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## THE IMPACT OF REGIONAL COOPERATION ON THE GOVERNANCE MECHANISM FOR ENERGY AND CLIMATE ACTION IN THE CONTEXT OF THE GREEN ECONOMY

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### Abstract

**Background:** *The article aims to set priorities for Moldova's ambitious legal approximation and implementation of the EU acquis, as well as for joint action under the Paris Agreement on climate change. It considers the ongoing discussions on the European Green Deal and the extent to which countries can align themselves with its objectives. The study provides a basis for in-depth reflection on the establishment and implementation of a governance mechanism to ensure effective planning, monitoring and reporting on the achievement of the 2030 climate and energy targets, as well as the collective goal of climate neutrality by 2050. This approach is consistent with the long-term objectives of the 2015 Paris Agreement, while minimizing administrative complexity and ensuring access to secure, sustainable, competitive and affordable energy for consumers, including households and businesses. Furthermore, it emphasizes the promotion of research and innovation through investments in the green economy.*

*A special focus is given to the implementation of innovative regulatory test projects in the energy sector, highlighting their role in promoting the integration of renewable energy, optimising resource use and supporting the green transition. Such projects, facilitated by innovative sandbox mechanisms, are crucial for the alignment of Moldova's energy sector with EU standards and the achievement of sustainable development goals.*

**Objectives:** *To promote regional cooperation to harmonize national policies with the Energy Governance and Climate Change Regulation, support cross-border projects, and integrate renewable energy solutions through innovative sandbox projects.*

**Methodology:** *The study conducts an analysis of existing legislative and policy documents related to Moldova's legal alignment with the EU acquis, commitments under the Paris Agreement and the European Green Deal.*

**Findings:** *Address legislative challenges, including weak implementation of climate change adaptation and mitigation measures, the lack of effective mechanisms for monitoring, reporting and reviewing climate change policies (including NECPs), and the urgent need to streamline administrative procedures to improve policy implementation. This also includes promoting innovation in the energy sector and accelerating the uptake of innovative solutions.*

**Keywords:** Climate Change, Consumers; Green Deal; Green Economy; Energy; Greenhouse Gas Emissions, Governance Mechanism

**JEL classification:** K32, K33, O44, P18, P28, Q54

## Introduction

The Paris Agreement sets an ambitious collective target on climate change, allowing for individual countries to develop individual climate objectives through nationally determined contributions (NDCs) in line with their “state individual responsibilities to common response”. A strong transition to a green economy is essential for containing the risks of dangerous climate change effects. Limiting global warming to 1.5°-2°C, the central goal of the 2015 Paris Agreement, will require climate policy and legislative packages that drive transformative changes within their harmonization with the EU standards.

Moldova ranks among the most climate vulnerable countries in Europe and Central Asia based on a range of social and economic indicators and faces a number of adaptation challenges in conformity with the Global Adaptation Index. In accordance with the third Biennial Update Report of the Republic of Moldova, over the last 132 years, the Republic of Moldova has experienced changes in average values of temperature and precipitation. The country had become warmer, with an average temperature increase of more than 1.2°C, while the increase in precipitation was only 51.3 mm (The Third Biennial Update Report of the RM, p.16). The Republic of Moldova committed in 2020 in its updated NDC to achieve more ambitious reduction targets than those included in the INDC from 2015. The updated unconditional target provides for a reduction of GHG emissions by up to 70% by 2030 compared to the level of the reference year 1990, instead of 64-67% undertaken in the INDC. Regarding the conditional target, instead of the 78% undertaken in the INDC, the reduction commitment expressed above could be increased to 88% as compared to the 1990 level, provided that external support is obtained, including in form of low-cost financial resources, technology transfer, and technical cooperation, etc. (The Third Biennial Update Report of the RM, p.14).

Moldova’s energy sector, distinguished by the most important contribution to GHG emissions in the Republic of Moldova (67.5%, 2019), will significantly contribute to meeting the country’s commitments to reduce GHG emissions. (The Third Biennial Update Report of the RM, p.26). Moldova does not have significant energy resources

such as coal and oil, and its renewable energy potential is not fully exploited. In 2022, up to 80.5% of primary energy resources will be imported, and the country's natural gas supply depends on imports from a single source – the Russian-owned gas company Gazprom. Natural gas is the main resource used to produce electricity and heat, which only exacerbates the situation. Oil products are imported mainly from Romania, Russia and Belarus. Moldova also relies heavily on electricity imports to meet domestic demand.

In the context of energy vulnerability, the protection of end consumers is particularly important due to the large proportion of the affected population.

Also, there is still insufficient political will to prioritize the mechanisms of climate, environmental and energy at the national level. For the past 10 years, environment and climate change legislation have not been on the government agenda's priority list.

Similarly, Moldova faces the same problem of a sustainable innovation process in the energy sector. According to the Global Competitiveness Index, Moldova ranks 109th out of 141 countries in terms of innovation capacity, while neighbouring countries such as Romania and Ukraine rank 55th and 60th, respectively.

Alignment with the European Green Deal acquis and the Regulation on Energy Governance and Climate Action is to set priorities for further, ambitious legal approximation and implementation of the Green Deal provisions in Moldova, taking into account the recent accession of the Republic of Moldova to the EU.

## Screening of National Legislation

Moldova has yet to fully implement its obligations under the EU-MR Association Agreement, which, although a political priority, continues to polarize Moldovan society. The commitment to implement the European standards on climate change mitigation in the Republic of Moldova-EU AA (Annex XII) is set in following acts: i) Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading; ii) Regulation (EC) no. 842/2006 on certain fluorinated greenhouse gases, replaced by Regulation (EU) no. 517/2014; iii) Regulation (EC) no. 1005/2009 on ozone-depleting substances; iv) Directive no. 98/70/EC on the quality of petrol and diesel.

Only one of the four EU acquis foreseen in the Moldova-EU AA hasn't been fully transposed, Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading (should be transposed by 2022).

Regarding climate change, Energy Community recommended for implementation following two EU provisions: i) Recommendation 2016/02/MC-EnC on preparing for the implementation of Regulation (EU) 525/2013 on the mechanism for monitoring and reporting greenhouse gas emissions; ii) Recommendation 2018/01/MC-EnC on preparing for the development of integrated national energy and climate plans. Only Recommendation 2016/02/MC-EnC has been transposed into national legislation.

The regulations on certain fluorinated greenhouse gases were transposed into Law No. 43/2023 on fluorinated greenhouse gases and are in line with the country's commitments to contribute to the achievement of the Sustainable Development Goals (SDGs) set out in the National Development Strategy "European Moldova 2030" (hereinafter - NDS), approved by Law No. 315/2022, in particular General Objective 10, which aims to ensure a healthy and safe environment.

GHG emission reduction targets are defined in several national policy documents and normative acts, including the Low Emission Development Programme of the Republic of Moldova until 2030, approved by GD No. 659/2023, which will contribute to the achievement of the target of climate neutrality by 2050 set in the Law No. 74/2024 on Climate Actions.

The Law No. 74/2024 on Climate Actions sets out mandatory national actions to enable the collective achievement of the 2050 climate neutrality goal, taking into account the 2030 net domestic greenhouse gas emission reduction target, and the long-term goal as designed under the Paris Agreement, as well as progress on adaptation to protect against climate-related risks. The law introduces Monitoring Reporting and Verification (MRV) of aviation GHG emissions under CORSIA and establishes the general basis for MRV of GHG emissions from stationary sources and aviation activities, as well as maritime transport under the provisions of Directive 2003/87/EC.

ETS Directive 2003/87/EC was partially transposed into national legislation. The EU greenhouse gas emissions trading scheme is implemented through two EU regulations:

Regulation (EU) 2018/2066 on the monitoring and reporting of greenhouse gas emissions under Directive 2003/87/EC; Regulation (EU) 2018/2067 on data verification and accreditation of verifiers under Directive 2003/87/EC, not yet implemented.

Decarbonization of the industrial sector plays an essential role in ensuring the transition to a green economy, in line with the specific objective 2.1 of the Programme for the Promotion of the Green and Circular Economy in the Republic of Moldova for the period 2024-2028, approved by Government Decision No. 495/2024, which focuses on the development and improvement of economic instruments aimed at reducing pollution and greenhouse gas emissions.

Law No. 227/2022 on Industrial Emissions, which establishes the regulatory framework for the prevention of pollution caused by industrial and economic activities in order to reduce emissions to air, water and soil, including waste generation, as well as environmental control, promotion and application of best available techniques to achieve a high level of environmental protection. Law No. 227/2022 establishes the integrated environmental permit/environmental authorization system, the procedure for the application of best available techniques and general rules for operators, as well as the system for monitoring compliance with the conditions of the integrated

environmental permit/environmental authorization. The provisions of this Act apply to stationary installations emitting greenhouse gases.

Government Decision No. 1277/2018 on the Establishment and Functioning of the National System for Monitoring and Reporting of Greenhouse Gas Emissions and Other Information Relevant to Climate Change created the legal framework to strengthen institutional capacity and ensure the monitoring of all anthropogenic emissions from sources of greenhouse gases, the assessment of progress in meeting commitments related to these emissions, and the implementation of reporting requirements under the UNFCCC and the Paris Agreement. Through the reporting instruments to the CONUSC provided by Government Decision No. 1277/2018 (National Greenhouse Gas Emissions Inventory National Inventory Report, Biennial Transparency Report and National Communication), information is presented on how the implementation of mitigation policies and measures, GHG emissions projections and progress in achieving the determined national contribution contribute to the adaptation of the Moldovan economy to global climate change, while promoting human rights and gender equality.

The legal framework for organizing and carrying out activities in the energy sector under conditions of accessibility, availability, reliability, continuity and competitiveness, and for establishing the basic principles to ensure that consumers receive quality energy under fair, transparent and non-discriminatory conditions, is governed by Law No. 174/2017 on Energy. This law includes the obligation to develop a planning document - the National Energy and Climate Plan (NECP) - whose main function is to present the set of actions and measures that the government intends to undertake and/or facilitate in order to achieve the objectives of energy efficiency, use of renewable energy and reduction of greenhouse gas (GHG) emissions.

The Recommendation 2018/01/MC-EnC on preparing for the development of integrated national energy and climate plans (NECPs) by the Contracting Parties of the Energy Community, including Policy Guidelines (PG 03/2018) on the development of NECPs has not been adopted and implemented. According to the country's annual implementation report to the Energy Community from November 1st, 2021, drafting of the narrative component of four NECP chapters and the development of different policy scenarios took place in 2021. Work on the non-energy related parts has to commence.

Law No. 139/2018 on Energy Efficiency ensures the implementation of State policy in the areas of energy efficiency, energy performance of buildings, and use of renewable energy sources, including by attracting and managing financial resources to finance projects in these areas in an environmentally sustainable manner, taking into account the impact on climate change.

Law No. 10/2016 on the Promotion of Energy from Renewable Sources establishes the regulatory framework for the promotion and use of energy from renewable sources. The screening process confirms that the Republic of Moldova has started to

establish the monitoring, reporting and verification system at the national level. Most of the reviewed legal acts contain requirements relevant for the collection of sectoral activity data, information on policies and measures (PAMs) and the functioning of the system. In fact, existing laws and secondary legislation provide a good starting point that should be maintained in the process of developing climate legislation.

## European Union Green Deal Related Acquis Relevant for the Republic of Moldova

The aim of the assessment of the European Green Deal (hereinafter –EGD) related acquis relevant for the Republic of Moldova is to set priorities for further, very ambitious legal approximation and implementation of EU acquis and actions in Moldova, taking into consideration the new candidate status of the RM.

The EGD is the new growth strategy for an EU economy that aims to be sustainable, cleaner, safer and healthier by turning climate and environmental challenges into opportunities across all areas of policy in a way that is fair and inclusive. EGD sets out a plan of action for ensuring:

- an economy with net-zero greenhouse gas emissions by 2050;
- boost the efficient use of resources by moving to a clean, circular economy;
- restore biodiversity and cut pollution.

The EGD contains proposals for action which cover a number of policy areas:

(i) The **Climate Action Initiatives** under the EGD include:

- the **Roadmap - Key actions** (COM (2019) 640) in above mentioned policy areas;
- the **European Climate Law** (OJ L 243), which includes a legal objective for the Union to reach the goals set out in the EGD. The Regulation (EU) 2021/1119 (**European Climate Law**) will help to meet the European Green Deal objectives while taking fairness, solidarity and cost-effectiveness;
- as part of the EGD, the Commission through **European Climate Pact** encourages people, communities and organizations to connect and sharing knowledge, learning about climate change and development solutions to fight climate change;
- **2030 Climate Target Plan** (COM(2020) 788) Commission has proposed to increase the EU's ambition to cut greenhouse gas emissions by at least 55% by 2030 sets Europe on a responsible path to becoming net-zero greenhouse gas emissions by 2050. The package contains legislative proposals under the **"Fit for 55"** to revise the entire EU 2030 climate and energy framework, including the legislation on effort sharing, land use and forestry, renewable energy, energy efficiency, emission standards for new cars and vans, and the Energy Taxation Directive;
- **EU Strategy on Adaptation to Climate Change** (COM(2021) 82) aims to realize the 2050 vision of a climate-resilient Union by making adaptation smarter, more systemic, swifter, and by stepping up international action. This would mean adaptation awareness and planning spread to every single local authority,

company and household; adaptation implementation well underway for those most affected; and global leadership in areas such as climate services, climate proofing, or nature-based solutions.

- (ii) **Taxation of GHG emissions and Emissions Trading System.** The taxation of energy products and electricity plays an important role in the area of climate and energy policy. The proposal for recasting framework for the taxation of energy products and electricity is part of the EGD and of the *“Fit for 55”* legislative package focuses on environmental and climate issues to achieve the EU’s domestic greenhouse gas emissions reductions objectives and air pollution reduction. Reducing man-made GHG emissions can help to limit global warming. The **EU Emissions Trading System** is a basic pillar of the EU’s policy to combat climate change and its key tool for reducing greenhouse gas emissions cost-effectively. It is the world’s first major carbon market and remains the biggest one. Companies that are regulated by the EU ETS include stationary installations (such as power plants, industrial plants and other large energy users) and airlines. The sectors of the economy not covered by the EU ETS must reduce emissions by 30% by 2030 compared to 2005 as their contribution to the overall target through the **Effort Sharing Regulation** (Regulation (EU) 2018/842) translates this commitment into binding annual greenhouse gas emission targets for each Member State for the period 2021 – 2030, based on the principles of fairness, cost-effectiveness and environmental integrity.

Finally, the ESR, its relevance as a regulatory instrument and its scope will be subject to review for the development of the climate and energy framework post-2030, taking into account the interactions between the various instruments, in particular the extension of emission trading to new sectors and the regulation of an agriculture land use and forestry pillar. The proposal (COM/2021/555) determines to reduce GHG emissions by ensuring parallel coverage of ESR and ETS in case of an extension of the ETS, to buildings and road transport.

- (iii) **Carbon Border Adjustment** determines reduce GHG emissions by ensuring fairness through dampening any negative competitiveness effects. The Carbon Border Adjustment Mechanism (CBAM) is intended to complement the **Emissions Trading System** and level the playing field between EU and non-EU businesses, ensuring that production of carbon-intensive goods does not shift from within the EU to third countries in order to take advantage of less stringent climate policies. It is due to take effect in a transitional form from 1 January 2023 and be fully operational from 1 January 2026.

Proposal for a Regulation of the EU Parliament and of the Council establishing a carbon border adjustment mechanism (CBAM) 2021/0214 from 14.7.2021 (COM/2021/564) The CBAM seeks to replace the existing mechanisms (free allocation of EU ETS allowances and financial measures to compensate for indirect emission costs incurred from GHG emission costs (Directive 2003/87/EC)) by addressing the risk of carbon leakage in a different way, namely by ensuring equivalent carbon pricing for imports and domestic products.

(iv) **Transition to greener mobility.**

**Sustainable and Smart Mobility Strategy** (COM(2020) 789)) sets out actions to transform the transport sector into a truly multimodal system of sustainable and smart mobility services. As the first pillar, uptake of low- and zero-emission vehicles as well as renewable and low-carbon fuels for road, waterborne, air and rail transport. Support research and innovation on competitive, sustainable and circular products and services, ensure that the right vehicles and fuels are supplied by the industry, put in place the necessary infrastructure, and incentivize demand by end-users.

The CO<sub>2</sub> emissions performance requirements for new passenger cars and for new light commercial vehicles are set out by the *Regulation (EU) 2019/631 setting CO<sub>2</sub> emission performance standards for new passenger cars and for new light commercial vehicles*. In the context of “Fit for 55” legislative package, the Commission introducing amendments to Regulation (EU) 2019/631[10] as regards the CO<sub>2</sub> emission performance standards for new passenger cars and new light commercial vehicles.

The **Zero Pollution Action Plan** (COM(2021) 400) further supports the shift toward zero-emission vehicles. Emission standards for passenger cars and light commercial vehicles were seen as key drivers for reducing CO<sub>2</sub> emissions in the sector throughout. This draft law aims to accelerate the transition by requiring average emissions of new cars to come down by 55% from 2030 and 100% from 2035 compared to 2021 levels. All new cars registered as of 2035 should be zero-emission.

In order to achieve the broadest possible use of alternative fuels for transport, while ensuring technological neutrality, and to promote sustainable electric mobility throughout the Union, must take suitable measures for the implementation of the strategy set out in the Communication entitled '**Clean Power for Transport: A European alternative fuels strategy** (COM/2013/017). For this purpose the Commission propose the new Regulation for the deployment of alternative fuels infrastructure, which will repeal *Directive 2014/94/EU on the deployment of alternative fuels infrastructure*. This initiative seeks to ensure the availability and usability of a dense, widespread network of alternative fuels infrastructure throughout the EU.

(v) **Industrial policy package.** The **update the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery** (COM/2021/350) is a targeted update, which focuses on a tailored assessment of the needs of each industrial ecosystem and how all market players can best work together. And it identifies a set of strategic dependencies and capacities and proposes measures to address and reduce them.

(vi) **A Clean Air Programme for Europe** (COM(2013) 918) proposes legislation to reduce harmful emissions in the longer term which contribute to poor air quality and promote measures which mitigate atmospheric warming and climate change. The objectives for the emission reductions are fully consistent with the **EGD** and **EU Action Plan: Towards Zero Pollution for Air, Water and Soil**.

(vii) **Circular economy.** **The 8th Environment Action Programme** (COM/2020/652) aims to achieve that by 2050 the prosperity within the planet's ecological limits

that healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is conserved, valued and restored in ways that enhance resilience to climate change. **The new Circular Economy Action Plan** presents a set of initiatives to establish climate-neutral, resource-efficient and competitive economy. **Bioeconomy Strategy** based on sustainability and circularity will drive the renewal industries, the modernization of primary production systems, the protection of the environment and will enhance biodiversity and will provide 'no emissions' economy, in line with the EGD.

(viii) **Renewable energy targets.** The common system to promote energy from renewable sources across the different sectors has established by the *Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources*. The key points of the Directive are part of the package of measures needed to reduce greenhouse gas emissions by at least 40% below 1990 levels by 2030 comply with the **EGD** and the **EU climate and energy policies in the period from 2020 to 2030**. It establishes a common set of rules for the use of renewables in electricity, heating and cooling, and transport in the EU.

**Clean Energy For All Europeans** (COM/2016/0860) is the legislative proposal cover energy efficiency, renewable energy, the design of the electricity market, security of supply and governance rules for the Energy Union. This initiative sets out a range of specific measures to improve the regulatory, economic and investment environment for innovation in clean-energy technologies and systems.

**Energy efficient buildings.** The strategy to start a **Renovation Wave for Europe** proposed by the Commission Communication enhance the energy and resource-efficient renovation, supporting fresh investment over a sustained period starting from public and less efficient buildings, spurring digitalization and creating employment and growth opportunities across the renovation supply.

**Energy system integration.** **Powering a climate-neutral economy: An EU Strategy for Energy System Integration** (COM(2020) 299) proposes policy and legislative measures at EU level to gradually shape a new integrated energy system, while respecting the differing starting points of Member States in achieving the target to climate neutral economy at the least cost across sectors, while strengthening energy security, protecting health and the environment.

## Transposition and Implementation of the Governance Mechanism on Energy and Climate Action

Transposition of Regulation on Energy Governance and Climate Action (Regulation (EU) 2018/1999) into national legislation is equivalent to transposition of the Ministerial Council Decision 2021/14/MC-EnC of 30 November 2021 on incorporating Regulation (EU) 2018/1999 in the Energy Community acquis communautaire and amending Annex I of the Treaty, into national legislation.

The main objective of the governance mechanism is to enable the achievement of the objectives in the field of GHG emission reduction, energy from renewable sources and energy efficiency. None of those objectives, which are indissociably linked, can be regarded as secondary to the other.

Among else, the Governance act introduces obligation to plan and report on implementation of:

(1) the integrated national energy and climate plans (NECP), that means on five dimensions:

1. decarbonization (greenhouse gas reduction and renewables-RES)
2. energy security
3. energy efficiency
4. internal energy market
5. research, innovation and competitiveness,

(2) long-term strategies that include an analysis covering a highly energy efficient and highly renewables-based energy system (GHG emission reductions and enhancements of removals by sinks in all sectors with a perspective of at least 30 years). The NECP and the long-term strategies should be consistent with each other,

(3) adaptation to climate change, and

(4) provision of financial, technological and capacity-building support for climate action.

It refers to policies and measures, projections of GHG emissions and removals by the sinks (forestry), GHG inventories, reporting to the Paris Agreement.

Therefore, Ministerial Council Decision 2021/14/MC-EnC defines objectives, targets and contributions for these five dimensions and prescribes:

- NECP scope, content and timeline, objectives, targets and contributions for five dimensions as well as update and timeline for reporting;
- cooperation with other Contracting parties and EU MSs while developing NECP
- scope and content of long-term strategy with a 30 years perspective and consistent with the Energy Community's climate-neutrality objective;
- consistency of NECP and the long-term strategies;
- development of a strategic plan for methane at Energy Community level;
- timelines for submission of NECP progress reports, annual reporting and Biennial progress reports (BTR);
- reporting on GHG emissions and removals, policies and measures and on projections, national adaptation actions, financial and technology support provided to developing countries and carbon price revenues, renewable energy, energy efficiency, energy security and market, energy poverty, research, innovation and competitiveness;
- role of European Environment Agency in quality assurance and quality control of information submitted by the Contracting party.

Additionally, strategic environment assessment (SEA) is required to be conducted for defining the draft NECP. SEA is a process for evaluating the environmental implications of a proposed policy, plan or programme prepared for agriculture,

forestry, fisheries, energy, industry, transport, waste management, water resources management, electronic communications, tourism, land use, urban and rural planning. In the Republic of Moldova, SEA procedure is regulated by the Law no.11/2017. SEA procedure shall start when the draft NECP will be defined. Public consultation of the SEA Report, including those at the transboundary level (with Ukraine and Romania) are part of the SEA process.

Moldova faces the same challenge of sustaining an innovation-driven process in the energy sector. In addition, Moldova's economy is increasingly integrated into the global economy, so comparing the results of Moldova's innovative activities with those of other countries can be useful for policy planning.

According to the Global Competitiveness Index, Moldova ranks 109th out of 141 countries in terms of innovation capacity, while neighboring countries such as Romania and Ukraine rank 55th and 60th, respectively.

The slower innovation development of Moldovan enterprises is significantly hampered by the low intensity of research and development (R&D) activities within enterprises. For example, the share of R&D activities performed by Moldovan enterprises in total R&D activities is less than a third of the corresponding indicator for the CIS and Central and Eastern European countries.

With regard to Moldova's energy sector, the lack of indigenous energy sources and raw materials has contributed significantly to the country's heavy dependence on external energy resources. This dependence has affected the ability of consumers to pay for the energy they consume, as the prices of energy resources have risen significantly, since the majority of energy resources are imported. As a result, Moldova urgently needs an energy sector that can provide basic security and support its sustainable development goals. This includes the development of innovative technologies to promote increased electrification of activities, a low-carbon economy and adaptation to the challenges of climate change.

## Conclusions and Recommendations

Climate change adaptation and mitigation in the Republic of Moldova is considered essential for the protection of well-being and the achievement of continuous progress in sustainable development, priorities that were reflected in the National Development Strategy "European Moldova 2030".

The objectives to ensure functioning climate change adaptation and mitigation mechanism in context are:

- developing strategies at the national level and implement technologies that could reduce threats to global climate change over time;
- developing a legislative framework, which provides the institutional, legal and procedural framework, for establishing the efficient mechanisms implementing adaptation and mitigation policies on climate change;

- identifying lessons learned from implementation experience at the national level and initiate the enhancement and amending the secondary legislative application;
- developing IT tools for ensuring data accessibility and strengthening the data management;
- adopting an efficient enforcement mechanism (including sanctions).

The main barriers and constraints related to aligning the national legislation with the EU and EnC Treaty commitments are the lack of institutional, technical and financial capacities. Despite the fact that the approximation of European Green Deal (EGD) related acquis means that the Republic of Moldova, as a candidate state, must align their national laws, rules, and procedures in order to give effect to the entire body of EU legislative framework.

Regional cooperation as per the Governance Regulation, could include regional cooperation to facilitate better coordination of national policies and measures and implementation of relevant policies and measures of the NECPs, joint approaches to renewable development, support to cross-border projects and cooperation between subnational actors.

In order to facilitate regional cooperation, the Commission should promote market integration, cost-efficient policies, effective cooperation, partnerships and consultations, identify further opportunities for regional cooperation covering one or more of the five dimensions of the Energy Union in accordance with this Regulation, with a long-term vision and based on existing market conditions. In order to stimulate innovation processes in the energy sector, it is proposed to regulate the concept of an "Innovative Testing Space in the Energy Sector", which aims to support innovative solutions by granting exemptions from certain regulatory provisions for a limited period of time.

Innovative testing projects in the energy sector are essential for the innovation system by creating innovative regulatory testing spaces. These spaces allow the testing of innovative technologies, products and services under controlled conditions that are only partially compatible with the existing legal and regulatory framework, while ensuring consumer protection and energy security.

The lessons learnt from these controlled and often spatially limited regulatory experiments should provide the Ministry of Energy and relevant authorities with a basis for the further development of the regulatory framework in the energy sector, using an approach based on the results of innovative solutions and emphasising regulatory learning. Regulatory learning occurs when authorities gather information on the risks and opportunities associated with certain emerging technologies and innovations, as well as on any gaps or shortcomings in the applicable regulatory and supervisory framework. This is particularly important in areas where new technologies are required. Regulatory learning enables competent authorities to gain a better understanding of the risks and opportunities, as well as the potential need for changes or new interpretations of existing legislation, in order to effectively address new

technological developments and foster innovation. The purpose of regulatory learning is to gain insights from emerging innovation activities within a test bed. This process can improve the regulatory governance of innovation by incorporating a broader evidence base and by adopting flexible, participatory and forward-looking elements.

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