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# TOWARDS DEVELOPMENT/ STRENGTHENING OF THE NATIONAL GHG INVENTORY SYSTEM —

CONCEPTUAL FRAMEWORK FOR MONITORING,  
REPORTING AND VERIFICATION OF LAND USE, LAND-USE  
CHANGE AND FORESTRY (LULUCF) SECTOR IN GEORGIA

MRV LULUCF GEORGIA

ROADMAP





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Conceptual Framework for Monitoring,  
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Change and Forestry (LULUCF) Sector in Georgia

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## RECOMMENDATIONS FOR THE NEXT STEPS NECESSARY TO BUILD A ROBUST MRV SYSTEM RELATED TO THE LULUCF SECTOR (ROADMAP)

November 2022

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This publication has been produced with the assistance of the European Union (EU) and the United Nations Development Programme (UNDP). Its contents are the sole responsibility of the authors and do not necessarily reflect the views of the EU and UNDP.

# Outline

OUTLINE .....	5
INTRODUCTION .....	6
<b>1.</b> ELABORATION OF THE STRATEGY .....	7
<b>2.</b> ADOPTION OF INSTITUTIONAL ARRANGEMENTS .....	7
<b>3.</b> FORMALIZATION OF THE LEGISLATIVE FRAMEWORK.....	8
<b>4.</b> DEVELOPMENT OF LEGALLY BINDING INSTRUMENTS .....	8
<b>5.</b> ADOPTION OF THE WORKPLAN .....	8
<b>6.</b> CAPACITY BUILDING .....	9
<b>7.</b> DEVELOPMENT OF METHODOLOGY AND TOOLS .....	10
<b>8.</b> DEFINITION OF QA/QC PROCEDURES .....	11

# INTRODUCTION

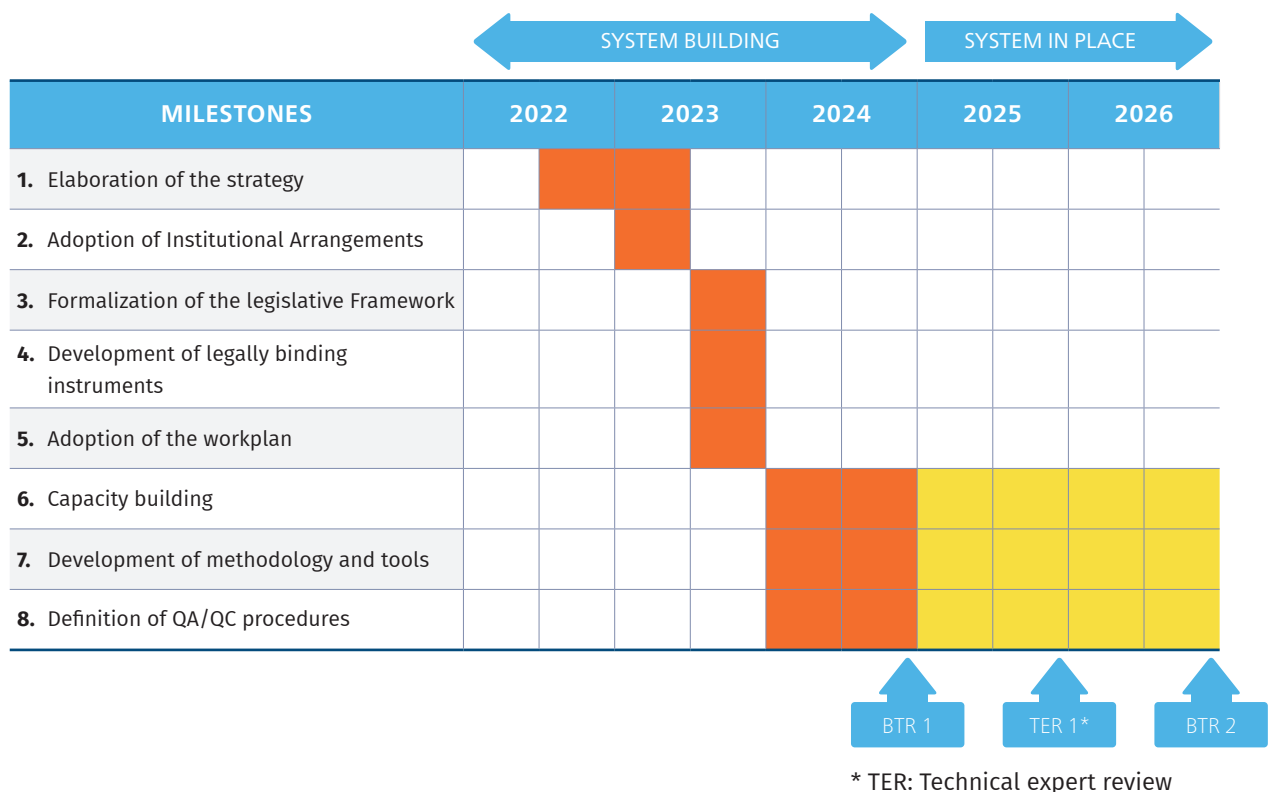
This report presents the roadmap for implementing a new MRV organizational scheme for LULUCF in Georgia. The roadmap describes the steps to achieve an efficient inventory system for LULUCF.

It includes recommendations for the next steps necessary to build a robust MRV system related to the LULUCF sector, as described in the previous detailed report.

Ideally it would have been strongly recommended to complete this roadmap by the end of 2024 to meet the desired reporting requirements under the Paris Agreement and effectively contribute to the implementation of Georgia’s first biennial transparency report (BTR). In practice the process of producing the BTR 1 is already ongoing, and it is rather unlikely that the system becomes already operational for this next exercise.

This report summarizes key actions that need to be put in place to have a robust, efficient, impactful, and sustainable MRV system for LULUCF in Georgia.

**FIGURE 1:** POSSIBLE ROADMAP FOR SYSTEM BUILDING





## 1. ELABORATION OF THE STRATEGY

The EU4Climate project that the present reports is part of already participates to the strategy for implementing a new MRV organizational scheme for LULUCF, by presenting several options of organizations. As mentioned in the detailed report there is no obvious or “natural organization” for LULUCF in Georgia, so there are still needs for national brainstorming on the best system to conduct the LULUCF GHG inventory.

The strategy requires to cross the possible organizations, the expected results and the possible resources. It may be difficult to reach a national consensus and it is important to remind that all choices must be associated with appropriate communication on objectives and constraints.

**TABLE 1:** INFORMAL RECOMMENDATIONS ON THE STRATEGY

<b>Reco 1</b>	<i>We recommend involving stakeholders broadly in decision process.</i>
<b>Reco 2</b>	<i>We recommend reminding the national interest, and the importance of international engagements when making the choice of options.</i>
<b>Reco 3</b>	<i>We recommend basing the strategy on technical skills and capacities of involvement from teams more than current data availability.</i>



## 2. ADOPTION OF INSTITUTIONAL ARRANGEMENTS

The institutional arrangements are the results of a national consultation. They may be adopted by a large panel of actors and thus approved with a workshop where all stakeholders are invited.

The validation of the institutional, organizational and regulatory aspects should be done by the relevant stakeholders as soon as possible in order to adopt and initiate the operations of setting up the system and those determining the preparation and establishment of the Decree, as well as internal Orders / Circulars within the bodies involved in the system.

**TABLE 2:** INFORMAL RECOMMENDATIONS FOR ADOPTION OF INSTITUTIONAL ARRANGEMENTS

<b>Reco 4</b>	<i>We recommend ensuring the consistency of treatment of LULUCF with other sectors but reminding the high specificities of the sector (no obvious responsibility, technical issues, political importance, data gaps, uncertainties)</i>
<b>Reco 5</b>	<i>We recommend organizing a workshop/event for the adoption of the system.</i>
<b>Reco 6</b>	<i>We recommend using schemes to explain and communicate on the institutional arrangements (the scheme presented in detailed report on options is recommended).</i>



### 3. FORMALIZATION OF THE LEGISLATIVE FRAMEWORK

The establishment of the system should be based on a legal text giving legal force to the inventory operation, ideally in the form of a Decree, followed by an Order. This document may be common with other sectors. Precisions on the content of this document are provided in section 3.1 of the detailed report.

**TABLE 3:** INFORMAL RECOMMENDATIONS FOR FORMALIZATION OF THE LEGISLATIVE FRAMEWORK

<b>Reco 7</b>	<i>We recommend naming organizations in the official documents but without being too precise in terms of data because methods are changing often.</i>
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## 4. DEVELOPMENT OF LEGALLY BINDING INSTRUMENTS

MEPA in collaboration with EIEC and organization in charge of technical work for LULUCF need to develop data sharing Memorandum of Understanding (MoUs) and Agreements.

One must remind that data supply agreements are presented in 2019 IPCC refinement paragraph 1.4.2.2 as good practices.

**TABLE 4:** INFORMAL RECOMMENDATIONS ON THE DEVELOPMENT OF LEGALLY BINDING INSTRUMENTS

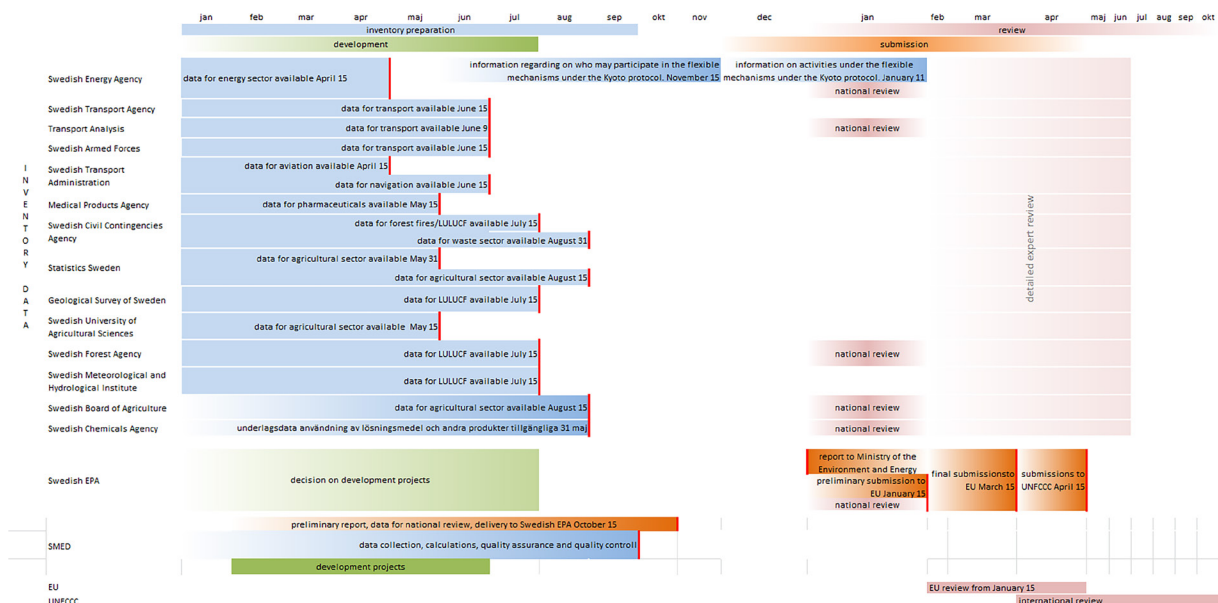
<b>Reco 8</b>	<i>We recommend using the public data and encouraging the organization to communicate on the data they use.</i>
<b>Reco 9</b>	<i>We recommend reminding to data providers that it is useful to officialize the data needs to keep sustainable data production.</i>
<b>Reco 10</b>	<i>We recommend officializing data provision by Data Supply Agreement (DSA) or Memorandum of understanding (MoU) for which a template is provided in Annex 1 of the detailed report.</i>



## 5. ADOPTION OF THE WORKPLAN

The workplan must be drawn up both by the organizations politically responsible for the inventory and by the organizations in charge of its technical implementation. The adoption of the workplan does not require the holding of a specific event such as the adoption of the institutional framework but it is important to have an official document that can be updated regularly.

**FIGURE 2:** EXAMPLE OF WORKPLAN FOR THE ENTIRE INVENTORY PROPOSED BY SWEDEN IN ITS NIR 2022



**TABLE 5:** INFORMAL RECOMMENDATIONS ON ADOPTION OF THE WORKPLAN

<b>Reco 11</b>	<i>We recommend using the workplan presented by the 2019 IPCC refinement.</i>
<b>Reco 12</b>	<i>We recommend to include the presentation of accurate deadlines, working periods, stakeholders and expected results in the workplan (like the exemple from Sweden presented above)</i>



## 6. CAPACITY BUILDING

The capacity-building plan should be continuous and support experts for long periods. It may cover:

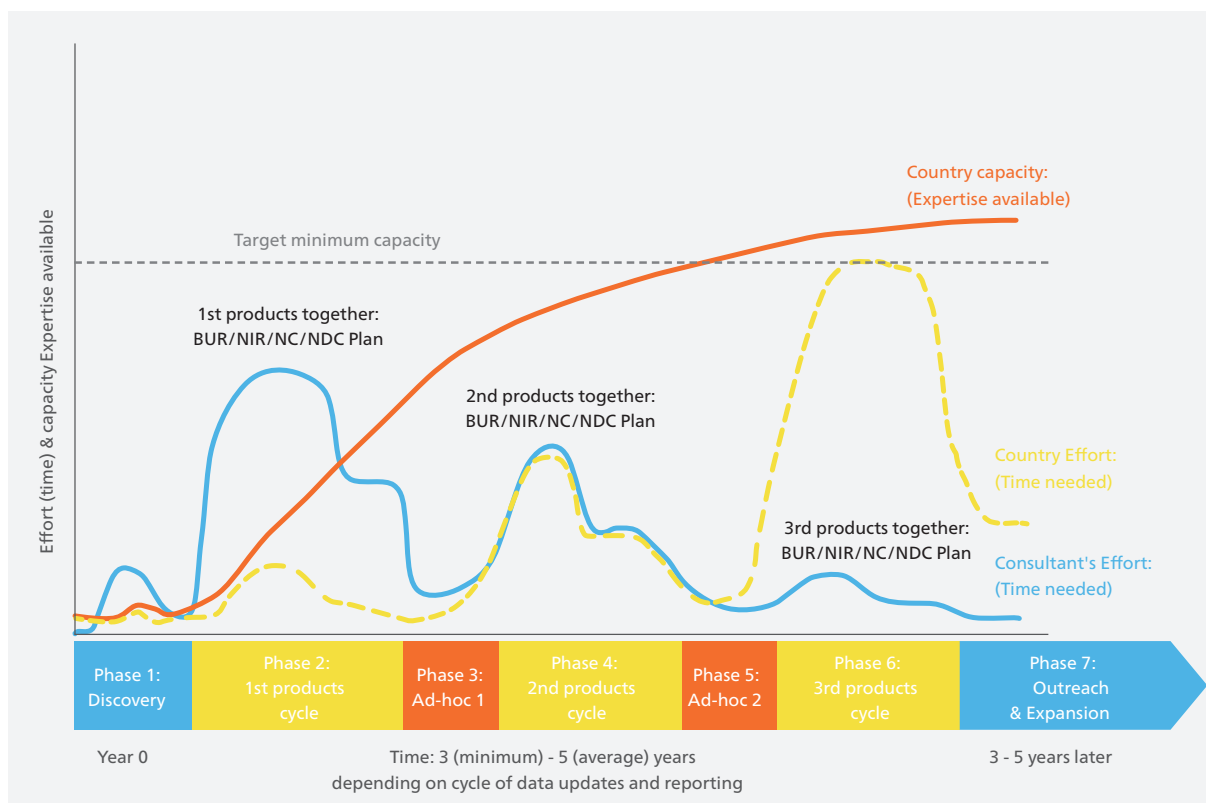
- Sectoral aspects and the definition of actions to improve methods;
- Cross-cutting aspects (analyses, key sources, uncertainties, report content, inventory cycles, QA/QC);
- Coordination and management of tools;
- Reporting to the UNFCCC and other international reporting requirements: the participation of national experts in the reviews would be an essential element of motivation for the teams, but also of positioning the country in the global expertise on the GHG inventory and in the improvement of methods.

Training may cover both the political dimensions of the process and the technical aspects:

- The enhanced transparency framework (ETF) of the Paris Agreement and the application of the Paris Rulebook;
- The collection process to be implemented to calculate GHGs according to the 2006 and 2019 IPCC methodologies;
- Synergies between GHG emissions, energy accounting and cross-cutting aspects on the scope to be covered (in terms of GHGs, sectors, etc.);
- GHG accounting principles highlighting the differences between the 2006 and 2019 guidelines;

The expertise at the national level must be consolidated over a period of 3 to 5 years, which corresponds to the publication cycle of the second BTR at the end of 2026.

**FIGURE 2:** TYPICAL CYCLE OF CAPITALIZATION OF GHG INVENTORY SKILLS AND EXPERTISE



Source: CGE 2020, Handbook on institutional arrangements to support MRV/transparency of climate action and support

**TABLE 6:** INFORMAL RECOMMENDATIONS ON CAPACITY BUILDING

<b>Reco 13</b>	<i>We recommend considering capacity building on technical issues when teams are already built and in charge of the products. The non-targeted capacity building on technical topics have limited benefits.</i>
<b>Reco 14</b>	<i>We recommend the shift of responsibilities from national consultants to expert teams (private or public but sustainable) within the 4 coming years.</i>



## 7. DEVELOPMENT OF METHODOLOGY AND TOOLS

Calculations for LULUCF inventory must be done in accordance with expected reporting format. The format for the coming BTR (biennial transparency report) was recently fixed by the UNFCCC with the final version of CRT (common reporting tables) including tables for LULUCF. These reporting tables are closed to the ones use in Annex I countries until now.

Approved version of CRT<sup>1</sup> tables is version 2.80. These tables give an overview of reporting expectations for LULUCF.

Results provided by the entities in charge of the technical responsibility of LULUCF should be sufficient to fulfil this document.

Methodologies for estimating emissions and removals may be developed as well as develop a nationally appropriate book as a guide to clarify and simplify the process. Both methodologies and tools may be very frequently updated to respond to the increasing demand of accuracy on inventories.

This must be developed by the organization in charge of the technical work on LULUCF in accordance with other actors involved in the inventory process.

**TABLE 7:** INFORMAL RECOMMENDATIONS ON METHODOLOGIES AND TOOLS

<b>Reco 15</b>	<i>We recommend authorizing the diversity of tools for LULUCF as far as they are developed/ accepted by the technical teams</i>
<b>Reco 16</b>	<i>We recommend using Microsoft Excel for its flexibility and facility when calculations are not too huge and other software like R, PostgreSQL when data are becoming important.</i>
<b>Reco 17</b>	<i>We recommend preparing data out of IPCC tool (if IPCC tool is used at national level) and calculate emissions out of IPCC tool at the same time to ensure that calculations are well managed.</i>



## 8. DEFINITION OF QA/QC PROCEDURES

There are two types of controls to be implemented within the framework of an inventory: quality control and quality assurance.

- Quality Control is a control performed by personnel involved in inventory compilation, it is a system of routine technical activities intended to assess and maintain the quality of the inventory as compiled.
- Quality assurance is a control performed by personnel not directly involved in the compilation process, these are external checks. In the MRV system it is relevant to specify some responsibilities in terms of quality assurance. It could be expected from experts in ministries but also from fully independent reviewers that can be recorded in the MRV system.

A nationally appropriate process for quality control (QC) and quality assurance (QA) of all data collected in the sector should be built.

It must be developed by the organization in charge of the technical work on LULUCF in accordance with other actors involved in the inventory process.

**TABLE 8:** INFORMAL RECOMMENDATIONS ON QA/QC

<b>Reco 18</b>	<i>We recommend tracking very accurately the methodology changes with a panel of rules (color codes, dates of modification, common rules of work)</i>
<b>Reco 19</b>	<i>We recommend the nomination of support people for each category of the inventory (at least 2 people by topic)</i>
<b>Reco 20</b>	<i>We recommend the implementation of lots of consistency checks in the calculation files.</i>
<b>Reco 21</b>	<i>We recommend recording the mistakes and comments from internal and external reviews and quality assurance</i>
<b>Reco 22</b>	<i>We recommend the assistance of experienced inventory teams for developing good QA/QC systems</i>





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