



Report on the technical expert review of the first biennial transparency report of Georgia*

Addendum

Summary

This addendum to the report on the technical expert review of the first biennial transparency report of Georgia, conducted by a technical expert review team in accordance with the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement, contains the results of the review of the consistency of the information submitted by the Party with those modalities, procedures and guidelines, and presents capacity-building needs identified by the Party and by the technical expert review team in consultation with the Party during the review. The review took place from 1 to 5 December 2025 in Tbilisi.

* In the symbol for this document, 2024 refers to the year in which the original biennial transparency report was submitted, not to the year of publication.



Abbreviations and acronyms

2006 IPCC Guidelines	<i>2006 IPCC Guidelines for National Greenhouse Gas Inventories</i>
AD	activity data
BTR	biennial transparency report
C	confidential
CEIP	Centre on Emission Inventories and Projections
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CRT	common reporting table
CSC	carbon stock change
CTF	common tabular format
EF	emission factor
EIEC	Environmental Information and Education Centre of Georgia
FAOSTAT	statistical database of the Food and Agriculture Organization of the United Nations
Geostat	National Statistics Office of Georgia
GHG	greenhouse gas
HFC	hydrofluorocarbon
HWP	harvested wood products
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
LT-LEDS	long-term low-emission development strategy(ies)
LULUCF	land use, land-use change and forestry
M _B	mass of fuel available for combustion
MEPA	Ministry of Environmental Protection and Agriculture of Georgia
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
N	nitrogen
N ₂ O	nitrous oxide
NA	not applicable
NDC	nationally determined contribution
NE	not estimated
NF ₃	nitrogen trifluoride
NFI	national forest inventory
NID	national inventory document
NIR	national inventory report
NMVOG	non-methane volatile organic compound
NO	not occurring
NO _x	nitrogen oxides
PaMs	policies and measures
PFC	perfluorocarbon
QA/QC	quality assurance/quality control
SF ₆	sulfur hexafluoride
SOC	soil organic carbon
SO _x	sulfur oxides
TERT	technical expert review team

WAM	‘with additional measures’
WM	‘with measures’

I. Areas of improvement¹ identified during the technical expert review of the Party’s first biennial transparency report

1. Tables 1–14 present the results of the review of the consistency with the MPGs² of the information submitted by Georgia in its BTR1. All recommendations and encouragements contained in the tables are for the next BTR or NIR, unless otherwise specified.

A. General reporting provisions

Table 1

Areas of improvement relating to general reporting provisions

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
NA	NA	No areas of improvement identified

B. Greenhouse gas emissions and removals

Table 2

Areas of improvement relating to general findings on greenhouse gas emissions and removals

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
2.G.1	Specified in paragraph 18 of the MPGs Inventory submission	<p>Georgia submitted its BTR1, including a summary of GHG emissions and removals, and the corresponding CRTs and CTF tables, on 31 December 2024, on the deadline. However, the Party submitted its NID as a stand-alone report on 7 May 2025, after the deadline of 31 December 2024.</p> <p>During the review, Georgia explained that this delay was due to limited technical capacity and human resources, time-consuming fragmented and manual workflows, knowledge gaps in the use of the web portal tool for reporting under the enhanced transparency framework and gaps in language skills. The Party indicated that, to overcome the challenges associated with submitting its NID on time, it has already identified priority actions for improving its reporting workflows.</p> <p>The TERT encourages Georgia to follow up on the identified priority actions and establish the necessary capacity and knowledge, develop efficient workflows and strengthen its national inventory arrangements so that it can submit its next NIR, including its NID, on time.</p>
2.G.2	Specified in paragraph 18 of the MPGs Institutional arrangements	<p>In its NID (section 1.2, pp.24–27), Georgia described its institutional and procedural arrangements for preparing its GHG inventory. However, it did not describe the legal framework used to establish, implement and maintain the national inventory arrangements for the continued estimation, compilation and timely reporting of its national inventory.</p> <p>During the review, Georgia explained that its inventory arrangements derive from its approval of the Paris Agreement (decree 96 of 21 February 2017) and its accession to the Energy Community, which requires it to comply with Article 26 (Annual Reporting) of European Union regulation 2018/1999 on the governance of the Energy Union and climate action on submitting annual GHG inventories. The TERT noted that decree 96 does not establish institutional responsibilities for preparing the national inventory. Georgia indicated in NID section 1.2 (p.25) that it is upgrading its national GHG inventory system in line with Energy Community obligations in a process expected to span multiple BTR cycles. The TERT further noted that, in its 2024 Annual Implementation Report for Georgia (published on 1 November 2024), the Energy Community secretariat indicated that the Party still lacks a formal legal basis for its national GHG inventory system.</p>

¹ As referred to in paras. 7, 8, 146(d) and 162(d) of the MPGs, contained in the annex to decision 18/CMA.1.

² Decision 18/CMA.1, annex.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
2.G.3	Specified in paragraph 19(b) and 19(d) of the MPGs Institutional arrangements	<p>The TERT encourages Georgia to implement and maintain the legal arrangements for the continued estimation, compilation and timely reporting of NIRs, and include in its NID related information, including on its progress in establishing a legal basis for its national GHG inventory system, should this not yet be in place. Given that the Energy Community Treaty is distinct from the Paris Agreement, the TERT also encourages Georgia to explain the relationship between the requirements cited in Article 26 of European Union regulation 2018/1999 on the governance of the Energy Union and climate action and the domestic legal framework underpinning the preparation of the Party's national GHG inventory.</p> <p>In its NID (section 1.2, pp.25–27), the Party described the coordinating role of MEPA and EIEC and listed the institutions involved in preparing its national GHG inventory. However, the information reported by the Party in the NID does not provide a general overview of responsibilities in the area of data handling or clearly set out how responsibilities are divided among data-providing institutions. In particular, Georgia did not identify which specific entities are responsible for generating, collecting, validating and transmitting AD for each sector, nor did it specify how responsibilities are allocated among institutions involved in preparing the inventory. Similarly, the Party did not describe in its NID any formal process for the official consideration and approval of the inventory. While NID sections 1.2.2 and 1.2.4 (pp.26–27) do refer to an internal review conducted by MEPA and EIEC, they do not identify the entity with overall responsibility for the inventory or the instrument(s) through which approval of the inventory is conferred. The TERT noted that the information provided in the NID is therefore not sufficient for assessing whether Georgia's inventory arrangements fully ensure the effective planning, preparation and management of the national inventory.</p> <p>During the review, Georgia explained that it uses several publicly accessible national databases as primary sources of AD, while non-public data are obtained by means of official correspondence between EIEC and relevant data-providing institutions. To obtain such data, national inventory experts at EIEC prepare a questionnaire that is sent out to data-providing institutions together with a formal request letter. The institutions typically return the completed questionnaire with the requested data within one month, after which the national inventory experts check the information, as needed, and proceed with calculating GHG emission estimates. Georgia indicated that improvements in the data-collection process are related to the ongoing development of its Climate Change Law and the second Capacity-building Initiative for Transparency project, including a planned simplified online data-collection system for public entities. Georgia confirmed that no formal approval procedures (e.g. ministerial decree or endorsement mechanism) currently exist for the NIR, but that it applies interim internal review arrangements.</p> <p>The TERT recommends that Georgia report in its NID clear information on the responsibilities and formalization of the role of data-providing institutions across sectors and information on the processes for the official consideration and approval of its national GHG inventory, including information on the entity with overall responsibility for the inventory and the instrument(s) used for this purpose, and, in addition, information reflecting the data-flow and interim approval arrangements explained during the review.</p>
2.G.4	Specified in paragraphs 35 and 46 of the MPGs QA/QC and verification	<p>In NID section 1.5 (pp.28–29), the Party reported information on its inventory QA/QC plan, which is structured around general and sector-specific QC procedures. The Party also reported that QA procedures are conducted by experts not involved in preparing the inventory and are applied to 50 per cent of the key categories and categories with high uncertainty or major methodological changes. In NID annex IV (pp.364–367), Georgia presented information on the QA/QC plan in a stepwise tabular format. In the sectoral chapters of the NID on categories of the energy sector (e.g. section 3.3.2.4, p.102) and IPPU sector (e.g. section 4.2.3.6, p.131), when providing information on implementation of the QA/QC plan, the Party referred to general cross-cutting QC procedures without detailing sector- or category-specific procedures. For the agriculture sector (e.g. section 5.1.4, p.187) and waste sector (e.g. section 7.1.4, p.298), the Party noted that standard QC forms and checklists were completed and that documentation was archived in hard copy and electronically, but provided limited operational details on category-specific QC</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		<p>procedures. Georgia did not describe any QA/QC procedures for the LULUCF sector in the NID.</p> <p>During the review, Georgia explained that independent QA procedures carried out on the inventory identified issues related to compliance with the 2006 IPCC Guidelines, the transparency and verifiability of calculations, the documentation of AD and the availability of references for data sources, as well as some systematic errors. Georgia indicated its intention to strengthen expert capacity in the application of the methodological guidance provided in the 2006 IPCC Guidelines (vol. 1, chap. 6), to fully implement its QA/QC plan and designate a responsible person for its implementation, and to strengthen the link between the QA/QC procedures, the key category analysis and the planned improvements for the inventory, which will ensure the proper application of methods and tiers in the calculations for the GHG inventory and other national reports. The Party clarified that the QA procedures for the current inventory cycle were conducted during the final stage of preparing the inventory, shortly before the submission of the NIR to the secretariat, resulting in only the NID undergoing QA and there being insufficient time to conduct QA on the CRTs.</p> <p>The TERT recommends that Georgia fully implement its QA/QC plan and provide transparent and consistent information on the application of general inventory QC procedures implemented or to be implemented across all sectors, including information on any category-specific QC or QA activities, whenever applied at the sectoral level, along with documentation on how QA findings have been addressed. The TERT encourages Georgia to apply category-specific QC procedures consistently across the inventory for key categories and for those individual categories in which significant methodological changes and/or data revisions have occurred.</p>
2.G.5	<p>Specified in paragraphs 31–32 of the MPGs</p> <p>Completeness</p>	<p>Georgia reported several categories and subcategories as “NE” across all sectors in its CRTs. In CRT 9, the Party only listed such cases for the energy and LULUCF sectors and did not provide any explanations for the use of “NE”. In the NID (section 1.7, pp.29–30), the Party explained in general terms that it uses “NE” when emissions or removals are considered to be irrelevant to the national context, there is a lack of reliable data for them to be calculated or estimating them would be disproportionately expensive. Georgia indicated that categories reported as “NE” are expected to exceed the insignificance threshold for the total national aggregate of estimated emissions and that the next GHG inventory will include a more detailed breakdown of these categories, clarifying which are insignificant and which are not estimated owing to data or cost constraints. The TERT noted that subcategory 2.G.3.b.i propellant for pressure and aerosol products is the only subcategory reported as insignificant in the NID (p.30). The TERT also noted that certain categories reported as “NO” were in fact not estimated (e.g. 2.D.2 paraffin wax use, 2.F.2 foam blowing agents, 2.F.3 fire protection and 2.F.5 solvents) and that activities related to certain categories and fuels reported as “NE” may in fact not occur in the country (see ID# 3.E.3 in table 3).</p> <p>During the review, Georgia confirmed that it will revise its use of notation keys and document the reasons preventing it from estimating emissions for specific categories or subcategories.</p> <p>The TERT recommends that Georgia systematically review its use of notation keys and provide clear explanations in the NID for all categories or subcategories reported as “NE” or “NO”, including by identifying those categories or subcategories considered insignificant in accordance with paragraph 32 of the MPGs.</p>
2.G.6	<p>Specified in paragraphs 31 and 51 of the MPGs</p> <p>Other</p>	<p>Georgia reported partial and scarce estimates of emissions of precursor gases (NO_x, CO, NMVOCs and SO_x) across all relevant sectors in the CRTs. In the energy sector (CRT 1), it reported precursor gases as “NE” or “NO”. In the IPPU sector (CRT 2(I)), it reported NO_x and CO emissions for relevant categories, but used “NE” or “NO” for NMVOC and SO_x emissions for some categories. In the LULUCF sector (CRT 4), it reported NO_x and CO emissions for relevant categories, but used “NE” for NMVOC emissions in some cases. In the agriculture sector (CRT 3) and waste sector (CRT 5), the Party left all cells for reporting precursor gases blank. In its NID (sections 4.2.1, 4.3.1, 4.3.2 and 4.4.2, pp.112, 136, 141 and 156 respectively), the Party referred to the Georgian Air Pollutant</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>Emissions Inventory submitted under the Convention on Long-range Transboundary Air Pollution through CEIP, explaining that it compiles and presents emissions of atmospheric pollutants such as NO_x, CO, NMVOCs and sulfur dioxide (reported as SO_x) in the GHG inventory in accordance with the CEIP inventory (https://www.ceip.at/status-of-reporting-and-review-results/2024-submission).</p> <p>During the review, Georgia explained that it seeks to implement the requirements of paragraph 51 of the MPGs in a resource-efficient manner. To report precursor gases in a consistent and pragmatic way, Georgia plans to continue reporting precursor gases and to increase the degree of completeness of its inventory as the CEIP inventory is further populated and aligned with the GHG inventory.</p> <p>The TERT encourages Georgia to enhance its reporting of precursor gases across all relevant sectors and categories of the inventory, increase the completeness of the reporting of precursor gases as new data become available in the CEIP inventory, and use the corresponding notation keys to complete the cells in the CRTs where numerical data are not available.</p>

Table 3

Areas of improvement of the reporting on greenhouse gas emissions and removals – energy sector

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
3.E.1	<p>Specified in paragraphs 26 and 40 of the MPGs</p> <p>1. General (energy sector) – all fuels – CO₂, CH₄ and N₂O</p>	<p>Georgia reported in its NID (section 3.2.3, p.48) that AD for the energy sector were primarily derived from IEA energy balances for 1990–2012 and from Geostat for 2013–2022 and that these data were complemented by information received from specialist national institutions such as the Georgian Oil and Gas Corporation. The Party further reported that it compiled aggregated energy balances for 1990–2012 based on the data provided by these entities. However, in NID sections 3.2.5.5 (p.60), 3.2.6.5 (p.66), 3.2.7.5 (p.74), 3.2.8.5 (p.81), 3.2.9.5 (p.85), 3.3.1.5 (p.94) and 3.3.2.5 (pp.102–103), the Party did not explain in detail how it constructed these aggregated energy balances or how it ensured time-series consistency when combining data from IEA, Geostat and specialist national institutions. As a result, the procedures used to ensure time-series consistency from 1990 to 2022 are not fully transparent. The Party also indicated in its NID (pp.59, 66, 74, 81, 85 and 94) that, with the exception of category 1.B.2 oil and natural gas and other emissions from energy production (p.102), it used the same underlying sources for AD across the time series. However, the TERT noted missing or inconsistent AD indicative of time-series inconsistencies in several fuel-combustion categories or subcategories, including subcategories 1.A.1.b petroleum refining, 1.A.2.a iron and steel, 1.A.2.c chemicals, 1.A.2.f non-metallic minerals, 1.A.2.g.iii mining (excluding fuels) and quarrying, 1.A.2.g.v construction, 1.A.3.a domestic aviation, 1.A.3.b road transportation, 1.A.3.c railways, 1.A.3.d domestic navigation, 1.A.3.e.i pipeline transport, 1.A.4.a commercial/institutional, 1.A.4.c.iii fishing, 1.D.1.a international aviation (aviation bunkers) and 1.D.1.b international navigation (marine bunkers). The NID (pp.29–30) further outlines Georgia's intention to enhance completeness, improve the quality and consistency of its historical data, and strengthen data collection in cooperation with relevant stakeholders.</p> <p>During the review, Georgia explained how it used information from specialist national institutions and, where necessary, interpolation and extrapolation techniques to address data gaps, particularly for early years in the time series. Georgia indicated that the IEA energy balances include inconsistencies and unexplained fluctuations and are considered less reliable than national data and that, for overlapping years, it therefore gave priority to the operational data held by specialist national institutions. It applied the same approach where sample-based estimates from Geostat diverged from these institutional data sets. Looking ahead, Georgia confirmed that it plans to strengthen collaboration with Geostat and other organizations to improve data quality, recover historical information where possible and apply standard splicing techniques for remaining data gaps.</p> <p>The TERT recommends that Georgia provide clear information, to the extent possible, on how it constructed and harmonized the aggregated energy balances for 1990–2012, including on the roles of IEA, Geostat and specialist national institutions in the provision of data, and how it treated data gaps and revisions of</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
3.E.2	<p>Specified in paragraph 54 of the MPGs</p> <p>Feedstocks, reductants and other non-energy use of fuels – all fuels – CO₂, CH₄ and N₂O</p>	<p>the underlying data. The TERT encourages Georgia to ensure time-series consistency and completeness of the AD used in the energy sector, in particular when combining data from IEA, Geostat and specialist national institutions.</p> <p>In its NID (p.53), the Party reported information on the non-energy use of lubricants, bitumen/asphalt, and natural gas for 1990–2022, and indicated that (1) data on lubricants cover engine oils and a range of industrial oils and greases, (2) bitumen/asphalt is used mainly in road paving and roofing, and (3) natural gas is used primarily as a feedstock in fertilizer production. The NID does not mention the use of fuels as reductants.</p> <p>During the review, Georgia explained that, because the Geostat energy balance does not disaggregate lubricant use by end use, it used the figures on the non-energy use of lubricants in the Geostat energy balance to estimate the corresponding emissions and report them under the IPPU sector. Consequently, the Party did not separately identify lubricants that are combusted (e.g. in two-stroke engines), meaning that related combustion emissions of lubricants appear to be included under the IPPU sector rather than the energy sector. The Party clarified that information on the use of fuels as reductants is not yet available for the inventory and that this will be addressed in future submissions as it improves its data-collection processes. The Party indicated that coke oven coke is reported in the Geostat energy balance as if it is used for energy purposes only and that, to avoid double counting between the energy and IPPU sectors, it deducted the quantity of coke oven coke used in industrial processes from the total reported in the Geostat energy balance and calculated emissions using this net value.</p> <p>The TERT encourages Georgia to obtain more detailed information on the use of lubricants in two-stroke engines and on the use of fuels as feedstocks and reductants in cooperation with Geostat and other relevant institutions and to clearly indicate in the NID and CRTs how these non-energy uses of fuels are accounted for in the inventory and allocated between the energy and IPPU sectors in accordance with the 2006 IPCC Guidelines.</p>
3.E.3	<p>Specified in paragraphs 31 and 53 of the MPGs</p> <p>International navigation – liquid fuels – CO₂, CH₄ and N₂O</p>	<p>In CRT 1.D, Georgia only reported international navigation emissions from residual fuel oil and gas/diesel oil for certain years in the time series (1991–1995, 2002 and 2014–2022), using “NE” for the remaining years. The Party used “NE” to report international navigation emissions from gasoline, gaseous fuels and biomass for 1990–2022. The TERT noted that these fuels were unlikely to have been used for international navigation. In its NID (p.52), the Party explained that, owing to limited data, it completed the IEA data on international navigation for earlier years in the time series (1991–1995 and 2002) with available information on diesel oil consumption from the Geostat energy balance, for 2014–2022. The TERT observed that the Geostat energy balance allocates “road diesel oil” to international marine bunkers from 2018 onward.</p> <p>During the review, Georgia explained that AD reported for international navigation for 2014–2017 were obtained from the Transport and Logistics Development Policy Department of the Ministry of Economy and Sustainable Development and from the Geostat energy balance from 2018 onward. It further explained that, for the earlier years of the time series, no national AD were available despite it having conducted searches across relevant organizations and that only data on fuel oil and diesel oil consumption for 1991–1995 and 2002 were found to be available from IEA. Consequently, it reported AD for the remaining years as “NE” in the inventory.</p> <p>The TERT encourages Georgia to acquire the necessary accurate AD for all types of fuel consumption for international navigation, for example by establishing a data-collection process and modelling or gap-filling procedures for estimating the corresponding emissions for the entire time series, while ensuring that fuels are allocated correctly, in particular “road diesel oil”. The TERT recommends that Georgia confirm whether gasoline, gaseous fuels and biomass have been used for international navigation and apply the appropriate notation keys (“NO” or “NE”).</p>
3.E.4	<p>Specified in paragraphs 21, 23 and 24 of the MPGs</p>	<p>In NID tables R-1 and R-2 (pp.19–22), Georgia identified CO₂ emissions from the combustion of gaseous fuels for categories and subcategories 1.A.1 energy industries, 1.A.2 manufacturing industries and construction, 1.A.3.b road transportation, 1.A.4.a commercial/institutional and 1.A.4.b residential as key</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
1.A Fuel combustion – sectoral approach – gaseous fuels – CO ₂	<p>categories. The TERT noted that Georgia used a tier 1 approach to estimate and report CO₂ emissions for these key categories. The Party reported in its NID (pp.63, 78 and 84) that it applied a tier 1 methodological approach owing to the absence of specialist laboratories for determining the net calorific value and carbon content of fuels and the lack of such data for imported fuels needed to develop country-specific CO₂ EFs. The TERT also noted that CO₂ emissions for subcategory 1.A.1.a public electricity and heat production were estimated for 2000–2022 using both tier 1 and tier 2 approaches (NID pp.56–57), but that Georgia opted to report CO₂ emissions estimated using a tier 1 approach for the complete time series. The tier 2 CO₂ emission estimates were derived using plant-specific data (AD and EFs) from five power plants (NID tables 3-13–3-14, pp.58–59).</p> <p>During the review, Georgia explained that the difference between the tier 1 and tier 2 estimates is relatively small and that tier 2 data were not available for other categories or subcategories within the energy industries. For this reason, Georgia decided to apply a tier 1 approach consistently for the entire category to ensure methodological relevance and comparability. Georgia also indicated that it plans to further analyse the data presented in NID table 3-13 to assess whether the natural gas used by the thermal power plants is representative of the fuel composition across the entire country. Based on this assessment, the Party may apply weighted averages to derive a more accurate country-specific CO₂ EF for natural gas.</p> <p>The TERT recommends that Georgia estimate and report CO₂ emissions from the combustion of gaseous fuels for subcategory 1.A.1.a public electricity and heat production using a tier 2 approach for the complete time series, in line with the decision tree in figure 2.1 of the 2006 IPCC Guidelines (vol. 2, chap. 2, p.2.15) and include in the NID information on the analysis in terms of the representativeness of plant-specific CO₂ EFs for natural gas obtained from thermal power plants, for application in all relevant categories of the inventory for the energy sector. The TERT encourages Georgia to make every effort to develop country-specific CO₂ EFs for natural gas, which would enable the use of a higher-tier method across categories in the energy sector, in line with the 2006 IPCC Guidelines good practice, and to report information on how it is addressing or intends to address the issue.</p>	
<p>3.E.5 Specified in paragraphs 21, 23 and 24 of the MPGs</p> <p>1.A Fuel combustion – sectoral approach – liquid and solid fuels – CO₂</p>	<p>In NID tables R-1 and R-2 (pp.19–22), Georgia identified CO₂ emissions from the combustion of liquid fuels for categories and subcategories 1.A.1 energy industries, 1.A.2 manufacturing industries and construction, 1.A.3.b road transportation, 1.A.4.a commercial/institutional, 1.A.4.b residential and 1.A.4.c agriculture/forestry/fishing as key categories. The Party also identified in NID tables R-1 and R-2 CO₂ emissions from the combustion of solid fuels as key categories for subcategory 1.A.1.c manufacture of solid fuels and other energy industries, category 1.A.2 manufacturing industries and construction and subcategory 1.A.4.b residential. It used a tier 1 approach to estimate CO₂ emissions for all these categories and subcategories. In the case of natural gas, for example, the Party reported in its NID (pp.63, 78 and 84) that it used a tier 1 methodological approach owing to a lack of resources. While Georgia has developed plant-specific CO₂ EFs for natural gas and is planning to assess their applicability at the national level, it does not have similar country-specific information for the other fossil fuels (see ID# 3.E.4 above).</p> <p>During the review, Georgia indicated that it has prioritized the development of country-specific CO₂ EFs for key transport and stationary combustion categories. To this end, Georgia plans to work with Geostat and fuel suppliers to collect and analyse fuel samples and promote legislative amendments requiring fuel producers and importers to report the relevant data so that they can be systematically compiled and made publicly available. Georgia explained that such reporting is currently not mandatory, Geostat does not collect or publish these data, and, to the Party’s knowledge, no other entities collect this information.</p> <p>The TERT encourages Georgia to make every effort to determine country-specific CO₂ EFs for liquid and solid fuels used for key categories in the energy sector, which would enable the Party to use a higher-tier method in line with the 2006 IPCC Guidelines. The TERT also encourages Georgia to report information on how it is addressing or intends to address this issue.</p>	

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
3.E.6	<p>Specified in paragraphs 31, 40 and 47 of the MPGs</p> <p>1.A.1.b Petroleum refining – liquid fuels – CO₂, CH₄ and N₂O</p>	<p>In NID section 3.2.5.5 (p.60), the Party stated that “oil refineries do not consume fuel, as processing is conducted using natural sedimentation”. The TERT noted that, in the CRTs, Georgia reported emissions for subcategory 1.A.1.b petroleum refining as “NE” rather than “NA” for the entire time series. At the same time, the Geostat energy balance reports an input of crude oil (1,822.50 TJ) and an output of petroleum products (1,770.30 TJ) for 2022 under the “refineries transformation” category, with a product slate including motor gasoline, road diesel oil, gas oil, low-sulfur fuel oil, bitumen and other petroleum products. These data suggest that petroleum refining activities have taken place, potentially involving energy-consuming transformation processes, but the nature of those processes and any associated use of fuel or related emissions remains unclear across the time series.</p> <p>During the review, Georgia explained that large-scale refining effectively ceased in the country in 1991. A small refinery in Sartichala operated briefly from 1998 to 1999, while several small processing plants reportedly operated intermittently from 2001 to 2005. Georgia indicated that only a single primary oil refinery (Georgian Oil and Gas Corporation) and two small-scale petroleum refineries (Globus Ltd and ZD Oil Company), which have held licences since 2015, are currently in operation in the country. Georgia clarified that the oil refinery operated by the Georgian Oil and Gas Corporation applies a sedimentation process before heating the crude oil using gas or diesel to remove additional water. The purified crude oil is then supplied to the two above-mentioned small-scale petroleum refineries.</p> <p>The TERT recommends that Georgia provide transparent information, to the extent possible, for the entire time series, on whether and when petroleum refineries are or have been in operation in the country, on whether any energy-consuming processes are or were involved in the operation of these refineries, and on how any associated fuel use has been allocated and reported in the inventory. The TERT also recommends that the Party estimate and report the related emissions under subcategory 1.A.1.b petroleum refining, ensuring that information is consistent between the NID, the Geostat energy balance and the CRTs, in particular by distinguishing between the periods when mechanical oil purification processes involving no energy use or energy-consuming refining operations requiring the estimation and reporting of associated emissions occurred in the country. The TERT also recommends that the Party use the appropriate notation keys (“NA” or “NO”) to report information under subcategory 1.A.1.b for the years when the activity did not generate emissions or did not occur in the country.</p>
3.E.7	<p>Specified in paragraphs 31 and 47 of the MPGs</p> <p>1.A.5.b Mobile – liquid fuels – CO₂, CH₄ and N₂O</p>	<p>In CRT 1.A(a) (sheet 4), Georgia reported “NO” for subcategory 1.A.5.b mobile (other) for the entire time series. The TERT noted that the Georgian Coast Guard undertakes mobile military aviation and navigation activities involving fuel combustion. The Party did not provide any information in the NID on how emissions from these activities are estimated or allocated in the inventory. However, the use of “NO” appears inconsistent with the existence of such activities.</p> <p>During the review, Georgia indicated that military data are not disclosed, even for the purpose of compiling the inventory. Emissions from military aviation and navigation are therefore neither estimated nor reported and, in line with data confidentiality requirements for these activities, these emissions will not be estimated or reported in future inventories.</p> <p>The TERT recommends that Georgia report emissions from military aviation and navigation as “C” under subcategory 1.A.5.b mobile (other) in CRT 1.A(a) (sheet 4) and include information on the rationale for this reporting approach in the NID.</p>
3.E.8	<p>Specified in paragraph 21 of the MPGs</p> <p>1.B.1.a Coal mining and handling – solid fuels – CH₄</p>	<p>Georgia reported in its NID (section 3.3.1.2, p.93) that the AD for subcategory 1.B.1.a coal mining and handling are from Geostat. The TERT noted that these AD may relate to marketable (saleable) coal, whereas the 2006 IPCC Guidelines (vol. 2, chap. 4, section 4.1.3, p.4.9) specify that raw coal production is the appropriate AD for estimating fugitive emissions, with data on saleable coal requiring an adjustment for preparation losses.</p> <p>During the review, Georgia confirmed that the coal production data reported by Geostat relate to marketable (saleable) coal and that no adjustment has been applied to convert these figures into raw coal production data. Georgia indicated that it would convert the data on marketable coal production into raw coal</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>production data and apply the methodology accordingly to ensure consistency with the 2006 IPCC Guidelines good practice.</p> <p>The TERT recommends that Georgia convert data on marketable coal production into data on raw coal production for use in its CH₄ emission estimates for subcategory 1.B.1.a coal mining and handling in accordance with the 2006 IPCC Guidelines (vol. 2, chap. 4, section 4.1.3, p.4.9) and revise the entire time series of CH₄ emissions as needed.</p>
3.E.9	<p>Specified in paragraphs 39–40 of the MPGs</p> <p>1.B.2 Oil, natural gas and other emissions from energy production – gaseous fuels – CH₄</p>	<p>In NID section 3.3.2 (pp.96–104) Georgia presented information on the estimation and reporting of fugitive emissions for subcategories 1.B.2.a oil, 1.B.2.b natural gas and 1.B.2.c venting and flaring. In the NID (p.98), the Party reported that it used a tier 1 method to estimate fugitive CH₄ emissions, while elsewhere in the NID (pp.22 and 336), it stated that it used a tier 2 method to estimate CH₄ emissions from natural gas. This inconsistency is also reflected in NID table 3-38 (pp.99–100), which lists the EFs used for the estimates. The TERT noted that all EFs listed, with the exception of those for natural gas transmission and distribution, were taken from table 4.2.5 of the 2006 IPCC Guidelines (vol. 2, chap. 4, pp.4.55–4.63). The Party did not report in its NID the rationale for selecting the EFs reported for natural gas transmission and distribution, nor did it clearly specify the methodology used to estimate CH₄ emissions for subcategories 1.B.2.b and 1.B.2.c, which are identified as key categories (NID tables 10-3–10-4, pp.342–344). In its NID (pp.100–101), the Party explained that it obtained information on the production, transmission and distribution of natural gas, including losses, from Geostat, the Georgian Oil and Gas Corporation and the Georgian National Energy and Water Supply Regulatory Commission. The TERT noted that the use of such data on losses may be indicative of some elements of a country-specific method for estimating fugitive emissions from natural gas, but this is not transparently described or clearly linked to the methodological tier reported in the NID.</p> <p>During the review, Georgia explained that data on natural gas losses were multiplied by the fraction 0.64512, which represents the CH₄ content in natural gas derived from data from earlier clean development mechanism projects and used in previous inventories to calculate fugitive CH₄ emissions from natural gas production, transmission and distribution. The Party acknowledged that this value may be outdated and not fully representative of the current conditions of the national gas industry. Georgia confirmed that it plans to work with Geostat to update the CH₄ fraction accordingly and contact gas producers and natural gas suppliers to verify whether fugitive losses are monitored at production, transmission and distribution sites.</p> <p>The TERT recommends that Georgia provide transparent information, to the extent possible, on the methods and the rationale for their choice, data and parameters used to estimate CH₄ emissions for subcategories 1.B.2.b natural gas and 1.B.2.c venting and flaring, which are identified as key categories, including the rationale for selecting the EFs reported for natural gas transmission and distribution and the assumptions, references and sources of information used for the emission calculations.</p>

Table 4

Areas of improvement of the reporting on greenhouse gas emissions and removals – industrial processes and product use sector

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
4.I.1	<p>Specified in paragraphs 21 and 23 of the MPGs</p> <p>2.C.2 Ferroalloys production – CO₂</p>	<p>Georgia reported in its NID (p.152) that CO₂ emissions for category 2.C.2 ferroalloys production is a key category. The TERT noted that according to the NID (pp.157–158), Georgia used a tier 1 method to estimate CO₂ emissions from ferroalloys production. However, the Party did not document the rationale for not following the appropriate choice of methodological tier for this key category in line with the 2006 IPCC Guidelines (vol. 1, chap. 4, pp.4.5–4.19).</p> <p>During the review, Georgia explained that the national statistical data available on total ferroalloys production only supported the use of a tier 1 method and that it lacked resources for improving these estimates. In addition, the Party indicated its intention to coordinate with local producers so that it can obtain detailed data to</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>allow it to use a tier 2 method for its 2030 submission with the support of the second Capacity-building Initiative for Transparency project.</p> <p>The TERT recommends that Georgia include in its NID the explanation provided during the review for using a tier 1 approach for key category 2.C.2 ferroalloys production. The TERT encourages the Party to make every effort to use a higher-tier method for estimating CO₂ emissions from ferroalloys production in accordance with the 2006 IPCC Guidelines (vol. 3, chap. 4, pp.4.32–4.42) and to report information on how it is addressing or intends to address this issue.</p>
4.I.2	<p>Specified in paragraphs 21 and 47 of the MPGs</p> <p>2.D.2 Paraffin wax use – CO₂</p>	<p>The Party reported in its NID (p.164) that CO₂ emissions for category 2.D.2 paraffin wax use do not occur in Georgia. It therefore used “NO” when reporting AD and emissions for this category in CRT 2(I).A-H. However, the TERT noted that there is evidence of activities related to paraffin wax use in Georgia, including industrial production data (e.g. open data from candle manufacturer Waxis LLC in Georgia).</p> <p>During the review, Georgia explained that, according to the Geostat energy balance, data were not available on paraffin wax use for non-energy purposes and that candle manufacturers were not included in the MEPA national industry database used to compile the GHG inventory.</p> <p>The TERT recommends that Georgia collect the necessary AD and estimate CO₂ emissions for category 2.D.2 paraffin wax use in accordance with the 2006 IPCC Guidelines (vol. 3, chap. 5, pp.5.11–5.13).</p>
4.I.3	<p>Specified in paragraphs 21 and 47 of the MPGs</p> <p>2.F Product uses as substitutes for ozone-depleting substances – fluorinated gases</p>	<p>Georgia reported in its NID (pp.170 and 174) that categories 2.F.2 foam blowing agents, 2.F.3 fire protection and 2.F.5 solvents were not assessed. The TERT noted, however, in CRT 2(II), that the Party reported HFC, PFC, SF₆ and NF₃ emissions as “NO” under these categories.</p> <p>During the review, Georgia clarified that categories 2.F.2, 2.F.3 and 2.F.5 were not assessed owing to the absence of adequate official data.</p> <p>The TERT recommends that Georgia collect the necessary AD and estimate the corresponding HFC, PFC, SF₆ and NF₃ emissions occurring for categories 2.F.2, 2.F.3 and 2.F.5 in accordance with the 2006 IPCC Guidelines (vol. 3, chap. 7, pp.7.23–7.27, 7.32–7.42 and 7.61–7.65) and ensure that it uses notation keys correctly where no numerical data are reported for these categories in the CRTs.</p>

Table 5
Areas of improvement of the reporting on greenhouse gas emissions and removals – agriculture sector

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
5.A.1	<p>Specified in paragraphs 26 and 28 of the MPGs</p> <p>3. General (agriculture) – CH₄ and N₂O</p>	<p>The TERT noted atypical patterns in the cattle population data reported in NID table 5-8 (pp.191–192) for 1990–1996. During this period, the dairy cattle population declined by 424,200 (from 481,600 in 1990 to 57,400 in 1996), while the total cattle population declined by only 273,400 (from 1,258,600 in 1990 to 985,200 in 1996), implying that the population of other cattle subcategories increased by approximately 150,900 during the same period. Georgia did not provide a transparent explanation for these population size dynamics in the NID.</p> <p>During the review, the Party explained that the apparent increase in other cattle subcategories during 1990–1996 may be attributed to data-collection methods and the reclassification of cattle subcategories during Georgia’s transition from a planned to a market economy.</p> <p>The TERT encourages the Party to investigate the decrease in the dairy cattle population, the data-collection methods used and the allocation of the population of other cattle into different cattle subcategories between 1990 and 1996, ensuring time-series consistency. If a lack of consistency in the cattle population is identified across the time series, the TERT recommends that the Party revise its CH₄ and N₂O emission estimates in accordance with the 2006 IPCC Guidelines, ensuring that changes in emission trends are not introduced as a result of changes in methods or assumptions across the time series.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
5.A.2	Specified in paragraphs 28 and 40 of the MPGs 3. General (agriculture) – CH ₄ and N ₂ O	<p>The TERT noted a divergent trend in the cattle population time series reported in NID table 5-8 (pp.191–192) following the methodological update to the annual livestock survey based on the 2014 Agricultural Census, according to which the dairy cattle population increased by 23,200 or 968 per cent from 2,400 in 2013 to 25,600 in 2022 and the total cattle population decreased by 97,000 or 8 per cent from 1,211,500 in 2013 to 1,114,500 in 2022. Georgia did not provide any explanation for these population trends in the NID.</p> <p>During the review, the Party explained that the sampling frame for the annual livestock survey (the list of agricultural holdings from which survey respondents are selected) was updated in 2014 from being based on the 2004 Agricultural Census (5,000 holdings) to the 2014 Agricultural Census (12,000 holdings) with a correction factor of 1.327 applied to the cattle population data for 2014 onward, and calculated as the ratio between results from the two sampling frames for 2014 onward. The Party indicated that it did not make any retrospective adjustments to ensure time-series consistency.</p> <p>The TERT recommends that Georgia provide, to the extent possible, clear documentation in its NID on the methodological differences and changes between the pre-2014 and post-2014 cattle population surveys and assess whether these changes have introduced artificial breaks or shifts in the time-series consistency of the cattle population and related emission trends. If such effects are identified, the TERT recommends that Georgia revise the underlying AD and associated emission estimates in accordance with the 2006 IPCC Guidelines, ensuring that changes in emission trends are not introduced as a result of changes in data-collection methods or assumptions across the time series.</p>
5.A.3	Specified in paragraphs 21 and 23 of the MPGs 3.A.1 Cattle – CH ₄	<p>Georgia reported that it applied a tier 1 method for estimating CH₄ emissions from enteric fermentation in dairy cattle, which represented 50.2 per cent of total CH₄ emissions for category 3.A.1 cattle in 1990 (NID table 5-9, p.192). The Party identified CH₄ emissions for category 3.A.1 as a key category for 1990 (NID table 10-2, pp.341–342) and 2022 (NID tables 10-3–10-4, pp.342–344). The Party justified its methodological choice by citing the small share of the dairy cattle population in total livestock numbers in recent years (NID p.194).</p> <p>During the review, the Party explained that, while the total population of dairy cattle is known, no information is available on breed-specific population sizes. The Party indicated that it will make efforts to collect all other necessary information for estimating CH₄ emissions from enteric fermentation in dairy cattle using a higher-tier method, as it has developed improvement plans for implementing higher-tier methods. The TERT noted that, in accordance with the 2006 IPCC Guidelines (vol. 4, chap. 10, p.10.26), a tier 2 method requires detailed country-specific data on gross energy intake and methane conversion factors for specific livestock categories.</p> <p>The TERT recommends that the Party use the tier 2 method from the 2006 IPCC Guidelines (vol. 4, chap. 10, pp.10.10–10.23 and 10.25–10.31) to estimate CH₄ emissions from enteric fermentation in dairy cattle, using enhanced species characterization data and detailed country-specific parameters or document in its NID the reasons for not following the relevant decision tree in the 2006 IPCC Guidelines in its choice of estimation method.</p>
5.A.4	Specified in paragraph 40 of the MPGs 3.F Field burning of agricultural residues – CH ₄ and N ₂ O	<p>Georgia reported CH₄ and N₂O emissions for category 3.F field burning of agricultural residues in NID table 5-72 (pp.252–253) and under subcategory 3.F.1.a wheat in CRT 3.F, but did not report the underlying AD used to estimate these emissions for 1990–2022 in either its NID or CRT 3.F.</p> <p>During the review, the Party indicated that AD are available for the complete time series and will be included in its NID.</p> <p>The TERT recommends that Georgia report, to the extent possible, the AD used for estimating CH₄ and N₂O emissions for category 3.F field burning of agricultural residues for the complete time series in the NID and CRT 3.F, including area burned, biomass available for combustion, combustion factor and total biomass burned.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
5.A.5	Specified in paragraphs 21, 39 and 47 of the MPGs 3.H Urea application – CO ₂	<p>Georgia reported CO₂ emissions for category 3.H urea application in NID table 5-75 (p.255) and CRT 3.G-J, but did not report the AD used to estimate these emissions in CRT 3.G-J. The TERT noted that the Party’s assumption that all net imported urea (imports minus exports) is applied to agricultural soils, together with the assertion that urea is not consumed for non-agricultural purposes within the country, requires additional documentation and appears inconsistent with global practices, as, for example, urea is widely used in diesel exhaust fluid in modern vehicles with selective catalytic reduction systems.</p> <p>During the review, the Party acknowledged that urea consumption for non-agricultural purposes may occur within the country and indicated that ongoing cross-validation efforts could enhance the completeness of its inventory estimates.</p> <p>The TERT recommends that Georgia revise, if necessary, and correct the AD used to calculate CO₂ emissions for category 3.H urea application and report the corresponding AD and CO₂ emissions in CRT 3.G-J, ensuring that it include only annual quantities of urea applied to agricultural soils, while reporting CO₂ estimates for the non-agricultural use of urea in the corresponding categories of the GHG inventory. The TERT also recommends that the Party document in its NID the methodology used to assess the consumption of urea for non-agricultural purposes and cross-validate estimates of urea consumption with agricultural statistics and fertilizer data.</p>

Table 6

Areas of improvement of the reporting on greenhouse gas emissions and removals – land use, land-use change and forestry sector

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
6.L.1	Specified in paragraphs 21 and 47 of the MPGs Land representation	<p>From information in the NID (pp.259–260), the TERT noted that Georgia used approach 1 for land representation and that it has no mechanism in place for recording changes in land-use categories for the purpose of monitoring land-use changes. Therefore, the Party only reported on land areas where land has remained in the same land-use category. According to the 2006 IPCC Guidelines (vol. 4, chap. 3, p.3.11), depending on methodological requirements, some activities in the LULUCF sector require information on land areas in each land-use category to be broken down into “land remaining in the same land-use category” and “land converted to a new land-use category”. In practice, many methods used to estimate CSCs, including in soils and biomass carbon pools, are implemented using this breakdown between land remaining in the same land-use category and land converted to a new land-use category. Therefore, it is desirable to distinguish between these areas, using expert judgment where necessary.</p> <p>During the review, the Party confirmed that there is no statutory obligation in the country to report annual land-use and land-use change data for use in the GHG inventory and, as a result, the land-use data set available is limited. The Party is therefore unable, to date, to separate land areas into land remaining in the same land-use category and land converted to a new land-use category and all areas are reported under land remaining in the same land-use category based on approach 1 for land representation.</p> <p>The TERT recommends that the Party develop and report a complete and consistent land-use representation for all years in the time series, including land-use conversions, and separate land areas into “land remaining in the same land-use category” and “land converted to a new land-use category”, applying expert judgment where required, with the aim of covering the methodological requirements specified in the 2006 IPCC Guidelines for developing accurate and complete emission estimates for both soils and biomass carbon pools.</p>
6.L.2	Specified in paragraphs 26–28 and 39 of the MPGs Land representation	<p>In CRT 4.1, Georgia reported an increase in the area of forest land remaining forest land (managed) from 2,331.6 to 2,404.9 kha between 2020 and 2021 and a decrease in the area of other land remaining other land from 429.6 to 324.8 kha in the same period. The Party also reported increases in the area of unmanaged forest land between 2020 and 2021 (see ID# 6.L.3 below). The TERT noted that Georgia did not provide any explanation in its NID on the inferred significant annual conversion of other land to forest land in 2021, and it is not clear how the increase</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		<p>in forest land area is reflected in the net biomass CSC calculations, which remained relatively stable between 2020 and 2021, increasing by only 2 per cent.</p>
		<p>During the review, the Party clarified that the area of managed forest land reported for 2021 is the most accurate, as it is based on the first NFI (2019–2023), whereas areas for previous years are based on the 2003 land cadastre. The Party indicated that the increase in the area of managed forest land reported for 2021 does not reflect the actual change in the area of forest land.</p>
		<p>The TERT recommends that the Party revise the areas of managed forest land reported for years prior to 2021 in the time series based on the value for 2021 from the NFI to avoid large annual changes in the time series caused by the change in data source and estimation approach. The TERT also recommends that the Party perform corresponding recalculations of the estimates in accordance with the 2006 IPCC Guidelines. The TERT encourages the Party to ensure time-series consistency of the estimates by, for example, applying expert judgment or, where required, using the surrogate data splicing technique specified in the 2006 IPCC Guidelines. The TERT also recommends that the Party provide a clear explanation in the NID on the approach employed, data limitations and adjustments made for the estimates.</p>
6.L.3	<p>Specified in paragraphs 22 and 39 of the MPGs</p> <p>Land representation</p>	<p>The Party reported in its NID (p.265) that all lands in the country are managed and that the emission and removal calculations do not include the Abkhazia or Tskhinvali regions owing to lack of data (NID p.266). The TERT noted that in CRT 4.1, Georgia reported the areas of both managed and unmanaged forest land, showing that the area of unmanaged forest land increased from 608.1 kha in 2008 to 656.8 kha in 2009 and again in 2021, when it reached 695.6 kha. However, it only reported data on one category (category 4.A.1 forest land remaining forest land) in CRT 4.A.</p>
		<p>During the review, the Party clarified that the areas reported as unmanaged in CRT 4.1 cover the Abkhazia and Tskhinvali regions, which were not included in the NFI, and that the increase in the area of unmanaged forest land in 2021 does not reflect the actual change in the areas of unmanaged forest land (see ID# 6.L.2 above). The Party confirmed that CSCs in these areas are not accounted for in any year of the time series.</p>
		<p>The TERT encourages the Party to report the areas currently classified as unmanaged forest land as a subcategory under managed forest land in CRT 4.A covering the areas of the Abkhazia and Tskhinvali regions, assuming that these areas are made up entirely of forest land. It further encourages the Party to ensure the consistency of these data with the data reported in CRT 4.1. The TERT recommends that the Party update and complete the description in its NID to explain the rationale for including the country-specific forest land subcategories and issues related to estimating CSCs for these subcategories.</p>
6.L.4	<p>Specified in paragraphs 21, 24 and 39 of the MPGs</p> <p>4.A Forest land – CO₂</p>	<p>The Party reported in NID table 6-8 (p.274) AD on fuelwood production used to calculate CSCs using the gain–loss method for category 4.A forest land. The AD were based on data provided by the National Forestry Agency. The Party stated in its NID (p.48) that the data on firewood stocks and consumption used for the calculations in the energy sector were obtained from the Ministry of Energy. The TERT noted inconsistencies between the fuelwood AD used for estimates in the energy sector and the data used for estimates for category 4.A forest land. Furthermore, Georgia did not provide any estimates for fuelwood production for category 4.G HWP, reporting instead “NE” for this entire category.</p>
		<p>During the review, the Party confirmed that discrepancies between the data on fuelwood consumption included in the energy balance and the data used for the LULUCF sector are a recurring issue, although the difference between the data has decreased in recent years. It further confirmed that small discrepancies occur because the energy balance includes local harvest data not tracked by the National Forestry Agency, but acknowledged that the larger discrepancies observed for earlier years in the time series need to be resolved. The Party clarified that the fuelwood AD included in the energy balance, which are higher than the fuelwood production estimates currently used in the LULUCF sector, are expected to be more accurate.</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
6.L.5	Specified in paragraph 55 of the MPGs 4.A Forest land – CO ₂	<p>The TERT recommends that the Party revise the fuelwood production data used for estimating CSCs and associated emissions in the LULUCF sector, in particular for category 4.A and, for consistency, for category 4.G. The TERT also recommends that the Party ensure that these data are aligned with the fuelwood production AD included in the energy balance and that the Party include information in the NID on the references and sources of information used for the fuelwood AD in the LULUCF sector and explain any assumptions and remaining discrepancies.</p> <p>The Party reported in its NID (p.261) information on the damage caused to forests by natural disturbances based on data from the 2019–2023 NFI (e.g. 15.6 per cent of damage was caused by phytopathogenic and entomological diseases and 1.0 per cent by forest fires). The Party further reported data on areas impacted by forest fires in NID table 6-10 (pp.276–277). The TERT noted that the Party addressed natural disturbances on managed lands in its national GHG inventory but did not report information on how the impact of natural disturbances, other than non-CO₂ emissions from forest fires reported in CRT 4(IV), was considered in the estimates for category 4.A forest land across the time series. It also did not report information on the approach taken and whether it is consistent with IPCC guidance or on whether the estimates are indicated in national totals.</p> <p>During the review, the Party clarified that data on natural disturbances from the NFI are only applied in the calculations for recent years in the time series and that additional regional data are collected by the Georgia Forestry Commission on a 10-year cycle. It also clarified that there are data gaps in the early 1990s owing to the collapse of the Soviet Union.</p> <p>The TERT recommends that the Party report information on the approach taken to calculate losses from natural disturbances on managed lands for all years in the time series, including information on how the approach taken is consistent with IPCC guidance, as appropriate, and whether and which of the estimates are indicated in national totals.</p>
6.L.6	Specified in paragraph 39 of the MPGs 4.A Forest land – CO ₂	<p>The Party reported in its NID (p.261) that the first NFI was conducted between 2019 and 2023 and that it used the resulting data (area and forest health indicators) in the CSC estimates for 2021 and 2022 (see ID# 6.L.2 above). However, the NID does not provide any further information on the NFI, including, for example, the approaches and methodology used and how the data were considered in the estimation of CSCs for category 4.A forest land.</p> <p>During the review, the Party clarified that information is available on the methodology used by the NFI, including the sampling design and stratification process. It noted that trees outside of forest land are currently excluded from the NFI and that no carbon stock estimates are available, but it hopes that trees outside of forest land will be included in the next NFI. The TERT considers that this issue will be addressed through the development of a complete land-use data set based on a consistent representation of land use (see ID# 6.L.1 above) and the continued conducting of the NFI, planned for 2029–2033.</p> <p>The TERT recommends that the Party transparently report on the methods used for calculating emissions and removals for category 4.A forest land, based on the data provided by the NFI (2019–2023), including a summary of the scope of the methodology used by the NFI, the sampling design and data-collection and stratification process, as well as the process for tracking land-use areas and the assumptions applied when calculating estimates of emissions and removals for years not covered by the NFI.</p>
6.L.7	Specified in paragraphs 45 and 47 of the MPGs 4.B Cropland – CO ₂	<p>Georgia reported in its NID (p.280) that SOC is calculated for mineral and organic soils under category 4.B cropland. However, the TERT noted that the Party reported the area of organic soils and CSCs in organic soils as “NE” in CRT 4.B.</p> <p>During the review, the Party clarified that, while a national soil map and land-use data map are available, owing to resource constraints it has not been able to determine the land use and management of areas of organic soils to date, except for peatlands, as reported in CRT 4.D. The Party noted that, to improve the completeness of estimates in the LULUCF sector, it needs to develop a comprehensive land cadastre and conduct the associated field and laboratory studies required to identify and classify organic soils across land-use categories.</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
6.L.8	Specified in paragraphs 21, 23 and 39 of the MPGs 4.B Cropland – CO ₂	<p>The TERT recommends that the Party report CSCs in organic soils for category 4.B cropland in CRT 4.B or, if this is not possible, provide information in its NID on the reasons for the lack of completeness in the estimations of CSCs in organic soils, including information on any methodological or data gaps.</p> <p>The Party reported in its NID (p.337) that it used country-specific EFs alongside IPCC default values for estimating emissions and removals for category 4.B cropland. However, the TERT noted that the Party applied default EFs for perennial cropland and that annual cropland biomass carbon stocks were assumed to be in equilibrium in accordance with tier 1 assumptions (NID pp.280 and 283). The TERT also noted that the Party reported that CO₂ for category 4.B.1 cropland remaining cropland is a key category (NID table R-1, p.20) and that living biomass is a significant pool (net removals contributed 100 per cent to the net emissions and removals for category 4.B in 2022 and were greater than the emissions from mineral soils).</p> <p>During the review, the Party clarified that the description provided in the NID was not representative of the method implemented in the current inventory cycle and that country-specific EFs were only applied to category 4.A forest land.</p> <p>The TERT recommends that the Party use the appropriate higher-tier method by developing country-specific EFs for the biomass pool for perennial cropland in accordance with the 2006 IPCC Guidelines (vol. 4, chap. 5, pp.5.7–5.11) or document in the NID the reasons for not following the relevant methodological guidance from the 2006 IPCC Guidelines (vol. 4, chap. 5, p.5.7, and vol. 4, chap. 2, figure 2.2, p.2.14) for key category 4.B.1 cropland remaining cropland. In addition, the TERT recommends that the Party update the description of category 4.B in the NID and transparently explain the methods applied in the GHG inventory, including information on all CSC factors applied.</p>
6.L.9	Specified in paragraph 47 of the MPGs 4.G HWP – CO ₂	<p>The Party reported AD and emissions or removals for category 4.G HWP as “NE” in CRT 4.G and explained in its NID (p.292) that this was due to the unavailability of AD. The TERT noted, however, that data on timber production since 1990 are provided in NID table 6-8 (p.274) and are used to estimate carbon losses in category 4.A.1 forest land remaining forest land. Data from the early 1990s on the production, import and export of HWP are available from FAOSTAT. In addition, the TERT noted that a methodology combined with expert judgment for estimating AD for HWP dating back to 1900 is provided in the 2006 IPCC Guidelines (vol. 4, chap. 12, pp.12.9–12.15).</p> <p>During the review, the Party clarified that the most accurate data on HWP production are available from the Georgia Forestry Commission, but that no data on imports and only limited data on exports are available. It further clarified that these national data are considered more reliable than those available from FAOSTAT.</p> <p>The TERT recommends that the Party use the available HWP data from national sources and FAOSTAT, combined with expert judgment, to generate AD for HWP for all years from 1900, calculate the corresponding emissions and removals, and report them in CRT 4.G. The TERT also recommends that the Party ensure that the fuelwood estimates used for the calculations for HWP are consistent with the AD used in category 4.A forest land (see ID# 6.L.4 above).</p>
6.L.10	Specified in paragraphs 21, 31 and 47 of the MPGs 4(III) Direct and indirect N ₂ O emissions from N mineralization/ immobilization – N ₂ O	<p>The Party used “NE” and left cells blank in CRT 4(III) for all years in the time series and left all the cells blank in CRT 3.D under subcategory 3.D.1.e mineralization/immobilization associated with loss/gain of soil organic matter, again for all years in the time series. The TERT noted that in CRT 4.C, Georgia reported a loss in SOC for all years in the time series under category 4.C.1 grassland remaining grassland. The TERT therefore expected the associated N₂O emissions from N mineralization or immobilization associated with the loss or gain of soil organic matter to be reported in either CRT 3.D or CRT 4(III). The Party indicated in its NID (p.287) that the loss in SOC in category 4.C.1 is due to land being converted from hay meadows to pastures, as hay meadows experience less degradation than pastures. The TERT noted that N₂O emissions where there are losses in SOC due to agricultural practices under category 4.B.1 cropland remaining cropland or category 4.C.1 grassland remaining grassland should be</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>reported under the agriculture sector in CRT 3.D, while all other emissions should be reported in CRT 4(III).</p> <p>During the review, the Party clarified that the SOC losses reported under category 4.C.1 are due to agricultural practices resulting in the degradation of pastures.</p> <p>The TERT recommends that the Party use the method provided in the 2006 IPCC Guidelines (vol. 4, chap. 11, pp.11.15–11.16) to estimate and report N₂O emissions from N mineralization or immobilization associated with the loss or gain of soil organic matter due to agricultural practices for all years in the time series and report the corresponding N₂O emissions in CRT 3.D, including relevant information in the NID and in CRT 4(III), as necessary. The TERT also recommends that the Party use the corresponding notation keys to complete the cells in the CRTs where numerical data are not available.</p>
6.L.11	Specified in paragraphs 21, 35 and 40 of the MPGs 4(IV) Biomass burning – CH ₄ and N ₂ O	<p>The Party reported in CRT 4(IV) emissions from wildfires on forest land (under category 4(IV).A.1 forest land remaining forest land). The TERT noted that the implied EFs reported for CH₄ and N₂O significantly fluctuate across the time series (e.g. the value for N₂O ranges from 0.000003 t N₂O/ha in 2014 to 632.86 t N₂O/ha in 2011).</p> <p>During the review, the Party clarified that a country-specific parameter is used for the mass of fuel available for combustion (parameter M_B) and that the high implied EFs for CH₄ and N₂O reported in CRT 4(IV) result from errors.</p> <p>The TERT recommends that the Party revise its country-specific parameters, in particular M_B, and calculations used to estimate CH₄ and N₂O emissions from biomass burning in accordance with equation 2.27 of the 2006 IPCC Guidelines (vol. 4, chap. 2, p.2.42) and, to the extent possible, include detailed information on the country-specific parameters used in the emission estimates. The TERT encourages the Party to implement category-specific QA/QC procedures for the reported data to avoid future reporting errors in CRT 4(IV).</p>

Table 7

Areas of improvement of the reporting on greenhouse gas emissions and removals – waste sector

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
7.W.1	Specified in paragraphs 31, 39 and 47 of the MPGs 5.A Solid waste disposal on land – CH ₄	<p>Georgia reported CH₄ emissions from solid waste disposal sites in CRT 5.A; however, it did not report any data or notation keys for CH₄ flaring or recovery across the entire time series and did not indicate in its NID whether landfill-gas flaring or recovery systems exist in the country.</p> <p>During the review, the Party clarified that neither CH₄ flaring or recovery systems are currently operational at solid waste disposal sites in the country. However, the TERT considers that there is a possibility that these activities could occur, given the ongoing national waste management reforms in Georgia and modernization efforts in this sector.</p> <p>The TERT recommends that the Party report in its NID information on the status of and planned developments in the landfill-gas flaring and recovery infrastructure in the country for the complete time series, including related data. For the periods when CH₄ flaring and recovery systems are confirmed to be operational, the TERT also recommends that the Party report estimates of CH₄ flaring or recovery in the CRTs. It further recommends that the Party use the appropriate notation key for the years in which these activities did not occur in the country.</p>
7.W.2	Specified in paragraphs 31, 45 and 47 of the MPGs 5.C.1 Waste incineration – CO ₂ , CH ₄ and N ₂ O	<p>In CRT 5.C, the Party reported CO₂ emissions for subcategory 5.C.1.a.i municipal solid waste (biogenic – waste incineration), but left blank the cells for AD and CH₄ and N₂O emissions for this subcategory. It also left blank in CRT 5.C the cells for AD and CO₂, CH₄ and N₂O emissions for the other subcategories under category 5.C.1 waste incineration across the entire time series, most notably under subcategories 5.C.1.a.ii other (biogenic – waste incineration) and 5.C.1.b non-biogenic (waste incineration). The Party also did not provide information in its NID on whether these activities occur in the country.</p> <p>During the review, the Party clarified that these emissions were not estimated owing to uncertainty associated with the type of incineration method and technology used in the country for these activities.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		The TERT recommends that the Party estimate and report CO ₂ , CH ₄ and N ₂ O emissions for all relevant subcategories under category 5.C.1 waste incineration, including both biogenic (subcategory 5.C.1.a) and non-biogenic (subcategory 5.C.1.b) incineration. If such estimations are not possible, the TERT recommends that the Party use the appropriate notation keys and report clear information in the NID on the reasons for the lack of completeness, including information on any methodological or data gaps.
7.W.3	Specified in paragraphs 31, 45 and 47 of the MPGs 5.C.2 Open burning of waste – CO ₂ , CH ₄ and N ₂ O	In its NID (p.322), the Party used “NE” for reporting AD and emissions for category 5.C.2 open burning of waste. However, it did not provide any underlying reason in its NID for not estimating these emissions and for leaving blank all cells for the AD and emissions for category 5.C.2, including subcategories 5.C.2.a biogenic and 5.C.2.b non-biogenic, in CRT 5.C for the entire time series. During the review, the Party clarified that, although the open burning of waste is legally prohibited under the Waste Management Code of Georgia, such activities continue to occur illegally, but cannot be quantified owing to lack of data. The TERT recommends that the Party estimate and report all relevant CO ₂ , CH ₄ and N ₂ O emissions for category 5.C.2 open burning of waste. If estimating these emissions is not possible, the TERT recommends that the Party use the appropriate notation keys consistently in both the NID and CRT 5.C and report clear information in the NID on the reasons for the lack of completeness, including information on any methodological or data gaps, as well as any planned efforts to collect data for this category.
7.W.4	Specified in paragraphs 21 and 23 of the MPGs 5.D.1 Domestic wastewater – CH ₄	The Party estimated CH ₄ emissions from domestic wastewater using a tier 1 method, despite CH ₄ emissions for this category being identified as a key category in NID table R-1 (p.20). The Party did not provide any information in the NID to explain why it was unable to apply a higher-tier method for this key category and whether it has prioritized this key category for future improvement. During the review, the Party clarified that it intends to use country-specific values for its CH ₄ emission estimates for domestic wastewater, including a national biochemical oxygen demand parameter (0.044735 kg/person/day), and that it is undertaking efforts to identify data sources to enable the use of a tier 2 method in future submissions. The TERT recommends that the Party use an appropriate higher-tier method from the 2006 IPCC Guidelines (vol. 5, chap. 6, pp.6.10–6.11) to estimate CH ₄ emissions from domestic wastewater as planned, or document in the NID the reasons for not following the relevant decision tree in the 2006 IPCC Guidelines.

C. Information necessary to track progress in implementing and achieving the nationally determined contribution under Article 4 of the Paris Agreement

Table 8
Areas of improvement of the reporting on national circumstances and institutional arrangements

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
NA	NA	No areas of improvement identified

Table 9
Areas of improvement of the description of the nationally determined contribution under Article 4 of the Paris Agreement, including updates

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
NA	NA	No areas of improvement identified

Table 10

Areas of improvement of the reporting of the information necessary to track progress in implementing and achieving the nationally determined contribution under Article 4 of the Paris Agreement

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
10.1	Specified in paragraph 67 of the MPGs	<p>Georgia reported in its BTR1 (table 5, p.82) that the base year for the supporting indicator “Carbon capture potential of forests” is 2015. However, in CTF table 4.5, the Party reported that the base year for this indicator is 2030.</p> <p>During the review, Georgia confirmed that the correct base or reference year for the supporting indicator “Carbon capture potential of forests” is 2015.</p> <p>The TERT recommends that Georgia ensure that it consistently report the base year for the indicators selected to track progress towards the implementation and achievement of its NDC both in its BTR and CTF tables, particularly for the supporting indicator “Carbon capture potential of forests”.</p>

Table 11

Areas of improvement of the reporting on mitigation policies and measures, actions and plans, including those with mitigation co-benefits resulting from adaptation actions and economic diversification plans, related to implementing and achieving the nationally determined contribution under Article 4 of the Paris Agreement

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
11.1	Specified in paragraph 85 of the MPGs	<p>Georgia reported the estimates of expected and achieved GHG emission reductions for its actions and PaMs in both CTF table 5 and BTR1 tables 6–12 (pp.89–119). The TERT noted some issues with the reported estimates. In particular: (1) in BTR1 table 11 (p.114), the Party reported the reduction in expected and achieved GHG emissions resulting from the mitigation measure involving biodegradable waste recycling as the total emissions resulting from waste composting activities, despite the fact that emissions from these activities do not represent any actual emission reductions; (2) in BTR1 table 9 (p.105), the Party reported an expected emission reduction of 2,730.18 Gg CO₂ equivalent by 2030 for the mitigation measure involving the development of individual EFs; however, despite such EFs improving the accuracy of emission estimates, they do not deliver emission reductions; and (3) only CO₂ emission reductions for several PaMs were reported in BTR1 tables 6–12; however, in practice, the mitigation measures listed for the energy, transport and agriculture sectors would also result in reductions in CH₄ and N₂O emissions, potentially increasing the overall reduction in expected and achieved GHG emissions.</p> <p>During the review, Georgia acknowledged the need to further examine the estimates of expected and achieved GHG emission reductions for the measure involving biodegradable waste recycling. It also acknowledged the need to account for improvements in the emission estimates resulting from the measure involving the development of individual EFs and the need to include CH₄ and N₂O emission reductions when estimating expected and achieved GHG emission reductions for relevant PaMs.</p> <p>The TERT recommends that Georgia provide, to the extent possible, estimates of expected and achieved GHG emission reductions for its actions and PaMs and revise any possible errors, misinterpretations and omissions noted, including for the estimates of emission reductions resulting from the mitigation measure involving biodegradable waste recycling and the measure involving the development of country- or plant-specific EFs in the industry sector and, where applicable, by considering the reductions in CH₄ and N₂O emissions resulting from several PaMs.</p>
11.2	Specified in paragraph 88 of the MPGs	<p>Georgia did not report any actions or PaMs that influence GHG emissions from international transport in either the narrative section of its BTR1 or the CTF tables. As noted in the BTR1 (p.168), Georgia’s NDC does not include GHG emissions for subcategories 1.D.1.a international aviation (aviation bunkers) or 1.D.1.b international navigation (marine bunkers). Consequently, Georgia’s 2030 Climate Change Strategy and Action Plan, which is a source of information for the PaMs listed in the BTR1, does not explicitly address mitigation measures targeting emissions from international transport.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>During the review, Georgia explained that it continues to cooperate with relevant international bodies, including the International Civil Aviation Organization and International Maritime Organization, to stay aligned with global developments and reporting requirements related to emissions from international transport.</p> <p>The TERT encourages Georgia to identify and report in its BTR its actions and PaMs that influence GHG emissions from international transport, including information on its collaboration with the International Civil Aviation Organization and International Maritime Organization.</p>

Table 12

Areas of improvement of the summary of greenhouse gas emissions and removals

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
12.1	Specified in paragraph 91 of the MPGs	<p>Georgia submitted a stand-alone NIR with its BTR1. In its BTR1 (pp.169–172), the Party provided a summary of its GHG emissions and removals for 2018–2022, consistent with the data provided in NID tables 2-1–2-2 (pp.32–33 and 35–36) for the above-mentioned period. The TERT noted that Georgia’s NID covers the reporting period 1990–2022. However, the summary information on the Party’s GHG emissions and removals presented in tabular and textual format in the BTR1 covers only part of this reporting period (2018–2022). In addition, the TERT noted that CTF table 6 includes no data and only blank cells.</p> <p>During the review, Georgia explained that the summary of GHG emissions and removals presented in its BTR1 describes new emission estimates for 2018–2022. The Party further explained that it meant to report recalculated data for earlier years in CTF table 6, but it was unable to do so owing to technical issues with the tools for reporting under the enhanced transparency framework.</p> <p>The TERT recommends that, if Georgia submits a stand-alone NIR, it provide in either its BTR or CTF table 6 a summary of its GHG emissions and removals covering the reporting years corresponding to its most recent NIR, in tabular format.</p>

Table 13

Areas of improvement of the projections of greenhouse gas emissions and removals

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
13.1	Specified in paragraph 94 of the MPGs	<p>Georgia stated in its BTR1 (p.186) that the WM scenario considers the impact on GHG emissions of PaMs that have been implemented or are planned to be implemented within the country and that the WAM scenario considers additional PaMs alongside the currently adopted and planned mitigation PaMs. The TERT noted that according to the MPGs, the WM scenario encompasses currently implemented and adopted PaMs, whereas the WAM scenario encompasses implemented, adopted and planned PaMs.</p> <p>During the review, the Party clarified the misleading wording presented in the BTR1 and provided the actual definitions used for constructing its WM and WAM scenarios, which the TERT found to be in line with the MPGs.</p> <p>The TERT recommends that the Party report on projections throughout the BTR using the correct definitions for projection scenarios in line with those provided in the MPGs.</p>
13.2	Specified in paragraph 96(a) of the MPGs	<p>Georgia reported in its BTR1 (pp.184–189) information on the methodology, assumptions and parameters used to develop projections, including a description of the Ex-Ante Carbon-balance tool used for evaluating emission reductions in the forestry and agriculture sectors. The TERT noted that from the description provided in the BTR1 and information in Georgia’s LT-LEDS, it is not sufficiently clear how CH₄ and N₂O emission projections have been calculated for the agriculture sector. In CTF table 11 and BTR1 table 54 (p.187), Georgia provided quantitative information on its key underlying assumptions and parameters used to develop projections. The information reported covers gross domestic product and the country’s population. The TERT also noted that the most recent historical year reported for these parameters and assumptions in BTR1 table 54 is 2020, while the projections reported cover 2025, 2030, 2040 and 2050. The projection scenarios reported in CTF</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>tables 7–9 begin from 2022, as this is the most recent year in the NIR, and cover the period up until 2040.</p> <p>During the review, Georgia provided the calculation files from the Ex-Ante Carbon-balance tool, including the calculation records for estimating N₂O and CH₄ emissions from enteric fermentation, manure management and the application of fertilizer for the agriculture sector. Regarding the time frame for the key underlying assumptions and parameters, the Party explained that, at the time of preparing the projections for the LT-LEDS, 2020 was the most recent year for which data were available and 2050 was the last year covered. However, the base-year data for the projections reported in the BTR1 was changed, but the key underlying assumptions were kept the same and reported as such in the BTR1.</p> <p>The TERT encourages the Party to include a detailed description of the models and/or approaches used for the development of national emission projections for all relevant sectors, categories and gases, including information on the key underlying assumptions and parameters used for projections covering the same time frame as the reported projection scenarios.</p>
13.3	Specified in paragraph 96(c) of the MPGs	<p>Georgia reported emission projections up until 2040 in its BTR1, while the reported PaMs and their expected emission reductions only cover the time frame up until 2030. It is unclear what assumptions on PaMs included in the WM and WAM projection scenarios are valid beyond 2030.</p> <p>During the review, Georgia explained that the projections presented in the BTR1 are based on the LT-LEDS, are aligned with the PaMs outlined in its 2030 Climate Change Strategy and 2021–2023 Action Plan and consider the ongoing effects of these PaMs beyond 2030.</p> <p>The TERT encourages the Party to provide in the BTR complete and accurate information on the assumptions on PaMs included in the WM and WAM projection scenarios for the entire period covered by the reported projections.</p>

Table 14

Areas of improvement of other information relevant to tracking progress in implementing and achieving the nationally determined contribution under Article 4 of the Paris Agreement

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
NA	NA	No areas of improvement identified

II. Capacity-building needs³ identified by the Party and by the technical expert review team in consultation with the Party during the technical expert review of its first biennial transparency report

2. Table 15 presents capacity-building needs identified by the Party and by the TERT in consultation with the Party during the technical expert review of its BTR1.

Table 15

Capacity-building needs identified in consultation with the Party

<i>ID#</i>	<i>Reporting requirement</i>	<i>Area in which capacity-building is needed</i>
General reporting		
1_CBN.1 ^a	Specified in paragraphs 10 and 18 of the MPGs	Enhancing knowledge management across institutions contributing to the preparation of the BTR and GHG inventory to preserve institutional memory, ensure systematic documentation and facilitate effective staff handover, thereby supporting continuity and consistency in the preparation of the BTR and GHG inventory (high priority)

³ As referred to in paras. 7, 8 and 162(d) of the MPGs.

<i>ID#</i>	<i>Reporting requirement</i>	<i>Area in which capacity-building is needed</i>
NIR – general		
2.G_CBN.1 ^a	Specified in paragraphs 18–19 of the MPGs	Strengthening institutional capacity by establishing a dedicated and permanent inventory team with sufficient staff to coordinate and oversee the regular compilation of the GHG inventory, implement systematic improvements, including TERT recommendations, and ensure continuity of the inventory process (high priority)
2.G_CBN.2 ^a	Specified in paragraph 18 of the MPGs	Supporting the enhancement of a formal framework for the preparation of the GHG inventory that defines the mandates, responsibilities and coordination mechanisms among all data providers, including structured procedures for collecting, validating and transmitting data (high priority)
NIR – energy		
3.E_CBN.1 ^a	Specified in paragraph 18 of the MPGs	Strengthening the technical capacities of Geostat, MEPA and EIEC for operating a coherent national energy statistics system, while ensuring that the official energy balance and complementary data sets are tailored to the data needs of the GHG inventory (high priority)
NIR – IPPU		
NA	NA	No capacity-building needs identified
NIR – agriculture		
NA	NA	No capacity-building needs identified
NIR – LULUCF		
6.L_CBN.1 ^a	Specified in paragraphs 21 and 24 of the MPGs	Enhancing the legislative framework for mandating the annual collection and timely reporting of AD required for compiling the GHG inventory for the LULUCF sector, including specific institutional responsibilities and reporting procedures for the systematic collection of land-use and land-use-change data (high priority)
6.L_CBN.2 ^a	Specified in paragraphs 21 and 24 of the MPGs	Developing the ability to conduct the NFI on a 10-year cycle and to implement improvements to the NFI based on priorities identified in the GHG inventory (high priority)
6.L_CBN.3 ^a	Specified in paragraphs 20 and 24 of the MPGs	Developing the ability to generate a combined national soil and land-use map, including by applying expertise in geographic information systems (high priority)
NIR – waste		
NA	NA	No capacity-building needs identified
Information necessary to track progress in implementing and achieving the NDC under Article 4 of the Paris Agreement		
11_CBN.1 ^a	Specified in paragraph 85 of the MPGs	Enhancing the ability to select appropriate and relevant methodologies for estimating expected and achieved GHG emission reductions for actions and PaMs to be reported in the BTR (medium priority)
13_CBN.1 ^a	Specified in paragraph 96 of the MPGs	Strengthening technical capacity at the national level to calculate and update the emission projections, enhance the integration of PaMs in the appropriate scenarios, and ensure overall consistency among the GHG inventory, PaMs and projections (high priority)

^a Capacity-building need identified by the TERT in consultation with the Party as per the MPGs.

Annex

Documents and information used during the review

A. Reference documents

BTR1 of Georgia. Available at <https://unfccc.int/first-biennial-transparency-reports>.

BTR1 CTF tables of Georgia. Available at <https://unfccc.int/first-biennial-transparency-reports>.

CRTs of Georgia. Available at <https://unfccc.int/first-biennial-transparency-reports>.

Georgia's updated NDC. Available at https://unfccc.int/sites/default/files/NDC/2022-06/NDC%20Georgia_ENG%20WEB-approved.pdf.

“Guidance for operationalizing the modalities, procedures and guidelines for the enhanced transparency framework referred to in Article 13 of the Paris Agreement”. Decision 5/CMA.3. FCCC/PA/CMA/2021/10/Add.2. Available at <https://unfccc.int/documents/460951>.

IPCC. 2006. *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. S Eggleston, L Buendia, K Miwa, et al. (eds.). Hayama, Japan: Institute for Global Environmental Strategies. Available at <http://www.ipcc-nggip.iges.or.jp/public/2006gl>.

IPCC. 2019. *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*. E Buendia, K Tanabe, et al. (eds.). Geneva: IPCC. Available at <https://www.ipcc-nggip.iges.or.jp/public/2019rf/>.

“Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement”. Annex to decision 18/CMA.1. FCCC/PA/CMA/2018/3/Add.2. Available at <https://unfccc.int/documents/193408>.

NID of Georgia. Available at <https://unfccc.int/first-biennial-transparency-reports>.

“Reviews on a voluntary basis of the information reported pursuant to decision 18/CMA.1, annex, chapter IV, and respective training courses needed”. Decision 9/CMA.4. FCCC/PA/CMA/2022/10/Add.2. Available at <https://unfccc.int/documents/626570>.

B. Additional information provided by the Party

Responses to questions during the review were received from Kakhaveri Mdivani (Environmental Information and Education Centre of the Ministry of Environmental Protection and Agriculture of Georgia), including additional material. The following references were provided by Georgia and may not conform to UNFCCC editorial style as some have been reproduced as received:

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Government of Georgia. 2021. *2021-2023 Action Plan of Georgia's 2030 Climate Strategy*. Available at: <https://mepa.gov.ge/En/Files/ViewFile/50122>.

Government of Georgia. 2021. *Georgia's updated 2021 Nationally Determined Contribution (NDC)*. Available at: <https://unfccc.int/documents/497505>.

Government of Georgia. 2022. *Report on the Implementation of Georgia's 2030 Climate Change Strategy and Action Plan for 2021-2023*. Available at: <https://mepa.gov.ge/Ge/Files/ViewFile/54001>.

Government of Georgia. 2023. *Georgia's Long-Term Low Emission Development Strategy (LT-LEDS)*. Available at: <https://unfccc.int/documents/630740>.

Government of Georgia. 2024. საქართველოს ენერგეტიკისა და კლიმატის
ეროვნული ინტეგრირებული გეგმა (Integrated National Energy and Climate Plan).
Available at: <https://www.energy-community.org/dam/jcr:0deb6d78-0edb-4be0-aded-bec6c154bcaa/NECP%20of%20Georgia.pdf>.
