# The Concept of the 2030 Low Emissions Development Program of the Republic of Moldova and its Action Plan

#### Title of the document

2030 Low Emissions Development Program of the Republic of Moldova and its Action Plan

### Type of the public policy paper proposed for drafting

In accordance with point 5 of the Regulation on planning, drafting, approval, implementation, monitoring and evaluation of public policy papers, GD 386/2020, "There are two types of public policy papers – strategies and programs". This document is the concept of the 2030 Low emissions development program and had been drafted in line with the provisions of the GD 386/2020.

#### **Addressed issues**

The climate on Earth changes dramatically, the consequences being more and more felt during the last decades. For instance, one of the main climate indicators – average temperature on the surface of the Earth went up by 0.74°C compared to 1950. It is very probable that the value of this index by 2100 might be around 1.8-4°C. It is noteworthy that these changes may have an irreversible impact on the evolutionary development of life on Earth. According to the last Report of the Intergovernmental climate change group (IPCC, 2014), "It is very probable that heat waves become more frequent and last longer, while extreme precipitation events become more intense and frequent in many regions. The Ocean will continue to warm up and become acidic, while the global sea level would raise".

There are certain proofs that global warming is, to the largest extent, the result of human activity, manifested by greenhouse gas (GHG) emissions (carbon dioxide, methane, nitrous oxide and others).

With regard to the Republic of Moldova, in the last 130 years the average yearly temperature grew by over 1.0 °C. As a result, droughts and large-scale floods became more frequent phenomena, having a deep impact on the economy and the society. Of the 38 episodes of seasonal drought officially recorded since 1945, 13 episodes have happened after the year 2000, while 9 of them had covered such a wide area, that they had been ranked as disastrous. As the draft "Moldova 2030" Development Strategy reads, the most direct consequence of the more arid climate, which is looming in the decades to follow, would be a drop in the outputs of agricultural crops, including wheat, corn, grapes, vegetables, technical and feed crops, with an emphasized north-south gradient in the scale of the impact.

It takes shared global efforts to control the climate change phenomenon, which the Republic of Moldova should join too. The XXI Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC), which took place in Paris in 2015, had set out an action plan to contain global warming "much under" 2°C, provided for in the Paris Agreement, which the Republic of Moldova had ratified by the Law no. 78/2017. With a view to achieving the purpose of the Agreement, all Parties must undertake and communicate their ambitious efforts to reduce GHG emissions, exposed in the Nationally Determined Contributions (NDCs). The Republic of Moldova reported to the UNFCCC its first NDC (NDC1) on 25 September 2015. According to it, the country had committed to achieve, by the end of 2030, the unconditional

target of 64% of net GHG emissions reduction compared to the level of 1990. The emissions reduction commitment might go up to 78% in a conditional manner, having the respective donor support.

With a view to achieving the NDC1 objectives, in 2016 the Government had drafted and approved the 2030 Low emissions development strategy of the Republic of Moldova and its action plan (LEDS 2030), GD 1470/2016. 3 conclusions can already now be drawn with regard to the implementation of the commitments the country had taken. LEDS set out intermediary GHG emissions reduction objectives by 2020. It should be noted that another strategy, 2014-2023 Environmental Strategy, approved by GD no. 301/2014, also includes GHG emissions reduction objectives by 2020, which correspond to those of the LEDS. According to preliminary estimations, as a whole, certain successes in achieving the objectives set out for this year can be identified. According to the table below, where the current developments with regards to LEDS implementation are shown, the Republic of Moldova exceeded the planned level of emissions by only about 4%, registering progress in GHG emissions reduction in the following sectors: "Electricity and heat production" – by 19% and Agriculture – by 26%. At the same time, there is a significant increase in GHG compared to the targets set out for 2020 in the following sectors: "Buildings" – by 49%, "Transportation" – by 37% and "Industrial processes" – by 39%.

Table: Updates on the implementation of the LEDS, approved by GD no. 1479/2016

Sectors	LEDS target for 2020, GHG emissions, ktCO2eq	Estimated GHG emissions effectively generated in 2020, kt CO2eq	Increase in GHG emissions in 2020 compared to LEDS objective for this year, %
Energy sector, including:	8796	9370	7
- electricity and heat production	5070	4105	-19
- buildings	1727	2574	49
- transportation	1999	2730	37
Industrial processes	782	1090	39
Agriculture	2613	1929	-26
Forestry	-712	-496	-30
Waste	1437	1590	11
Total national GHG, with	12978	13483	4
forestry			
Total national GHG, without forestry	13690	13979	2

Note: "Effective" emissions for 2020 were obtained by interpolating the data from the National GHG emissions preventive inventory available for 2016-2019.

In spite of exceeding GHG emissions planned for 2020, the Republic of Moldova is not among the countries with the largest gaps in the intensity of greenhouse gas emissions. In 2018, it registered 0.91 kg CO<sub>2</sub>/US Dollars related to the country's GDP, updated to the level of 2015, less than Russia (1.12), Ukraine (1.84), Bosnia and Herzegovina (1.26) and Belarus (0.98).

As mentioned above, 2030 LEDS, which is currently effective, aims at setting the policy of fulfilling the commitments formulated in the NDC1. At the same time, according to the Decision 1/CP.21 UNFCCC, the Parties whose NDC1 had the deadline until 2030 (the case of the Republic of Moldova), update them every 5 years, starting with 2020. Following the Decision 1/CP21, the Republic of Moldova updated its NDC (NDC2) and submitted it to the UNFCCC Secretariat on 21.02.2020, which was officially registered and posted on the Convention's platform on 04.03.2020. The unconditional goal of reducing GHG emissions by 2030 as defined in NDC2, compared to NDC1, went up from 64% to 70% compared to 1990, while the conditional goal is of 88% versus 78% set out in the NDC1. Thus, NDC2 of the Republic of Moldova complies with the requirements of art. 4.3 of the Paris Agreement, reflecting a bigger ambition and indicating progress compared to the commitments taken in NDC1.

#### The purpose of drafting a public policy paper

The purpose of drafting the 2030 Low emissions development program of the Republic of Moldova and its action plan (LEDP) is to achieve the objectives of greenhouse gas emissions reduction as provided for in NDC2.

As soon as more ambitious targets of reducing GHG emissions are set, the current 2030 LEDS can no longer serve as means of comprehensive fulfillment of NDC2. Thus, with a view to achieving the NDC2 objectives, it is necessary to update the effective 2030 LEDS. At the same time, the provisions of point 4 of the GD 386/2020 read that "An effective public policy paper, which does not comply with the provisions of the current decision, remains enforceable until the end of its implementation timeline, but not more than 2 years from the entry into effect of this decision". As a result of this clause, the present document reflects the provisions of the 2030 Low emissions development program of the Republic of Moldova, with a view to achieving NDC2 objectives.

The general objective of the 2030 Low emissions development program corresponds to that established in NDC2 and aims at reducing GHG emissions unconditionally by 70% and conditionally by 88% compared to 1990.

The program identifies the key actions for various sectors of the economy with a view to reducing GHG emissions compared to the level of 1990, the benchmark year, emphasizing energy efficiency, developing renewable energy sources, application of performing cement and glass producing technologies, conservative agriculture, afforestation and efficient waste management.

The specific objectives of mitigating GHG emissions by 2030 by sectors, unconditionally, in relation to the benchmark year are the following: energy -81%, transportation -52%, buildings -74%, industrial processes -27%, agriculture -44%, forestry and land use, change of the designation of land use and forestry (FTSCFTS) -10%, waste -14%. These objectives could have been more ambitious provided there would be financial support from international donors, technical assistance and transfer of technologies.

Program implementation, which implies the use of performing technologies and best practices in the field, is associated with a wide range of benefits: financial, developmental, impact on new jobs creation and business opportunities, improved quality of life of the population and environment, enhanced energy security and not lastly, better environmental standards and enhanced ecological security. Program implementation will benefit both the citizens, businesses, as well as the country as a whole. The document will ensure enhanced cohesion between the branches of the national economy targeting GHG emissions reduction and the consumption of fossil fuels.

# Consistency with the National development strategy, the National development plan, Medium-term budgetary framework, etc.

The Program will contribute to the fulfillment of the commitments provided for in the Moldova-EU association agreement, which, in art. 95 of Chapter XVII of "Climate policies" read that the Republic of Moldova will design and approve mid-term and long-term measures for reducing GHG emissions.

The Program is consistent with the objectives of the draft National development strategy "Moldova 2030", which pays special attention to climate change. According to "Moldova 2030" NDS, a better quality of life implies achieving sustainable and wide-ranging progress in social matters in 10 dimensions, including the quality of the environment. "Moldova 2030" Strategy highlights the fact that climate change affects all areas of the country's development. The most of

the sectors are vulnerable to climate change and are affected by extreme phenomena occurring throughout the country. In this connection, climate change adaptation measures and GHG emissions reduction measures need to be promoted.

The Program supports the achievement of sustainable development goals, set out in "Moldova 2030" Strategy, offering a strategic national context to the mitigation efforts for which the country receives international support. It contains a set of measures designated to contribute to greenhouse gas emissions reduction, to the quantification of the respective reduction of emissions for each measure, as well as the costs associated with their implementation. The document includes the measures and principles of *green economy* in the production processes of the branches of the national economy, contributing thus to improved quality of environment and respectively to the living standard of the population. This manner of development will enhance the process of decoupling economic growth from environmental degradation.

According to preliminary estimations, to achieve unconditional goals of GHG emissions reduction by 2030, about 8.3 billion US Dollars will be required, including: in the sector of energy and heat production – 2.9 billion US Dollars; transportation, including roads – 3.1 billion US Dollars; buildings – 2.3 billion US Dollars; industry – 200 million US Dollars; agriculture – 873 million US Dollars; forestry – 33 million US Dollars and waste - 151 million US Dollars. To achieve the conditional objective of GHG emissions reduction by 2030, an additional amount of 2.6 million US Dollars would be required, according to the assessments.

It should be mentioned that the measures underlying the determination of financing needs correspond to Moldova's development policies, programs and plans, including sectorial ones, widely described in the Updated Biannual Report of the Republic of Moldova to the UNFCCC (2018), as well as those approved or in the process of debates/endorsements during 2018-2020. The availability of the respective amounts does not imply supplementary efforts by the state budget than those already exposed or provided for in the above-mentioned policies, programs and plans. The respective financing comes, mainly, from private sources and credits, the latter being exposed in already signed or forecast agreements. Therefore, the construction of the installations for producing renewable energy would be made by private companies, the cost of investments and operation being included in the tariff regulated by ANRE, which is ultimately covered by consumers. Energy efficient transportation (electric, hybrid) is already being promoted by applying an adequate tax policy to the importation of used vehicles, which is being discouraged. The implementation of the Program does not provide for exceeding the limits of expenditures and investments by sectors, provided for by the Medium-term budgetary framework (2021-2023), approved by the GD no. 776/2020. When drafting the Program, one will take into account the last developments of the economic and social situation at local and regional level, especially in the context of COVID-19 pandemic and its consequences/impact in the medium and long run on the society and the economy. The sectors that are most affected by the measures to control the spreading of COVID-19 are: transportation, tourism, hotels and restaurants, culture and leisure, trade. It is obvious that slowing down their activities leads to a slowdown in GHG emissions.

Program implementation period covers the years of 2021-2030. The institution coordinating the Program is the Ministry of Agriculture, Regional Development and Environment, which is also the author of the document, structured according to the standards of the Government Decision no. 386/2020 on planning, drafting, approval, implementation, monitoring and evaluation of the public policy papers.

#### Possible consequences and risks in case of the absence of the Program

The lack of an updated document, which would set out GHG emissions reduction policies and activities, as these are formulated in the NDC2, GHG emissions reduction objectives by sectors,

monitoring indicators, anticipated risks and their mitigation or removal measures will lead to the failure to fulfil the commitments the country assumed to the UNFCCC and the Paris Agreement.

It is important to highlight that the international finance institutions, involved in the financing of climate change projects condition, as a rule, their support on the presence of an official document on low emissions development, which would reflect the NDC2. The absence thereof slows down or, in general, precludes the attraction of foreign investments and donations in the sector. The Program, as to its contents, will allow for a better understanding of the planned ways of economic growth and financial and technical support needs, in moving towards reducing greenhouse gas emissions in the long run. The document will contribute to enhanced transparency, to stimulating the exchange of information and lessons learned, to building confidence among countries and to international recognition of climate actions. The lack of a Program disadvantages the country in getting attractive donor funding and does not contribute to growing confidence in being part to concerted actions towards achieving UNFCCC GHG emissions reduction objectives.

## Period planned for drafting the public policy paper

The Program shall be drafted during April-May 2021 with the UNDP support, provided within the EU4Climate project.

#### **Stakeholders**

Ministry of Agriculture, Regional Development and Environment is the key stakeholder in this exercise. It is responsible for drafting the Program, as well as for promoting it for approval, while after it enters into effect – it will be responsible for monitoring, reporting and verifying the actions provided for in the Program. Given that the Program foresees activities to reduce emissions in sectors such as energy, transportation, buildings, industry, agriculture, forestry and waste, when the draft document would be prepared for approval, it would be consulted as provided for by the law, while the following stakeholders would be mainly involved in the implementation process:

- 1. Ministry of Economy and Infrastructure
- 2. Ministry of Finance
- 3. Ministry of Education, Culture and Research

Businesses, central and local authorities, civil society and citizens will participate in the implementation of the Program.