

Report

on gap analysis of the current legislation in Republic of Moldova and development of a roadmap outlining EU4Climate support to Republic of Moldova in alignment with EU acquis included in Bilateral Agreements on Climate Action and/or Energy Community Treaty (Lot 2)

Part III: Development of a Roadmap for EU4Climate support outlining priority actions for the R. of Moldova

Produced by *Ion Comendant* as part of the contract assignment with Energy Community Secretariat

Project number: 00115652

Contract: 66-2019_EU4Climate_ECS_LOT2_06-11-2019

March 2020

The contents of this report are the sole responsibility of the author and can in no way be taken to reflect the views of the Energy Community Secretariat



Table of Contents

LIS	Γ OF ABBREVIATIONS	3
1.	INTRODUCTION	4
2.	EXECUTIVE SUMMARY	5
3.	IDENTIFYING THE PRIORITY ACTIONS FOR EU4CLIMATE SUPPORT	7
	ACTION 1. ESTABLISHING A LEGAL OPERATING SCHEME FOR EENHOUSE GAS EMISSION ALLOWANCE TRADING (TRANSPOSITION OF ECTIVE NO 2003/87/EC)	8
4. FE 4 20 4 GR 4	1. RECOMMENDATION 1. PERFORMING A STUDY WITH A GOAL TO DETERMINE THE ASIBILITY OF DIRECTIVE NO 2003/87/EC TRANSPOSITION INTO NATIONAL LEGISLATION . 1	0
5.	ACTION 2. ADOPTING LEGISLATION ON F-GASES (TRANSPOSITION OF	
5. TR 5 5 SP 5	3. RECOMMENDATION 3. AMENDING GD ON TRAINING AND CERTIFICATION OF ECIALISTS IN THE FIELD OF TECHNOLOGIES CONTAINING F-GASES	4 4 5
6. 020	ACTION 3. AMENDING LEGISLATION ON SUBSTANCES THAT DEPLETE THE	
6. 6.	1. RECOMMENDATION 1. AMENDING THE NATIONAL LAW 852/2002	7
7 .	ACTION 4. IMPLEMENTING THE RECOMMENDATION 2018/01/MC-ENC2	0
7. 7.5 7.5	2. RECOMMENDATION 2. SUBMITTING FINAL NECP TO THE ENC SECRETARIAT2	1
0	CONCLUSIONS	2



List of abbreviations

AA Association Agreement

CO₂ Carbon dioxide

EaP Eastern Partnership countries

EC European Commission
EnC Energy Community

EnCT Energy Community Treaty ETS Emission Trading System

EU European Union

F-gases Fluorinated gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur

hexafluoride (SF6) and nitrogen trifluoride (NF3)

GD Government Decision

GD1277 GD no. 1277 of 26.12.2018 regarding the establishment and operation of the

National System for monitoring and reporting greenhouse gas emissions and

other information relevant to climate change

GD483 GD no. 483 of 18.10.2019 on the approval of the Regulation regarding the

training and certification of specialists in the field of cooling technology

containing hydrochlorofluorocarbons and fluorinated greenhouse gases

GHG Green House Gases

GWP Global Warming Potential HCFC hydrochlorofluorocarbons

HFCs hydrofluorocarbons

L218 Contravention Code of the R. Moldova no. 218 of. 24.10.2008

L277 Law no. 277 of 29.11.2018 on chemicals

Law no. 852 of 14.02.2002 on the approval the Regulation on the commercial

regime and the regulation of the use of halogenated hydrocarbons that destroy the

ozone layer

MAC Mobile Air Conditioning

MARDE Ministry of Agriculture, Regional Development and Environment

MC Ministerial Council

MEI Ministry of Economy and Infrastructure MRV Monitoring, Reporting and Verification

N/A Not Applicable

NDC Nationally determined contribution NECP National Energy and Climate Plan ODS Ozone Depleting Substances

PA Paris Agreement

R Recommendation

RAC Refrigeration, Air-conditioning

RM Republic of Moldova

TIMES The Integrated MARKAL-EFOM System. MARKAL (MARKet ALlocation) -

EFOM (Energy Flow Optimization Model)

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change



1. Introduction

The Republic of Moldova is a relatively new state. The country declared its independence on 27 August 1991 as a result of the USSR disintegration. Its progressive development is seen through advanced regional cooperation, including in overcoming climate change challenges. In this respect two very important documents have been signed during the last ten years: EU-RM AA (2014) and The Accession to the Energy Community Treaty (2010).

EU-RM AA contains specific commitments to align with the EU Directives and Regulations such as Emission Allowance Trading, Ozone-depleting substances (ODS), Fluorinated greenhouse gases (F-gases), Fuel Quality Directive. Additionally, it contains commitments related to climate planning such as adaptation and low-emissions development planning.

The climate dimension of the Energy Community is focused on supporting Contracting Parties in developing climate policy and legislation and integrating energy and climate planning.

Moldova has limitations in institutional, technical and financial capacities to meet its commitments under the EU cooperation agreements and EnC Treaty, and to proactively promote national climate action. In order to address these gaps, within the EU4Climate project, gap analysis of the current legislation in Republic of Moldova and development of a roadmap outlining EU4Climate support to Republic of Moldova in alignment with EU acquis included in Bilateral Agreements on Climate Action and/or Energy Community was initiated in the autumn of 2019. Up to the middle of February 2020 two reports have been developed: "Review of relevant climate acquis (EU and Energy Community) applicable to R. of Moldova" and "Detailed gap analysis of existing national legislative framework vis-a-vis R. of Moldova's commitments"

This report, the third one in the frame of the same project, is oriented to develop a Roadmap for EU4Climate support outlining priority actions on climate component for the R. of Moldova. The bases for carrying out this part of the project serve the outcomes obtained in the previous two reports. According to them:

- Only one of four EU acquis prescribed in the EU-RM AA is transposed into national legislation. The Directive 98/70/EC (the quality of petrol and diesel fuels) is fully integrated into GD no. 1116 of 22.08.2002 on the approval of the Regulation regarding the storage and wholesale trade, through automated system, of the identified petroleum products. Another three EU acquis are partially transposed into national legislation for which deadline for transposition have been already expired (in 2018-2019), except for Emission Allowance Trading (by 2022);
- Only one of two EnC recommendations 2. on climate is transposed into national legislation: the Recommendation 2016/02/MC-EnC, - by approving GD1277 of 26.12.2018 regarding the establishment and operation of the National System for monitoring and reporting greenhouse gas emissions and other information relevant to climate change. The second Recommendation 2018/01/MC-EnC under is implementation by now.

Despite the delay in transposition of the EU *acquis* on climate, R. of Moldova undertook impressive actions to align with the Paris Agreement. At the beginning of 2020 it has finalized and submitted to the UNFCCC the second updated National Determined Contribution. In its updated NDC (NDC2), the Republic of Moldova intends to achieve more ambitious targets than in its NDC1. The country's new economy-wide unconditional

Energy Community

target is to reduce its greenhouse gas emissions by 70 per cent below its 1990 level in 2030, instead of 64-67 per cent as committed in NDC1.

As to the new economy-wide conditional target, instead of 78 per cent as committed in NDC1, the reduction commitment expressed above could be increased in NDC2 up to 88 per cent below 1990 level, provided a global agreement addressing important topics including low-cost financial resources, technology transfer, and technical cooperation, accessible to all at a scale commensurate to the challenge of global climate change, is insured. According to Government of R. Moldova's action plan for 2020-2023¹, Low Emission Development Strategy up to 2030 and Action Plan for its implementation is planned be updated respectively in 2020, to reach the targets of new updated NDC2. By 2022 a new LEDS for the period up to 2050 is planned to be approved as well, according to the same GD¹.

In this respect, a full transposition of EU acquis on climate exposed in EU-RM AA will favor the achievements the NDC2 objectives in a more favorable legal climate conditions.

2. Executive Summary

In the report hereinafter the attention is payed developing the roadmap outlining EU4Climate support to Republic of Moldova in the transposing of EU acquis on Emission Allowance **Trading** (Directive No 2003/87/EC), Ozone-depleting substances (Regulation (EC) No 1005/2009), Fluorinated greenhouse gases (Regulation (EC) No 842/2006, replaced by Regulation (EU) No 517/2014) and Recommendation 2018/01/MC-EnC which, by now, partially implemented. Other acquis, i.e. Directive 98/70/EC (the quality of petrol and diesel fuels) and the Recommendation 2016/02/MC-EnC (MRV) have been transposed already into national legislation, as it was proven in the Report no 2 of this project.

In order to build up the roadmap, a set of recommendations are identified per each acquis, referred to as Action. Each recommendation is described in details in the text, the deadline for implementation being established in the respective Gantt chart, the summarized one being presented below.

The transposition of Emission Allowance Trading would require first of all carrying out a study with the goal to determine the feasibility of the Directive implementation, as the benefit of GHG emission reduction in the R. Moldova may be much lower than the total ETS operational costs, i.e. implementation of ETS in the country may be not feasible. This study is planned be carried out in the frame of Energy Community Study on Carbon Pricing launched in early 2020 by EnC Secretariat.

A Law on F-gases is required be developed and approved in the R. Moldova to transpose Regulation (EU) no. 517/2014 which replaced Regulation (EC) no. 842/2006.

The national Law 852/2002 on commercial regime and the regulation of the use of halogenated hydrocarbons that destroy the ozone layer shall be respectively in order to be consistent with Regulation (EC) No 1005/2009. From 26 provisions of this EC Regulation "Transposed" into national legislation are only 5 provisions (19%),transposed" – 10 (38%), "Not transposed" – 9 (35%), "No transposition required" -2(8%).

As to Recommendation 2018/01/MC-EnC", it is still in the process of implementation.

¹ GD No. 636 of 11.12.2019 on the approval of the Government Action Plan for the years 2020-2023.

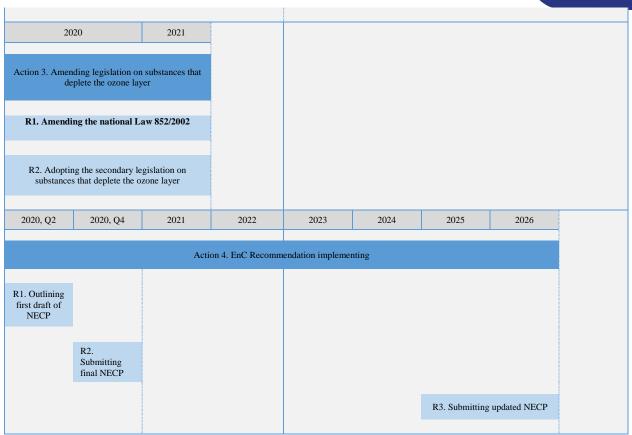
https://www.legis.md/cautare/getResults?doc_id=119405&lang=r



Roadmap outlining EU4Climate support to Republic of Moldova in alignment with EU acquis included in Bilateral Agreements on Climate Action and Energy Community Treaty

acquis included	d in Bilatera	l Agreements	on Climate	Action and	Energy Con	nmunity Tre	aty	
SHORT	SHORT TERM			MEDIUM TERM				
2020	2021	2022	2023	2024	2025	2026	2027	
Action 1. Establishing a legal ope trading (transpo	rating scheme for sition of Directive	greenhouse gas emis No 2003/87/EC)	ssion allowance					
R1. Performing a study on determining the feasibility of Directive transposition								
	R2. Adopti	ng the Law on trans	position the					
		R3. Adopting GE the scheme for allowance	GHG emission					
	R4. Adopting O	GD on the monitorin	g and reporting vant EU acquis					
	R2(1). Amending GD 373/2018 on National Registry of Emissions and Transfer of Pollutants (not applicable if ETS implementation is feasible)							
2020	2021	2022						
Action 2. Adopting	legislation on F-ga	ses						
R1. F-gases reporting threshold determination								
R2. Adopting F-gases Law + amer entrepreneurial activ								
		R3. Amending GD on training and certification						
		R4. Adopting penalties applicable to infringements of F-gases Law						





3. Identifying the priority actions for EU4Climate support

As gap analysis showed there are three EU climate change acquis in the frame of EU-RM AA and one EnC Recommendation in the frame of EnCT which are not yet transposed into national legislation: Directive No 2003/87/EC (Emission Allowance Trading) – deadline for transposition: 2022; EU Regulation 517/2014 (F-gases) – deadline for transposition: 2018; Regulation (Ozone-depleting (EC) No 1005/2009 substances) – deadline for transposition: 2019; Recommendation 2018/01/MC-EnC deadline for implementation: 2020. If we judge by the transposition deadline, all these legal acts require to undertake not delayed actions to transpose them into national legislation, even Directive No 2003/87/EC which requires at least six years to be put in

practice, i.e. its deadline of 2022 cannot be respected. In other words, all this acquis shall be treated as priority actions. However, due to the fact that: a) R. of Moldova is under way of ratification of the Kigali Amendment to the Montreal Protocol - the implementation complexity of which imposes to have a legal act at the level of law; b) The quantity of Fgases imported is increasing from year to year the Global Warming Potential (GWP) of which is very high; c) In its NDC2 the R. of Moldova intends to achieve more ambitious targets than in its NDC1 and d) it foresees strong actions to reduce GHG emissions, therefore the transposition of EU Regulation 517/2014 becomes a key priority action for the country and it shall be finalized by adopting F-gases Law in a short time period. The preparation of F-gases draft law is foreseen for 2020 and may be approved one year later, while it is planned officially – in 2023, as it is stipulated in the Government Action Plan for the years 2020-2023¹.

Energy Community

Taking into consideration that the EU Emissions Trading System (EU ETS) is considered a cornerstone of the European Union's policy to combat climate change, the transposition of Directive No 2003/87/EC should be considered as a second priority action to be transposed into national legislation. In the same category we may place amending legislation on substances that deplete the ozone layer (Regulation (EC) No 1005/2009).

As to the EnC Recommendation 2018/01/MC-EnC (NECP), it is considered as legal pieces which shall be implemented in a short time period, i.e. during the year 2020.

Based on the information presented above, the appropriate Roadmap for each action is developed below. They outline if the EU4Climate support is available at an appropriate level to start providing assistance for transposing all the acquis in 2020. If the resources are limited, transposition of Directive No 2003/87/EC and Regulation (EC) No 1005/2009 into national legislation may leverage of TA from different projects.

4. Action 1. Establishing a legal operating scheme for greenhouse gas emission allowance trading (transposition of Directive No 2003/87/EC)

Directive No 2003/87/EC establishes a scheme for greenhouse gas emission allowance trading within the Community in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner. The document institutes the fundament for launching the EU Emissions Trading System (EU ETS) which is considered a cornerstone of the European Union's policy to combat

² Task: Assess Moldova's capacity to implement the EU emissions trading system and develop a study in this regard. FEASIBILITY STUDY ON INTRODUCING THE EMISSION TRADING

climate change. It started in

2005 and works on the "cap and trade" principle. This means there is a limit, on the total amount of certain greenhouse gases, that can be emitted by factories, power plants and other installations in the system. Within this cap, companies receive for free emission allowances which they can sell to or buy from one another as needed. At the end of each year each company must surrender enough allowances to cover all its emissions, otherwise heavy fines are imposed.

The requirement to transpose Directive No 2003/87/EC into national legislation come from EU vision on development of an international carbon market. If the R. of Moldova succeeds to develop a compatible domestic "cap and trade" ETS, it could potentially link it to EU ETS, but not before accomplish specific criteria required. Linking up to the EU-ETS might offer environmental and economic benefits²:

- The small scale of the Moldova market impedes trading and price formation, while a larger market for emission allowances offers more cost-effective reduction potential;
- A larger and well-established market creates more liquidity and price stability;
- Moldovan companies could operate in the same emissions market as their business partners in the EU. This will definitively make the Moldova industry and energy sector more attractive to foreign investors;
- With access to the EU market, companies would have more flexibility in the way they meet their CO₂ targets;
- Integration with the EU-ETS will boost the improvement of the energy efficiency of the Moldova installations as well as the

SYSTEM IN MOLDOVA. https://www.undp.org/content/dam/moldova/docs/Publications/ETS_Feasibility_Study_UNDP.pdf

Energy Community

modernization of the production plants.

Furthermore, the option of linking to the EU-ETS will have other consequences:

- Before connecting ETS installations to the EU-ETS, GHG-emissions from installations these shall determined. At present, five installations are identified according to Order of MARDE no. 11 of 25.01.2018 regarding the approval of the List of installations falling within the scope of Directive 2003/87 / EC. However, there are other installations which may correspond to requirement of Annex 1³ of Directive. For example, Lafarge Cement Plant which produces more than 500 tonnes of cement / clinker per day;
- The EU is very supportive to countries which aim to be linked to the EU-ETS;
 Substantial funding and technical assistance will probably become available to the Government of Moldova and, possibly, to the ETS sector in Moldova;
- Although introducing a Moldova ETS and linking it to the EU-ETS will generate substantial cost to the industrial operators, the scheme will surely enhance the attractiveness of the Moldovan industry to foreign investors and partners;
- Transparency and certainty of environmental restrictions is much appreciated by foreign investors. As long as the environmental standards are in line with the practices in the EU, these standards will not create significant barrier for investors;

• Linking of Moldova to the EU-ETS shall be an instrument in the framework of Moldova's agenda for its future accession to the EU.

transposition of Directive The No 2003/87/EC into national legislation should be considered as the first step in the creation of an ETS which will be compatible to link further to EU-ETS. In order to be part of EU-ETS at least another seven EU Directives and Regulations should be implemented, including regulating MRV. those Registration of **GHG** emissions, Benchmarking, Auctioning etc.

The time span granted for the implementation of Directive No 2003/87/EC in the R. Moldova started in 2014 and should end in 2022. The gap analysis of the work done for transposition of this Directive showed that:

- 1. From 16 provisions of 2003/87/EC Directive only two of them (Annex I and Annex II) were transposed into national legislation. By MARDE Order no. 11 of 25.01.2018 the List of installations (total six, belonged to three enterprises: Termoelectrica S.A., S.A. Bucuria and S.A. Macon) falling within the scope of Directive 2003/87 / EC was laid down. However, there are still doubts on the effective number of country installations eligible for an ETS market.
- 2. EU evaluation Report on EU-RM AA implementation progress made in 2016⁴ stated: "The conducted study⁵ has identified that the implementation of the EU emissions trading scheme in Moldova will only be possible when the date of Moldova's accession to the EU will be determined. Until then, Moldova has to establish and introduce requirements for authorizing, monitoring,

³ Annex 1 of Directive No 2003/87/EC: Categories of activities referred to in Articles 2(1), 3, 4, 14(1), 28 AND 30 (The threshold referred to production capacities or outputs).

 $< https://mfa.gov.md/sites/default/files/annex_6_to_progress_report.pdf>$

⁵ Task: Assess Moldova's capacity to implement the EU emissions trading system and develop a study in this regard. FEASIBILITY STUDY ON INTRODUCING THE EMISSION TRADING SYSTEM IN MOLDOVA. https://www.undp.org/content/dam/moldova/docs/Publications/ETS_Feasibility_Study_UNDP.pdf



reporting and verifying the greenhouse gas emissions." No any further actions have been undertaken to amend respectively EU-RM AA;

3. The time remaining up to 2022 is believed to be too short for the Directive may to be transposed into national legislation on time.

In this respect, the following Recommendations are foreseen to transpose this Directive:

- 1. To carry out a study with a goal to determine the feasibility of Directive implementation, i.e. to promote reductions of greenhouse emissions in a cost-effective and economically efficient manner based on GHG emission allowance trading. This analysis is planned be carried out in the frame of Energy Community Study on Carbon Pricing launched early 2020 by EnC Secretariat. If the study demonstrates the feasibility of Directive transposition into national legislation, then:
- 2. To prepare and approve the Law on transposition the Directive 2003/87/EC
- 3. To prepare and approve a GD on establishing the scheme for greenhouse gas emission allowance trading in the R. of Moldova
- 4. To prepare and approve GD on transposition of the Regulation (EU) No 601/2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC, other acquis identified by above mentioned study
- 5. If the study mentioned in p. 1 will confirm that the implementation of the EU emissions trading scheme in the R. Moldova is not feasible at this stage, GD 373/2018 may be considered as GHG emission

reporting system for the same operators, after being amended respectively.

Below, these recommendations are analyzed in more detail, with their time of implementation, shown also in the Gantt chart for Action 1 (Chart 1).

4.1. Recommendation 1.

Performing a study with a goal to determine the feasibility of Directive No 2003/87/EC transposition into national legislation

EU evaluation Report on EU-RM AA implementation progress made in 2016 Error! Bookmark not defined. stated: "The conducted study⁵ has identified that the implementation of the EU emissions trading scheme in Moldova will only be possible when the date of Moldova's accession to the EU will be determined. Until then, Moldova has to establish and introduce requirements for authorizing, monitoring, reporting and verifying the greenhouse gas emissions."

No any further actions have been undertaken to amend respectively EU-RM AA. However, the mentioned study doesn't expressly state ETS is not feasible in the R. of Moldova.

According to the study /5/ the total ETS operational cost will be between 250.000 - 670.000 Euro per year. The expected cost of emission reduction as of Directive implementation could be much lower than ETS operational cost, i.e. the reduction of greenhouse gas emissions activity may result in a not cost-effective and economically efficient manner (breach of Art. 1 of Directive).

A new study commissioned by the Energy Community Secretariat will look at the implementation possibilities of carbon pricing schemes in the Contracting Parties.



The results of this study should be published by September 2020. The results of this study should be taken into account when considering the transposition of the Directive.

In this respect, if the need arises, a separate national study has to: a) update the List of installations falling within the scope of Directive 2003/87/EC and approved by MARDE Order no. 11 of 25.01.2018; b) evaluate the benchmark of GHG emissions allowance per each installations depicted; c) evaluate the costs for operation of ETS in the R. of Moldova; d) determine the full list of EU acquis subject for transposing in the country to start ETS market and, e) take into consideration other relevant aspects and determine the feasibility of Directive implementation in the R. of Moldova.

the study demonstrates that implementation of ETS in the R. of Moldova is not feasible, then an analysis should be done on opportunity to apply the GD373 (on the national Register of emissions and pollutant transfer) to national installations falling within the scope of Directive 2003/87/EC, instead of adopting new legislation which would transpose Regulation (EU) No 601/2012 (on the monitoring and reporting of greenhouse gas emissions). The obligation to follow Regulation (EU) No 601/2012, as it is required in /Error! **Bookmark** defined./, without having an operating ETS, may introduce an inequity vis-à-vis EU operators; by doing, so national operators will not have the possibility to trade GHG emission allowances on carbon market, which could lead to an unjustified negative impact on their economic activity.

4.2. Recommendation 2. Adopting the Law on transposition Directive 2003/87 / EC

This recommendation is valid if the EnC study in the subchapter 3.1 above demonstrates that ETS is feasible in the R. Moldova.

Among other legal aspects, the Law on transposition of the Directive 2003/87/EC has to include, as mandatory, the following Articles and Annexes from the Directive, as it is specified in the Annex XII of EU - RM AA:

- Annexes I and II (establishment of a system for identifying relevant installations and for identifying greenhouse gases);
- Articles 9, 14 17, 19 and 21 (establishment of monitoring, reporting, verification and enforcement systems and public consultations procedures) and others articles to whom the articles mentioned make reference, including:
 - The scheme for greenhouse gas emission allowance trading in the R. of Moldova;
 - Establishing of emissions trading governance in the R. of Moldova and designation of appropriate competent authority/authorities;
 - The necessity of developing the national plan stating the total quantity of allowances that it intends to allocate for activities specified in Annex I of Directive and how it proposes to allocate them; the plan shall be published;
 - Establishment of emissions trading registry, inventory of GHG from installations, monitoring of GHG emissions from installations, etc.



4.3. Recommendation 3.

Adopting GD on establishing the scheme for greenhouse gas emission allowance trading in the R. of Moldova

This recommendation is valid if the EnC study in the subchapter 3.1 above demonstrates the ETS is feasible in the R. Moldova.

The appropriate GD should regulate at least but not last the following activities:

- The procedure and periodicity of updating the List of installations falling within the scope of Directive 2003/87 / EC;
- The procedures and periodicity of developing the national plan stating the total quantity of allowances that it intends to allocate for activities specified in Annex I of Directive and how it proposes to allocate them;
- Maintaining of a registry in order to ensure the accurate accounting of the issue, holding, transfer and cancellation of allowances, etc.

The need of GD is dictated by the fact that the implementation of such a complex ETS mechanism, as national experience demonstrated on implementation of other complex activities, would require frequent changes in the regulatory framework which can be done more easily in a GD document than in the Law.

4.4. Recommendation 4.
Adopting GD on the monitoring and reporting of GHG emissions pursuant to Directive 2003/87/EC

This recommendation is valid if the EnC study in the subchapter 3.1 above demonstrates the ETS is feasible in the R. Moldova.

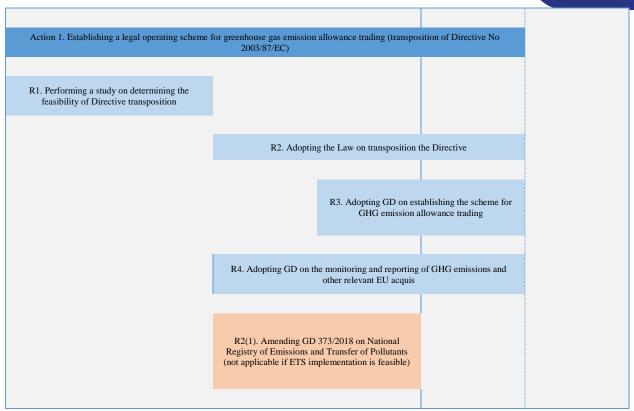
This GD shall transpose Regulation (EU) No 601/2012 in the national legislation. It lays down rules for the monitoring and reporting of greenhouse gas emissions and activity data pursuant to Directive 2003/87/EC in the trading periods. The Regulation shall apply to the monitoring and reporting of greenhouse gas emissions specified in relation to the activities listed in Annex I to Directive 2003/87/EC and activity data from stationary installations, from aviation activities and to the monitoring and reporting of tonne-kilometre data from aviation activities.

Along with the Regulation (EU) No 601/2012, other acquis needed to put in operation an ETS in the country should be identified (subject of the study mentioned in the Recommendation 1 above) and transposed into national legislation.

The Roadmap outlining EU4Climate support to Republic of Moldova in alignment with Directive 2003/87/EC is presented in the Chart 1 below.

Chart 1. Roadmap outlining EU4Climate support to Republic of Moldova in alignment with Directive No 2003/87/EC								
SHORT	MEDIUM TERM							
2020	2021	2022	2023	2024				





5. Action 2. Adopting legislation on F-gases (transposition of Regulation (EC) No 842/2006)

The objective of this Regulation is to contain, prevent and thereby reduce emissions of the fluorinated greenhouse gases covered by the Kyoto Protocol. Specifically, EU-RM AA requires:

- adoption of national legislation and designation of competent authority/authorities;
- establishment/adaptation of national training and certification requirements for relevant personnel and companies (Article 5);
- establishment of reporting systems for acquiring emission data from the relevant sectors (Article 6);

- establishment of enforcement system (Article 13)

The Regulation (EC) no. 842/2006 is not more in force. It is replaced by Regulation (EU) no. 517/2014 in which Article 10 relates to Article 5 in the Regulation (EC) no. 842/2006, Article 19 to Article 6 and Article 25 to Article 13 respectively. To be mentioned, EU-RM AA doesn't contain any amendments referred to this replacement. However, the draft of the operational conclusions of the 4th meeting of the EU-RM Sub-Committee on Energy, Transport, Environment, Climate Action and Civil Protection (cluster no.3), stipulates that when approximating legislation to the EU climate acquis set out in the Association Agreement, RM should take into account the latest version of the EU legal acts. Taking this into consideration, the roadmap below is designed for transposition of Regulation (EU) no. 517/2014 which replaced Regulation (EC) no. 842/2006.

Energy Community

The gap analysis carried out as second deliverable of the project showed that, from 6 provisions of Regulation (EC) No 842/2006, not one is transposed into national legislation, except of Art. 5(2, establishment of national own training and certification requirements) and Art. 5(4, the companies' personnel hold certificates), which partially transposed in GD483, the last transposition of Regulation (EU) no. 517/2014. At the same time, the established deadline for the Regulation's implementation (September 2018), expired 1.5 years ago and new terms have not been identified yet. Based on this status, the following recommendations are proposed:

- 1. Before proceeding to transpose Art. 6(1) and Art. 6(4),) an evaluation/study should be done to identify if national producers, importers and exporters operate or could operate more than one tonne of fluorinated greenhouse gases per annum. Art. 6(1) refers to companies which operate more than one tonne of fluorinated greenhouse gases per annum.
- 2. The law of F-gases should be developed and approved.
- 3. Updating GD483 of 18.10.2019 on the approval of the Regulation regarding the training and certification of specialists in the field of cooling technology containing hydrochlorofluorocarbons and fluorinated greenhouse gases.
- 4. Contravention Code of the RM no. 218 of. 24.10.2008 should be amended respectively to reflect penalties applicable to infringements of the provisions of the Regulation (EU) no. 517/2014.

5.1. Recommendation 1Fgases reporting threshold determination (Art. 19 transposition into national legislation)

Art. 19 of Regulation (EU) no. 517/2014 (or Art. 6 of Regulation (EC) No 842/2006)

stipulates that every year thereafter, each producer, importer and exporter that produced, imported or exported F-gases during the preceding calendar year shall report to the Commission the appropriate data. Reporting requirements refer to the following activities:

- each producer, importer and exporter that produced, imported or exported 1 metric tonne or 100 t CO₂ eq or more of F-gases or other F-gases (covers bulk gases only);
- each company that destroyed 1 metric tonne or 1 000 t CO₂ equivalent or more of F-gases or other F-gases;
- each company that used 1 000 t CO₂ eq or more of F-gases as feedstock;
- each company that placed 500 t CO₂ eq or more of F-gases or other F-gases contained in imported products or equipment on the market.

Preliminary analysis showed that the companies involved in F-gases activities on country territory operate the quantities of F-gases, which are much smaller than mentioned above. However, to clarify this aspect with a sufficient degree of certainty, a respective evaluation is required to be carried out in this regard. Depending on the outcome received, it will be decided on F-gases reporting thresholds transposed into national legislation.

5.2. Recommendation 2. Adopting F-gases Law

There are many national factors that require the regulation of F-gases activities by law⁶:

- 1. The F-gases activities (import, placing on the market, use, etc.) in the R. of Moldova are not regulated, except the ones referred to training and certification of personnel involved in activities provided for by EC Regulation.
- 2. R. of Moldova is under way of ratifying the Kigali Amendment to



- the Montreal Protocol, the draft of which is set up. Implementation complexity of this document imposes to have a legal act at the level of law.
- 3. The EU-RM AA requires that a Competent Authority for F-gases is legally designated.
- 4. While the EU-RM AA does not require R. of Moldova to transpose the entire EU legislative framework on F-gases, Moldova can decide to establish further provisions than Articles 10, 19 and 25 of the EU Regulation 517/2014 (Art. 5, 6 and 13 of EU Regulation 842/2006 respectively).
- 5. The quantity of F-gases imported with very high global warming potential is increasing from year to year.
- 6. In its updated NDC (NDC2), the Republic of Moldova intends to achieve more ambitious targets than in its NDC1 and that foreseen strong actions to reduce GHG emissions.

Among other aspects, F-gases law should (Art. 1 of EU Regulation 517/2014):

- a) establish rules on containment, use, recovery and destruction of fluorinated greenhouse gases, and on related ancillary measures;
- b) impose conditions on the placing on the market of specific products and equipment that contain, or whose functioning relies upon, fluorinated greenhouse gases;
- c) impose conditions on specific uses of fluorinated greenhouse gases; and
- d) establish quantitative limits for the placing on the market of hydrofluorocarbons.

The adoption of F-gases Law should be done together with amending Annex 1 of the Law No. 160 / 2011 of 22.07.2011 on regulation by authorization the entrepreneur activity (authorization of F-gases activity).

5.3. Recommendation 3. Amending GD on training and certification of specialists in the field of technologies containing F-gases

Unlike Regulation (EC) No 842/2006 (subject of transposition into national legislation according to EU-RM AA), Regulation (EU) no. 517/2014, which replaces the first one, doesn't require to ensure the training and certification of companies involved in activities provided for by the EC Regulation. It means that no need exist to introduce modification into national GD 483, which addresses the training and certification of personnel only, i.e. natural persons as Art. 10 of Regulation (EU) no. 517/2014 prescribes.

The national regulation applies to stationary RAC, stationary heat pumps, refrigeration units of refrigerated trucks and trailers and MAC. Stationary fire protection equipment, electric switchgear and stationary equipment that contains solvents are not addressed.

It is hence necessary that national F-gas legislation covers not only the refrigeration, air conditioning and heat pump sector but also refers to stationary fire protection equipment, electric switchgear and stationary equipment that contains solvents.

Since some of these sectors might be inexistent or rather small in the R. of Moldova, the options for covering related certification requirements should investigated closely in order to avoid administrative burden and disproportional high cost. There would be the possibility to cover certification requirements for these sectors through recognition of certificates from EU Member States. In this way, technicians from Moldova could participate in trainings in EU Member States and their certificates would afterwards be recognized in Moldova. Furthermore, also certified



technicians from EU Member States would be able to perform work in Moldova⁶.

5.4. Recommendation 4. Adopting penalties applicable to infringements of the provisions of the EU Regulation

The transposition of Art. 13 of the EU Regulation 842/2006 on penalties and its updating contained in Art. 25 of EU Regulation 517/2014 is mandatory according to EU-RM AA. R. of Moldova shall lay down the rules on penalties applicable to infringements of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.

In national legislation, the Contravention Code No 218/2008, Art. 148 states the penalties for violation of the regime and the use of ODS. The provision does not relate to F-gases.

Such provisions can be introduced after adopting national legislation on F-gases.

The Roadmap outlining EU4Climate support to Republic of Moldova in alignment with EU Regulation 517/2014 is presented in the Chart 2 below.

6. Action 3. Amending legislation on substances that deplete the ozone layer

In the list of legal acts of EU-RM AA subject of transposition into national legislation is Regulation (EC) No 1005/2009 which lays down rules on the production, import, export, placing on the market, use, recovery, recycling, reclamation and destruction of substances that deplete the ozone layer, on the reporting of information related to those substances. The transposition required refers only to specific items, as following:

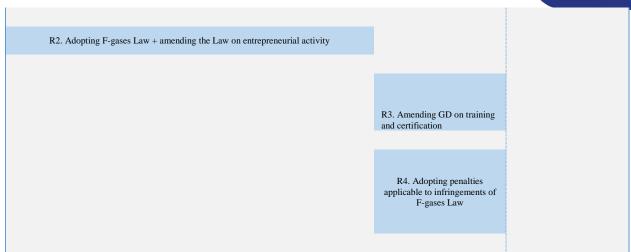
- adoption of national legislation and designation of competent authority/ies⁷
- establishment of a ban on the production of controlled substances, except for specific uses and, until 2019, of hydrochlorofluorocarbons (HCFC) (Article 4)
- establishment of a ban on the placing on the market and use of controlled substances, except for reclaimed HCFC which might be used as refrigerant until 2015 (Articles 5 and 11)
- definition of the conditions for the production, placing on the market and use of controlled substances for exempted uses (as feedstock, process agents, for essential laboratory and

Chart 2. Roadmap outlining EU4Climate	vith EU Regulation		
2020	2021	2022	2023
Action 2. Adopting			
R1. F-gases reporting threshold determination			

⁶ EU4Climate Project. Barbara Gschrey. Deliverable 5 - Final Report: Designing a fully-fledged integrated F-gas database system and harmonized reporting system. 28.01.2020. 78 pages.

⁷ Environment Agency of MARDE is designated as competent authority to monitor controlled substances in the RM. http://www.mediu.gov.md/





analytical uses, critical uses of halons) and individual derogations, including emergency uses of methyl bromide (Chapter III)

- establishment of a licensing system for the import and export of controlled substances for exempted uses (Chapter IV) and reporting obligations for Member States and undertakings (Articles 26 and 27)
- establishment of obligations to recover, recycle, reclaim and destruct used controlled substances (Article 22)
- establishment of procedures for monitoring and inspecting leakages of controlled substances (Article 23)

These provisions of Regulation shall be implemented by 2019.

Gap analysis made showed that, by this time, from 26 provisions of Regulation "Transposed" into national legislation are 5 (19%) of them, "Partially transposed" – 10 (38%), "Not transposed" – 9 (35%), "No transposition required" – 2 (8%). Main gaps are presented below:

1. When reclaimed or recycled hydrochlorofluorocarbons are used for maintenance or servicing, the refrigeration, air-conditioning and heat pump equipment concerned are not required to be labelled

- respectively in the national legislation.
- 2. Existing national legislation do not have any provisions on reporting controlled substances to Commission.
- 3. National legislation neither regulate the terms of equipment's controlled substances leakages verification nor recording of controlled substances added and the quantity recovered.
- 4. National legislation doesn't regulate controlled substances: used as feedstock and as process agents; or inadvertently produced in the course of the manufacture of other chemicals.

In order to overcome these gaps, Law 852/2002 should be amended respectively. More details on these recommendations are presented below.

6.1. Recommendation 1. Amending the national Law 852/2002

In order to fully transpose the Regulation (EC) No 1005/2009 into national legislation the following actions are recommended be undertaken:

1. Chapter III shall be completed with a provision which transposes Art. 5(2) of EC Regulation, i.e. controlled



substances shall not be placed on the market in non-refillable containers, except for laboratory and analytical uses.

2. P.4 of L852 shall:

- a) contain provisions that prohibit production of substances that destroy the ozone layer, i.e. transposition of Art. 4 of EC Regulation. Or, remove "production" from paragraph 5 of Chapter III if the production is not the case for the RM.
- b) be completed with a provision transposing Art. 5(3) of EC Regulation, i.e. controlled substances shall not be placed on the market in non-refillable containers, except for laboratory and analytical uses.
- c) regulate reclaimed hydrochlorofluorocarbons (Art. 11(3) of EC Regulation). They may be placed on the market and used for the maintenance or servicing of existing equipment, provided that the container is labelled with an indication that the substance has been reclaimed and with information on the reclamation facility.
- d) reflect the content of Art. 11(5) of EC Regulation, indicating that hydrochlorofluorocarbons may be placed on the market for repackaging and subsequent export, the Commission being informed respectively.
- e) be completed with a provision transposing Art. 11(6) of EC Regulation, which regulate labeling of reclaimed and recycled hydrochlorofluorocarbons used for maintenance or servicing of appropriate equipment. This provision may be part of

transposition into national legislation of the Regulation (EC) no 1272/2008 on classification, labelling and packaging of substances and mixtures.

3. L852 shall contain:

- a) definition of the conditions for the production, placing on the market and use of controlled substances for exempted uses (as feedstock, process agents, for essential laboratory and analytical uses, critical uses of halons) and individual derogations, including emergency uses of methyl bromide. P. 4(4)/L852 refer to derogation in agriculture sector only and only emergency uses of methyl bromide;
- b) provisions (probably in the Chapter III "Emissions control") which shall prevent and minimize any leakages and emissions of controlled substances, as Art. 23(1), Art. 23(2) and Art. 23(5,6) of EC Regulation requires.
- c) a provision (probably in the Chapter III "Emissions control") that oblige undertakings to record the quantity and type of controlled substances added and the quantity recovered during maintenance, servicing and final disposal of the equipment or system referred to; other information as Art. 23(3) of EC Regulation require. controlled substances used as feedstock and as process agents; or inadvertently produced in the course of the manufacture of other chemicals should be expressly defined.
- 4. P. 13/L852 shall contain reference to authorization for the import and



export of controlled substances for exempted uses as well.

5. L852 should:

- a) contain a provision regulating the system of collecting and reporting electronically to the EC the information stipulated in Art. 26(1, reporting on: methyl bromide, halons for critical uses, cases of illegal trade) and Art. 27(1-7, on production, import, export, destroying, feedstock or process of controlled substances) of EC Regulation. In this regard L852 should:
 - be completed with a list of new substances (Annex II of EC Regulation);
 - stipulate the way used the Reports to Commission be performed and sent according to EC Regulation requirements. The main plausible means in this respect would be to use "Register of chemicals placed on the market of the Republic of Moldova - SIA "REPC", which would reflect the information stipulated in the Art. 26(1) and Art. 27(1-7) as well. Currently **MARDE** elaborating the technical concept of this Automated Information Systems.
- b) present in a separate annex the technologies for destruction of controlled substances listed in Annex VII of EC Regulation. P. 8/L852 stipulates that the destruction of controlled substances is carried out with

special equipment, not listing them.

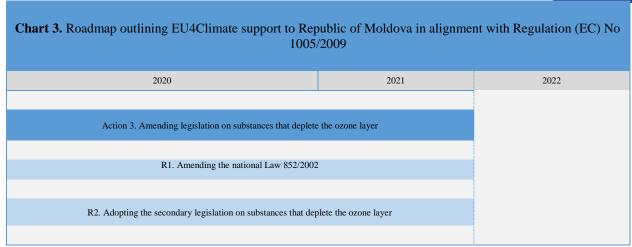
6. National legislation doesn't regulate the activity of recycling or reclamation of controlled substances (Art. 22(1) and Art. 22(4) of EC Regulation), only destruction. However, if this is a deliberated decision, than no changes should be done.

6.2. Recommendation 2. Adopting the secondary legislation on substances that deplete the ozone layer

The implementation of L852 after it is amended respectively (with the provisions of Regulation (EC) No 1005/2009) requires to have put in effect appropriate secondary legislation, including on collecting and reporting electronically to the EC the appropriate information; monitoring leakages and emissions of controlled substances, etc. In order to fulfill the provision of EC Regulation an Automated Information System on substances that deplete the ozone layer is needed on country level. It could encompass F-gases as well. MARDE is elaborating the technical concept of this system and a fully-fledged integrated F-gas database system and harmonized reporting system is designed already⁶. In addition, the Regulation on the way of keeping the Register of chemicals placed on the market is planned be approved by the Government, according to L277, Art. 30(5).

The Roadmap outlining EU4Climate support to Republic of Moldova is in alignment with Regulation (EC) No 1005/2009 is presented in the Chart 3 below.





7. Action 4. Implementing the Recommendation 2018/01/MC-EnC

The following two pieces of EC legislation shall apply to the R. of Moldova:

- 1. Recommendation 2016/02/MC-EnC on preparing for the implementation of Regulation (EU) 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions;
- 2. Recommendation 2018/01/MC-EnC on preparing for the development of integrated national energy and climate plans by the Contracting Parties of the Energy Community, including Policy Guidelines (PG 03/2018) on the development of NECPs.

Gap analysis of Recommendation 2016/02/MC-EnC showed that the country made more than this document prescribes. Instead of preparing the legal institutional preconditions for the implementation of the core elements of Regulation (EU) No 525/2013, the last document was fully integrated into national legislation, by approving GD no 1277 of 26.12.2018 regarding the establishment and operation of the National System for monitoring and reporting greenhouse gas emissions and other information relevant to climate change. There are only some exceptions. GD1277 does not regulate the use of revenues from auctioning allowances pursuant to Article 3d(1) and (2) and Article 10(1) of Directive 2003/87/EC.

As to Recommendation 2018/01/MC-EnC, its implementation has been foreseen for the years 2018-2020. Unfortunately, the indicative timeline for developing national energy and climate plans prescribed by "Policy Guidelines by the Energy Community Secretariat on the development of National Energy and Climate Plans under Recommendation 2018/01/MC-EnC⁸" has been only partially followed by RM so far:

- The draft of Working Group list of experts on the preparation of country NECP is outlined;
- Three energy sector development scenarios up to 2050 have been formulated and now, using TIMES model and technical assistance of EU in the frame of the project "Support to the Modernization of the Energy Sector in the Republic of Moldova (STARS)", experts are in the process of calculation. The following scenarios are formulated up to 2050: 1. BAU; 2. Sustainable development

⁸ PG 03/2018 / June 2018



scenario; 3. De-carbonization scenario.

In order to implement Recommendation 2018/01/MC-EnC the following recommendations, prescribed by EnC Policy Guidelines⁸ mentioned above, are foreseen:

- 1. Preparation of the first draft of NECP based on policy and reference scenarios developed in the first quarter of 2020;
- 2. Submit final national energy and climate plans to EnC Secretariat by October 2020;
- 3. Updating approved NECP in the time period up to 2030.

7.1. Recommendation 1. Outlining first draft of NECP

As it is mentioned above, in the frame of the project "Support to the Modernization of the Energy Sector in the Republic of Moldova (STARS)", using "TIMES" model, a team of international and

local experts has formulated and are calculating three scenarios of country energy sector development:

- Reference scenario:
- Sustainable scenario (policy scenario);
- De-carbonization scenario.

The consultation of scenarios' input data with stakeholders started in November 2018. Feedback obtained from interested parties up to February 2020 served as valuable information for updating the final input data for scenarios calculation. It is expected that a multi-iterative procedure will be used onward in order to get scenarios corresponded to both national targets set out in energy and climate sectors up to 2030 and to EU trends on GHG emissions phase-down out up to 2050. The objectives stipulated into R. of Moldova's

Second National
Determined Contribution are the key elements of this preparation process, which establishes a new economy-wide unconditional target: to reduce its greenhouse gas emissions by 70 per cent below its 1990 level in 2030, instead of 64-67 per cent as committed in NDC1.

Based on scenarios identified, an appropriate first draft of NECP may be outlined based on the template provided in the Annex I of Regulation (EU) 2018/1999 and further consulted with stakeholders.

7.2. Recommendation 2. Submitting final NECP to the EnC Secretariat

The first draft of NECP should be submitted to EnC Secretariat by the first quarter of 2020. After review, consultation made, comments and recommendations received, the draft of NECP is updated and final version of NECP is presented to EnC Secretariat by the end of October 2020. EnC Secretariat support in finalizing national plans is foreseen.

7.3. Recommendation 3. Submitting updated NECP in the time period after 2025

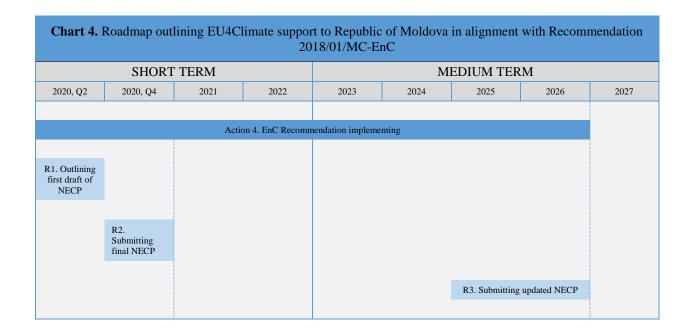
The first country NDC was submitted in 2015 and had targets relates to 2030. The decision 1/CP.21 requests those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2030 to communicate or update by 2020 these contributions and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Paris Agreement. Taking into consideration that RM's NDC2 targets relates to 2030, while in five years an updated NDC should be developed, country NECP should be updated once appropriately as well between 2021 and 2030 and, final



draft of NECP being submitted to EnC Secretariat by 2026.

The Roadmap outlining EU4Climate support to Republic of Moldova in alignment with

Recommendation 2018/01/MC-EnC is presented in the Chart 4 below.



8. Conclusions

The Roadmap in this report is compiled for transposition of three EU acquis and one EnC Recommendation into national legislation, specifically Emission Allowance Trading (Directive No 2003/87/EC), Ozone-depleting substances (Regulation (EC) No 1005/2009), Fluorinated greenhouse gases (Regulation (EC) No 842/2006, replaced by Regulation (EU) No 517/2014) and Recommendation 2018/01/MC-EnC (NECP). Depending on the complexity of this documents and country capacity to transpose them into national legislation the steps and terms for transposition varies from one legal act to another.

Before transposing Emission Allowance Trading Directive No 2003/87/EC an EnC study will be carried out in order to determine the ETS implementation feasibility in the Energy Community and in the R. Moldova. If

the study is in favor to put in effect ETS, than it is recommended to: Adopt the Law on transposition the Directive; Adopt GD on establishing the scheme for GHG emission allowance trading, Adopt GD on the monitoring and reporting of GHG emissions, and other relevant EU acquis. Around three years are needed to put in practice these recommendations, i.e. a time period lasting from 2020 and ending in 2023.

If the study proves otherwise, GD 373/2018 on National Registry of Emissions and Transfer of Pollutants is recommended be amended respectively to monitor GHG emissions of installations which fall under the scope of the Directive.

In order to transpose legislation on ozone-depleting substances, regulated by EC Regulation No 1005/2009, two recommendations are foreseen: Amending respectively the national Law 852/2002 and Adopting the secondary legislation on

substances that deplete the ozone layer, including on collecting and reporting electronically to the EC the appropriate information; monitoring leakages and emissions of controlled substances, keeping the Register of chemicals placed on the market, etc. The transposition of Regulation into national legislation is foreseen during the years 2020-2021.

The key element of transposing Fluorinated greenhouse gases Regulation (EU) No 517/2014 are: F-gases reporting threshold determination; Adopting F-gases Law together with amending the Law on entrepreneurial activity; Amending GD on training and certification; Adopting penalties applicable to infringements of F-gases Law.

The need to determine the threshold for F-gases reporting is dictated by several factors. The EU Regulation is applied to the companies which operate more than one tonne of fluorinated greenhouse gases per annum.

The preliminary estimations showed that no such operators on RM market exist and unlikely foreseen in the future. On October 15, 2016 the Republic of Moldova signed the Kigali Amendment for the progressive reduction of the use of hydrofluorocarbons (HFCs, which belong to F-gases) worldwide. Kigali Amendment doesn't apply HFCs threshold for operators. However, monitoring F-gases requires resources expenditure and this activity should be feasible. Adopting the F-gases Law is considered high priority action vis-à-vis other EU climate change acquis under EU-RM AA.

Expected time for EU F-gases Regulation implementation is of three years, from 2020 to 2022 year.

As for Recommendation 2018/01/MC-EnC, three activities are recommended to follow. During Q1-Q2 of 2020 year, the first draft of NECP should be outlined and then, after wide consultations, the final NECP should be submitted to the EnC Secretariat not later than the end of 2020. In the years between 2021 and 2030, the NECP should be updated once and submitted to EnC Secretariat respectively. The progress report on NECP implementation should be submitted to EnC Secretariat every two years.