Republic of Moldova Progress Report under

Renewable Energy Directive 2009/28/EC as adapted by the

Ministerial Council Decision 2012/04/MC-EnC

Article 15 of Ministerial Council Decision 2012/04/MC-EnC requires Contracting Parties to submit a report to the Energy Community Secretariat on progress in the promotion and use of energy from renewable sources covering the points referred to in Article 22 of Directive 2009/28/EC by 31 December 2014, and every two years thereafter.

Contracting Party reports will be important for monitoring overall renewable energy policy developments and Contracting Party compliance with the measures set out in the Directive 2009/28/EC and the National Renewable Energy Action Plans of each Contracting Party. The data included in these reports will also serve to measure the impacts referred to in Article 23 of Directive 2009/28/EC. Consistency in Contracting Party data and reporting would be useful.

The purpose of the template is to help ensure that Contracting Party reports are complete, cover all the requirements laid down in the Article 22 of Directive and are comparable with each other, over time and with National Renewable Energy Action Plans submitted by Contracting Party in 2013. Much of the template draws on the template for the National Renewable Energy Action Plans[1]*.*

When filling in the template, Contracting Party should comply with the definitions, calculation rules and terminology laid down in Directive 2009/28/EC and those of Regulation (EC) No. 1099/2008 of the European Parliament and the Council[2]*.*

Additional information can be provided either in the prescribed structure of the report or by including annexes.

Passages in italics aim to guide Contracting Party in the preparation of their reports. Contracting Parties may delete these passages in the version of the report which they submit to the Energy Community Secretariat.

[1] C(2009)5174

[2] OJ L 304, 14.11.2008, p. 1.

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 sources[3]**

	2014 *Year n-1*	**2013** *Year n-1*	**2012** *Year n-2*
RES-H&C[4] (%)	**-**	**18.58 %**	**16.25 %**
RES-E[5] (%)	**-**	**1.41 %**	**1.02**
RES-T[6] (%)	**-**	**0.0 %**	**0.0 %**
Overall RES share[7] (%)	**-**	**11.74 %**	**10.31 %**
Of which from cooperation mechanism[8] (%)	**0.0 %**	**0.0 %**	**0.0 %**
Surplus for cooperation mechanism[9] (%)	**0.0 %**	**0.0 %**	**0.0 %**

***Table 1a:* Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)[10]**

	2014 *Year n-1*	***2013*** *Year n-1*	***2012*** *Year n-2*
(A) Gross final consumption of RES for heating and cooling	-	268.00	231.00
(B) Gross final consumption of electricity from RES	-	4.11	3.00
(C) Gross final consumption of energy from RES in transport	0.00	0.00	0.00
(D) Gross total RES consumption[11]	-	272.11	234.00
(E) Transfer of RES to other Contracting	0	0	0

[3]Facilitatescomparisonwith Table 3 and Table 4a of theNREAPs.
[4]Share of renewableenergy in heatingandcooling: gross final consumption of energyfromrenewablesources for heatingandcooling (as defined in Articles 5(1)b) and 5(4) of Directive 2009/28/EC dividedbygross final consumption of energy for heatingandcooling. The same methodology as in Table 3 of NREAPsapplies.
[5]Share of renewableenergy in electricity: gross final consumption of electricityfromrenewablesources for electricity (as defined in Articles 5(1)a) and 5(3) of Directive 2009/28/ECdividedby total gross final consumption of electricity. The same methodology as in Table 3 of NREAPsapplies.
[6]Share of renewableenergy in transport: final energyfromrenewablesourcesconsumed in transport (cf. Article 5(1)c) and 5(5)of Directive 2009/28/EC dividedbytheconsumption in transport of 1) petrol; 2) diesel; 3) biofuelsused in roadandrail transport and 4) electricity in land transport (as reflected in row 3 of Table 1). The same methodology as in Table 3 of NREAPsapplies.
[7]Share of renewableenergy in gross final energyconsumption. The same methodology as in Table 3 of NREAPsapplies.
[8] In percentagepoint of overall RES share.
[9] In percentagepoint of overall RES share.
[10]Facilitatescomparisonwith Table 4a of theNREAPs
[11]Accordingto Art.5(1)of Directive 2009/28/EC gas, electricityandhydrogenfromrenewableenergysourcesshallonlybeconsideredonce. No doublecountingisallowed.

Parties or Member States			
(F) Transfer of RES from other Contracting Parties and 3rd countries	0	0	0
(G) RES consumption adjusted for target (D)-(E)+(F)	0	0	0

***Table 1.b*: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in the Republic of Moldova to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity[12]**

	2014 *Year n-1*		**2013** *Year n-1*		**2012** *Year n-2*	
	MW	***GWh***	***MW***	***GWh***	***MW***	***GWh***
Hydro[13]:	16	58.29	16	44.65	16	33.54
non pumped	-	-	-	-	-	-
<1MW	-	-	-	-	-	-
1MW–10 MW	-	-	-	-	-	-
>10MW	16	58.29	16	44.65	16	33.54
pumped	-	-	-	-	-	-
mixed[14]	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-
Solar:			0.11	0.101	0	0
photovoltaic	1.5	0.38	0.11	0.101	0	0
concentrated solar power	0	0	0	0	0	0
Tide, wave, ocean	0	0	0	0	0	0
Wind:	1.1	1.49	1.1	0.94	0	0
onshore	1.1	1.49	1.1	0.94	0	0
offshore	-	-	-	-	-	-
Biomass[15]:			2.8	2.15	0.40	0.31
solid biomass	-	-	-	-	-	-
biogas	2.8	13.85	2.8	2.15	0.40	0.31
bioliquids	-	-	-	-	-	-
TOTAL	21,4	74.01	20.01	47.84	16.4	33.85
of which in CHP	2.8	13.85	2.8	2.15	0.40	0.31

[12] Facilitatescomparisonwith Table 10a of theNREAPs.
[13] Normalised in accordancewith Directive2009/28/EC andEurostatmethodology.
[14] In accordancewithnewEurostatmethodology.
[15] Take intoaccountonlythosecomplyingwithapplicablesustainabilitycriteria, cf. Article 5(1) of Directive 2009/28/EC lastsubparagraph.

***Table 1c: Total actual contribution (final energy consumption[16]) from each renewable energy technology* in the Republic of Moldova *to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)*[17]**

	2014 *Year n-1*	**2013** *Year n-1*	**2012** *Year n-2*
Geothermal (excluding low temperature geothermal heat in heat pump applications)	-	-	-
Solar	-	-	-
Biomass[18]:	-	268	225
solid biomass	-	268	225
biogas	-	-	-
bioliquids	-	-	-
Renewable energy from heat pumps: *- of which aerothermal* *- of which geothermal* *- of which hydrothermal*	-	-	-
TOTAL	-	268	225
Of which DH[19]	-	-	-
Of which biomass in households[20]	-	251	210

***Table 1d:* Total actual contribution from each renewable energy technology in in the Republic of Moldova to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)[21],[22]**

	2014 *Year n-1*	**2013** *Year n-1*	**2012** *Year n-2*
Bioethanol/ bio-ETBE	0	0	0
Of which Biofuels[23] Article 21.2	0	0	0
Of which imported[24]	0	0	0
Biodiesel	0	0	0
Of which Biofuels[25] Article 21.2	0	0	0
Of which imported[26]	0	0	0
Hydrogen from renewables	0	0	0
Renewable electricity	0	0	0
Of which road transport	0	0	0
Of which non-road transport	0	0	0
Others (as biogas, vegetable oils, etc.) – please specify	0	0	0
Of which Biofuels[27] Article 21.2	0	0	0
TOTAL	0	0	0

[16] Direct useand district heat as defined in Article 5.4 of Directive 2009/28/EC.
[17] Facilitatescomparisonwith Table 11 of theNREAPs.
[18] Take intoaccountonlythosecomplyingwithapplicablesustainabilitycriteria, cf. Article 5(1) lastsubparagraph of Directive 2009/28/EC.
[19] District heatingand / or coolingfrom total renewableheatingandcoolingconsumption (RES- DH).
[20] Fromthe total renewableheatingandcoolingconsumption.
[21] For biofuelstakeintoaccountonlythosecompliantwiththesustainabilitycriteria, cf. Article 5(1) lastsubparagraph.
[22] Facilitatescomparisonwith Table 12 of theNREAPs.
[23] Biofuelsthat are included in Article 21(2) of Directive 2009/28/EC.
[24] Fromthewholeamount of bioethanol / bio-ETBE.
[25] Biofuelsthat are included in Article 21(2) of Directive 2009/28/EC.
[26] Fromthewholeamount of biodiesel.
[27] Biofuelsthat are included in Article 21(2) of Directive 2009/28/EC.

2. Measures taken <u>in the preceding 2 years (2013-2014)</u> and/or planned (2015) 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*
Laws, strategies, plans and programs					
Energy Strategy of the Republic of Moldova till 2030 (GD no.102 of 05.02.2013)	Regulatory	Creation of framework and stable conditions for RES development	Energy stakeholders	Existing	2013-2020
National Action Plan for Energy Efficiency 2013-2015 (GD no.113 of 07.02.2013)	Regulatory	Planning of activities related to the energy efficiency and promotion of RES development	Investors Companies End users Energy efficiency Agency (EEA)	Existing	2013-2015
Law on heating and promotion of cogeneration (Law no.92 of 29.05.2014)	Regulatory	Creation of framework for RES development – heating and cooling	RES producers – heating and cooling TSO DSO Heating suppliers	Existing	2014
Law on Energy Performance of Buildings (EPB) (Law no.128 of 11.07.2014)	Regulatory	Framework for improving the energy performance of buildings, including promoting decentralized energy supply (electricity, heating and cooling) on RES (particularly based on solar energy generation)	Ministry of Regional Development and Constructions EEA End users Public administration Buildings owners	Existing	2014
Draft law on promotion of	Regulatory	Creation of framework for	RES producers	Planned	2015

renewable sources of energy transposing Directive 2009/28/EC		RES development to achieve the national target	TSO DSO Electricity/ Heating/fuel suppliers		
Draft law on electricity	Regulatory	Creation of framework for RES promotion and prioritary dispatch	RES producers TSO DSO Electricity suppliers	Planned	2015
Secondary legislation in RES field	Regulatory	Stimulating the use of energy produced from RES in the gross internal consumption Framework for tendering procedures	RES producers TSO DSO Electricity/ Heating/fuel suppliers	Planned	2015
Secondary legislation in EPB field	Regulatory	Framework for improving the energy performance of buildings, including promoting decentralized energy supply (electricity, heating and cooling) on RES (particularly based on solar energy generation)	Ministry of Regional Development and Constructions EEA End users Public administration Buildings owners	Planned	2015
Monitoring system for the implementation of NREAP 2013-2020 (annual/monthly reporting by EEA)	Technical	Further actions for implementation of NREAP 2013-2020	EEA	Planned	2015-2020
Local public authorities – signatories of Convention of Mayors	Regulatory	Development of SEAP-s to promote RES at local level	Local public authorities Investors End users	Existent and planned	2013-2020
RES development and support schemes					
Policy and	Regulatory	Ensuring the	RES	Planned	2015-2020

support schemes for promoting use of RES in electricity production	Financial	increase of share of annual generation of power from RES	producers TSO DSO Electricity suppliers		
Policy and support schemes for promoting use of RES in transport	Regulatory Financial	Ensuring the increase of biofuel share in the total used fuel	Biofuel producers, importers and distributors	Planned	2015-2020
Policy and support schemes for promoting use of RES in heating-cooling	Regulatory Financial	Ensuring the increase of share of heating-cooling from RES	RES producers Heating suppliers	Planned	2015-2020
Information dissemination					
One-stop shop to support investors in renewable energy	Soft	Dissemination of information	RES producers Biofuels producers Local public authorities RES investors End users	Existing and planned	2013-2020
Development and implementation of a communication Plan for EEA	Soft	Efficient tools for information dissemination for target groups Message adjustment for each target group Budget planning for suggested measures	RES producers Biofuels producers Local public authorities RES investors End users	Existing and planned	2013-2020
Permanent updating of EEA web-site	Soft	Dissemination of information	RES producers Biofuels producers Local public authorities RES investors End users	Existing and planned	2013-2020
Organization	Soft	Dissemination	RES	Existing and	2013-2020

of events/conferences		of information for public and target groups	producers Biofuels producers Local public authorities RES investors End users	planned	
Public awareness campaign on use of RES organized by EEA	Soft	Information of target groups	RES producers Biofuels producers Local public authorities RES investors End users	Existing and planned	2013-2020
Training courses for local public authorities, regional development agencies and energy managers	Soft	Institutional capacities development	Local public authorities Regional development agencies Energy managers	Existing and planned	2014-2020
Studies and research					
Development of a study regarding the wind and solar potential	Research	Wind Atlas Solar Atlas	Power engineering institute/ASM Technical University of Moldova EEA Local and foreign consultants	Planned	2015
Development of a pre-feasibility study for RES projects – electricity for heating and cooling in country regions	Research	Potential identification in the regions	Power engineering institute/ASM Technical University of Moldova EEA Local and foreign consultants	Planned	2015

* 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?

Country-specific <u>support</u> system	Only renewable energy plants with an installed capacity of minimum 10 kW are eligible for feed-in tariffs. Furthermore, the electricity has to be intended for commercialisation on the electricity market (Item 4 of the Methodology approved by Decision No. 321/2009). The feed-in tariffs are calculated individually for every single renewable energy plant based on a methodology defined by the Moldavian National Energy Regulatory Authority (Item 5 of the Methodology approved by Decision No. 321/2009). The feed-in tariffs are determined and approved annually, depending on the type and capacity of the power plant, the amount of electricity produced and the expected amount of electricity to be delivered (Art. 24 par. 1 Law No. 160/2009).	
Promoted technologies	**General information**	Only renewable energy plants with an installed capacity of minimum 10 kW are eligible for feed-in tariffs. Furthermore, the electricity has to be intended for commercialisation on the electricity market (Item 4 of the Methodology approved by Decision No. 321/2009). All renewable energy technologies are eligible (Art. 5 par. 3 lit. e) in conjunction with Art. 3 Law No. 160/2007).
	Wind energy	Eligible. The law does not distinguish between on- and offshore wind power.
	Solar energy	Eligible. The law does not distinguish between PV and CSP installations.
	Geothermal energy	Eligible.
	Biogas	Eligible. Biogas, gas produced from digestion of waste and gas produced from digestion of sewage sludge are eligible (Art. 5 par. 3 lit. e) in conjunction with Art. 3 Law No. 160/2007).
	Hydro-power	Eligible. Traditional hydro-power and ocean energy are both eligible (Art. 5 par. 3 lit. e) in conjunction with Art. 3 Law No. 160/2007).
	Biomass	Eligible.
Amount	**General information**	The feed-in tariffs are calculated individually for every single renewable energy plant based on a methodology defined by the Moldavian National Energy Regulatory Authority (Item 6 of the Methodology approved by Decision No. 321/2009). The feed-in tariffs are determined and approved annually, depending on the type and capacity of the power plant, the amount of electricity produced and the expected amount of electricity to be delivered. When setting the feed-in tariffs, prices on the international market shall be taken into account (Art. 24 par. 1 and 2 Law No. 160/2009). The calculation method is defined by Item 6 and 8 of the Methodology approved by Decision No. 321/2009 and is based on the expenditures for operating the plant and the plant's profitability. The same calculation method applies for all technologies. The feed-in tariffs can be adjusted annually. The approved feed-in tariffs can be accessed on the ANRE website: http://www.anre.md/ro/content/tarife-la-energia-

		electric%C4%83-produs%C4%83-din-surse-regenerabile-de-energie.

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))*.

Administrative procedures to remove regulatory and non-regulatory barriers to the development of renewable energy are specified in the new draft law on RES according to EU acquis, that is under the final approval in the Parliament.

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))*.

According to article 18 of the Law on electricity no.124 of 23.12.2009, licensees must not to admit discrimination of the power market participants when granting access to the network and give priority to purchase and dispatch of electricity produced by power plants from renewable energy sources.

In the same time, according to article 35 of the Law on electricity, when dispatching electricity, transmission network and system operator must give priority to power plants that generate electricity from renewable energy sources.

According to article 40 of the Law on electricity, transmission network and system operator and distribution networks operators shall ensure access to transmission and distribution networks for all system users (including producers of electricity from renewable energy sources) and third parties, without discrimination. Transmission network and system operator and distribution networks operators may refuse access to their networks only if they experience a lack of capacity. The refusal shall be motivated and justified in an adequate manner.

Transmission network and system operator is obliged to inform the Agency about all and any cases when power market participant or applicant were refused to get access to the electric transmission networks, as well as about congestions, proposing methods to solve thereof.

The general procedure, conditions and deadlines regarding connection to the networks are established in article 41 of the Law on electricity.

All costs related to the connection of the producer's power plant to the network (connection installation) are fully supported by the producer.

The network extension and grid reinforcement should be performed where necessary by the network operators, according to a regulation, approved by ANRE (article 42 of the Law on electricity). The procedures for network extension, as well as other requirements regarding network planning are established in ANRE Regulation regarding the extension of distribution networks (approved by ANRE resolution no. 493 from 23.11.2011), Technical norms of the transmission network (approved by ANRE resolution no. 266 from 20.11.2007), Technical norms of the distribution networks (approved by ANRE resolution no. 267 from 20.11.2007).

According to provisions from chapter IV of Technical Norms of the transmission network, transmission network and system operator is responsible for the extension and development of the

electric transmission network. For this purpose, transmission network and system operator must develop perspective plans for electricity transmission network, taking into consideration the actual and future demand and production of electricity. According to this plan, transmission network and system operator must ensure the development (extension, capacity consolidation) of the transmission network, in order to be able to transport all the electricity that was imported, exported or locally produced.

All expenses related to network extension and grid reinforcement, done in accordance with the investment plans, approved by the Agency, shall be fully supported by the transmission network and system operator. Respectively, expenses related to transmission network extension and grid reinforcement will be taken into account when establishing tariffs for transmission/distribution of electricity, if these expenses were made in compliance with license conditions, tariff methodologies and other regulations developed and approved by ANRE (article 42 of the Law on electricity).

The procedure for the development of the distribution network is described in Technical Norms of the distribution networks and is similar with the network development procedure for transmission networks. The development plan for the distribution network is developed by the distribution network operator.

All expenses related to distribution network extension and grid reinforcement, done in accordance with the investment plans, approved by the Agency, shall be fully supported by the distribution system operator. These expenses will be taken into account when establishing tariffs for distribution of electricity if these expenses were made in compliance with license conditions, tariff methodologies and other regulations developed and approved by ANRE (article 42 of the Law on electricity).

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))*.

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

RES support schemes year n (e.g. 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	-	-
	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

Currently, the support scheme is based on mandatory purchase by local electricity suppliers of electricity generated from RES, which was delivered into the transmission/distribution network, at tariffs approved by ANRE in accordance with the ANRE methodology (Methodology for the calculation of tariffs for electricity and biofuels produced from renewable energy sources, approved by ANRE resolution no. 321 from 22.01.2009).

RES-E generators with an installed capacity of more than 10 kW, must calculate the RES-E tariffs according to the Methodology mentioned above, and submit their calculations and relevant documentation to the Agency for approval. Approved tariffs for RES-E are calculated for a payback period up to 15 years. When approving tariffs for RES-E, prices for similar products on international markets shall be taken into consideration.
Rate of return taken into consideration for the calculation of tariffs is higher than the similar rate applied for traditional energy:

- 1.5 times higher for the first 5 years
- 1.3 times higher for the next 5 years
- 1.1 for the last 5 years.

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 existing Renewable energy Law (no. 160 from 12.07.2007), all suppliers are obliged to buy the electricity produced from RES, at tariffs approved by ANRE. Costs related to RES-E, acquired by suppliers at regulated tariffs are included in the regulated tariffs for electricity, paid by final customers.

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))*.

The approved feed-in tariffs (support scheme) and their structure can be accessed on the ANRE website:

http://www.anre.md/ro/content/tarife-la-energia-electric%C4%83-produs%C4%83-din-surse-regenerabile-de-energie

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))*.

The existing Renewable Energy Law (160-XVI/12.07.2007) provides the primary legal framework for the GoO system. According to the Renewable energy law, electricity produced from RES is commercialized on a contractual basis at rates (tariffs) approved by ANRE only by producers with

an installed capacity of at least 10 kW and on the basis of the guarantee of origin, issued by the network operator. The procedures related to GoO issuance and use, as well as the structure of a GoO shall be established in a Regulation, approved by ANRE.

Currently, the GoOs are issued and used in accordance with the Regulation on guarantees of origin for electricity produced from renewable energy sources, approved by ANRE in 2009 (ANRE Resolution No 330 of 03.04.2009).

According to the provisions of the Regulation, mentioned above, the guarantees of origin for the electricity produced from renewable energy sources are issued by the network operator following the request from the RES-E producer. The network operator will issue the guarantee of origin only after an expertise is conducted on-site and not later than 30 calendar days from the date when the request was filed.

Guarantees of origin are issued each month by the transmission or distribution network operator, for producers with an installed capacity of at least 10 kW. A GoO covers all the electricity produced from RES in the respective month. ANRE keeps records and supervises the issuance and usage of guarantees of origin.

A guarantee of origin contains the following information:

- Information about the network operator and producer;
- The amount of generated electricity;
- The voltage level of the network to which the generation facility is connected to;
- Number of generating units and installed capacity of each unit;
- Type of RES used (wind, photovoltaic, biogas, landfill gas, etc.)
- The period in which the RES-E was produced.

Information regarding the amount of GoOs issued by network operators and corresponding quantity of electricity from RES is published by ANRE in its yearly activity reports.

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))*.

***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 n-1*	**2012** *Year n-2*	**2013** *Year n-1*	**2012** *Year n-2*	**2013** *Year n-1*	**2012** *Year n-2*	**2013** *Year n-1*	**2012** *Year n-2*	**2013** *Year n-1*	**2012** *Year n-2*
Biomass supply for heating and electricity:												
Direct supply of wood biomass from forests and other wooded land energy generation	-	-	239	231	-	-	-	-	-	-	-	-

(fellings etc.)**												
Indirect supply of wood biomass (residues and co-products from wood industry etc.)**	-	-	-	-	-	-	-	-	-	-	-	-
Energy crops (grasses, etc.) and short rotation trees *(please specify)*	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural by-products / processed residues and fishery by-products **	-	-	-	-	-	-	-	-	-	-	-	-
Biomass from waste (municipal, industrial etc.) **	-	-	-	-	-	-	-	-	-	-	-	-
Others (please specify)	-	-	-	-	-	-	-	-	-	-	-	-
Biomass supply for transport:												
Common arable crops for biofuels *(please specify main types)*	-	-	-	-	-	-	-	-	-	-	-	-
Energy crops (grasses,etc.) and short rotation trees for biofuels *(please specify main types)*	-	-	-	-	-	-	-	-	-	-	-	-
Others (please specify)	-	-	-	-	-	-	-	-	-	-	-	-

* Amount of raw material if possible in **m3for biomass from forestry** and in **tonnesfor 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*)**		
	2014 *Year n-1*	**2013** *Year n-1*	**2012** *Year n-2*
1. Land used for common arable crops (wheat, sugar beet etc.) and oil seeds (rapeseed, sunflower etc.) *(*Please specify main types)	-	-	-
2. Land used for short rotation trees (willows, poplars). (Please specify main types)	6 (willows)	2 (willows)	-
3. Land used for other energy crops such as grasses (reed			

canary grass, switch grass, Miscanthus), sorghum.(Please specify main types)	-	-	-

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))*.

Not available information

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[28]	**2014** *Year n-1*	**2013** *Year n-1*	**2012** *Year n-2*
Production – Fuel type X (Please specify)	-	-	-
Consumption – Fuel type X (Please specify)	-	-	-
Total production Art.21.2.biofuels	-	-	-
Total consumption Art.21.2. biofuels	-	-	-
% share of 21.2. fuels from total RES-T	-	-	-

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).***

Not available information.

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))*.

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

Environmental aspects	**2014** *Year n-1*	**2013** *Year n-1*	**2012** *Year n-2*
Total estimated net GHG emission saving from using renewable energy[29]	-	-	-
- Estimated net GHG saving from the use of renewable electricity	-	-	-
- Estimated net GHG saving from the use of renewable energy in heating and cooling	-	-	-

[28] Biofuels made fromwastes, residues, non-foodcellulosic material, andlignocellulosic material.

[29] The contribution of gas, electricityandhydrogenfromrenewableenergysourcesshouldbereporteddepending on the final use (electricity, heatingandcooling or transport) andonlybecountedoncetowardsthe total estimated net GHG savings.

- Estimated net GHG saving from the use of renewable energy in transport	-	-	-

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)).*

According to the last published Energy Balance for 2013 year, the share of solid biofuels and agricultural residues used as energy and fuels was revised. Due to this exercise, RES share in final energy consumption grew up from around 4% to 11,7%. Thus, the deficit , according to annual objectives established by NREAP provisions is the following:

	Goal	Achieved	Difference
RES H&C	21,93	18.58 %	-3,35
RES – E	2,05	1.41 %	-0,64
RES - T	0,00	0.0 %	0

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 the Republic of Moldova (ktoe)[30],[31]**

	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)	-	-	1,35	1,51	22,21	26,48	52,68	58,1	64,8
RES H&C	- 4,59	-3,35	-	-	-	-	-	-	-
RES – E	- 1,05	-0,64	-	-	-	-	-	-	-
RES – T	0	0	-	-	-	-	-	-	-

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.

Not available information

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)*.
Not available information.

[30]Pleaseuse actual figuresto report on theexcessproduction in thetwoyearsprecedingsubmission of the report, andestimates for thefollowingyearsup 2020. In each report Contracting Party maycorrectthe data of thepreviousreports.
[31]Whenfilling in the table, for deficit productionpleasemarktheshortage of productionusing negative numbers (e.g. –x ktoe).