biomass exploitation.

The use of biomass has been stable during the last three years for the following reasons:

- The slow introduction of improved installations used for the exploitation of biomass in heating;
- The increase of wood price;
- The improved performance of energy in buildings.

Apart from the above information, we are kindly asking you to describe the current agricultural land situation used for energy production as follows:

- The current use of the agricultural land for the production of agricultural energy cultures in 2009 (ha);
- The use of agricultural land for the production of agricultural energy cultures, Surface
- Land used for wood with a fast growing cycle (poplins, willows); For the period 2006-2009 there is no hectare of land used for these purposes;
- Land used for other agricultural energy cultures, such as: grasses (Phalaris arundinacea, Panicum virgatum, Miscanthus), sorghum: based on the statistics published by INSTAT, there is no HPPtar of land used for these purposes.

According to the figures offered by the Ministry of Agriculture, Rural Development and Water Administration (based on the annual publication in 2009), the degraded land surface is 12,335 ha.

The unused agricultural land is assessed as approximately 34 568 ha. There is no planned measure for the increase of energy agricultural cultures but at the same time it is important to mention the fact that planting energy agricultural cultures is one of the mitigating measures for the gases with the greenhouse effect, which is mentioned in the Second National Communication of Albania addressed to the Framework Convention of United Nations on Climate Changes (FCUNCC) from 2009. Energy was not generated from the animals' fertilizer and some preliminary feasibility studies have been carried out for the production of bio-gas from the fertilizer of different farms. There are no specific stimuli which promote the production and the use of bio-gas, apart from its use in the combined production of heat and energy, based on which the produced amount of energy is bought with preferential prices and Energy Regulatory Entity (ERE) should prepare the special fees for this technology. At the moment, the amount of biogas produced is zero; however, measures have been

planned for getting the product in an amount of 7,1 ktoe biogas pursuant to the current document of RENAP. Attempts are being made to improve the management of forests in order to increase the development on the future and the sustainable reproduction. The certification of the communal forest and the state ones has been planned, to improve the techniques for their management.

***Table 4*: Biomass supply for energy use**

	Amount of domestic raw material (*)		**Primary energy in domestic raw material (ktoe)**		**Amount of imported raw material from EU (*)**		**Primary energy in amount of imported raw material from EU (ktoe)**		**Amount of imported raw material from non EU(*)**		**Primary energy in amount of imported raw material from non EU (ktoe)**	
	2015 *Year n-1*	**2014** *Year n-2*	**2015** *Year n-1*	**2014** *Year n-2*	**2015** *Year n-1*	**2014** *Year n-2*	**2015** *Year n-1*	**2014** *Year n-2*	**2015** *Year n-1*	**2014** *Year n-2*	**2015** *Year n-1*	**2014** *Year n-2*
Biomass supply for heating and electricity:												
Direct supply of wood biomass from forests and other wooded land energy generation (fellings etc.)**	1043506.07	978662.5	182	171								
Indirect supply of wood biomass (residues and co-products from wood industry etc.)**	57231.73	57231.73	10	10								
Energy crops (grasses, etc.) and short rotation trees (please specify)	0	0	0	0								
Agricultural by-products / processed residues and fishery by-products **	68678.07	68678.07	12	12								
Biomass from waste (municipal, industrial etc.) **	0	0	0	0								
Others (please specify)	0	0	0	0								
Biomass supply for transport:												
Common arable crops for biofuels (please specify main types)	0	0										
Energy crops (grasses,etc.) and short rotation trees for biofuels (please specify main types)	0	0										
Others (please specify)	0	0										

* Amount of raw material if possible in **m3 for biomass from forestry** and in **tonnes for biomass from agriculture and fishery and biomass from waste**
** The definition of this biomass category should be understood in line with table 7 of part 4.6.1 of Commission Decision C (2009) 5174 final establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC

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

Land use	**Surface (*ha*)**	
	2015 *Year n-1*	**2014** *Year n-2*
1. Land used for common arable crops (wheat, sugar beet etc.) and oil seeds (rapeseed, sunflower etc.) *(*Please specify main types)	**0**	**0**
2. Land used for short rotation trees (willows, poplars). (Please specify main types)	**0**	**0**
3. Land used for other energy crops such as grasses (reed canary grass, switch grass, Miscanthus), sorghum. (Please specify main types)	**0**	**0**

7. Please provide information on any changes in commodity prices and land use <u>within your Contracting Party in the preceding 2 years</u> associated with increased use of biomass and other forms of energy from renewable sources? Please provide where available references to relevant documentation on these impacts in your country. *(Article 22(1) h) of Directive 2009/28/EC))*.

When assessing commodity price impacts, it is suggested to consider at least the following commodities: common food and feed crops, energy wood, pellets.

There was no evidence of an increase in commodity prices as a result of the use of biomass and other forms of energy from renewable sources.

8. Please describe the development and share of biofuels made from wastes, residues, non-food cellulosic material, and lingo cellulosic material. *(Article 22(1) i) of Directive 2009/28/EC))*.

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

Article 21(2) biofuels[26]	**2015** *Year n-1*	**2014** *Year n-2*
Production – Fuel type X (biodiesel) (ktoe)	33	29
Consumption – Fuel type X (biodiesel)	33	29
Total production Art.21.2.biofuels	33	29
Total consumption Art.21.2. biofuels	33	29
% share of 21.2. fuels from total RES-T	4.1	4.4

9. Please provide information on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within your country <u>in the preceding 2 years</u>. Please provide information on how these impacts were assessed, with references to relevant documentation on these impacts within your country. **(*Article 22 (1) j) of Directive 2009/28/EC).***

Currently no information on estimated impacts of the production of biofuels.

10. Please estimate the net greenhouse gas emission savings due to the use of energy from renewable sources (*Article 22 (1) k) of Directive 2009/28/EC))*.

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

For the calculation of net greenhouse gas emission savings from the use of renewable energy, the following methodology is suggested:

- *For biofuels: In accordance with Article 22(2) of Directive 2009/28/EC.*
- *For electricity and heat it is suggested to use the EU wide fossil fuel comparators for electricity and heat as set out in the report on sustainability requirements for the use of solid and gaseous biomass sources in electricity, heating and cooling[27], if no later estimates are available.*

If a Contracting Party chooses not to use the suggested methodology for estimating the net greenhouse gas emission savings, please describe what other methodology has been used to estimate these savings.

Albania has ratified both the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol with the status of a Non-Annex 1 Party. In the International Climate Change talks Albania has associated with European Union positions and within the restrictions of being a Non Annex I party committed to implement 'National Appropriate Mitigation Actions'-NAMAs. Albania's contribution to the global greenhouse gas emissions is relatively low, estimated at an average of 9,4 million ton/year of CO2 eqv. This is because over 95 percent of Albania's electricity is produced from hydro sources and high energy intensity industries are no longer operating. Transportation (mobile sources) followed by agriculture and waste sector are the main categories that are found to have significant contribution to the total greenhouse gas emissions for Albania.

The contribution of renewable energy sources in the reduction of emissions of greenhouse gases, has been made, so-called avoided CO2 emissions due to the use of renewable energy instead of fossil fuels. The avoided emissions is determined in a manner that the amount of electricity from renewable energy sources, the amount of renewable energy for heating and cooling and renewable energy in the transport, is replaced by fossil fuels and their respective CO2 emissions.

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

Environmental aspects	**2015** *Year n-1*	**2014** *Year n-2*
Total estimated net GHG emission saving from using renewable energy[28]	6153259.92	5205657.36
- Estimated net GHG saving from the use of renewable electricity	4662883.47	3944799.01
- Estimated net GHG saving from the use of renewable energy in heating and cooling	1766667.91	1494600.90
- Estimated net GHG saving from the use of renewable energy in transport	272997.03	230955.47

11. Please report on (<u>for the preceding 2 years</u>) and estimate (<u>for the following years up to 2020</u>) the excess/deficit production of energy from renewable sources compared to the indicative trajectory which could be transferred to/imported from other Contracting Parties, Member States and/or third countries, as well as estimated potential for joint projects until 2020. (*Article 22 (1) l, m) of Directive 2009/28/EC)).*

***Table 7:* Actual and estimated excess and/or deficit (-) production of renewable energy compared to the indicative trajectory which could be transferred to/from other Contracting Parties, Member States and/or third countries in [*Contracting Party*] (ktoe)[29],[30]**

	2012 *Year n-2*	**2013** *Year n-1*	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**

[27] Report available on: http://ec.europa.eu/energy/renewables/transparency_platform/doc/2010_report/com_2010_0011_3_report.pdf .

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

[29] Please use actual figures to report on the excess production in the two years preceding submission of the report, and estimates for the following years up 2020. In each report Contracting Party may correct the data of the previous reports.

[30] When filling in the table, for deficit production please mark the shortage of production using negative numbers (e.g. –x ktoe).

Actual/estimated excess or deficit production (Please distinguish per type of renewable energy and per origin/destination of import/export)	**deficit (-)**	**deficit (-)**	**deficit (-)**	**deficit (-)**	**deficit (-)**				

There is no planned transfer to/from other Contracting Parties, Member States and/or third countries.

11.1. Please provide details of statistical transfers, joint projects and joint support scheme decision rules. If a Contracting Party decided to implement Article 8 and/or 9 of the Ministerial Council Decision it should report on the measures taken to arrange for an independent external audit, in accordance with Article 13 of Ministerial Council Decision.

There is no planned use of statistical transfers or participation in joint projects and joint support scheme decision rules.

12. Please provide information on how the share for biodegradable waste in waste used for producing energy has been estimated, and what steps have been taken to improve and verify such estimates. (*Article 22(1)(n) of Directive 2009/28/EC*).

Please note that in the second progress report (2015 report) Contracting Parties are invited to outline their intentions with regard to the questions addressed in Article 22(3a-c). In addition, Contracting Parties are also welcome to provide any other information considered relevant to the specific situation of developing renewable energy of each Contracting Parties.

Biodegradable waste through its decomposition releases CH_4 and CO_2 gases into the atmosphere. The MSW in Albania contains a high percentage of organic waste and currently there is no recycling or composting in the country to prevent the amounts of organic waste from being disposed in landfills. Organic waste in landfills is the main source of CH_4 emission. CH_4 emission. The most effective abatement measure at this stage would be the introduction of landfill gas recovery infrastructure that could recover up to 70 % of the methane emissions from the landfill. This measure is still not being implemented in Albania.