Albania National Agency of Natural Resources

Albania Progress Reports under
Renewable Energy Directive 2009/28/EC as adapted by the
Ministerial Council Decision 2012/04/MC-EnC

1. Sectoral and overall shares and actual consumption of energy from renewable sources in the preceding 2 years (n-1; n-2 e.g. 2013 and 2012) (Article 22 (1) a of Directive 2009/28/EC).

Table 1: The sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources¹

	2013	2012
	Year n-1	Year n-2
RES-H&C ² (%)	27	30
RES-E ³ (%)	62.2	79
RES-T ⁴ (%)	0	0
Overall RES share ⁵ (%)	36.10	32.3
Of which from	0	0
cooperation mechanism ⁶		
(%)		
Surplus for cooperation	0	0
mechanism ⁷ (%)		

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

	2013 Year n-1	2012 Year n-2
(A) Gross final consumption of RES for heating and cooling	216.52	187.67
(B) Gross final consumption of electricity from RES	592.72	495.33
(C) Gross final consumption of energy from RES in transport	35	29
(D) Gross total RES consumption ⁹	846.63	653.65
(E) Transfer of RES to other Contracting Parties or Member States	0	0
(F) Transfer of RES <u>from</u> other Contracting Parties and 3rd countries	0	0
(G) RES consumption adjusted for target (D)-(E)+(F)	846.63	653.65

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.

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.

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

⁹According 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

		2013 ar n-1		2012 ear n-2
	MW GWh		MW	GWh
Hydro ¹¹ :	1672	6959	1628	4725
non pumped				
<1MW	21	79	16	53.639
1MW-10 MW	171	683	159	463.741
>10MW	1480	6197	1453	4207.620
pumped				
mixed ¹²				
Geothermal				
Solar:				
photovoltaic				
concentrated solar power				
Tide, wave, ocean				
Wind:				
onshore				
offshore				
Biomass ¹³ :				
solid biomass				
biogas				
bioliquids				
TOTAL	1672	6959	1628	4725
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

	2013	2012
	Year n-1	Year n-2
Geothermal (excluding low temperature geothermal heat in heat pump applications)	0	0
Solar	11.92	11.8
Biomass ¹⁶ :		
solid biomass	201.5	206.5
biogas	0	0
bioliquids	0	0
Renewable energy from heat pumps: - of which aerothermal - of which geothermal - of which hydrothermal		
TOTAL	213.42	218.30
Of which DH ¹⁷		
Of which biomass in households ¹⁸		

¹⁰Facilitates 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.

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

¹⁴Direct use and district heat as defined in Article 5.4 of Directive 2009/28/EC.

¹⁵Facilitates comparison with Table 11 of the NREAPs.

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).

¹⁸From 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

	2013	2012
	Year n-1	Year n-2
Bioethanol/ bio-ETBE	0	0
Of which Biofuels ²¹ Article 21.2		
Of which imported ²²		
Biodiesel (ton)	35	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.)	35	29
please specify		
Of which Biofuels ²⁵ Article 21.2		
TOTAL	35	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

Name and reference of the measure	Type of measure*	Expected result**	Targeted group and or activity***	Existing or planned****	Start and end dates of the measure
Feed-in tariffs for electricity produced from renewable sources (FiT)	Financial	Energy generated (ktoe)	Investors	Existing	2015
2. Obligatory and priority connection of producers of electricity from renewable sources to the grid	Regulatory	Energy generated (ktoe)	Investors	Existing	No specific time limit
3. Payment only of the direct costs of connection to the grid	Regulatory	Installed capacity (MW/year)	Investors	Existing	No specific time limit
4. Long-term power purchase agreements with regard to electricity produced from SHPPs	Regulatory	Energy generated (ktoe)	Investors	Existing	15 years
5. Obligatory purchase of electricity produced for HPPs of lower 15 MW installed capacity	Regulatory	Energy generated (ktoe)	Investors	Existing	15 years

 $^{^{19}}$ 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.

²¹Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

²²From the whole amount of bioethanol / bio-ETBE.

 $^{^{23}\}mbox{Biofuels}$ that are included in Article 21(2) of Directive 2009/28/EC.

²⁴From the whole amount of biodiesel.

²⁵Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

6. Penalty payments in the event of curtailment of production due to the network operator's fault (take or pay clauses) 7. Compensation	Financial Regulatory	Energy generated (ktoe) Energy generated	Investors Networks,	Planned	15 years
mechanism for the costs of the Public Supplier and Public Retailers of purchasing electricity from SHPPs at preferential prices	Regulatory	(ktoe)	investors, users	Existing	15 years
8. Licensing procedures for producers of electricity from renewable sources up to 15 MW installed capacity	Regulatory	Energy generated (ktoe)	Producers	Existing	No specific time limit
9. Guarantees of origin for all non- priority RES (all RES expect SHPPs)	Regulatory	Energy generated (ktoe)	Investors	Planned	No specific time limit
10. Obligations for persons placing on the market petroleum-derived liquid fuels for transport purposes to offer fuels for diesel and petrol engines blended with biofuels in the percentage terms laid down in the existing Biofuel Law	Financial	Biofuel production and use (ktoe)	Investors, traders and public administration	Existing	In force from 2009
11. Zero rate of excise duty for pure biodiesel and reduced rate of excise duty for biofuel blends of a specified percentage	Financial	Biofuel production and use (ktoe)	Investors, traders and public administration	Existing	In force from 2013
12. The authority responsible for supervising the quality of pure biofuels	Administrative	Use of biofuels for transport	Distributors and end users	Existing	In force from 2013
13. Energy Efficiency and Renewable Energy Credit Line ('EERECL'). This will be fixed after the approval of Energy Efficiency Fund	Financial	Energy Savings and generated (ktoe)	Investors and (industrial) end users	Planned	2015
14. Energy Efficiency Facility of the European Reconstruction and Development Bank and as well as European Investment Bank	Financial	Energy Savings and generated from RES	Investors	Existing EBRD direct or through banks Existing KfW direct or through banks	2020
15. Adoption of policies and measures for	Administrative	Energy generated from SWHS	Newly built or existing ones, public or private	Planned	2015

increasing the use of solar energy in buildings to install solar water heating system			buildings		
16. Installation of solar water heating systems by taking into account in the certificate for energy performance of the building issued according to the provisions of the Law on energy efficiency.	Administrative	Energy generated from SWHS	Newly built or existing ones, public or private buildings	Planned	2015

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

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)).

The Government of Albania has made a lot of efforts to facilitate the coordination between different administrative bodies responsible for different parts of the permit for a specific project. The establishment of the National Licensing Centre has been a positive step forward in creating a one-stop shop for all licenses and permits required for a project. However, there are still some licenses or permits such as the license issued by the Energy Regulator for carrying out an activity in power sector or the construction permit issued by the local authority that are not integrated in the National Licensing Centre.

The authorizations for construction of RES installations are granted by the Council of Ministers either under the concession law requirements for hydropower plants or under the power sector law requirements for other types of RES power producers or under the biofuel law for producers of biofuel.

Licenses for carrying out the activity of electricity generation from RES are issued by the Energy Regulatory Authority.

The conditions and criteria for granting an authorization for construction of a RES power plant other than hydropower plants are already contemplated in the existing power sector law (no.9072, date 22.05.2003) and the specific regulation approved by the Council of Ministers (decree no. 1701, date 12.12.2008) regulates the procedures in Albania take into account the specificities of the different renewable energy technologies.

^{**}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?

For any RES power generator or biofuel producer an environment permit is required to be issued by the Ministry of Environment, based on an environment impact assessment. The law on the environment protection and the law on environment impact assessment require that the Ministry of Environment and local authorities cooperate during the whole process guaranteeing the public participation in any possible decision-making.

As to construction permit, according to the new law on territorial planning, the local authorities are responsible for issuing such a permit. The new law also stipulates that a close cooperation will be established by the National Territory Council and the National Territorial Planning Agency from one side as central government bodies and the local authorities from the other. Article 4 of the law on territorial planning provides for that the horizontal and vertical coordination between the national and local planning authorities and the stakeholders, which helps ensure that the planning instruments are adopted in compliance with the planning instruments enacted by the other authorities, and that help harmonize the public and private, national and local interests.

Actually, it appears that there are not any unnecessary obstacles or non-proportionate requirements related to authorization, certification and licensing procedures applied to plants and associated transmission and distribution network infrastructure. The establishment of the National Licensing Centre has facilitated guite a lot the process of getting a license, authorization or permit.

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 licenses for generation of electricity from RES, transmission and distribution are granted based on the criteria established by the power sector law and the licensing procedures approved by the ERE, which are published in the official journal and the ERE official website. The interested persons wishing to carry out an activity in power sector may also contact directly the technical staff of ERE responsible for licensing and get information on the procedures, requirements and the documentations required to be provided for getting a license.

According to the Power Sector Law (Article 40, 41 and 42) its amendments and Transmission Code (Chapter 2, 3 and 4), the Transmission System Operator (TSO) is, among the others, responsible for the operation, developments and expansion of the transmission network and for managing any transit of electricity between foreign power systems, which are using Albania Power System. According to Article III.5.1 of the Transmission Code, TSO is required to prepare a Prospective Plan covering a 15-year period for the development of the transmission system taking in consideration the forecasts on electricity demand, peak load, additional electric capacity, transmitting capacity, losses and other important parameters of the Electric Power System.

On the other hand the Distribution Operation Code (Article II.4) requires that the Distribution System Operator (DSO) prepare a Distribution System Development

Plan based on a perspective development study of the electric network for an average time-period of 5 to a maximum of 10 years.

Curtailments of electricity from renewables have been evidenced in cases when the distribution system operator has been obliged for technical reason to load shed one remote area were the small hydropower producer is located and connected. Albanian Government is developing an off-take contract for small HPPs based on "take-or-pay" principle, which will guarantee the small power producers that in case of their curtailment by the network operator without a technical reason they will be compensated for the reduced output.

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)).

As a support scheme for electricity produced from renewable energy sources, *Albania*

is working to chose a system of guaranteed purchase of electricity by "feed-intariffs", according to update the Law on Renewable Energy and adopted by-laws. Besides the guaranteed tariffs, the privileged producers are entitled to 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.

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 suppo	rt schemes year n (e.g. 2014)	Per unit	Total
		support	(M€)*
[(sub) categ	ory of specific technology or fuel]		
Instrument	3		
(provide	Penalty/Buy out option/ Buy out price		
data as	(€/unit)		
relevant)	Average certificate price		
	Tax exemption/refund		
	Investment subsidies (capital grants or		
	loans) (€/unit)		
	Production incentives		
	Feed-in tariff (only for hydro plant)	52.6 (Euro/MWh)	
	Feed-in premiums		
	Tendering		
Total annual	estimated support in the electricity		
sector			
Total annua	al estimated support in the heating		
sector			

Total annual estimated support in the	
transport sector	
***************************************	 1

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

The financial support to RES power producers is provided through two schemes:

Feed-in tariff for small power

producers Tax exemption

Feed-in tariff is applied for small HPPs with capacity up to 15 MW since 2007. Based on the law no.9072, date 22.05.2003 "On power sector" as amended, the Council of Ministers 27, date 19.01.2007 "On approval of rules for evaluation and granting of concessions" as amended, and the Decree no. 338, date 19.03.2008 "On approval of the Albanian Market Model" as amended the ERE adopted two different feed-in tariff methodologies for small HPP with installed capacity up to 15 MW, one for the existing small HPPs that were privatized or given through concession based and one for the new HPPs commissioned after December 2006. The feed-in tariff for the existing SHPPs is calculated and approved every year by the ERE based on a formula using the average retail tariff of tariff customers as a reference. While the feed-in tariff for new commissioned SHPPs is calculated and approved every year by the ERE based on a formula using the average import price of the previous year as a reference.

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.

As to obligation, Article 39 of the law no.9072, dated 22.05.2003 "On Power Sector" stipulates that the independent power producers using no renewable energy sources with an installed capacity higher than 50 MW, are obliged to produce and/or inject to the power system an amount of electricity of not less than 3% of their annual output of the previous year from generation renewable power plants.

It is worthwhile to underline that this provision hasn't been implemented in practice because no any new fossil fuel power generator has been commissioned since the law was adopted.

Both schemes have been in place for many years demonstrating some sort of reliability. With the approval of the seconary law on renewable, the feed-in tariff besides being applied for other RES technologies in addition of hydro power plants, will be more secured and reliable because it will be stipulated by a primary legal act.

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)).

According to the Power Sector Law (Article 37) any connection cost to the network of a power producer including RES power producers shall be borne by the producer. The connection procedures are stipulated by the transmission or distribution codes.

The new law on renewable (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 same Article stipulates that the grid system operators shall set up and make public the standard rules relating to bearing and sharing the costs of technical adaptations, such as grid connections and grid reinforcement, improved operation of the grids and rules on the non-discriminatory implementation of the grid codes, which are necessary in order to integrate new Producer into the interconnected grid. Those rules shall be based on objective, transparent and non-discriminatory criteria taking particular account of all the costs and benefits associated with the connection of Producers to the grid and of the particular circumstances of Producers located in peripheral regions and in regions of low population density. The standard rules relating the bearing and sharing of costs shall be approved by ERE.

Actually the connection of new producers is made according to the specific rules contained in the transmission and distribution code, but not any specific provision exist in the primary legislation for that purpose. In the law on renewable (Article 13/3) it is provided for that upon the request of the producers seeking connection to the Grid Systems, the Grid System Operators will provide them comprehensive and necessary information including:

- Comprehensive and detailed estimate of the costs associated with the physical connection to the grid;
- Reasonable and precise timetable for receiving and processing the request for the connection to the grid;
- Reasonable indicative timetable for any proposed grid connection.
 All such requirements will also be part of the respective codes or other specific regulations approved by ERE.
- 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)).

Actually, only small hydropower plants with installed capacity less than 15 MW are eligible to get a feed-in tariff. However, the feed-in tariff changes every year reflecting the average import price of the previous year and the average retail tariff for tariff

customers. Although, the Albanian Market Model approved by the decree no. 338, date 19.03.2008 provides for that for any SPPs despite their technology connected to the distribution network, the Wholesale Public Supplier will have the obligation to purchase their output with a price approved by the ERE, no feed-in tariffs are approved for other technologies.

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)).

Legislation related to issuing, transfers and cancellation of guarantees of origin remains to be adopted by ERE as the designated body. Currently, there is no compliance with this requirement.

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

Biomass is the most widely used energy resource in Albania – predominantly in the form of firewood combined with many shrubs and agricultural residual plants. The consumption of firewood has been decreased almost three to four times during the period 1990-2002. After this year fuel wood consumption has increased slightly in recent years as a result of the increased prices of other fuels and electricity. Processed wood fuels — wood chips, pellets and briquettes — are not popular due to their higher prices and the underdeveloped supply system.

Residues from fallings and low-quality wood are mainly used. Biomass waste from agriculture is not used to a great extent and is usually destroyed on the spot. The use of biogas is underdeveloped despite the available resources. It should be noted that most of the heating appliances used — stoves and fireplaces — are obsolete and inefficient, with heat losses amounting to 40 - 50%. Heating by high efficiency boilers for local systems is underdeveloped. The estimates of updated Strategy of Energy show a significant potential in the extraction and utilization of biomass in Albania from forestry, agriculture and livestock (for biogas production).

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)	
	2013 Year n-1	2012 Year n-2	2013 Year	2012 Year	201 3	201 2	201 3	201 2	201 3	201 2	201 3	201 2
			n-1	n-2	Year	Year	Year	Year	Year	Year	Year	Year
					n-1	n-2	n-1	n-2	n-1	n-2	n-1	n-2
			electricity									
Biomass	supply for I	heating and	:									
Direct supply	877002.2	901431.3	179.	184.								
of wood biomass from forests	7	0	5	5								

and other									
wooded									
land energy									
generation									
(fellings									
etc.)**									
	40050.05	40050.05	10	4.0					
Indirect	48858.07	48858.07	10	10					
supply of									
wood									
biomass									
(residues									
and co-									
products									
from wood									
industry									
etc.)**									
Energy	0	0	0	0					
crops	0	0	0	U					
(grasses,									
etc.) and									
short rotation									
trees (please									
specify)									
Agricultural by-products /	58629.68	58629.68	12	12					
by-products /									
processed									
residues and									
fishery by-									
products **									
Biomass	0	0	0	0					
from waste									
(municipal,									
industrial									
etc.) **									
	0	0	0	0					
Others	0	0	0	U					
(please									
specify)									
Biomass s	upply for tra	insport:							
Common	0	0							
arable crops									
for biofuels									
(please									
specify main									
types)									
Energy	0	0							
crops	Ĭ	~							
(grasses,etc.									
) and short									
rotation trees									
for biofuels					I				
(please									
specify main									
types)									
Others	0	0							
(please			1						
\•									
specify)							 		

^{*} 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

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

Land use	Surface (ha)		
	2013	2012	
	Year n-1	Year n-2	
Land used for common arable crops (wheat, sugar beet etc.) and oil seeds (rapeseed, sunflower etc.) (Please specify main types)	0	0	

^{**} 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

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 within your Contracting Party in the preceding 2 years 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	2013	2012	
	Year n-1	Year n-2	
Production – Fuel type X (biodiesel) (ktoe)	35	29	
Consumption – Fuel type X (biodiesel)	35	29	
Total production Art.21.2.biofuels	35	29	
Total consumption Art.21.2. biofuels	35	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 in the preceding 2 years. 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)).

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 cooling²⁷, 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.

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

 $^{^{26}}$ Biofuels made from wastes, residues, non-food cellulosic material, and lignocellulosic material.

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	2013 Year n-1	2012 Year n- 2
Total estimated net GHG emission saving from using renewable energy ²⁸	6,788,309	5,240,989
- Estimated net GHG saving from the use of renewable electricity	4,752,450	3,971,573
- Estimated net GHG saving from the use of renewable energy in heating and cooling	1,736,065	1,504,745
- Estimated net GHG saving from the use of renewable energy in transport	280,631	232,523

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

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

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.

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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.

 $^{^{30}}$ When filling in the table, for deficit production please mark the shortage of production using negative numbers (e.g. -x ktoe).

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 first progress report (2014 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 CH₄ and CO₂ 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 CH₄ emission. CH₄ 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.