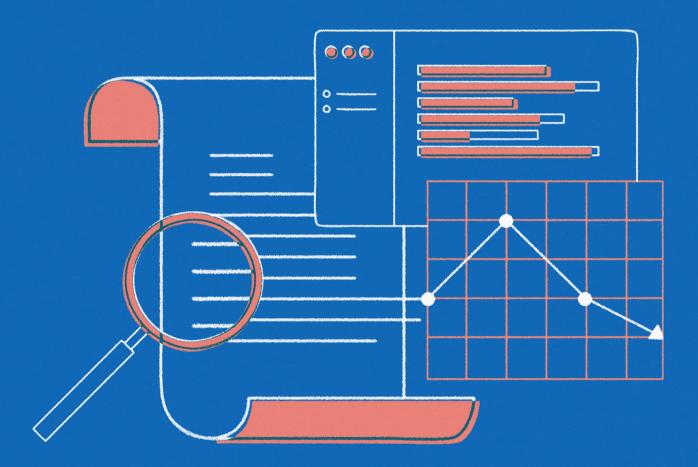
# Enhancement of the Nationally Determined Contribution under the Paris Agreement

Manual for monitoring the NDC 2021-2030



This publication was prepared under the Readiness and Preparatory Support Project of the Green Climate Fund for the Ministry of Tourism and Environment of Albania "Enhancement of the existing NDC" 2020–2022. The project was implemented by the Urban Research Institute.

Urban Research Institute is the Readiness Delivery Partner of the Green Climate Fund for Albania, supporting the Ministry of Tourism and Environment in the development of the national climate change strategic framework and human capacities.

The views expressed in this publication are those of the Urban Research Institute. Urban Research Institute cannot be held responsible for the use made of its content.

#### Prepared by:

Michel Köhler, the greenwerk.

With the contribution of: Edlir Vokopola, Urban Research Institute Entela Kallamata, Urban Research Institute

April, 2022

© 2023 Urban Research Institute Rruga "Asim Vokshi", Ndërtesa 14, Hyrja 11, Ap. 56 1057 Tirana, Albania www.uri.org.al

Some rights reserved.

The material in this work is subject to copyright. Because Urban Research Institute encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Graphic design: Jolin Matraku Printed: Express Print and Communication, Tirana, April 2023









#### **FOREWORD**

This publication is a manual for the development of a monitoring and evaluation system of Albania's Nationally Determined Contribution 2021–2030; it supports the Ministry of Tourism and Environment in the implementation of the policies and measures of the Nationally Determined Contribution 2021–2030, as well as in the qualitative fulfilment of the obligations of Albania towards the United Nations Framework Convention on Climate Change and the Paris Agreement.

Urban Research Institute is thankful to the Ministry of Tourism and Environment for the coordination of the inter-institutional communication during the implementation of the Readiness and Preparatory Support Project "Enhancement of the existing NDC" 2020–2022.

## **Content**

- 1 INTRODUCTION
- 1 METHODOLOGY
- 1 CLIMATE CHANGE MEASUREMENT, REPORTING AND VERIFICATION
- 1 Definitions
- 3 International requirements

#### 9 GOOD REGIONAL PRACTICES - GEORGIA

- 9 Legal framework
- 10 Institutional framework
- 10 Technical operation
- 10 Private sector engagement
- 10 Capacity building
- 10 Lessons learned

#### 11 STATUS QUO OF CLIMATE CHANGE MRV IN ALBANIA

## 13 PATH FORWARD FOR THE DEVELOPMENT OF THE CLIMATE CHANGE MRV IN ALBANIA

- 13 Challenges in establishing and implementing the MRV system
- 13 Considerations for an efficient and effective MRV system

#### 19 CONCLUSION

## **Figures**

- 9 Figure 1: Types of mitigation measurement, reporting and verification systems
- 9 Figure 2: Paris Agreement's goals and NDC revisions
- 10 Figure 3: Main benefits and case-related benefits of climate reporting
- 11 Figure 4: Interrelations of UNFCCC and EU reporting requirements for Albania
- 11 Figure 5: Understanding the transparency guidance
- 12 Figure 6: Transition timeline towards the ETF
- 13 Figure 7: Understanding ETF decisions
- 15 Figure 8: Updated reporting tables on GHG energy
- 16 Figure 9: Framework of Georgia's MRV system
- 21 Figure 10: Energy data for NDCs
- 22 Figure 11: Potential institutional setting for an MRV system for energy data
- 23 Figure 12: Capacities required for the implementation of an MRV system
- 24 Figure 13: Bodies and initiatives supporting the set-up of capacities for MRV systems

## **Abbreviations**

AEE Energy Efficiency Agency
BTR Biennial Transparency Report
BUR Biennial Update Report

bieririlai opuate Report

CCSAP Climate Change Strategy and Action Plans

2019-2030

CDM Clean Development Mechanism
CGE Consultative Group of Experts

CLRTAP Convention on Long-range Transboundary

Air Pollution

CMA Conference of the Parties serving as the meeting of

the Parties to the Paris Agreement

COP Conference of Parties
CRT Common Reporting Tables
CTF Common Tabular Formats

DCM Decision of the Council of Minister
ETF Enhanced Transparency Framework

EU European Union
GCF Green Climate Fund
GHG Greenhouse Gas

ICI International Climate Initiative

IMWGCC Inter-Ministerial Working Group on Climate Change

INSTAT Institute of Statistics

IPA Instrument for Pre-Accession Assistance
IPCC Intergovernmental Panel on Climate Change

MFE Ministry of Finance and Economy
MIE Ministry of Infrastructure and Energy
MMR Monitoring Mechanism Regulation
MPG Modalities, Procedures and Guidelines
MRV Measurement, Reporting, Verification
MTE Ministry of Tourism and Environment
NAMA Nationally Appropriate Mitigation Action

NC National Communication

NDC Nationally Determined Contribution
NECP National Energy and Climate Plan

PA Paris Agreement

SDG Sustainable Development Goal

#### 1. INTRODUCTION

This document serves as a manual for the development of a national climate change measurement, reporting and verification system of Albania's Nationally Determined Contribution 2021–2030. It provides an analysis of the institutional, legal and procedural elements of the system and recommendations for the fulfilment of the requirements of Albania towards the United Nations Framework Convention on Climate Change and the European Union.

#### 2. METHODOLOGY

The manual has been prepared based on five methodological processes:

- Desk research on the requirements of the EU and UNFCCC for climate change measurement, reporting and verification;
- Review of existing national legal basis on climate change and data measurement, reporting and verification:
- Direct lessons learned from the data collection process for the enhancement of Albania's Nationally Determined Contribution 2021–2030 with additional energy efficiency measures<sup>1</sup>;
- Review of regional good practices on the establishment of a climate change measurement, reporting and verification system;
- Consultation with stakeholders of national climate change data measurement, reporting and verification.

# 3. CLIMATE CHANGE MEASUREMENT, REPORTING AND VERIFICATION

This chapter provides an overview of the characteristics, significance and benefits of measurement, reporting and verification of climate change data. It further outlines the existing and forthcoming international requirements Albania will have to fulfil as a Party to the UNFCCC and as an EU candidate country.

#### 3.1. Definitions

Measurement (M) entails the collection of data on GHG emission, GHG mitigation measures and their impact, and support needed and received;

Reporting **(R)** refers to the transparent compilation of such information in inventories and other standardized formats to make it accessible to a range of users and to facilitate public disclosure of information;

Verification (V) entails the periodical assessment and confirmation of the completeness, consistency and reliability of the reported information through an independent process, which can be established at the international or domestic level<sup>2</sup>.

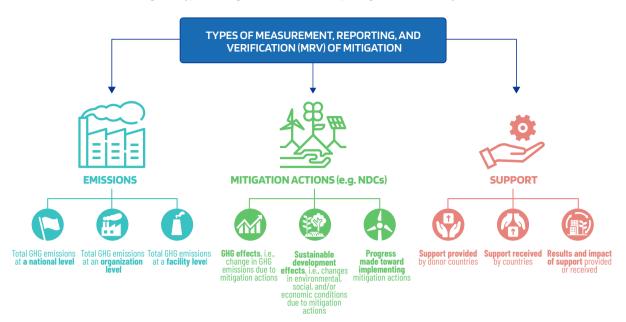
As illustrated in figure 1, to generate the necessary information and data needed for various reporting purposes, such as the UNFCCC National Communications, Biennial Update Reports and from 2023 onwards, Biennial Transparency Reports in addition to EU reporting requirements, national systems need to cover:

- MRV of emissions at different levels (project, corporate, city/province, sectoral or national level) to define the GHG inventories to be included in the National Communications, Biennial Update Reports and Biennial Transparency Reports.
- MRV of mitigation measures, defining a baseline scenario and monitoring emissions of different activities. This goes beyond GHG monitoring only.
- MRV of support, finances, technology transfer and capacity-building received (not mandatory for developing countries but for all EU Member States).

A strong national MRV system generates enhanced transparency, which is one of the Paris Agreement's (PA) key elements. NDCs are set nationally and there are no penalties for non-compliance. At present, only a policy of 'naming and shaming' applies in the post-Kyoto climate regime.

Article 13 of the Paris Agreement establishes the "Enhanced Transparency Framework", "to build mutual trust and confidence and promote effective implementation" through the provision of information on "action and support". The ETF essentially reveals whether the Paris Agreement is effective (and how). Continuous MRV of emissions, of mitigation measures and, if applicable, of international support received is a precondition for improving the NDCs and for

Figure 1: Types of mitigation measurement, reporting and verification systems



Source: WRI. 2016

contributing to the achievement of the PA's goals (see Figure 2 for a schematic illustration of the process until 2030). While the UNFCCC sets certain deadlines by when countries need to report their NDCs, the underlying NDC MRV process is defined at the national level, taking the respective country's national circumstances into account.

Aside from compliance with international reporting requirements, MRV of the progress on NDC comes with several additional benefits for countries (compare also Figure 3).

#### These include:

- Building a comprehensive emissions inventory;
- Promoting effective mitigation assessment, as a comprehensive MRV:
  - informs policies, plans, strategies and programmes;
  - identifies opportunities for reducing
  - emissions in all sectors;
  - allows communication of efforts, challenges and needs;
  - improves access to support;
- Finally, the implementation of a MRV process:
  - raises awareness among stakeholders;
  - increases political buy-in;
  - enhances the capacity of sectoral experts.

Figure 2: Paris Agreement's goals and NDC revisions

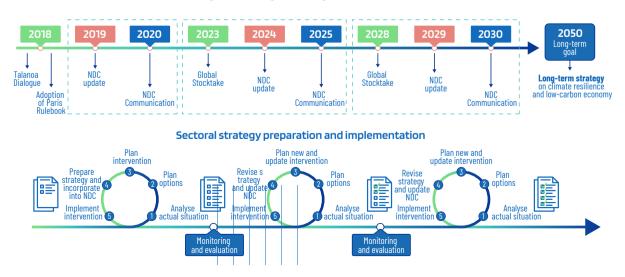
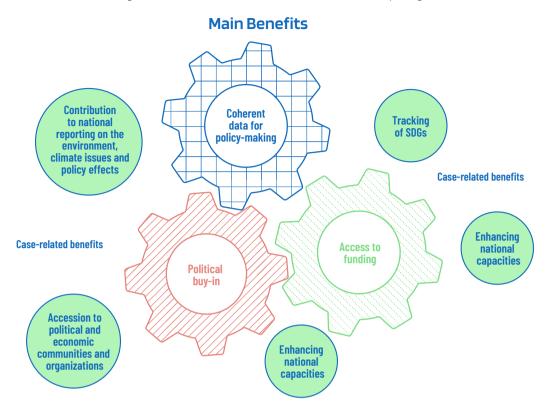


Figure 3: Main benefits and case-related benefits of climate reporting



Source: GIZ, 2018

#### 3.2 International requirements

As a Party to the UNFCCC and an EU candidate country, Albania is committed to complying with several reporting requirements. As illustrated in Figure 4, the reporting requirements are interrelated, and a future MRV system should be underpinned by synergies. The following section outlines the reporting framework and related obligations in more detail.

#### 3.2.1. Requirements from the UNFCCC

Albania is a Non-Annex 1 member of the 1992 UN Framework Convention on Climate Change, the first multilateral agreement governing climate action. Non-Annex1 countries historically have low emissions and a less advanced economy. Although Albania's economic structure is similar to that of former Soviet states, it was not classified as a so-called 'economy in transition'.

Further negotiations resulted in the adoption of the Kyoto Protocol in 1997, which introduced climate mitigation obligations for Annex 1 Parties. The Protocol entered into force in 2005. Its effectiveness was limited, however, in part due to opposition by the United States. Although negotiations resumed, the talks in Copenhagen (2009) failed, leading to a fundamental reorientation of multilateral commitments.

The most recent multilateral instrument regulating climate action is the 2015 Paris Agreement. It places significant responsibility on countries to formulate NDCs.

Albania ratified the PA on 21 September 2016, indicating its commitment to the ambitious goal of "keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius", and a number of legally binding obligations, including the preparation and submission of NDCs every five years and rigorous reporting under the enhanced transparency framework. Detailed rules on how countries shall implement the ETF were agreed at the Climate Conference to the Paris Agreement COP24/CMA1 in Katowice (2018) and COP26/CMA3 in Glasgow (2021).

Prior to the entry into force of the PA, Non-Annex 1 Parties were already subject to a number of transparency obligations, although these were contingent on their capacities, reflecting their national circumstances. Albania, for example, submitted its Third National Communication in October 2016. Figure 5 outlines the reporting requirements under the PA and the Framework Convention, the associated

United Nations Framework
Convention on Climate Change

MMR Reporting
Upcoming Governance
of the Energy Union and
Climate Action
Regulation

Regulation

Figure 5: Understanding the transparency guidance



Source: Öko-Institut .e.V., 2021

technical reviews, and consideration of the reports at the international level by the COP or CMA.

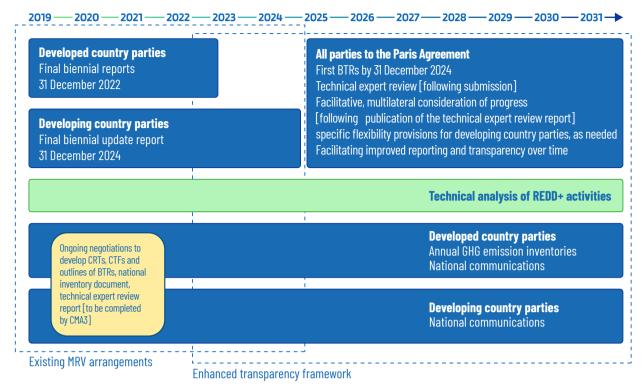
Albania made a significant set of submissions to the UNFCCC in October 2021: the first Biennial Update Report, the accompanying National Greenhouse Gas Inventory Report, and the National Adaptation Plan, thus meeting many of its prior existing transparency requirements. A Fourth National Communication is being prepared for 2022.

National stakeholders and international experts involved in this project agree that the existing MRV system needs to be significantly strengthened if Albania is to meet the ETF requirements. Rather than ad hoc data collection, the ETF system requires

regular/ongoing collection of high-quality data that is transparent and verifiable. Figure 6 illustrates the staggered development from the current MRV system to the ETF.

Article 13 of the PA establishes two transparency frameworks, one on climate change action and one on support to developing country Parties.

Under the transparency of action framework, the Parties to the PA are legally required to provide communications that are subject to technical expert reviews, the modalities of which are to be defined by the CMA at its first meeting. The communications must contain the following information:



Source: UNFCCC, 2020

- a national inventory report on GHG emissions by sources and removals by sinks, using good practice methodologies accepted by the Intergovernmental Panel on Climate Change, and
- inputs necessary to track the progress made in implementing and achieving NDCs (PA, Article 13(7)).

An adaptation communication shall also be submitted for consideration and may include a national adaptation plan commenting on national priorities and support needs (PA Article 7(10)).

Taking the principle of common but differentiated responsibilities and respective capabilities into account, and in the light of different national circumstances, the technical expert review provides a clear understanding of the information submitted and identifies good practices, priorities, needs and gaps (PA, Article 13(5)).

Under the transparency of support framework, developed country Parties and Parties that provide support shall provide information on the financial, technology transfer and capacity-building support provided to developing country Parties and support received (PA, Article 13(6)).

Facilitative multilateral consideration of progress will assess the information submitted, along with

information on support provided to developing country Parties for the planning and implementation of adaptation measures (PA, Article 7(7)) as well as on financial, technology transfer and capacity-building support provided to developing country Parties under Articles 9, 10, and 11 (PA Article 13(11)).

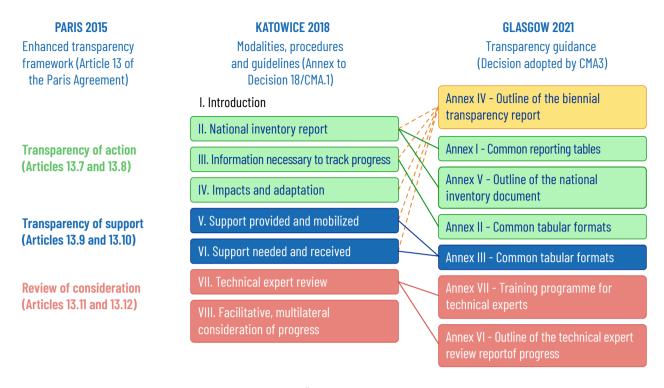
The Katowice COP24 decided that countries must submit their first "Biennial Transparency Report" and "National Inventory Report" by the end of 2024. The reporting guidance is referred to as the Modalities, Procedures & Guidelines (MPGs) contained in the Annex to Decision 18/CMA.1.

COP26 agreed on information would be reported (common format tables with defined rows, columns, formats, etc.). This system of reporting is common but allows for flexibility for developing country Parties in terms of "collapsing" and "expanding" rows, columns and tables.

All reporting is subject to "technical expert review" and a peer-review process known as "facilitative multilateral consideration of progress".

Figure 7 provides an overview of the technical guidance established in the Katowice and Glasgow Decisions.

Figure 7: Understanding ETF decisions



Source: Öko-Institut .e.V.,, 2021

#### 3.2.2. Requirements from the EU

The Stabilisation and Association Agreement, the framework for relations between the FU and Western Balkan countries, has been in effect in Albania since 1 April 2009<sup>3</sup>. After Albania applied for EU membership on 28 April 2009, it was awarded candidate status in 2014. On 25 March 2020, the Council decided to open accession negotiations with Albania. The Council tasked the Commission to report on a number of issues to be addressed by Albania prior to the first Intergovernmental Conference on accession negotiations. In May 2021, the European Commission determined that the conditions to be fulfilled prior to the first Inter-Governmental Conference of accession negotiations have been met. The next step in the process will be a decision on the negotiation framework and the setting of a date for the first Conference.

One of the underlying principles of EU membership is full transposition and implementation of EU legislation at the time of accession. Against this background, Albania has already taken several steps to adapt its national policies and strategies to EU standards. The accession process is structured according to the chapters of the acquis (presently 35) and determines the areas requiring reform. Progress in each area is monitored in annual country reports (see EU, 2021c). In terms of MRV of climate action, especially in relation to GHG emission reductions, the following EU frameworks have been of relevance for Albania:

- Climate Monitoring Mechanism: The Climate Monitoring Mechanism Regulation (525/2013) applied until 1 January 2021; its key reporting provisions apply to reporting for the years 2019 and 2020, which occurs in 2021 and 2022, respectively<sup>4</sup>.
- Energy Union and Climate Action: From the reporting year 2021 onwards, the Regulation on the Governance of the Energy Union and Climate Action (2018/1999) applies.

The regulatory reform aims to help the EU reach its 2030 climate and energy targets. In addition, the system of governance set out by the Energy Union Governance regulation is unique in the way it integrates medium- and long-term energy and

<sup>3</sup> EU, 2021a

<sup>4</sup> EU, 2021b

climate planning<sup>5</sup>. Albania is not yet fully compliant with the Climate Monitoring Mechanism but has already launched relevant programmes to comply with the Regulation on the Governance of the Energy Union and Climate Action<sup>6</sup>

Under the Climate Monitoring Mechanism, the Commission is required to produce an annual report on progress on the Kyoto and EU targets. Accordingly, Member States are required to submit relevant information based on established national processes and structures. Information Member States need to report based on a standardized e-reporting system (i.e. MMR tables) includes, inter alia, seven GHG emissions (the Greenhouse Gas Inventory) from all sectors; projections, policies and measures to cut GHG emissions; national measures to adapt to climate change; low-carbon development strategies; financial and technical support to developing countries, and other similar commitments; and "the use of revenues by national governments from auctioning their allowances in the EU emissions trading system (Member States have committed to spending at least half of those revenues on climate measures in the EU and abroad). The methodologies applied in this process mostly align with those used under the UNFCCC (i.e. the 2006 IPCC Guidelines)7. Albania does not yet fully comply with Regulation (EU) 525/2013, which primarily relates to GHG reporting. The Ministry of Tourism and Environment is currently drafting secondary legislation on a mechanism for monitoring and reporting of GHG emissions, including the institutionalisation of a national GHG inventory system, which at present is only project-based (Energy Community, 2021). In addition, as a Non-Annex I country, Albania is currently reporting under different prerequisites under the UNFCCC than EU Member States, which are all Annex-I countries.

The new feature under the Regulation on the Governance of the Energy Union and Climate Action is that EU Member States develop integrated National Energy and Climate Plans based on a common template. The plans cover the five dimensions of the Energy Union (i) decarbonisation (greenhouse gas reduction and renewables), (ii) energy security, (iii) energy efficiency, (iv) internal energy market research,

and (v) innovation and competitiveness, and have a 10-year timeframe. In 2019, the Albanian government endorsed the National Climate Change Strategy, its low carbon-development strategy within the meaning of the Paris Agreement. Law 155/2020 "On climate change" was adopted in December 2020. A law on fluorinated gases is currently under preparation. The law on climate change establishes the legal basis for the National Energy and Climate Plan, albeit provisions on its role and function, as well as details on updates of the Plan are still missing. The draft NECP was submitted for formal recommendations to the Secretariat in July 20218. The reporting under the new regulation builds on prior experiences and is also based on tables. Table 8 outlines an increase in complexity of the updated tables (e.g. different gases, connection to ETS/allowances and more information on support).

Biennial update reports on implementation are required for the NECP. Member States will report on progress made in implementing their energy and climate policies, including their national energy and climateplans, for the first time in March 2023. The former and updated MRV is highly aligned with UNFCCC MRV standards, which benefits countries as they can use the same data for different reporting requirements. In general, the Regulation also encourages Member States to institutionalise reporting on climaterelevant data. For example, Member States are required to maintain a 'national inventory system', namely a system of institutional, legal and procedural arrangements established within a Member State for estimating anthropogenic emissions by sources and the removal of GHG by sinks, and for reporting and archiving inventory information. Apart from collecting the data to be reported, Albania needs to also invest more efforts into establishing permanent reporting structures to achieve full compliance with the EU requirements.

<sup>5</sup> Agora Energiewende, 2020

<sup>6</sup> Energy Community, 2021

<sup>7</sup> EU, 2021b

<sup>8</sup> Energy Community, 2021

Old

#### ANNEX III

#### Format for reporting on recalculations pursuant to Article 8

Recalculated Year	Per Gas: CO <sub>2</sub> , N <sub>2</sub> O, CH <sub>4</sub>								
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Previous submission (CO <sub>2</sub> -eq, kt)	Latest submission (CO <sub>2</sub> -eq, kt)	Difference (CO <sub>2</sub> -eq, kt)	Difference (¹) %	Impact of recalculation on total emissions excluding LULUCF (²)	Impact of recalculation on total emissions including LULUCF (3)	Explanation for recalculations		
Total National Emissions and Removals									
1. Energy									
A. Fuel combustion activities									
1. Energy industries									
Manufacturing industries and construction									
3. Transport									
4. Other sectors									
5. Other									
B. Fugitive Emissions from Fuels									
1. Solid fuels									
2. Oil and natural gas									
C. CO <sub>2</sub> transport and storage									

n	ıe	w

#### ANNEX V

#### Reporting on approximated greenhouse gas inventories pursuant to Article 7 $\,$

Member State:	
Reported year 't-1'	
Reporting year 't'	

GREENHOUSE GAS SOURCE AND	CO <sub>2</sub> (1)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Unspecified mix of HFCs and PFCs	NF <sub>3</sub>	Total	ETS	Effort Sharir
SINK CATEGORIES		CO <sub>2</sub> equivalent (kt)							CO <sub>2</sub> equivalent (kt)		
Total (net emissions) (1)											
1. Energy											
A. Fuel combustion (sectoral approach)											
Energy industries											
Manufacturing industries and construction											
3. Transport											
4. Other sectors											
5. Other											
B. Fugitive emissions from fuels											
1. Solid fuels											
2. Oil and natural gas											
C. CO <sub>2</sub> transport and storage											
Industrial processes and product use											
A. Mineral industry											

Source: European Commission<sup>9</sup>

# 4. GOOD REGIONAL PRACTICES – GEORGIA

In this chapter the good practice of the establishment and implementation of the climate change MRV system in Georgia is reviewed. Just like Albania, Georgia is an EU membership candidate country, therefore, lessons learnt from it are relevant for Albania.

The lack of a domestic MRV system with standard rules and procedures tracking overall GHG emissions trends, sustainable development co-benefits and financial support induced the development of a comprehensive national MRV system in Georgia. To that end, Georgia proposed a design for a national MRV system in 2016 in its first BUR.

Since then, Georgia has successfully established a national MRV system. It has taken a phased approach to develop an accountable, inclusive and efficient MRV system for effective data collection, management and analysis across sectors and focus area<sup>10</sup>.

The current MRV system built on efforts undertaken under the Kyoto Protocol to monitor the implementation of Clean Development Mechanism projects in the energy sector. A national MRV system was first envisioned to incorporate MRV of internationally supported NAMA projects, i.e. it builds on more than a decade of experience at the project level.

#### 4.1. Legal framework

A proper procedural legal system is crucial for operationalising the MRV system. Georgia developed a legal background document in its second BUR to meet its future reporting obligations under the UNFCCC and other international treaties.

The 2014 Law on Environmental Protection requires "operators" to comply with emissions standards and to monitor them. It further mandates the development of a legal framework for climate change.

The 2016 Law on Protection of Ambient Air requires compliance with GHG emission standards, and instructs government agencies to fulfil the Paris Agreement commitments. Decree 54/2020 established a Climate Change Council in January 2021.

In June 2021, Georgia's 2030 Climate Change Strategy and 2021–2023 Action Plan was approved to guide NDC implementation<sup>11</sup>.

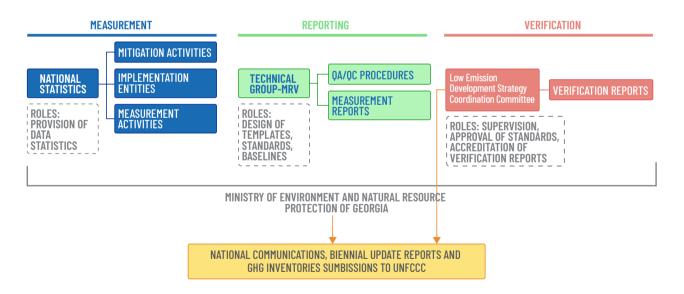


Figure 9: Framework of Georgia's MRV system

Source: Partnership on Transparency in the PA, 2019

10 GIZ. 2019

11 Further information and copies of the legislation referenced (some in Georgian language) are available from the climate law and governance database of the Grantham Research Institute.

#### 4.2.Institutional framework

The institutional framework of MRV in Georgia assigns clearly defined roles and responsibilities to different key actors. Appropriate stakeholders were selected through a consultative process.

As Figure 9 shows, the operation of the national MRV system is supervised by the Low Emission Development Strategy's Coordination Committee under the auspices of the Ministry of Environment Protection and Agriculture.

#### 4.3. Technical operation

The Ministry of Environment Protection and Agriculture formed a technical group of technical and industry experts, who designed detailed and robust guidelines and procedures covering:

- MRV of GHG emissions;
- 2. SDG co-benefits:
- 3. Financial Flows.

The technical group has developed common standards, templates and procedures, and is responsible for the establishment of emissions baselines; the methodologies used were based on the 2006 IPCC Guidelines. Moreover, it implements quality assurance procedures and prepares monitoring reports.

Adomestic registry system was designed to document mitigation measures and to describe each activity and the parameters that need to be monitored. Measurement and data collection responsibilities as well as reporting and verification processes have been determined and assigned. The National Statistics Office has established a single window system for efficient and reliable data reporting/collection on mitigation activities and reporting to the implementation entities and the group.

No information on IT software or modelling is available.

#### 4.4. Private sector engagement

Georgia has developed a robust, feasible, and costeffective MRV system based on a process that brought together key stakeholders from the government, private sector and civil society. Trainings and workshops were conducted to develop the capacity of all stakeholders and to provide them the opportunity to acquire a rich repository of relevant data in line with the requirements of advanced international MRV systems.

Sector- and/or project-specific feedback mechanisms were developed to analyse the impacts of the activities and provide feedback to decision makers.

#### 4.5. Capacity building

Extensive trainings and workshops offered to the stakeholders involved contributed to developing their capacity at different levels, enabling the successful measurement, reporting and verification of data.

#### 4.6. Lessons learned

Having reviewed Georgia's experience, the following lessons can be drawn:

- It proved beneficial having a well-established national statistics office that is responsible for processing data, conducting surveys and providing equal access to information; the national statistics office, in collaboration with line ministries, developed indicators and targets for all SDGs in 2017, closely linked to GHG emission reductions;
- Strong political backing is important, which needs to be understood in relation to the EU Accession Agreement of a country, which promotes accountability and transparency in public institutions;
- Technical support is equally important, demanding the involvement of technical experts of the MRV system throughout the process of its establishment and implementation;
- Inthesecond BUR, improvements were introduced to make the MRV system more efficient and to increase the transparency of both mitigation and adaptation activities; the MRV system in Georgia was built on existing systems and infrastructure;
- Financial support from international programs dedicated to the MRV system is necessary considering limited national budgets.

# 5. STATUS QUO OF CLIMATE CHANGE MRV IN ALBANIA

At present, the establishment of a climate change MRV system in compliance with the UNFCCC's and EU's environmental and climate change acquis requirements is one of the policy objectives of the Albanian National Climate Change Strategy and National Mitigation Plan 2021–2030, under the second strategic priority, namely to establish a national climate change MRV system in line with EU requirements.

Law No.155/2020 "On climate change" (the national law on climate change, hereinafter the Law) was adopted in December 2020 and entered into force in July 2021. It is partially aligned with Regulation (EU) 525/2013 defines MRV as "measurement or evaluation made in the Republic of Albania, reporting both nationally and internationally, verification (assurance and control of quality) at national level, as well as international supervision of emissions / sinks or other performance measurement data, defined in:

- a. GHG National Inventory Report,
- b. NCs, BURs, NDCs,
- monitoring reports of GHG emissions by private operators,
- d. analyses of the effects of the implementation of strategic documents related to climate change,
- e. projections of GHG emissions by sources and removals by sinks,
- f. financial and investment support for climate change."

The Law defines a bottom-up approach to MRV on climate change; it determines the institutional framework for climate change, as follows:

The **Ministry for Environment**, currently the Ministry for Tourism and Environment, is the highest government institution responsible for climate change; it is the UNFCCC's national focal point, and is responsible for the overall coordination and management of MRV, the preparation of NCs and BURs, and the preparation, implementation and reporting on NDCs;

The **National Environment Agency** is responsible for the national GHG inventory system;

**Line ministries** whose fields of activity influence and/ or are influenced by climate change, as defined in the Law, collect and report data on climate change to the Ministry for Environment; **Private sector actors** engaged in fields related to climate change, as defined in the Law, monitor and report on GHG emissions from their activities to the National Environment Agency;

The Institute of Statistics is the national, regional and local official data source of the Government of Albania, and provides socio-economic and demographic data on climate change, supports in developing the necessary national methodologies for national and international reporting on climate change;

The Institute of Geosciences, scientific research institutions, universities conduct research and publish studies on climate change, and support the GoA in the development of national methodologies needed for national and international reporting on climate change;

**Local government units** collect and report data for their territorial jurisdiction on climate change mitigation and adaptation measures at the local level to the Ministry for Environment;

The Inter-Ministerial Working Group on Climate Change is responsible for the overall coordination of responsibilities on climate change across government institutions, state institutions and the private sector, as determined by the Law; it is also responsible for monitoring the progress made towards the national targets on climate change and their review; it was established prior to the entry into force of the Law by the Order of the Prime Minister No. 155 of 25 April 2014 "On the establishment and functioning of the interministerial working group on climate change", chaired by the Minister for Environment, with members from other line ministries.

The **Council of Ministers**, based on a proposal of the Ministry for Environment, adopts the national procedures for MRV of national data on climate change.

The strategy and the law on climate change embody Albania's current national policy and legal framework on climate change in Albania, and in particular the MRV system on climate change. The law specifies that sub-legal acts pursuant to it shall be adopted within 4 years from its entry into force.

A draft Decision of the Council of Minister "On monitoring and reporting GHG emissions and other information relevant to climate change at the national level, including related procedures and timing", has been prepared as the first draft sub-legal act pursuant to the law.

The purpose of the draft DCM is to:

- ensure reporting by Albania to the UNFCCC and Kyoto Protocol as a Non-Annex 1 Party, and to the EU,
- ensure transparent, accurate, consistent, comparable and complete reporting,
- establish national procedures for MRV of data required for reporting.

Within the institutional framework for climate change determined by the Law, the draft DCM establishes the institutional framework of the climate change MRV system with the following specifications:

The **Ministry for Environment** is responsible for the endorsement and adoption of the national procedures necessary for implementation of the MRV system, supervision of data flow and data verification, and archiving of reported data and documents.

The National Environment Agency is responsible for the development of national GHG emission factors and national methods of climate change data measurement, reporting and verification, including assessment, estimation, uncertainty, quality assurance and control methods, as well as projections, as appropriate for Albania;

The National Agency of Natural Resources supports the National Environment Agency in the preparation of the national GHG inventory system and in developing emission factors and national methodologies needed for national and international reporting on climate change, including assessments, estimations, uncertainties, quality assurance and control methods, as well as projections related to its field of activity in the energy sector;

Line ministries whose fields of activity influence and/or are influenced by climate change, as defined in the law, collect and report data on GHG mitigation measures, climate change adaptation measures and/ or low-carbon development strategies developed and implemented as part of their sectoral strategic documents, support on data verification through implementation of the quality assurance and control plan, calculate and report on projections of GHG emissions by sources and removals by sinks.

The law and draft DCM do not yet complete the national framework for the establishment of the MRV system; several major gaps need to be addressed:

First, there are no national methods for the MRV of data: methods and templates are needed at every level of data measurement in line with the provisions on reporting and verification specified in the law and draft DCM, private sector actors, line ministries, local government units, INSTAT and the National Environment Agency; methods are primarily needed for (i) the identification of national anthropogenic GHG emission factors, including emission sources and removal sink categories and sub-categories, (ii) the collection, assessment, calculation or measurement of data, (iii) the assessment of uncertainty, (iv) quality assurance and control, and (v) the projection of GHG emissions by sources and removals by sinks; templates are primarily needed for the monitoring and reporting of data, as well as for an archiving system.

Second, no administrative structures, procedures and data sharing processes have been established: internal administrative structures and procedures must be introduced in all government and state institutions with MRV responsibilities as determined by the law and draft DCM, for the purpose of operationalizing their responsibilities and ensuring a timely and continuously verified data flow; for the same purpose, data sharing processes are needed in relation to private sector actors.

Third, the draft DCM needs to be revised before it is presented for adoption, based on the following objectives:

- a. alignment with the new reporting regulations of the EU under the Governance of the Energy Union and Climate Action (currently, it is only aligned with the Climate Monitoring Mechanism);
- b. provision of specifications on the responsibilities of private sector actors, which are currently lacking;
- provision of specifications of the responsibilities of local government units, which are currently lacking;
- d. provision of specifications of the responsibilities

- of IMWGCC, which are currently missing.
- e. provision of specifications of the responsibilities of line ministries and their agencies, which are currently incomplete;
- f. improvement of the bottom-up approach of the MRV system.

Fourth, the national budget for implementation of the MRV system must be projected: the initial investment, and annual operation and maintenance costs of the (i) national methods, (ii) administrative structures, procedures and data sharing processes, and (iii) the responsibilities assigned to government and state institutions by the revised draft DCM need to be projected and inform a cost-effectiveness analysis of the implementation of the MRV system.

# 6. PATH FORWARD FOR THE DEVELOPMENT OF THE CLIMATE CHANGE MRV IN ALBANIA

## 6.1. Challenges in establishing and implementing the MRV system

The GoA lacks the technical capacities to close the gaps and complete the national framework for establishing the climate change MRV system. Likewise, the GoA lacks the technical capacities to implement the system.

To date, the MTE has prepared three NCs, namely in 2002, 2009 and 2016, the first BUR, two NDCs in 2015 and 2021, and is currently preparing the fourth National Communication. The main data providers have been the Ministry for Environment, the NEA, the MIE, the National Agency for Natural Resources, the Ministry of Agriculture and Rural Development, the Extractive Industries Transparent Initiative and the INSTAT. However:

- data provided have not been in accordance with the IPCC,
- national emission factors have been represented by the default factors of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories,
- sectors characterized by high uncertainty in terms of emissions estimates are still unknown,
- aggregated information on the state of existing databases from these sources is missing.

Moreover the commitment to and cooperation across government and state institutions in climate

change reporting has been weak, and the IMWGCC's coordination activity has been lacking.

Finally, no regular monitoring of the implementation of strategic documents related to climate change has been carried out, namely of NDC 2015, CCSAP 2019–2030 and other sectoral strategic documents, among which most notably are the National Energy Efficiency Action Plans 2017–2030 and the National Strategy for Energy 2018–2030<sup>12</sup>; these documents envisage monitoring plans of implementation, but are not aligned with or prepared for the purpose and scope of MRV on climate change, and specifically not with the reporting requirements of GHG mitigation and climate change adaptation measures and/or low-carbon development strategies developed and implemented at sectoral level.

The cause of the present lack of technical capacities after so many years of national reporting is the weak commitment of the government and state institutions to the involvement in the work processes of the projects and to the ownership of the documents, methods and databases. At the root of such weak commitment is the lack of a national legal basis on climate change and, therefore, lack of legal institutional responsibilities and roles throughout these years; indeed, law no.155/2020 "On climate change" entered into force only in July 2021.

## 6.2. Considerations for an efficient and effective MRV system

Based on the presented analysis, the following insights and recommendations are valuable for consideration in the establishment and implementation of a national measurement, reporting and verification system on climate change which is efficient and effective.

#### 1. Proper reflection of international requirements

The analysis in Chapter 3.2 describes Albania's international reporting obligations as a Party to the UNFCCC and an EU candidate country. It reveals the need to design the future Albanian NDC MRV system in line with the requirements of the PA's Transparency Framework (compliance by the end of 2024) and the revised EU regulation (compliance by 2022). Moreover, the updated 2019 IPCC guidelines for national GHG inventories should be considered in future. These new reporting requirements come with the application of new software tools, which are currently being

developed.<sup>13</sup> Meeting both the EU's and UNFCCC's requirements necessitates the tracking of more granular and climate-related data to be presented in the EU's Monitoring Mechanism Regulation and PA BTR formats.

#### 2. Granular data tracking

To be credible, the ETF is based on the TACCC principles (transparency, accuracy, consistency, comparability and completeness). These principles need to be clearly reflected in the design and implementation of any MRV system. For illustration, the most recent exercise for the enhancement of the existing NDC of Albania of 2015 with energy efficiency measures is presented14; figure 10 illustrates the interrelations of the MRV of energy-relevant data within the NDC cycle: energy data are used to identify energy use by fuel type and (sub-)sector; GHG inventory methods and IPCC guidelines are applied to assess the status quo and baseline; finally, an analysis of energy demand of different (sub-)sectors determines areas where further interventions are needed to reduce energy demand and GHG emissions; the necessary statistics are:

- Total primary energy consumption by source (supply and demand): hydropower, hydrocarbons (oil, coal), biofuels and waste
- Total final energy consumption by type: electrical, heat, cooling, etc., and by sector: residential/ household, transport, industry, commercial, public

- services, agriculture, forestry, etc.
- Energy intensity and energy efficiency status: residential/ household, transport, industry, commercial, public services, agriculture, forestry, etc.
- energy consumption per gross domestic product,
- manufacturing energy consumption (tonnes of oil equivalent, billions),
- manufacturing energy intensity (tonnes of oil equivalent per USD1,000 manufacturing value added, constant 2010 USD).

Additional data and information on energy demand and consumption from sub-sectors are needed to interpret energy indicators and to calculate the potential for improving energy efficiency:

- Building: specific energy demand/ consumption per floor area (kWh/m²a), ideally separated by building type, age and current energy supply;
- Residential: ways of cooking and warm water supply; penetration rate of electric devices, etc.;
- Transport: average specific energy consumption of vehicles per 100 km.

These data provide a comprehensive overview of the status quo and baseline, distinguished by energy source type. Medium- and long-term forecasts for all relevant sectors can be derived from energy mapping to identify additional mitigation measures during the next NDC's round of revisions.

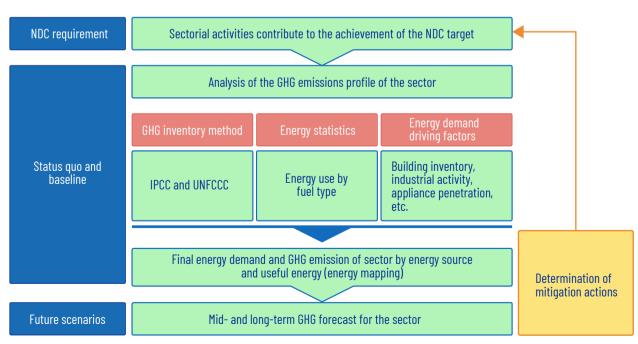


Figure 10: Energy data for NDCs

<sup>13</sup> The UNFCCCC CGE is currently working on an updated software solution for BTR reporting.

An appropriate MRV system, of NDC progress as well as of future biennial GHG Inventory Reports within the scope of the BTRs, calls for better data coverage. Thus, several layers of the existing MRV system require an update. In this context, the revision of the draft DCM on the MRV of climate change data, to further align it with the new EU reporting requirements under the Governance of the Energy Union and Climate Action as well as the PA BTR requirements, is a useful first step.

#### 3. Solid institutional arrangements and procedures

There is need to more completely determine the roles and responsibilities of the government and state institutions involved in the MRV system, and to better represent its bottom-up approach in the revised draft DCM, noting that in its current state the draft represents a rather top-down approach. In particular, the role of the Ministry for Energy, its agencies and INSTAT needs to be further defined in the collection of more granular data. This is illustrated in figure 11 below.

#### 4. Developed capacities

Finally, various capacities will be necessary to establish an MRV framework. The World Resources Institute has identified and categorized human, institutional, technical and financial capacities required.

#### 5. Quality assurance procedures

Effective verification is a key element for the credibility of MRV systems and their reported results. While several quality reviews exist at the international level, i.e. expert reviews and facilitative multilateral considerations of progress under the PA, there is only limited technical verification at the domestic level. Verification processes will be established with the revision and adoption of the draft DCM.

#### 6. Access to international support

Having emphasized the need for various capacity elements related to different facets of implementing MRV systems, many developing countries will face challenges in attaining these capacities on their own. Consequently, several bodies, institutions and initiatives provided by the UNFCCC and beyond aim to support the set-up of MRV systems in non-Annex I countries. As a non-Annex I country, Albania is eligible for such support facilities. A selection of potential multilateral support channels is presented in the following figure. Additionally, bilateral channels such as the International Climate Initiative in Germany provide support for energy-related MRV components, including the elaboration of NECPs.

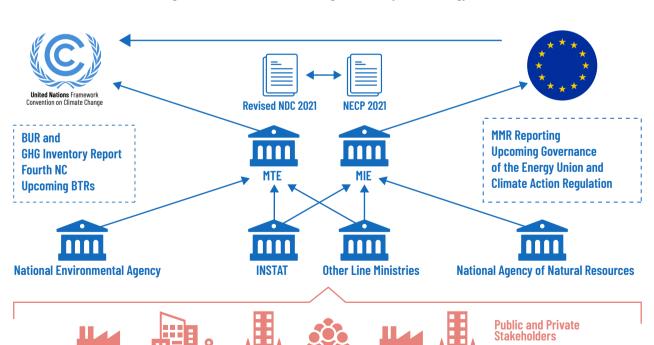


Figure 11: Potential institutional setting for an MRV system for energy data

Figure 12: Capacities required for the implementation of an MRV system

Capacity	Description and key elements
Human resources	Human resources are needed to perform a range of tasks and functions related to different types of MRV. Typical functions include: overall planning; coordination; management and technical oversight; conducting research; data collection and management; emission calculations; and quality assurance/quality control coordination.
	Key elements:  - Capacity and skills of individual staff, including managerial abilities and technical skills;  - Recruitment and retenetion of skilled staff;  - Regular training of new and existing staff.
Institutional capacity	Performing MRV requires institutions that have the necessary mandate, and clear and efficient processes. <b>Key elements:</b> - Ability of institucions to perform their functions;  - Effective institucional arrangements, processes and coordination mechanisms, leadership, and institutional mandates;  - Capability to identify problems and develope and implement solutions.
Technical capacity	Technical capacity needs can be understood in terms of availability of appropriate methodologies to obtain accurate data and adequate platforms for data collection and management.  Key elements:  - Availability and quality of data and information;  - Retention of institutional memory, archiving, and documentation procedures;  - Collection and dissemination of information;
Financial resources	- Technical and technological infrastructure (e.g. data collection platformes and monitoring technology).  Financial capacity involves ensuring that sufficient resources are available to start and sustain the implementation of MRV. Financial resoruces are needed to equip governments and other relevant entities for several MRV-realated tasks such as hiring qualified professional dedicated exclusively to perform MRV, building capacity among stakeholders to support MRV implementation, putting in place effective institutional arrangement and processes, and implementing new data collection system and methods.  Key elements:  - Adequate financial resources to perform functions and achieve objectives;  - Ability to manage these resources

Source: WRI, 2016

Finally, Albania is also eligible for support to build EU-compliant MRV approaches under the instrument for pre-accession assistance (IPA II), including MRV-related capacity-building and regional exchange.

#### 7. Technical group of experts

The establishment of a technical group of the MRV system with a wide range of experts, from government institutions, private sector, including industry, and academia should be considered; an adjustment of the draft DCM would be required for its regulation. This group would be part of all the processes of the establishment of the system, including national methods, institutional arrangements and procedures, capacity building, and more. Its relationship to the IGWGCC may need to be specified.

#### 8. Consultation among stakeholders

A platform for exchange of information, discussion and consultation among stakeholders of the MRV system may be considered.

Figure 13: Bodies and initiatives supporting the set-up of capacities for MRV systems

Body	Summary Introduction	Relevance to enhanced transparency framework of the Paris Agreement
Paris Committee on Capacity- building (PCCB)	The PCCB was created in 2015, during COP21, to enhance the UNFCCC institutional arrangement and oversee a comprehensive work program that includes identifying capacity gaps and needs; fostering international, regional, national, and subnational cooperation; assessing how to increase synergies, ccorination, collaboration, and coherence among existing bodies and activities within and outside the UNFCCC, promoting the developement and dissemination of relevant tools and methodologies; and collecting best practices and lessons learned to enhance ownership and retention of capacity at national regional, and subnational levels (UNFCCC 2015a, para.73).	The PCCB is tasked with supporting efforts under and implemntation related to the Paris Agreement. Capacity-building gaps and needs related to the enhanced transparency framework are within this purview.
Durban Forum	In 2011, Parties decided to create the Durban Forum, an annual indepth discussion on capacity building (UNFCCC 2011b, para.144). the Durban Forum has met every year since 2012 during the May/June sessions of the Subsidiary Body for Implementation.	Discussion under the Durban Forum, which are crucial to exploring capacity- building experiences, often include discussions of transparency-related topics.
Consulative Group of Experts (CGE)	The CGE was created in 1999 to respond specificially to the need to improve the preparation of national communications (CGE 2018). The COP, through Decision 19/CP.19, continued the CGE for five years, from 2014 to 2018, and mandated the CGE to also provide support for the preparation of BURs (CGE 2018). At COP24 the CGE was extended through 2026 and mandated to serve the Paris Agreeement.	The CGE has now been mandated to serve the implementation of the Paris Agreement, including providing support for the preparation of biennial transparency reports.
Capacity- building Initiative for Transaparency (CBIT)	In decision 1/CP.21, paragraph 84, countries established the CBIT to support developing countries in meeting their requirements under Article 13. The decision also outlined three key objectives of the CBIT: "(a) to strengthen national institutions for transparency-related activities in line with national priorities; (b)to provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement; (c) to assist in improvement of transparency over time" (UNFCCC 2015a, para.85).	The CBIT is expected to play a key role in helping countries meet transparency requirements as defined in Article 13 of the Paris Agreement, as mandated by Decision 1/CP.21, paragraph 84.
Global Environment Facility (GEF)	In addition to hosting the Capacity-building Initiative for Transparency (see entry above), the GEF has long supported transparency arrangements under the Convention by lending support to the preparation of NCs and BURs.	These national reports provide the foundation for transparency arrengements under the Paris Agreement.
Green climate fund (GCF)	The GCF's Readiness and Preparatory Support Programme offers support for the development of National Adaptation Plans (NAPs) and other adaptation planning processes (GCF n.d.). efforts also under the Readiness and Preparatory Support Programme aim to improve access to climate finance by aligning national strategies with funding proposals and country priorities (GCF n.d.).	The GCF is expected to play a critical role in implementing mitigation actions related to NDCs seeking support. In addition, GCF support for the formulation of NAPs will strengthen national reporting on adaptation actions. The GCF also supports implementing mitigation actions.

Initiative	Description	Web link
Partnership on Transparency in the Paris Agreement (PATPA)	PATPA was established in 2016 to promote support for practical exchange and policy dialogue between countries on enhanced climate transparency (PATPA n.d.). This initiative built on the earlier 2010 international partnership on mitigation and MRV between Germany, South Africa, and South Korea. PATPA expanded its scope to cover the transparency not only on mitigation actions, but also of adaptation and support. More than 100 countries participate in PATA activities, together with numerous agencies, research organizations and other international initiatives (PATPA n.d.).	www.transapency- partnership.net/
Information matters	Information matters is a projects of GIZ, Germany's international developement agency. The project aims to support countries in preparing their transparency reports under the Convention. It does so through approaches specific to developing countries in close consultation with country stakeholders and through national workshops, which bring together country and international experts (GIZ n.d.)	www.giz.de/world- wide/30164.html
Initiative for climate Action Transparency (ICAT)	ICAT was established in 2016 to promote the use of common voluntary framework to assess the impact of countries' policies and actions, report progress, and foster greater transparency, effectiveness, and ambition (ICAT 2016). The initiative relies on the developement of guidance and capacity-building activities to improve the availability and quality of data and enable countries to promote efficient and cost-effective policies. In addition to developing guidance, ICAT intigrates capacity-building activities and knowledge-sharing to engage countries in the use of a common framework.	www.climateactiontranspar ency.org/
Partnership to Strengthen Transparency for co-Innovation (PaSTI)	PaSTI seeks to support developing countries, particulary in the Asia-Pacific region, to strengthen transparency by engaging non-state actors and developing innovative incentive mechanisms that support the exchange of data (Overseas Environmental Cooperation Center, Japan 2019).	www.oecc.or.jp/e/pasti/inde x.html
Coalition on Paris Agreement Capacity Building	The coalition is comprised of a pool of experts with experience in greenhouse gas MRV and capacity-building activities. This coalition has provided an expert forum for the coordination and acceleration of improved capacity-building activities and has published recommendations for capacity-building strategy, including expert input to the PCCB and CBIT (Coalition on the Paris Agreement Capacity Building 2019).	www.capacitybuildingcoaliti on.org/
Partnership for Market Readiness (PMR)	The PMR rallies countries, organizations, and experts to explore and identify innovative approaches to GHG mitigation using markets and carbon pricing, including the underlying MRV system. An MRV workstream focuses on developing guidance for implementing and designing MRV systems that can support carbon-pricing efforts (PMR 2016)	www.thepmr.org/
Low Emission Developement Strategies Global Partnership (LEDS-GP)	LEDS-GP aims to advance climate-resiliant low-emission developement and support transitions to a low-carbo economy through coordination, information exchange, and cooporation among countries and key organizations.	www.ledsgp.org
Research collaborative led by the organization for Economic	The OECD research collaborative brings governments, research institutions, and international finance institution to partner and share best available data, expertise, and information to advance policy-relevant research on tracking private climate finance in a comprehensive and timely manner. This work aims to contribute to the design of international guidance for the tracking and transparency of support (OECD 2018).	www.oecd.org/finance/tracking-climate-finance.html

Source: WRI, 2019

#### 7. CONCLUSION

As a Party to the UNFCCC and as an EU membership candidate country, Albania is committed to complying with several reporting requirements on climate change at the national level. These requirements are interrelated, therefore, the future MRV system should aim to realize synergies. While the current system of UNFCCC reporting runs until the end of 2024, there is a need to commence the design and implementation of an Enhanced Transparency Framework to fulfil the PA's requirements. The revised 2019 IPCC guidelines for national GHG inventories should be considered and new software tools will have to be introduced.

The practice of energy-related data collection for the purpose of enhancing the Nationally Determined Contribution for the reduction of emissions of greenhouse gases 2021–2030, as well as good international practices, indicate the need for an MRV system providing granular data, particularly on drivers of energy demand; the current institutions do not provide such data in a sufficient manner; methods and templates need to be introduced at every level of data measurement in addition to internal administrative structures, procedures and data sharing processes.

Within the limited national budget on climate change, an MRV system budget needs to be projected and presented for discussion to the Ministry of Finance and Economy, including the initial investment, and annual operation and maintenance costs of the (i) national methods, (ii) administrative structures, procedures and data sharing processes, and (iii) the responsibilities assigned to government and state institutions; the engagement of the private sector into the system may also require dedicated financial funds

The draft DCM "On monitoring and reporting GHG emissions and other information relevant to climate change at the national level, including related procedures and timing" has to be adopted until July 2025, as required by the law 155/2020 "On climate change"; therefore, its revision should be prioritized in the next two years. During the revision, particular attention should be given to the regulation of a bottom-up approach of the MRV system; here, careful consideration is needed on the legal basis of establishment and functioning of the government institutions with responsibility in the implementation of the system, with the purpose of ensuring that the general bottom-up institutional arrangement

established by the law be reflected also in the specific institutional arrangements of the DCM.

There is need for long-term cooperation among stakeholders throughout the establishment and implementation of the MRV system; following the successful Georgian practice, a technical group with experts from all sectors and areas related to the measurement, reporting and verification of climate change data may be an organization form of such cooperation.

To support the complex process of building a MRV that is fit for the future, Albania could make use of various international mechanisms and initiatives under and beyond the UNFCCC. Green Climate Fund and Global Environment Facility funding and EU support for IPA II are helpful channels in this regard.

### References

Agora Energiewende, 2020. Policy Note. [Online]. Available from: https://static.agora-energiewende.de/fileadmin/Partnerpublikationen/2021/Klimapolitika\_NECPs\_as\_governance\_tools/NECP\_Paper\_1\_Klimapolitika\_FINAL.pdf

Deutsche Gesellschaft für Internationale Zusammenarbeit. 2018. National Benefits of Climate Reporting. Discussion Paper. Partnership on Transparency in the Paris Agreement. [Online]. Available from: https://transparency-partnership.net/system/files/document/GIZ\_2018\_National%20benefits%20of%20climate%20reporting.pdf

Energy Community. 2021. Implementation: Albania, Climate. [Database]. https://energy-community.org/implementation/Albania/CLIM.html

European Union. 2021a. Stabilisation and Association Agreement. [Online]. Available from: https://ec.europa.eu/neighbourhood-enlargement/enlargement policy/glossary/stabilisation-and-association-agreement\_de

European Union. 2021b. Emissions monitoring & reporting, Monitoring Mechanism Regulation 525/2013. [Online]. Available from: https://www.eea.europa.eu/policy-documents/monitoring-mechanism-regulation-525-2013.

Grantham Research Institute. 2021. Climate Change Laws of the World. [Online]. Available from: https://climate-laws.org/

Minister of Environment and Natural Resources Protection of Georgia. 2016. First Biennial Update Report on Climate Change. [Online]. Available from: https://unfccc.int/files/national\_reports/non-annex\_i\_parties/biennial\_update\_reports/application/pdf/first\_bur\_-\_georgia.pdf

Ministry of Infrastructure and Energy of Albania. 2021. National Energy and Climate Plan. Working document.

Ministry of Tourism and Environment of Albania. 2021a. Albania Revised NDC. Working document.

Ministry of Tourism and Environment of Albania. 2021b. First Biennial Update Report of Albania to the UNFCCC.

Öko-Institut.e.V.. 2021. Understanding the Transparency Guidance. Working paper. [Online]. Available from: https://www.oeko.de/en/publications/p-details/understanding-the-transparency-guidance

Partnership on Transparency in the Paris Agreement. 2019. National Benefits of Climate Reporting: The MRV System of Georgia. Good Practice Database. [Online]. Available from: https://transparency-partnership.net/system/files/document/200113\_GPD\_Georgia-Climate-reporting\_RZ.pdf

United Nations Framework Convention on Climate Change. 2020a. Consultative Group of Experts – Handbook on institutional arrangements to support MRV/transparency of climate action and support. [Online]. Available from: https://unfccc.int/sites/default/files/resource/Hand%20book\_EN.pdf

United Nations Framework Convention on Climate Change. 2020b. Technical handbook for developing country Parties on Preparing for implementation of the enhanced transparency framework under the Paris Agreement. [Online]. Available from: https://unfccc.int/sites/default/files/resource/ETF\_technical%20handbook\_First%20Edition.pdf

Urban Research Institute. 2021a. Additional potential of energy efficiency for the enhancement of Albania's NDC 2030. Green Climate Fund. Readiness and Preparatory Support Project. Working Document.

Urban Research Institute. 2021b. State of implementation of NDC 2015: Policies and measures of energy efficiency. Green Climate Fund. Readiness and Preparatory Support Project. Working Document.

World Resource Institute. 2016. MRV 101: Understanding Measurement, Reporting, and Verification of Climate Change mitigation. [Online]. Available from: https://www.wri.org/research/mrv-101-understanding-measurement-reporting-and-verification-climate-change-mitigation

World Resource Institute. 2019. Building capacity for the Paris Agreement's enhanced transparency framework: what can we learn from countries' experiences and UNFCCC processes? [Online]. Available from: https://www.wri.org/research/building-capacity-parisagreements-enhanced-transparency-framework







