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

Addendum

Summary

This addendum to the report on the technical expert review of the first biennial transparency report of Costa Rica, 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 20 to 24 October 2025 in San José.

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

Abbreviations and acronyms

2006 IPCC Guidelines	*2006 IPCC Guidelines for National Greenhouse Gas Inventories*
2019 Refinement to the 2006 IPCC Guidelines	*2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*
AD	activity data
BOD	biochemical oxygen demand
BTR	biennial transparency report
C	confidential
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
COD	chemical oxygen demand
CRT	common reporting table
CTF	common tabular format
DOC	degradable organic carbon
EF	emission factor
ETF	enhanced transparency framework under the Paris Agreement
FX	flexibility
GDP	gross domestic product
GHG	greenhouse gas
GWP	global warming potential
HWP	harvested wood products
INEC	National Institute of Statistics and Censuses of Costa Rica
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
LULUCF	land use, land-use change and forestry
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_2O	nitrous oxide
NA	not applicable
NDC	nationally determined contribution
NE	not estimated
NID	national inventory document
NIR	national inventory report
NMVOC	non-methane volatile organic compound
NO	not occurring
NO_X	nitrogen oxides
PaMs	policies and measures
QA/QC	quality assurance/quality control
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
SOM	soil organic matter
TERT	technical expert review team
WAM	‘with additional measures’
WM	‘with measures’
WOM	‘without measures’

I. Areas of improvement[1] 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 MPGs[2] of the information submitted by Costa Rica 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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
1.1	Specified in paragraph 3 of decision 18/CMA.1	The Party submitted its NID on 19 March 2025 and CRTs on 29 September 2025 (before the review), after the submission deadline of 31 December 2024. During the review, Costa Rica provided draft CTF tables for tracking progress in implementing and achieving its NDC, which included some of the information required to be reported and demonstrated the Party's intention to submit complete CTF tables in the future. The TERT recommends that Costa Rica implement and maintain national institutional arrangements for the continued estimation, compilation of its inventory and timely reporting of its next NID and accompanying CRTs and CTF tables in accordance with the timeline established by decision 1/CP.21.
1.2	Specified in paragraph 2 of decision 5/CMA.3	The structure of the BTR1 does not fully align with the mandated outline in annex IV to decision 5/CMA.3. Sections for information on flexibility and improvement are missing, and there is structural misalignment of sections of chapter 3 ("Tracking NDC") and chapter 5 ("Financing") with the mandated outline. While the NID mostly aligns with the outline in annex V to decision 5/CMA.3, sections 10.4 ("Areas of improvement and/or capacity-building in response to the review process") and 10.5 ("Areas of improvement and/or capacity-building related to the flexibility provisions applied") are missing. In addition, in chapter 5 ("Agriculture"), the sector structure does not align with the CRT categories but rather follows categories from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*. During the review, the Party explained that the structure of the reports was adapted to reflect national circumstances and reporting priorities and indicated that full alignment with the prescribed outlines will be pursued as national capacities and systems for reporting are strengthened. The TERT encourages Costa Rica to prepare its next BTR and NID in accordance with the reporting outlines specified in annexes IV and V to decision 5/CMA.3 respectively.
1.3	Specified in paragraphs 79–80 of the MPGs	The BTR submission does not include CTF tables for tracking progress in implementing and achieving the NDC, as required by the MPGs. During the review, the Party explained that it faced challenges in reporting the required information in tabular format owing to both lack of information and capacity constraints in using the ETF reporting tools. The TERT recommends that Costa Rica improve the completeness of its reporting by preparing and submitting CTF tables as an integral component of its next BTR submission.

[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.

B. Greenhouse gas emissions and removals

Table 2
Areas of improvement relating to general findings on greenhouse gas emissions and removals

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
2.G.1	Specified in paragraph 19(b) of the MPGs Institutional arrangements	Costa Rica did not clearly describe the institutional, legal and procedural arrangements for its inventory preparation process in accordance with the MPGs. The Party reported the key entities involved without clearly describing their roles and responsibilities and did not provide information on the mechanism in place for data collection (data flows) or the planning of inventory cycle activities. The validation process for the inventory was also not reported in the NID. An internal review of the NID is mentioned as being part of the QC process, but there is no reference to any QA processes for the NIR. The TERT considers that the reported information on institutional arrangements is not sufficiently transparent to enable an understanding of the inventory preparation cycle. Furthermore, the TERT noted that INEC is cited as a data source for the agriculture, LULUCF and waste sectors, but is not listed as a data provider in the NID (p.30) or referred to in the information on institutional arrangements for the GHG inventory. During the review, Costa Rica described the current legal framework in place for inventory preparation and provided all relevant legal texts (laws and decrees on functions of the National Meteorological Institute, the Directorate of Climate Change and the Inter-institutional Technical Committee on Climate Change, and the Law on Waste). Costa Rica also informed the TERT of its new climate change law aimed at reinforcing the national arrangements for the inventory system, to be developed in 2026. Regarding the role and responsibilities of INEC in inventory preparation, the Party clarified that it uses data from the INEC website but does not consider INEC a data provider as no expert from the Institute has been appointed to provide information. Nevertheless, the Party indicated that it will include INEC as a data provider in the next submission. In addition, during the review, in response to the draft technical expert review report, Costa Rica highlighted its commitment to enhance the transparency, completeness and consistency of the reporting for its next submission by including: (a) A comprehensive description of the institutional arrangements for the national inventory system, clearly defining the roles and responsibilities of all entities involved in the inventory preparation process; (b) A clear description of data-collection arrangements, including information on data flows and data providers; (c) Information on the inventory preparation cycle, including planning and key steps in developing the inventory; (d) A detailed description of the QA/QC procedures and activities implemented, in line with the IPCC *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*; (e) Information on data archiving arrangements; (f) A description of the official processes for the consideration, approval and submission of the NIR. The TERT recommends that Costa Rica report clear information on its inventory preparation process, including the roles and responsibilities of all institutions participating in inventory preparation, QA/QC implementation, data archiving, and the official consideration, approval and validation of the NIR.
2.G.2	Specified in paragraph 34 of the MPGs QA/QC and verification	Costa Rica reported in the NID (section 1.5, p.36, and annex IV, p.304) on the QA/QC plan for the inventory but did not report on its implementation or on the results obtained. The TERT noted inconsistencies and discrepancies between the NID and CRTs for all sectors related to the use of notation keys and to information reported in the reference list, tables and figures. The TERT considers that such inconsistencies, as well as typographical errors, could be addressed during a QA/QC process. During the review, the TERT raised questions regarding how the Party ensures QA/QC procedures are conducted, how QA/QC procedures are implemented, whether expert(s) are responsible for conducting QA/QC throughout the inventory cycle, whether QA/QC results are documented and how QA/QC results are

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		considered in the improvement plan. In response, Costa Rica clarified that the inventory coordinator was responsible for QA/QC of the most recent submission, but a new QA/QC coordinator, who was appointed in 2025, is in charge of preparing the QA/QC plan for the next submission. The results of QA/QC will be included in the improvement plan. Following consultation with national experts and the national inventory coordinator, the TERT concluded that QA/QC was not fully implemented and that QA procedures were not comprehensively applied owing to lack of time. The TERT considers that if the QA/QC process were correctly and fully implemented, all the inconsistencies, errors and typos identified could be addressed during the process. Costa Rica shared its calculation sheets, in which the TERT noted discrepancies with reported values in the NID and CRTs, confirming its assessment. The Party acknowledged that more robust QA/QC procedures need to be developed and implemented. The TERT recommends that Costa Rica enhance its QA/QC plan and improve implementation thereof to avoid reporting inconsistent information; provide training for all sectoral experts and the QA/QC coordinator responsible for developing and implementing the QA/QC plan, implementing QA/QC procedures and reporting on QA/QC results; and include QA/QC results in the inventory improvement plan. The TERT also recommends that Costa Rica inform all experts and stakeholders involved in QA/QC of the inventory about the reporting requirements in the MPGs and the reporting guidance and tables in the 2006 IPCC Guidelines (vol. 1, chap. 8).
2.G.3	Specified in paragraphs 25 and 41 of the MPGs Key category analysis	Costa Rica reported in NID tables I.1– I.2 (annex I, pp.285–290) a key category analysis for the latest reporting year (2021), including LULUCF categories, using approach 1 for both level and trend assessment. The Party did not report a key category analysis for the base year and a key category analysis without LULUCF categories. The TERT noted that Costa Rica conducted its key category analysis by subcategory, but without disaggregating by fuel for all sectors (NID table 1.3, p.35, and NID annex I). During the review, Costa Rica explained that the key category analysis included LULUCF categories for 2021 only. The TERT recommends that Costa Rica conduct a key category analysis disaggregated by subcategory and by fuel, for both level and trend assessment, with and without LULUCF, for the base year (1990) and the latest reporting year (2021), and report on its key category analysis in line with the 2006 IPCC Guidelines, in accordance with paragraphs 25 and 41 of the MPGs.
2.G.4	Specified in paragraph 51 of the MPGs Completeness	Costa Rica reported GHG gas precursor emissions by sector (NID table 2.7, p.45) and by gas (NID table 2.8, p.45). For the energy and LULUCF sectors, CO, NO_X, SO_2, NMVOCs and black carbon were reported (NID tables 3.41, p.74, and 6.4, p.127); for the IPPU sector, SO_2 and NMVOCs were reported (NID table 4.30, p.103); and for the agriculture sector, only black carbon was reported (NID table 5.22, p.121). The Party used methodologies of the European Environment Agency/Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe for estimating the emissions. The TERT noted that not all gas precursors were estimated and not all subcategories were included in the estimates; for example, subcategories were missing for the energy sector (NID table 3.41, p.74). During the review, Costa Rica acknowledged the finding of the TERT. The TERT encourages Costa Rica to estimate and report all precursor gases (CO, SO_2, NMVOCs and NO_X) for all sources (categories and subcategories) for all sectors to improve the completeness of its reporting.
2.G.5	Specified in paragraph 32 of the MPGs and paragraph 5(a) of decision 5/CMA.3 Notation keys	The TERT noted that notation keys are misused or not used at all in the NID and CRTs. Costa Rica applied a flexibility provision but did not report “FX” in the NID or CRTs, and it did not provide an explanation as to why a source was not estimated when “NE” was reported (e.g. lack of data, insignificance). During the review, Costa Rica acknowledged the finding of the TERT. The TERT recommends that Costa Rica improve the accuracy and transparency of its reporting by using appropriate notation keys in the NID and CRTs to report

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		information and justifying its use of notation keys, where necessary, and include QC procedures specific to notation key use in its QA/QC plan.
2.G.6	Specified in paragraph 31 of the MPGs CRTs	The TERT noted that CRTs for all categories are incomplete and not fully consistent with the information reported in the NID. During the review, Costa Rica explained that it faced challenges in using the ETF reporting tools and time constraints in having national experts report data for all years in CRTs using the ETF reporting tools. In addition, in response to the draft review report, Costa Rica noted that it is committed, in the light of its national circumstances, to strengthening its capacity to use the ETF reporting tools and to improving the data-collection process. The TERT recommends that Costa Rica report CRTs in accordance with the MPGs by taking steps such as enhancing the capacity of sectoral inventory leaders and the QA/QC coordinator to use the ETF reporting tools.
2.G.7	Specified in paragraph 29 of the MPGs Uncertainty analysis	Costa Rica quantitatively estimated uncertainties for 2017 (as the base year) and 2021 (as the latest reporting year) and reported them in NID tables II.1–II.2 (annex II, pp.291–301). However, the TERT noted that the Party did not provide uncertainties for all AD and EFs reported in the NID for all sources and sinks, and no reference to IPCC default uncertainty values was made. During the review, Costa Rica clarified that IPCC default values were used for AD and EFs for some subcategories but country-specific uncertainties were used for others in estimating uncertainties of emissions for the national GHG inventory. The TERT acknowledges that Costa Rica has developed country-specific uncertainty values, which is good practice in line with the 2006 IPCC Guidelines. The TERT recommends that Costa Rica estimate uncertainties, at least for the base year (1990); report and discuss uncertainties for all sources and sinks for each category; refer to IPCC default values for AD and EFs, when applied; report country-specific uncertainties for AD and EFs, when applied; and document country-specific uncertainties according to the 2006 IPCC Guidelines (vol. 1, chap. 2, annex 2A.1 (a protocol for expert elicitation)).
2.G.8	Specified in paragraph 47 of the MPGs AD	Costa Rica did not report AD for all sources and sinks for the entire time series of the inventory in the NID. During the review, Costa Rica explained that AD were reported in CRTs and to avoid duplication, they were not included in the NID. The Party raised the issue of confidentiality in providing cement AD by plant, as only two plants were operating in the country up until 2023 and a third plant commenced operations in 2023. The TERT recommends that Costa Rica report a complete time series for all emissions and removals, starting from the base year 1990, and preserve the confidentiality of relevant cement plant sources either by using the appropriate notation key and reporting those sources in an aggregated manner or by using indexes to report on the trend in clinker production.
2.G.9	Specified in paragraph 58 of the MPGs Flexibility	Costa Rica applied flexibility for the times series, with its latest reporting year being three years prior to the submission of its NIR, rather than two. However, the TERT noted that Costa Rica did not use the notation key “FX” in either the NID or the CRTs to indicate that flexibility was applied. Furthermore, it did not provide sufficient information on how it intends to improve its capacity for AD collection to enable it to report without applying the flexibility provision in the BTR3 in line with the plans specified in the NID. During the review, Costa Rica acknowledged the finding of the TERT. Moreover, in response to the draft review report, Costa Rica noted that as part of the measurement, reporting and verification processes, it is currently restructuring the architecture of its National Climate Change Metrics System into the system that will serve as a tool for data collection. The TERT recommends that Costa Rica report the activities planned to improve its data-collection system and make it sustainable for reporting in accordance with the MPGs for future BTRs.

Table 3
Areas of improvement of the reporting on greenhouse gas emissions and removals – energy sector

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
3.E.1	Specified in paragraph 36 of the MPGs Fuel combustion – reference approach – gaseous fuels – CO_2	The TERT noted a difference of more than 5 per cent between national values for CO_2 emissions from fuel combustion estimated using the sectoral and reference approaches for 1990, but this was not explained and accounted for in line with the 2006 IPCC Guidelines (vol. 2, chap. 2.6). The TERT also noted that CRT 1.A(c) has empty cells for gaseous fuels under the reference approach, but is populated with values under the sectoral approach, with differences of more than 5 per cent being observed for some types of fuel (e.g. liquid and gaseous). During the review, the Party explained that liquefied petroleum gas is reported under liquid fuels for the reference approach and under gaseous fuels for the sectoral approach, but the total amount of CO_2 emissions is correct, and that data for the reference and sectoral approaches come from the same energy balance. The TERT encourages Costa Rica to improve its allocation of data on fuels in CRT 1.A(c) and explain differences of more than 5 per cent between national values for CO_2 emissions from fuel combustion estimated using the sectoral and reference approaches for the base year (1990).
3.E.2	Specified in paragraph 40 of the MPGs 1.A.1.a Public electricity and heat production – all fuels – CO_2, N_2O and CH_4	The TERT noted that in NID table 3.10 (p.55) and NID figure 3.8 (p.56) CO_2 emissions for category 1.A.1.a fluctuate greatly from year to year across the entire time series. For example, emissions in 1995 are 715.08 Gg CO_2 eq, in 2000 are 34.53 Gg CO_2 eq and in 2005 are 245.70 Gg CO_2 eq. These variations are not clearly explained in the NID. During the review, the Party explained that in Costa Rica, between 90 and 99 per cent of electricity is produced by renewable energy, depending on the weather, so emissions are variable. The TERT recommends that Costa Rica improve the transparency of its reporting by including AD for the amount of electricity produced, by type of energy, under category 1.A.1.a.
3.E.3	Specified in paragraph 47 of the MPGs 1.A.1.b Petroleum refining – all fuels – CO_2, CH_4 and N_2O	In NID figure 3.10 (p.58), emissions for category 1.A.1.b from 1998 to 2000 are reported as "NO" because, as reported by the Party, the Costa Rican Petroleum Refinery company was not in operation in that period. In the same section (p.59), the Party reported that the company ceased refining crude oil in 2011, but the TERT noted that emissions are reported for 2011–2021. During the review, the Party explained that the emissions reported for 2011–2021 relate to the use of boilers and generators to keep fuels at the desired temperature, which also occurred in 1998–2000. The TERT recommends that Costa Rica improve completeness and report emissions from the refinery by, for example, investigating emissions related to the use of boilers and generators to keep fuels at the desired temperature by the Costa Rican Petroleum Refinery company for 1998–2000 or derive emission estimates for that period on the basis of data for 2011–2021.
3.E.4	Specified in paragraphs 35 and 46 of the MPGs 1.A.1.c Manufacture of solid fuels and other energy industries – charcoal – CO_2, CH_4 and N_2O	The TERT noted that in NID section 3.2.3.3 (p.60) an improvement plan for category 1.A.1.c related to identifying the interannual variation of emissions for the production of charcoal is reported, but this improvement is not included in the plan reported on page 284 of the NID. During the review, the Party clarified that the improvement plan for the consumption of wood to produce charcoal included a study aimed at updating the data on calorific value for biofuels, and that the study has been concluded. The TERT recommends that Costa Rica improve its QA/QC procedures for its reporting to ensure that the information reported in the NID is up to date.
3.E.5	Specified in paragraph 57 of the MPGs 1.A.2 Manufacturing industries and construction – all fuels – CO_2, CH_4 and N_2O	Costa Rica reported in NID section 3.2.4.1 emissions of CO_2 eq which show that the trend over time is variable for category 1.A.2 for the whole time series and explained that the changes are attributable to lower consumption of some fuels in some years. However, the TERT noted that no information on fuel consumption for the category, by year, is reported in the NID. During the review, the Party provided the TERT with data on total fuel consumption for the category, by year. The data show a change in the trend in

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		consumption after 2018, but they do not fully explain the change in the trend in emissions. Moreover, in response to the draft review report, Costa Rica noted that it intends to enhance the analysis of fuel consumption data by year and strengthen the documentation provided in the NID to better explain the observed emission trends and report on these improvements in the next submission. The TERT recommends that Costa Rica improve the transparency of its reporting by further investigating and reporting the reason for the variable trend in CO_2, CH_4 and N_2O emissions in manufacturing industries and construction across the time series.
3.E.6	Specified in paragraph 39 of the MPGs 1.A.3.b.iv Motorcycles – lubricants – CO_2, CH_4 and N_2O	The TERT noted that the Party did not report in its NID any information about the use of lubricants as fuel, for example, in two-stroke engines. During the review, the Party provided information on the use of lubricants in two-stroke engines in Costa Rica and how emissions associated with their use are estimated and reported in the inventory. The TERT recommends that Costa Rica describe the method for estimating emissions from the use of lubricants as fuel in the next NID.
3.E.7	Specified in paragraph 57 of the MPGs 1.A.3.d Domestic navigation – all fuels – CO_2, CH_4 and N_2O	In NID table 3.23 (p.65), Costa Rica reported information on emissions from domestic navigation. The TERT noted an unexpected decrease in domestic navigation emissions from 2005 (36.62 Gg CO_2 eq) to 2010 (6.39 Gg CO_2 eq). During the review, the Party explained that before 2010, fuel for domestic navigation was subsidized and there was a registry recording consumption of this fuel. Since the subsidy was removed, fuel for navigation has been purchased from gas stations, so consumption is included under road transportation. Moreover, in response to the draft review report, Costa Rica noted that it is assessing its resource availability for reporting consistent time series. The TERT recommends that Costa Rica use AD on drivers of emissions such as size of the fleet and fuel consumption before 2010 to estimate emissions for this category and report consistent time series.
3.E.8	Specified in paragraph 28 of the MPGs 1.A.4 Other sectors – all fuels – CO_2, CH_4 and N_2O	The TERT noted that emissions in CO_2 eq for category 1.A.4 show a wave shape in NID figures 3.19–3.20 (p.68); emissions increase from 1990 to 2003, then decrease from 2004 to 2011, before increasing again from 2012 to 2021. During the review, the Party explained that the trend in emissions could be due to the use of liquefied petroleum gas and electricity instead of wood in the 2000s and then a stagnation in GDP for some years. The TERT recommends that Costa Rica report AD on fuel use or specify the implied EF used for all gases to improve the transparency of its reporting.
3.E.9	Specified in paragraph 54 of the MPGs Feedstocks, reductants and other non-energy use of fuels – all fuels – CO_2, CH_4 and N_2O	The TERT noted that there is no information in the NID on how Costa Rica ensures that emissions from feedstocks, reductants and other non-energy use of fuels are correctly allocated in the inventory, and there are no data in CRTs 1.A(b) and 1.A(d). However, non-combustion fuel use, namely lubricant use (2.D.1) and paraffin wax use (2.D.2), is reported in the IPPU chapter of the NID. During the review, the Party explained how emissions from non-combustion fuel use are estimated and allocated in the inventory. The TERT encourages Costa Rica to include information on feedstocks, reductants and other non-energy use of fuels in the next submission to improve the transparency of its reporting.
3.E.10	Specified in paragraph 47 of the MPGs 1. General (energy sector) – liquid fuels – CO_2	Costa Rica reported in NID table 3.40 (section 3.4.1) emissions of biogenic CO_2 from the transportation sector, but only for one year (2010). During the review, the Party explained that a pilot project of substituting ethanol for gasoline ran from 2006 to 2012, leading to emissions of biogenic CO_2 during this period. In addition, in response to the draft review report, Costa Rica explained that it is checking whether data are available for years prior to 2010 and will ensure that the next submission reflects the available data, as appropriate. The TERT recommends that Costa Rica estimate biogenic CO_2 emissions from the transportation sector for 2006–2012 and take into account the possible mixing

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		of gasoline with ethanol by the Costa Rican Petroleum Refinery company after 2021.
3.E.11	Specified in paragraph 53 of the MPGs International navigation – liquid fuels – CO_2	Costa Rica reported in NID section 3.2.2.2 (p.54) CO_2 emissions from international navigation; however, the TERT noted that zero was reported for the emissions for 2021 in NID figure 3.6. The TERT also noted fluctuations in emissions between 2000 and 2010. During the review, the Party explained that information is provided by the Costa Rican Petroleum Refinery company, and no data were reported for 2021. The TERT encourages Costa Rica to investigate the fluctuations in CO_2 emissions from international navigation between 2000 and 2010 and the zero value reported for such emissions for 2021, report the results of the investigation in the NID and improve the QA/QC procedures.

Table 4
Areas of improvement of the reporting on greenhouse gas emissions and removals – industrial processes and product use sector

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
4.I.1	Specified in paragraph 39 of the MPGs 2.A.1 Cement production – CO_2	Costa Rica reported CO_2 emissions for category 2.A.1 cement production, which is a key category, and described the methodology applied to estimate emissions. The Party did not report data on clinker or cement production data. The TERT noted that Costa Rica did not report on the number of plants operating in the country. During the review, the Party explained that the AD on cement production for each plant are confidential. Costa Rica also provided more information on cement production in the country, including on imports and exports, and explained how data are collected from data providers and other sources and how interpolation has been applied given the confidentiality of data from the three companies producing clinker in Costa Rica. The TERT noted that emissions are estimated using a tier 2 method for two plants and tier 3 for the third plant. The TERT considered that the methodology is not consistent across the time series. The TERT recommends that Costa Rica report on the number of cement plants operating in the country, apply the "C" notation key to indicate confidentiality wherever appropriate in the NID, report on the cement production trend in terms of percentages to preserve confidentiality of data, describe the methodology applied to estimate clinker production for each plant across the whole time series, report on the tier applied to estimate emissions for each plant and provide an explanation of how time-series consistency is ensured.
4.I.2	Specified in paragraphs 20–22 of the MPGs 2.B.5 Carbide production – CO_2	Costa Rica estimated and reported on the use of acetylene under the chemical industry under category 2.B.5 carbide production. The TERT considers that doing so is a misallocation and not in line with the 2006 IPCC Guidelines. During the review, the Party acknowledged the finding of the TERT. The TERT recommends that Costa Rica allocate CO_2 emissions from carbide production to the energy sector under the category corresponding to the end use of the product (acetylene), that is, where it is burned by the end user (manufacturing or construction), and to report on the EF used in estimating the emissions.
4.I.3	Specified in paragraph 39 of the MPGs 2.D.1 Lubricant use – CO_2	The Party estimated emissions from lubricant use in fuels for two-stroke engines and reported them under both the energy sector and the IPPU sector. The TERT noted that Costa Rica did not report on how the quantity of lubricants used by motorcycles is estimated from the total amount of lubricants imported. During the review, Costa Rica explained that the database on imports is disaggregated by lubricant type, including the type used by motorcycles, for which data on annual consumption are collected and deducted from the total amount of lubricants imported annually. The TERT recommends that Costa Rica report on the methodology applied to estimate lubricant use in fuel used by motorcycles and document the source of data in order to improve the transparency of its reporting.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
4.I.4	Specified in paragraphs 34–35 of the MPGs 2.F Product uses as substitutes for ozone-depleting substances	The TERT noted many abnormal fluctuations in emissions under category 2.F.1 emissions from refrigeration and air conditioning (NID table 4.20, p.94) for mobile refrigeration, where emissions decrease from 5.0 kt CO_2 eq in 2000 to 2.7 kt CO_2 eq in 2005, rise to 5.4 kt CO_2 eq in 2010 and increase to 151.0 kt CO_2 eq in 2021. Zero was reported for category 2.F.3 fire protection for 2020 (NID table 4.23, p.98). During the review, Costa Rica shared the database on fluorinated gases, with AD used for estimating emissions and the emission calculation sheets. The Party applied a tier 2a method for estimating emissions for category 2.F in line with the 2006 IPCC Guidelines. The TERT commends Costa Rica for doing so, which was enabled by the database containing disaggregated data on all installed equipment and fluorinated gases imported (there is no production in the country). However, the TERT noted that there are many inconsistencies between the values in the calculation sheets and those reported in the NID for some subcategories of 2.F (2.F.3 fire protection and 2.F.4 aerosols). In addition, in response to the draft review report, Costa Rica expressed its commitment to improving the QA/QC process by appointing a new QA/QC coordinator to the GHG inventory team. The TERT recommends that Costa Rica include additional procedures in its QA/QC process to check the results reported for category 2.F and ensure consistency between the NID and the calculation sheets.
4.I.5	Specified in paragraphs 20–22 of the MPGs 2.G.1 Electrical equipment – SF_6	Costa Rica reported SF_6 emissions for category 2.G.1 electrical equipment for the whole time series, even though AD on SF_6 recharge were available only for 2010–2021. The Party reported completing the missing AD (for 1990–2009) by interpolation, taking into account the average SF_6 recharge for 2010–2013 and electricity generation for 1990–2013. The TERT considers the use of electricity production to interpolate SF_6 recharge of the equipment stock for the missing data for 1990–2009 to be not representative. During the review, the Party acknowledged the finding of the TERT. The TERT recommends that Costa Rica determine the first year of entry of SF_6 in the country; explore approaches other than the one that has been previously used for interpolating missing AD, such as using the import data since the first year of entry of SF_6 in the country; and determine the rate of SF_6 consumption to be applied for the period for which data are missing (1990–2009) and use it to extrapolate the missing data since 1990 on SF_6 recharge and use those AD to estimate SF_6 emissions for category 2.G.1.

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
5.A.1	Specified in paragraph 43 of the MPGs 3.A Enteric fermentation – CH_4 3.B Manure management – CH_4 and N_2O	In NID figures 5.4–5.6, the Party depicted the recalculation of emissions from enteric fermentation and manure management since the previous inventory for 1990–2017. According to the information in NID section 8.1.3, the recalculations include methodological changes, as well as an update to GWP values. However, from the information provided, the individual effect of each recalculation cannot be distinguished. During the review, the Party explained that the methodological changes arose from the implementation of methods from the 2019 Refinement to the 2006 IPCC Guidelines and provided information showing the separate recalculations due to the different changes. In addition, in response to the draft review report, Costa Rica expressed its commitment to providing clear explanatory information for all recalculations, including a quantitative and qualitative assessment of their impact on emission trends. The TERT recommends that Costa Rica provide explanatory information for all recalculations made, along with an indication of the impact of each recalculation on the emission trends.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
5.A.2	Specified in paragraph 39 of the MPGs 3.A.1 Cattle – CH_4	In NID section 5.2.1, the Party categorized three cattle production systems (meat, milk and dual purpose) and the emissions for these categories are reported in NID table 5.3. However, the TERT noted that in CRT 3.A, cattle numbers and emissions are reported under three different categories (mature dairy cattle, other mature cattle and growing cattle). During the review, the Party explained its difficulties in completing the CRTs and noted the lack of training for doing so. With more training, the CRT would have been completed in alignment with the categories reported in the NID. The TERT recommends that Costa Rica use a consistent categorization of cattle for reporting emissions in the NID and the relevant CRT.
5.A.3	Specified in paragraphs 39–40 of the MPGs 3.A.1 Cattle – CH_4	In NID section 5.2.1, the Party reported that whereas IPCC default EFs were used for some livestock subcategories under category 3.A.1 (reported in NID table 5.5), country-specific EFs were used to estimate enteric CH_4 emissions for each animal category under each cattle production system. However, the TERT noted that neither the country-specific EF values nor a reference as to where they can be found was provided in the NID. During the review, the Party described the research on which the country-specific EFs are based and provided the reference to the scientific publication. In addition, in response to the draft review report, the Party expressed its intention to review the CH_4 EF for cattle and reference in the next NID the scientific source for the information, as well as providing an analysis of comparability across all animal categories. The TERT recommends that Costa Rica provide the values of the country-specific EFs for each animal category used in calculating CH_4 emissions from the enteric fermentation of cattle and the publication they were derived from, categorized by one or more of the parameters for livestock described in the 2019 Refinement to the 2006 IPCC Guidelines (vol. 1, chap. 2.2.4, table 2.1A).
5.A.4	Specified in paragraph 35 of the MPGs 3.C.1 Irrigated – CH_4	In NID section 5.8.2, the Party reported using a country-specific EF of 4.94 kg CH_4/ha/day for estimating CH_4 emissions from irrigated rice cultivation. Given a flooded period of 120 days (based on the research study cited in the NID (Montenegro and Abarca, 2001)), this implies an annual EF of 59.28 g/m^2/year. However, the TERT noted that in CRT 3.C, the implied EF reported for 2021 is 592.88 g/m^2/year, and all other years have similar values. During the review, the Party clarified that the implied EF is an error attributable to incorrect entry of the harvested area in the CRT. Nevertheless, the correct emissions are reported in both the CRT and the NID. The TERT recommends that Costa Rica report the correct values for AD on harvested area in the relevant CRT. Costa Rica may wish to improve its QC processes to ensure that the reported implied EFs are within the expected ranges.
5.A.5	Specified in paragraph 39 of the MPGs 3.C.1 Irrigated – CH_4	In NID section 5.8.2, the Party reported using a country-specific EF of 4.94 kg CH_4/ha/day for estimating CH_4 emissions from irrigated rice cultivation based on the research by Montenegro and Abarca (2001). The TERT noted that this value is outside the default EF range provided for the world category in the 2019 Refinement to the 2006 IPCC Guidelines (vol. 4, chap. 5.5.2, table 5.11, p.5.53) (0.80–1.76 kg CH_4/ha/day) and is much greater than the largest regional category value (2.31 kg CH_4/ha/day). The TERT also noted that the underlying research is not published in a peer-reviewed publication. During the review, Costa Rica acknowledged the discrepancy with international default values and referred to the related publication on national research. In addition, in response to the draft review report, the Party noted that it intends to review different research studies and publications related to national EFs before deciding on the EF for irrigated rice cultivation. The TERT encourages Costa Rica to consider the 2006 IPCC Guidelines when assessing country-specific EFs (vol. 1, chap. 6.7.1.2, pp.6.12–6.13), including regarding QC checks on the background data used to develop the EFs.
5.A.6	Specified in paragraph 47 of the MPGs	In CRT 3.D, the value for direct N_2O emissions for category 3.D.1.a inorganic N fertilizers for 1996 is about 10 times smaller than the corresponding values for all other years. However, the TERT noted that the AD do not show the same pattern.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
	3.D.1.a Inorganic N fertilizers – N_2O	During the review, the Party explained that the value for 1996 is a typographical error, and that the correct values for emissions are as shown in NID figure 5.10. The TERT recommends that Costa Rica report the correct value for direct N_2O emissions for 1996 for this category in the relevant CRT.
5.A.7	Specified in paragraph 47 of the MPGs 3.D.1.c Urine and dung deposited by grazing animals – N_2O	In NID section 5.3.1.1, the Party reported that, with the exception of pigs and goats, livestock in Costa Rica are grazed on pasture. However, in CRT 3.B(b), no N excretion on pasture, range and paddock is reported for most years, and no emissions are reported for category 3.D.1.c direct N_2O emissions from urine and dung deposited by grazing animals. During the review, the Party explained that emissions for category 3.D.1.c are included in the reported emissions for category 3.D.1.a inorganic N fertilizers using a combined country-specific EF capturing emissions under categories 3.D.1.a and 3.D.1.c. The Party also indicated its difficulties in completing the CRTs and the lack of training for doing so. The TERT recommends that Costa Rica clarify in the NID whether emissions occur under category 3.D.1.c, and if no emissions occur or they are included elsewhere, report the appropriate notation key for this category in CRT 3.B(b).
5.A.8	Specified in paragraph 40 of the MPGs 3.G Liming – CO_2	In NID section 5.5.2, the Party reported that the default EF from the 2006 IPCC Guidelines was used to estimate emissions from liming. However, the TERT noted that those Guidelines (vol. 4, chap. 11.3.1, p.11.27) provide two default EFs, for limestone and dolomite, and it was unclear which was used by the Party. After the CRTs were supplied, it could be seen in CRT 3.G-J that only limestone is applied to pastures in Costa Rica, but the implied EF reported in the CRT is 0.05 t CO_2–C/t, which is not the default IPCC EF for limestone (0.12 t CO_2–C/t). During the review, the Party clarified that the appropriate EF for limestone was applied and that the emissions reported in the CRT are correct. The implied EF calculated in the CRT is the result of incorrect AD entered in that table. The TERT recommends that Costa Rica provide in the NID clear information as to whether only limestone is used and EFs and AD used at the most disaggregated level possible and report in the CRTs the correct AD.
5.A.9	Specified in paragraphs 31–32 of the MPGs 3.G Liming – CO_2	In NID table 5.14, Costa Rica noted that emissions from the liming of pastures is not included in the reported emissions. During the review, in response to the request of the TERT to clarify whether liming is applied to pastures, and if it is, to justify whether the emissions from liming are likely to meet any of the requirements for being considered insignificant, the Party explained that liming does not occur on pastures in Costa Rica. The TERT recommends that Costa Rica clearly describe the AD for liming in the NID, so that it is clear on what land lime is applied and whether the lime consists of limestone or dolomite.

Table 6

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
6.L.1	Specified in paragraph 47 of the MPGs 4. General (LULUCF)	The TERT noted that the LULUCF category naming, structure, disaggregation level and CO_2 eq units are different in the NID and CRTs (in the case of units, Gg and kt are used in the NID and CRTs respectively). During the review, the Party explained that it was difficult to follow the CRT structure because of challenges in transitioning from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* to the 2006 IPCC Guidelines and in using ETF reporting tools to add emissions and removals to the CRTs. The TERT recommends that Costa Rica adopt the same LULUCF category naming, structure, disaggregation level and CO_2 eq units in the NID and CRTs, in accordance with the MPGs.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
6.L.2	Specified in paragraph 39 of the MPGs 4.B.1 Cropland remaining cropland – CO_2, CH_4 and N_2O	The TERT noted that Costa Rica did not provide references for NID equations 6.1–6.2, which are used to calculate the total area of cropland remaining cropland affected by fires. During the review, the Party provided the references, explaining that the equations use data from the National System of Conservation Areas. The TERT recommends that Costa Rica provide clear information on the reporting methods used, including equations, along with the rationale for their selection, for this category, in line with the best practices outlined in the 2006 IPCC Guidelines and the MPGs.
6.L.3	Specified in paragraph 40 of the MPGs 4. General (LULUCF)	The TERT noted that Costa Rica stated in the NID (section 6.3.1, p.149) that CH_4, N_2O, black carbon, NO_X and CO emissions come from biomass burning on forest land, and that NID tables 6.20 and 6.24 include the subcategory "Losses due to natural disturbances", which is described in the NID as areas burned annually. However, the Party did not clearly distinguish between what was considered biomass burning, natural disturbance or controlled burning. During the review, the Party explained that biomass burning on forest land is considered as natural disturbance and is reported in CRT 4(IV) in the "Wildfires" subcategory of forest land. The Party also assumes that no controlled burning is practised on forest land. The TERT recommends that Costa Rica provide clear information on reported emission and removal estimates for the country-specific subcategories of forest land (4(IV).A.1.b, 4(IV).C.1.b and 4(IV).D.1.b (wildfires)) and maintain consistency between the land-use classification presented in the NID and the CRTs.
6.L.4	Specified in paragraphs 32, 45 and 47 of the MPGs 4. General (LULUCF)	The TERT noted that in NID table 6.5 (p.128), Costa Rica reported methods and EFs related to estimating emissions of SOM in organic soils as "NE". However, the Party did not provide documentation or justification to demonstrate that those emissions are considered insignificant or provide any other reason for use of the notation key. During the review, the Party explained that emissions from SOM in organic soils were not estimated because the country does not have sufficient data to perform the calculations. The TERT recommends that Costa Rica report emissions or removals for SOM in organic soils, or, if using notation keys because numerical data are not available, indicate the reasons for their use, in accordance with the MPGs, noting that the Party also has the option of applying flexibility provisions.
6.L.5	Specified in paragraph 39 of the MPGs 4. General (LULUCF)	The TERT noted that Costa Rica did not report the land-use change matrices in the NID, although the Party submitted the CRTs before the review week (on 29 September 2025), which include table 4.1 for each year of the time series (1990–2021). The TERT also noted that the Party did not describe in the NID how the annual matrices were produced for the changes in land cover determined for 1986–1991, 1992–1997, 1998–2000, 2001–2007 and 2008–2011. During the review, the Party explained that the land-use change matrices were not included in the NID because they were to be included in the CRTs. However, the Party did not describe the annualization method applied for the above-mentioned periods. The TERT recommends that Costa Rica provide clear information in the NID on the methods used to prepare the land-use change matrices, including the rationale for choosing those methods, in line with the best practices outlined in the 2006 IPCC Guidelines and the MPGs.
6.L.6	Specified in paragraphs 22, 23, 24, 30 and 31 of the MPGs 4.C.1 Grassland remaining grassland – CO_2	The TERT noted that Costa Rica reported in NID table 6.70 (section 6.5.3, p.196) emissions for the carbon pools below-ground biomass, litter and deadwood as "NO". During the review, in response to the request of the TERT to clarify the capacity constraints associated with resolving this issue, Costa Rica explained that it considers those carbon pools to be in balance, according to the results from the tier 1 method applied for the category, and acknowledged that the correct notation key for reporting is thus "NA". Costa Rica stated that it has no plans to estimate

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		emissions for those pools in the short term, as it is focusing on estimating emissions related to SOM. However, it may consider applying the tier 2 methodology for estimating emissions and removals from the carbon pools in the midterm to long term. The TERT recommends that Costa Rica report emissions or removals for the grassland carbon pools below-ground biomass, litter and deadwood, or, if using notation keys because numerical data are not available, use the correct notation key and indicate the reasons for its use. Costa Rica may wish to apply the tier 2 methodology to estimate emissions and removals from grassland carbon pools.
6.L.7	Specified in paragraphs 39–40 of the MPGs 4.A.1 Forest land remaining forest land – CO_2, CH_4 and N_2O	The Party reported emissions from forest land remaining forest land under five subcategories: 4.A.1.a primary forests remaining as such, 4.A.1.b secondary forests remaining as such, 4.A.1.c forest plantations, 4.A.1.d losses due to natural disturbances and 4.A.1.e losses due to wood removal. However, the TERT noted that the NID does not clearly indicate whether subcategories 4.A.1.d and 4.A.1.e refer to deforestation without land-use change or to partial biomass loss in forest land. During the review, the Party explained that subcategories 4.A.1.d and 4.A.1.e are not related to deforestation or partial biomass loss resulting from illegal (degradation) or legal wood extraction. The emissions for subcategory 4.A.1.d are calculated using forest fire data from the National System of Conservation Areas, while the estimates for subcategory 4.A.1.e are based on the country's wood harvest data from the National Forestry Office. The TERT recommends that Costa Rica clearly describe the country-specific subcategories reported under category 4.A.1 forest land remaining forest land and report emission and removal estimates for those subcategories.
6.L.8	Specified in paragraph 39 of the MPGs 4.G HWP – CO_2	The Party noted in NID section 6.9.3.3.2 that statistics from INEC on forest lumber used in construction for 2003 and 2004 were not used for the inventory because they were considered overestimations. However, the TERT noted that the Party did not explain the reasoning behind this assessment or which methods were used to derive the data. During the review, the Party explained that the data from INEC were considered an overestimation because they exceeded the estimated value for native forest wood produced in the country during those years, based on personal communication with the National Forestry Office technical team. The TERT recommends that Costa Rica provide clear information on the methods used, including the rationale for selecting them, in accordance with the best practices outlined in the 2006 IPCC Guidelines and the MPGs.
6.L.9	Specified in paragraph 39 of the MPGs 4.G HWP – CO_2	The TERT noted that NID table 6.119 does not include the source of the equation used to calculate the log volume ratio in construction. During the review, the Party explained that the source of information is the National Forestry Office and provided references. The TERT recommends that Costa Rica provide clear information on the equations used to calculate the log volume ratio in construction, including the rationale for choosing them, in line with the best practices outlined in the 2006 IPCC Guidelines and the MPGs.

Table 7
Areas of improvement of the reporting on greenhouse gas emissions and removals – waste sector

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
7.W.1	Specified in paragraphs 39–40 of the MPGs 5.A Solid waste disposal on land – CH_4	The TERT noted that wood is missing from the waste composition of Costa Rica presented in NID table 7.8 (p.265). Wood is part of waste composition and would be expected to occur in waste in Costa Rica. For example, the 2006 IPCC Guidelines (vol. 5, chap. 2, table 2.3) provide a regional default value for Central America for the percentage of wood of 13.5 per cent.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		During the review, the Party explained that wood is included in data on garden residues because municipalities do not disaggregate data on residues as recommended by the 2006 IPCC Guidelines. The TERT recommends that Costa Rica explain that wood is not reported separately, but rather included in its aggregated estimates of waste in Costa Rica to improve the transparency of its reporting.
7.W.2	Specified in paragraphs 39–40 of the MPGs 5.A Solid waste disposal on land – CH_4	The TERT noted that in NID table 7.5 (p.264), the DOC for industrial waste is reported as 15 per cent. The IPCC default values for industrial waste vary from 1 to 40 per cent depending on the type of waste (2006 IPCC Guidelines, vol. 5, chap. 2, table 2.5). Depending on the default DOC value selected by the Party, emissions could be underestimated or overestimated. During the review, the Party explained that the value of 15 per cent was selected because most industrial waste is from the food industry. The TERT recommends that Costa Rica explain its selection of the IPCC default DOC value for industrial waste based on the type of industries producing waste in the country.
7.W.3	Specified in paragraphs 20–21 of the MPGs 5.A Solid waste disposal on land – CH_4	The TERT noted that in NID table 7.3 and figure 7.8 (p.262) the annual CH_4 recovery amount was kept constant at 15 Gg for 2011–2021, without justification. Considering that CH_4 production and recovery depend on the quantity and composition of waste and on the characteristics of the landfills and the capture systems, the Party should explain the rationale for maintaining this value as constant. Furthermore, according to the 2006 IPCC Guidelines (vol. 5, chap. 3, p.3.18), CH_4 recovery should be reported only when references documenting the amount of CH_4 recovery are available. Reporting based on metering of all gas recovered for energy and flaring is consistent with good practice. Estimating the amount of CH_4 recovered using more indirect methods should be done with great care, using substantiated assumptions. Indirect methods might be based on the number of solid waste disposal sites in a country with CH_4 collection or the total capacity of utilization equipment or flaring capacity sold. When CH_4 recovery is estimated on the basis of the number of solid waste disposal sites with landfill gas recovery, the default estimate of recovery efficiency would be 20 per cent. During the review, the Party explained that the value of 15 Gg was estimated from the nominal capacity of the capture system of the only landfill operator that provided data. The Party indicated that it will contact the Ministry of Health and look into the carbon neutrality voluntary programme as a source of actual data. In addition, in response to the draft review report, the Party indicated that it will make efforts to obtain CH_4 recovery data for the entire time series directly from landfill operators by strengthening coordination with stakeholders and evaluating data availability, and will incorporate the information collected into future NID submissions, to the extent possible. The TERT recommends that Costa Rica obtain values of CH_4 recovery for the entire time series directly from landfill operators to improve the estimation of CH_4 emissions from solid waste disposal on land.
7.W.4	Specified in paragraphs 20–21 of the MPGs 5.A Solid waste disposal on land – CH_4	In the NID (p.265), Costa Rica reported that the per capita waste generation value for 1990 was applied for 1950–1989. The TERT noted that, considering per capita waste generation depends on GDP, the parameter should have different values in different years. During the review, the Party explained that no information is available for 1950–1989, so it will use gap-filling techniques to obtain data. The TERT recommends that Costa Rica use the splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, chap. 5, p.5.8) to obtain per capita waste generation data for 1950–1989 or justify the assumption for holding the value for the period constant at the 1990 value.
7.W.5	Specified in paragraphs 20–21 of the MPGs 5.A Solid waste disposal on land – CH_4	Costa Rica reported in the NID (p.265) that the percentage of industrial waste of total solid waste was estimated to be 27.05 per cent for the whole time series. Total waste generated was obtained using per capita waste generation and quantity of waste landfilled for 2012. However, the TERT noted that the 2006 IPCC Guidelines (vol. 5, chap. 3.2.2) indicate that the volume of municipal and

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		industrial waste depends on the population and the size of the industry respectively, so the value should be different in different years. During the review, the Party explained that it used the information available for one year for one landfill. The Party also indicated that it will ask the Ministry of Health for data from other landfills. The TERT recommends that Costa Rica use the splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, chap. 5, p.5.8) to obtain the percentage of industrial waste of total solid waste, taking into account the size of the industry to estimate the percentage of industrial waste for the whole time series.
7.W.6	Specified in paragraph 28 of the MPGs 5.B.1 Composting – CH_4 and N_2O	Costa Rica reported in NID table 7.9 (p.266) the amount of waste composted, noting that an increase occurred between 2011 (1.54 t) and 2015 (10.80 t) owing to some plants commencing operations in that period. However, the TERT noted that there is no explanation in the NID for the Party keeping the amount of waste constant at 1.54 t from 2006 to 2011 or for the increase in the quantity of waste composted from 19.43 t in 2018 to 202.71 t in 2019. During the review, the Party explained that it used the nominal values for composting in plants provided by local governments. The Party also explained that composting has been growing year after year, most significantly since the Law on Integral Management of Waste made local governments responsible for waste management. Around 2005, one municipality began composting programmes on municipal land, but with the adoption of the law in 2018, the number of municipalities and non-governmental organizations engaged in this activity rose sharply. Although composting occurs at the household level in Costa Rica, the national GHG inventory includes only contributions at the municipal level or by companies. The interannual variation should be smaller, as the increase in the amount of composting carried out did not occur in a single year. In addition, in response to the draft review report, Costa Rica expressed its intention to strengthen coordination with local governments and other stakeholders with a view to obtaining more detailed and complete annual data on composting activities and to ensure that its reporting more accurately reflects gradual changes in composting practices across the country. The TERT recommends that Costa Rica improve its collection of AD on amount of waste composted every year by consulting with local governments that have detailed AD available.
7.W.7	Specified in paragraph 47 of the MPGs 5.B.2 Anaerobic digestion at biogas facilities – CH_4 and N_2O	The Party did not report on biogas production. However, the TERT noted that according to the Costa Rican Biogas Association web page (https://asobiogas.org), more than 400 domestic biogas systems and more than 20 semi-industrial biogas systems exist in Costa Rica. During the review, the Party explained that the Costa Rican Biogas Association was founded in 2015 and in 2020 published its report indicating that there are 400 domestic and 20 semi-industrial biodigesters in the country. In addition to these, some pig farms and agricultural producers have biodigester systems on their premises, which should be accounted for, but have not been to date. The Association's report only identifies the sources of biogas – it does not quantify the emissions generated. The Party indicated that for the next inventory, emissions from the waste sector will be updated with these emissions and this item will be included in the improvement plan. The TERT recommends that Costa Rica collect the AD required for estimating CH_4 and N_2O emissions from anaerobic digestion at biogas facilities.
7.W.8	Specified in paragraphs 20–21 of the MPGs 5.C Incineration and open burning of waste – CH_4 and N_2O	The Party reported in NID figure 7.5 (p.268) the trends in emissions for this category. The TERT noted that the interannual increase of the emissions from 1990 to 2006 is different to the interannual increase from 2006 to 2016, and there is a decrease in emissions from 2017 to 2019 owing to the adoption of the Law on Integral Management of Waste, which increased auditing and reporting activities for open burning of waste. During the review, the Party explained that in the trend line up until 2016, the source of AD was the national censuses. From 2017 onward, the AD came from the Ministry of Health. While the census data show that the burning of waste occurs mainly in rural areas, where there is little collection of solid waste by

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		municipal authorities and burning takes place on private land, the Ministry's data are based on reports or information on more controlled burning. For future inventories, the sources of AD will be thoroughly reviewed to find AD values from burning in the most recent census that coincide with the AD reported from the Ministry of Health, so that it can be determined whether the sources should be added together or whether one of them covers the other. The TERT recommends that Costa Rica improve its data collection to ensure that the AD for category 5.C include all types of open burning of waste.
7.W.9	Specified in paragraphs 20 and 45 of the MPGs 5.D.1 Domestic wastewater – CH_4 and N_2O	The TERT noted that while domestic wastewater is a key category for the waste sector, emissions are estimated using a tier 1 method and default EFs. The Party did not report the reason it did not apply a higher-tier method in line with the 2006 IPCC Guidelines (vol. 5, chap. 6, p.6.10). During the review, the Party explained that it used a tier 1 method because it lacks the detailed information required for the use of higher-tier methods. The TERT recommends that Costa Rica include in the NID an explanation as to why it estimated emissions for the key category domestic wastewater using a tier 1 rather than a higher-tier method. Costa Rica may wish to make efforts to use a higher-tier method to estimate emissions from domestic wastewater, in line with the 2006 IPCC Guidelines, and to report information on its progress.
7.W.10	Specified in paragraphs 20–21 of the MPGs 5.D.1 Domestic wastewater – CH_4 and N_2O	The TERT noted that in NID section 7.5 (p.269), BOD and protein consumption values used to estimate emissions from domestic wastewater are constant throughout the time series, which could result in an underestimation of GHG emissions. During the review, the Party explained that the per capita protein consumption value per year was obtained from a study conducted by the Costa Rican Institute for Research and Teaching in Nutrition and Health, which is affiliated with the Ministry of Health. However, no similar studies have been conducted since that study, so the value was kept constant throughout the years covered in the inventory. The other parameters used to obtain emission estimates were default values from the 2006 IPCC Guidelines. For BOD per capita per year, a value of 62.3 g BOD per day was used, which was determined using information from the Costa Rican Institute of Aqueducts and Sewers, namely, BOD entering wastewater treatment plants divided by the population served and the flow entering the plant. The Party indicated that for future inventories, this parameter will be improved by using values from international organizations. The TERT recommends that Costa Rica determine whether data on BOD and protein consumption are available for the whole time series or use splicing techniques (provided in the 2006 IPCC Guidelines (vol. 1, chap. 5.3.3, pp.5.8–5.14)) to determine the values of BOD and protein consumption for the years where data are not available.
7.W.11	Specified in paragraphs 20–21 of the MPGs 5.D.2 Industrial wastewater – CH_4 and N_2O	In NID table 7.20 (p.274), the Party reported the COD in wastewater from different industries in the country (cattle, pig and poultry production and processing of coffee, sugarcane and palm oil). The TERT noted that some values are different from the 2006 IPCC Guidelines default values (vol. 5, chap. 6, table 6.9). During the review, the Party explained that it used the COD values of the industries that contributed most to GHG emissions from their wastewater, namely the sugar, coffee, meat processing and palm oil industries. To this end, information was sought on annual production quantities from the Agricultural Statistics Bulletin from the Executive Secretariat for Agricultural Sector Planning. Likewise, total organic load in wastewater indices were estimated for each of the above-mentioned industries (kg COD/unit produced) through production studies of some companies in each of the industries. The Party indicated that in order to improve GHG estimates for this category, the Ministry of Health was asked to include in the operational reports the COD or BOD value of raw wastewater from the generating industry, as well as the type of treatment (aerobic or anaerobic) used to treat it. In this way, data from the operational reports and database of the Ministry of Health can be used to perform calculations for this category.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		The TERT recommends that Costa Rica document in the NID the values of COD or BOD used for estimating CH_4 and N_2O emissions from industrial wastewater, as obtained from the applicable industries and reported by the Ministry of Health, and revise the BOD and COD values used to estimate those emissions.

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
8.1	Specified in paragraph 59 of the MPGs	The BTR (chap. 1) includes detailed information on national circumstances (e.g. demographics, the economy and geography) but does not sufficiently articulate the relevance of those circumstances to Costa Rica's progress in implementing and achieving its NDC, as reported in BTR chapter 3. In addition, in response to the draft review report, Costa Rica acknowledged the need to strengthen in its reporting the linkage between national circumstances and progress in implementing its NDC by describing how key national circumstances, such as demographic, economic and geographical factors, influence the design, implementation and progress of its NDC. The TERT recommends that Costa Rica improve the transparency and completeness of its reporting by clearly indicating how the national circumstances described in the BTR are relevant to the NDC implementation strategy and progress in implementation.
8.2	Specified in paragraph 60 of the MPGs	The BTR includes detailed information on national circumstances, but it does not include information on how the drivers linked to those circumstances affect GHG emissions and removals over time. During the review week, the Party shared with the TERT the final mitigation scenario report by Sancho (2026), which contains an analysis of drivers (e.g. correlation of emissions with GDP and population growth). The TERT recommends that Costa Rica include the analysis of drivers provided during the review in its next BTR.
8.3	Specified in paragraph 61 of the MPGs	The BTR does not include details on the specific institutional arrangements Costa Rica has in place to track progress in implementing and achieving its NDC. During the review, the Party clarified the process it uses to gather and manage the information required for tracking NDC implementation. The TERT recommends that Costa Rica include clear information on the process for gathering and managing the relevant data for tracking NDC implementation, including the roles of relevant institutions in that process, in its next BTR.
8.4	Specified in paragraph 62 of the MPGs	The BTR does not include specific information on the legal, institutional, administrative and procedural arrangements for domestic implementation, monitoring, reporting, archiving of information and stakeholder engagement related to implementation and achievement of its NDC. During the review, the Party shared some information on its processes for stakeholder consultation and engagement related to implementation and achievement of its NDC. The TERT recommends that Costa Rica provide in its next BTR information on the legal, institutional, administrative and procedural arrangements for domestic implementation, monitoring, reporting, archiving of information and stakeholder engagement related to implementation and achievement of its NDC.

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
9.1	Specified in paragraph 64(a) and (f) of the MPGs	The TERT noted that Costa Rica did not transparently report on its NDC targets. Specifically, the BTR includes information on two overarching mitigation targets and one overarching adaptation target, as well as information on 22 mitigation actions and 81 adaptation actions across 13 thematic areas. Furthermore, the Party did not report in its BTR whether it intends to use cooperative approaches that involve the use of internationally transferred mitigation outcomes. During the review, the TERT discussed with the Party the possibility of focusing on the two overarching mitigation targets as the two main contributions to NDC achievement, as well as including information on the mitigation actions in the PaMs section of the BTR and information on the adaptation actions in the adaptation chapter of the BTR. The Party acknowledged the suggestions of the TERT and indicated that it will take them into consideration when preparing the next BTR. Furthermore, the Party clarified that it does not yet intend to use cooperative approaches that involve the use of internationally transferred mitigation outcomes. The TERT recommends that Costa Rica, in its next BTR: (a) Improve the transparency of its reporting by focusing on the two overarching mitigation targets as the two main contributions to NDC achievement (BTR chap. 2, section C) (as described in the BTR outline contained in annex IV to decision 5/CMA.3), in accordance with paragraphs 65–79 of the MPGs; (b) Include information on progress in adaptation in BTR chapter 3 on climate change impacts and adaptation, in accordance with paragraphs 109–114 of the MPGs; (c) Report on progress in implementing its 22 mitigation actions (BTR chap. 2, section D), in accordance with paragraphs 80–90 of the MPGs; (d) Provide information on whether it intends to use cooperative approaches or, if it deems this provision to be not applicable, provide an explanation as to why.

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
10.1	Specified in paragraph 68 of the MPGs	Costa Rica did not provide transparent, recent information for each selected indicator for each reporting year of the implementation period of its NDC. The TERT noted that while BTR section 2.6 (in chap. 2 on the national inventory) provides an estimate of net national total CO_2 eq emissions, including LULUCF, for 2021 (12,632.50 Gg CO_2 eq), this information was not explicitly provided in the information on tracking progress of the two overarching mitigation targets of the NDC in BTR chapter 3 (on progress in implementing and compliance with the NDC). During the review, the Party acknowledged the lack of information in the BTR but provided no further clarification. The TERT recommends that Costa Rica provide in its next BTR the most recent information for each selected indicator for each reporting year of the implementation period of its NDC, in accordance with paragraph 68 of the MPGs.
10.2	Specified in paragraph 69 of the MPGs	Costa Rica did not compare the most recent information for each overarching mitigation target indicator with the information provided pursuant to paragraph 67 of the MPGs to track progress in implementing its NDC. The TERT noted that BTR chapter 2 (on the national inventory) provides an estimate of net national total CO_2 eq emissions, including LULUCF, for 2021; however, this estimate was not compared with the two overarching mitigation targets. During the review, the Party acknowledged the lack of information in the BTR but provided no further clarification.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		The TERT recommends that Costa Rica compare the most recent information for each selected indicator with the corresponding NDC target in its next BTR.
10.3	Specified in paragraph 74 of the MPGs	Costa Rica did not provide a description of each methodology and/or accounting approach applicable to its targets (as per para. 64 of the MPGs) or of the baselines and indicators (as per para. 65 of the MPGs). The TERT noted that, given the nature of the Party's two overarching mitigation targets, for information on methodologies and accounting approaches, the Party could refer to the information provided in the NIR; however, no explicit information from or references to the NIR were provided in the BTR. During the review, the Party acknowledged the lack of information in the BTR but provided no further clarification. The TERT recommends that Costa Rica provide in its next BTR a description of each methodology and accounting approach applicable to its mitigation targets, as well of as the baseline and indicators for those targets, or reference the NIR section(s) where the information can be found.
10.4	Specified in paragraph 75(a–c) of the MPGs	Costa Rica did not provide information on key parameters, assumptions, definitions, data sources, models, IPCC guidelines or metrics used for tracking progress in implementing and achieving its NDC. The TERT noted that, given the nature of the Party's two overarching mitigation targets, for this information the Party could refer to the information provided in the NIR; however, no explicit information from or references to the NIR were provided in the BTR. During the review, the Party acknowledged the lack of information in the BTR and provided draft CTF tables and the final mitigation scenario report by Sancho (2026), which includes some of the missing information. The TERT recommends that Costa Rica provide in the next BTR information on key parameters, assumptions, definitions, data sources, models, IPCC guidelines and metrics used for tracking progress in implementing and achieving its NDC, in accordance with paragraph 75(a–c) of the MPGs.
10.5	Specified in paragraph 76(a–b) of the MPGs	Costa Rica did not describe how each indicator identified as per paragraph 65 of the MPGs is relevant to its NDC. Costa Rica also did not explain how the methodology used for each reporting year is consistent with the methodology used when communicating the NDC. On the contrary, the Party noted in the BTR that the overarching mitigation targets were established with information based on GWP values from the Second Assessment Report of the IPCC, whereas the most recent inventory data are based on GWP values from the Fifth Assessment Report of the IPCC. Furthermore, Costa Rica did not describe how double counting of net GHG emission reductions has been avoided, including in accordance with guidance developed in relation to Article 6 of the Paris Agreement. During the review, the Party acknowledged the finding of the TERT. The TERT recommends that Costa Rica explain how each selected indicator is relevant to the two overarching mitigation targets of its NDC, how the methodology used for each reporting year is consistent with the methodology when communicating the NDC and how double counting of net GHG emission reductions has been avoided.
10.6	Specified in paragraph 77 of the MPGs	Costa Rica did not provide the information required by the MPGs to track progress in implementing and achieving the two overarching mitigation targets of its NDC in a structured summary; however, the TERT noted that such information was provided for the Party's 22 mitigation actions. During the review, the Party provided no further information. The TERT recommends that Costa Rica provide in its next BTR the information required by the MPGs to track progress in implementing and achieving the two overarching mitigation targets of its NDC in a structured summary.
10.7	Specified in paragraph 79 of the MPGs	Costa Rica did not provide the information referred to in paragraphs 65–78 of the MPGs in CTF tables. During the review, the Party provided draft CTF tables that include the information referred to in paragraphs 65–78 of the MPGs.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		The TERT recommends that Costa Rica provide the information referred to in paragraphs 65–78 of the MPGs in CTF tables.

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
11.1	Specified in paragraph 81 of the MPGs	The TERT noted that the sectoral classification of mitigation actions reported in BTR chapter 3 does not align with the sectoral classification in the CTF tables. Mitigation actions are included under 8 of the 13 NDC thematic areas in the BTR: mobility and transport; energy; industry, commerce and services; integrated waste management; agriculture; forests and terrestrial biodiversity; ocean and water resources; and finance. During the review, the Party acknowledged the finding of the TERT. The TERT recommends that Costa Rica organize, to the extent possible, the reporting of mitigation actions by sector, ensuring alignment of the sectoral classification between the BTR and the CTF tables.
11.2	Specified in paragraph 82 of the MPGs	Costa Rica did not provide in a tabular format information on its mitigation actions. Furthermore, the TERT noted that in the BTR, information on several reporting requirements is missing or not sufficiently specific, including a description (para. 82(b) of the MPGs), objectives (para. 82(c) of the MPGs), type of instrument (para. 82(d) of the MPGs) and implementing entity or entities (para. 82(i) of the MPGs) of the mitigation actions. During the review, Costa Rica explained the lack of completeness in its reporting was due to time constraints in processing and tailoring the gathered information. The TERT recommends that Costa Rica include, to the extent possible, complete information on its mitigation action in the CTF tables.
11.3	Specified in paragraph 83 of the MPGs	The BTR lacks information on the potential interaction between mitigation actions. Furthermore, the TERT noted that while some information on costs and non-GHG benefits (e.g. air quality improvement, job creation and technological innovation) of mitigation actions was provided, it was not provided for all mitigation actions. During the review, the Party explained that this situation arose owing to the partial or total absence of required information at the time of preparation of the BTR and its limited capacity for identifying interactions among the mitigation actions. The TERT encourages Costa Rica to provide complete and clear information on the potential interactions between and associated economic costs and non-GHG benefits of its mitigation actions, or to explain why this information has not been provided.
11.4	Specified in paragraph 85 of the MPGs	Costa Rica did not provide information, in tabular format, on expected and achieved GHG emission reductions and removals for each mitigation action. The TERT noted that quantitative information on expected reductions was provided for only two actions. During the review, Costa Rica explained that this situation arose owing to its limited capacity to establish monitoring systems, emission baselines and verification procedures for each mitigation action. The TERT recommends that Costa Rica improve the completeness of its reporting, to the extent possible, by including quantitative estimations of both expected and achieved GHG emission reductions and removals for each reported mitigation action.
11.5	Specified in paragraph 86 of the MPGs	The BTR does not include information on the methodologies and assumptions used for estimating the GHG emission reductions for the two mitigation actions for which this information was reported, namely, those relating to the electric passenger train and green hydrogen.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		During the review, the Party acknowledged the gap in reporting and shared its plan to establish a unified national framework for estimating emission reductions and its intention to improve its reporting for the next BTR. The TERT recommends that Costa Rica improve the transparency and completeness of its reporting by including detailed information on the methodologies and assumptions used to estimate the GHG emission reductions or removals for each mitigation action reported.
11.6	Specified in paragraph 88 of the MPGs	Costa Rica did not include information on mitigation measures that influence GHG emissions from international transport (air and maritime) in the BTR. During the review, Costa Rica explained that the exclusion of this information was due to emissions from those sources not being within the scope of Costa Rica's current NDC. The TERT encourages Costa Rica to enhance the transparency of its reporting by providing information on the influence of its domestic mitigation actions on international transport or by clearly documenting a reason for the exclusion of this information in its next BTR.
11.7	Specified in paragraph 89 of the MPGs	Costa Rica did not provide information on how its mitigation actions are modifying longer-term trends in GHG emissions and removals. During the review, Costa Rica indicated that this lack of information is due to capacity limitations in connecting individual measures with long-term projections. The TERT acknowledges Costa Rica's plan to develop a subsystem within its National Climate Change Metrics System to link mitigation measures, projections of emissions and sustainable development indicators for the next reporting cycle. The TERT encourages Costa Rica to enhance its reporting, to the extent possible, by providing clear, detailed information on the influence of its mitigation actions on longer-term trends in GHG emissions and removals.
11.8	Specified in paragraph 90 of the MPGs	The TERT noted that the BTR includes some information on the economic and social impacts of mitigation actions (e.g. for its decarbonization plan, transport electrification programmes and agricultural efficiency actions) but it was not systematically presented. During the review, the Party explained that it lacks quantitative methodologies and standardized templates for reporting information and has limited capacity to synthesize information owing to the large number of mitigation measures and actions tracked and reported in the BTR. The TERT encourages Costa Rica to improve, to the extent possible, the presentation of information on the assessment of the economic and social impacts of response measures.

Table 12
Areas of improvement of the summary of greenhouse gas emissions and removals

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
NA	NA	No areas of improvement identified

Table 13
Areas of improvement of the projections of greenhouse gas emissions and removals

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
13.1	Specified in paragraph 94 of the MPGs	Costa Rica did not report WM, WAM or WOM projections. The TERT noted that the BTR includes an abatement analysis in section 3.4.1.3 and figures 3.1–3.2, which show projected emissions to 2050 and potential emission reductions from the implementation of some of Costa Rica's PaMs. During the review, the Party clarified that the abatement analysis presented in section 3.4.1.3 corresponds to the requirement to report projections under paragraph 92 of the MPGs. The Party also explained that projections for the WOM and WM scenarios have been developed, but they were not provided in the BTR, and CTF tables had not been compiled at the time of the BTR submission owing to

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		difficulties encountered with the ETF reporting tools. During the review, the Party provided draft CTF tables that include information on the WOM and WM projections. The WM projections include a number of PaMs that had been implemented and adopted by 2024, but also some PaMs that are still being planned; therefore, the TERT considers they are not in line with the definitions under the MPGs of WM and WAM scenarios. The TERT recommends that Costa Rica provide WM projections and CTF tables. The TERT encourages Costa Rica to report WAM and WOM projections and follow the definitions under the MPGs for WOM, WM and WAM scenarios in developing those projections.
13.2	Specified in paragraph 96(a), (c) and (d) of the MPGs	Costa Rica did not include in the BTR a description of the methodology used to develop the projections, including models and/or approaches used and key underlying assumptions and parameters (para. 96(a) of the MPGs), assumptions on PaMs included in the WM and WAM projections (para. 96(c) of the MPGs) and sensitivity analysis for any of the projections, together with a brief explanation of the methodologies and parameters used (para. 96(d) of the MPGs). During the review, the Party provided projections and documentation thereon, which included information on key underlying assumptions and parameters used for projections, assumptions on PaMs and a sensitivity analysis. The TERT encourages Costa Rica to provide in the next BTR information on the methodology used to develop projections, including models and approaches used and key underlying assumptions and parameters; assumptions on PaMs included in the scenarios; and a sensitivity analysis, including a brief explanation of the methodologies and parameters used.
13.3	Specified in paragraph 97 of the MPGs	Costa Rica did not report in the BTR projections for key indicators for determining progress towards implementing and achieving its NDC. The TERT noted that the Party reported projections for the key indicator for one of the overarching mitigation targets (net emissions in 2030) in section 3.4.1.3, but not for the other (emission budget) target (total emissions over 2021–2030). During the review, Costa Rica provided projections of its national GHG emissions for 2025 and 2030 in the draft CTF tables provided during the review, as well as supporting documentation for the projections. However, the projections for the emission budget indicator were not provided. The TERT recommends that Costa Rica report in the next BTR, for both of its mitigation targets, projections of key indicators for determining progress towards implementing and achieving its NDC.
13.4	Specified in paragraph 98 of the MPGs	Costa Rica did not report projections on a sectoral basis or by gas. During the review, the Party provided draft CTF tables that include WOM and WM projections on a sectoral basis, but not by gas. The TERT recommends that Costa Rica report projections on a sectoral basis and by gas.
13.5	Specified in paragraph 100 of the MPGs	Costa Rica did not provide projections without LULUCF in its BTR. During the review, the Party provided draft CTF tables that include WOM and WM projections both with and without LULUCF. The TERT recommends that Costa Rica report projections with and without LULUCF.
13.6	Specified in paragraph 101 of the MPGs	Costa Rica did not report projections in tabular format in its BTR. During the review, the Party provided draft CTF tables that include WOM and WM projections in tabular format. The TERT recommends that Costa Rica report projections in both graphical and tabular format.

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

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
NA	NA	No areas of improvement identified

II. Capacity-building needs[3] 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

ID#	*Reporting requirement*	*Area in which capacity-building is needed*
General reporting		
1_CBN.1[a]	Specified in paragraphs 18, 79 and 80 of the MPGs, para 90 decision 1/CP.21	Reinforcing the internal technical capacity of institutions to empower them to prepare the BTR or NID internally, in particular to develop emission projections, report adaptation information and prepare inventories for the LULUCF and waste sectors, as well as training national experts in the use of the ETF reporting tools to enable compilation of consistent GHG inventories and timely submission of NIRs and CTF tables
1_CBN.2[a]	Specified in paragraphs 61–62 of the MPGs	Strengthening communication strategies for raising awareness of the public about climate action and strengthening engagement strategies that support stakeholder engagement in implementing and achieving the NDC (relevant to para. 62 of the MPGs) and stakeholder involvement in tracking progress in implementing and achieving the NDC (relevant to para. 61 of the MPGs)
1_CBN.3[a]	Specified in paragraphs 34–35 of the MPGs	Developing and implementing QA/QC and archiving systems that ensure the quality of data and information reported in BTRs and NIDs, as well as their retention and ability to be retrieved, and providing institutional staff with training on QA/QC and archiving
1_CBN.4[a]	Specified in paragraph 20 of the MPGs	Strengthening the understanding of experts on the reporting requirements set out in the MPGs and training them in applying the methodologies prescribed in the 2006 IPCC Guidelines and the 2019 Refinement to the 2006 IPCC Guidelines
1_CBN.5[a]	Specified in paragraph 62 of the MPGs	Strengthening the technical capacity of national institutions such that the sustainability of systems for the monitoring, reporting and archiving of data and information on climate change is ensured
NIR – general		
2_CBN.1[b]	Specified in paragraph 58 of the MPGs	Strengthening capacity for collecting national statistical data to enable sustainable reporting, with the latest reporting year being two years prior to the submission of the NIR rather than the three years set out in the flexibility provision in paragraph 58 of the MPGs
2_CBN.2[a]	Specified in paragraph 19 of the MPGs	Strengthening the implementation of the GHG inventory cycle (inventory planning, preparation and management), including QA/QC, to ensure timely and accurate GHG inventory compilation (including the NID and CRTs)

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

ID#	*Reporting requirement*	*Area in which capacity-building is needed*
Information necessary to track progress in implementing and achieving the NDC under Article 4 of the Paris Agreement		
8_CBN.1[a]	Specified in paragraph 85 of the MPGs	Developing tools and models for assessing the expected and achieved emission reductions of mitigation actions, including training experts to apply these tools and models.

[a] Capacity-building need identified by the TERT in consultation with the Party.
[b] Capacity-building need identified by the TERT in consultation with the Party relating to the flexibilities applied by it as per the MPGs.

Annex

Documents and information used during the review

A. Reference documents

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B. Additional information provided by the Party

Responses to questions during the review were received from Nazareth Rojas Morales and Adriana Bonilla Vargas (Directorate of Climate Change, Ministry of Environment and Energy of Costa Rica) and Ana Rita Chacon Araya, Johnny Montenegro Ballestero, Kathia Larissa Aguilar Martín, Roberto Rodríguez Sánchez and Rolando Fernández Zamor (National Meteorological Institute), including additional material. The following references were provided by Costa Rica and may not conform to UNFCCC editorial style as some have been reproduced as received:

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Government of Costa Rica, *Law 8839 (Waste Management):* https://pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=68300&nValor3=83024&strTipM=TC.

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