United Nations FCCC/ETF/TERR.1/2025/SLB/Add.1

Framework Convention on Climate Change

Distr.: General
18 November 2026

English only

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

Addendum

Summary

This addendum to the report on the technical expert review of the first biennial transparency report of Solomon Islands, 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 13 to 17 July 2026 in Honiara.

* In the symbol for this document, 2025 refers to the year in which the biennial transparency report was submitted, not to the year of publication.

Please recycle

Abbreviations and acronyms

2006 IPCC Guidelines	*2006 IPCC Guidelines for National Greenhouse Gas Inventories*
AD	activity data
BTR	biennial transparency report
CH_4	methane
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
CRT	common reporting table
CTF	common tabular format
EF	emission factor
FRL	forest reference level
FX	flexibility applied to reporting
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IE	included elsewhere
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
LULUCF	land use, land-use change and forestry
MECDM	Ministry of Environment, Climate Change, Disaster Management and Meteorology of Solomon Islands
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
MRV	measurement, reporting and verification
N	nitrogen
N_2O	nitrous oxide
NA	not applicable
NDC	nationally determined contribution
NE	not estimated
NIR	national inventory report
NO	not occurring
PaMs	policies and measures
QA/QC	quality assurance/quality control
REDD+	reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70)
TERT	technical expert review team
WAM	‘with additional measures’
WM	‘with 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 Solomon Islands 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 paragraphs 6, 35, 57, 85 and 102 of the MPGs	The TERT noted from the BTR1 (pp.36–38, 140) that Solomon Islands applied the flexibility provided for in the MPGs in relation to its reporting of information on the GHG inventory and tracking progress in implementing and achieving the NDC. The TERT identified however that the Party's use of flexibility was not transparently reported in the BTR1. The Party (1) did not clearly indicate the MPG reporting provision to which the flexibility for projections applied; (2) reported that it applied the flexibility provided for in paragraphs 35 (general inventory QC procedures), 57 (time series) and 102 (projections) of the MPGs owing to limited availability of time and historical data, resource and capacity constraints, and limited availability of robust data, financial resources and technical capacity respectively, but did not concisely clarify the capacity constraints relevant to the application of the flexibility provided for in paragraph 85 of the MPGs (estimates of expected and achieved GHG emission reductions); and (3) did not provide clear information on self-determined estimated time frames for improvements in relation to its capacity constraints for any of the flexibilities applied. During the review, Solomon Islands explained that it is aiming to implement improvements as its national capacities are progressively enhanced in each reporting cycle; hence, it is aiming to address the capacity constraints leading to its use of the flexibility provided for in paragraphs 57 and 35 of the MPGs to the extent possible in the BTR2. The Party indicated that addressing the constraint relevant to its use of the flexibility provided for in paragraph 85 of the MPGs will require the adoption of an integrated MRV system for monitoring and reporting quantitative information on the impacts of mitigation PaMs, together with improvements in data-collection systems and analytical and modelling capacity. Further, the Party clarified that for reporting projections it applied the flexibility provided for in paragraph 102 of the MPGs and that the associated capacity constraints are limited data availability and modelling capacity. The Party is aiming to improve its reporting on NDC tracking for the BTR2. The TERT recommends that the Party (1) clearly state which flexibility provision was applied, if applicable, for reporting projections, (2) concisely clarify its capacity constraints in relation to each flexibility provision applied, noting that some constraints may be relevant to several provisions, and (3) provide self-determined estimated time frames for improvements in relation to the capacity constraints that led to its application of flexibilities.

[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–c) of the MPGs Institutional arrangements	The Party did not report in sufficient detail on functions related to inventory planning, preparation and management in its BTR1 (pp.26–28); in particular, on the division of specific responsibilities between institutions participating in the inventory preparation process, and the archiving of QA/QC documentation, review results and planned inventory improvements. During the review, the Party explained the responsibilities of the MECDM (coordinating inventory preparation and implementation of QA/QC activities), the National Statistics Office, the Customs and Excise Division of the Ministry of Finance and Treasury, Solomon Power, the public and private sectors (South Pacific Oil, Markwarth Oil Ltd, etc.) (providing and validating AD) and national and international consultants (identifying inconsistencies and reviewing sectoral emission estimates). The Party indicated that it adopted its integrated MRV platform and established institutional arrangements, including formal designation of responsibilities and data flows through memorandums of understanding, with the aim of strengthening transparency in the national MRV processes and their alignment with IPCC guidelines and the MPGs. The Party further indicated that its archiving of QA/QC documentation, review results and planned inventory improvements is limited. The TERT recommends that the Party provide detailed information on the division of specific responsibilities between institutions participating in the inventory preparation process, as well as information on the archiving of QA/QC documentation, review results and planned inventory improvements.
2.G.2	Specified in paragraphs 21 and 23 of the MPGs Methods	The Party did not use the recommended higher-tier methods for estimating emissions for key categories or provide an explanation or documentation demonstrating why methodological choices were not in line with the corresponding decision trees of the 2006 IPCC Guidelines (e.g. vol. 1, chap. 4; vol. 2, chaps. 2–3; vol. 4, chaps. 4 and 10; vol. 5, chaps. 3 and 6). The TERT noted, for example, that the Party used a tier 1 approach for estimating emissions for categories 1.A.1 energy industries, 1.A.3 transport, 1.A.4 other sectors, 3.A enteric fermentation, 3.B manure management, 5.A solid waste disposal and 5.D wastewater treatment, which are key categories under the level assessment excluding LULUCF (see BTR1 table 1.3), as well as category 4.A.1 forest land remaining forest land, which is a key category under the level assessment including LULUCF (see BTR1 p.33). During the review, the Party explained that it applied tier 1 methods for key categories because of constraints on data availability, lack of country-specific EFs and limited technical capacity. The Party has identified priority areas for improvement and indicated capacity-building needs for gradually progressing to using higher-tier methods. The TERT encourages the Party to make every effort to use the (tier level) methods recommended for estimating emissions for key categories in the 2006 IPCC Guidelines. If the Party is unable to do so owing to lack of resources, the TERT recommends that it include an explanation for this in its BTR.
2.G.3	Specified in paragraph 25 of the MPGs Key category analysis	Solomon Islands did not identify key categories for the starting year of the time series (1994), including and excluding LULUCF, in the BTR1. During the review, the Party explained that it did not perform a key category analysis for 1994 because the inventory for that year was incomplete owing to insufficient AD and incomplete sectoral coverage. The Party indicated that, once the historical inventory time series has been constructed, it intends to conduct a key category analysis for the starting year and report the results in future BTRs. The TERT recommends that the Party identify key categories for the starting year of the time series (1994), including and excluding LULUCF, in accordance with the 2006 IPCC Guidelines.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
2.G.4	Specified in paragraphs 29 and 44 of the MPGs Uncertainty analysis	The Party did not report the uncertainty of the emission and removal estimates for any source or sink categories, including inventory totals, for the starting year of the time series (1994). The Party also did not provide a discussion of the uncertainty of the emission and removal estimates for any source or sink categories, including inventory totals, for the starting year (1994) and the latest reporting year (2022) of the time series. The TERT noted that the Party reported trend uncertainty only for emissions sources in the energy sector; for other source and sink categories, trend uncertainties were not appropriately estimated because the Party assumed that emissions and removals from sectors other than energy were zero in the starting year of the time series. During the review, the Party confirmed that an uncertainty assessment was not undertaken for 1994. The Party indicated it will include a qualitative discussion of key sources of uncertainty, including data limitations and methodological assumptions, in the BTR2 with the aim of improving the transparency and comprehensiveness of the reporting. The Party also confirmed that, for the purpose of the trend uncertainty assessment, categories that were not estimated for 1994 were effectively treated as having zero emissions, as complete historical AD for the IPPU, agriculture, LULUCF and waste sectors were not available. Consequently, the Party recognized that the trend uncertainty estimates for those categories, and the overall inventory total, may not be fully representative of actual uncertainties. As the data-collection system and availability of historical data improve, the Party intends to estimate emissions for these categories for 1994 and revise the trend uncertainty assessment accordingly. The TERT recommends that the Party quantitatively estimate and report the uncertainty of emission and removal estimates for all source and sink categories, including inventory totals, for 1994. The TERT also recommends that the Party provide a qualitative discussion of the uncertainty of the emission and removal estimates for all source and sink categories, including inventory totals, for at least the starting year and the latest reporting year of the time series. The TERT further recommends that the Party estimate and report trend uncertainty of emission and removal estimates for all source and sink categories, including inventory totals, between the starting year and the latest reporting year of the time series.
2.G.5	Specified in paragraph 31 of the MPGs Notation keys	The TERT noted that in several instances the Party did not report the correct notation key or indicate why data could not be reported. For example, the Party reported estimates of emissions from the IPPU sector of 0.0 kt CO_2 eq for 1994, 2000, 2005 and 2010 in BTR1 figure 2.4, but stated on page 42 of its BTR1 that emissions from the IPPU sector for 1994–2010 were not estimated owing to the unavailability of data for industrial activities for before 2010. Similarly, in BTR1 figures 2.5–2.7, the Party reported estimates of emissions from the agriculture, LULUCF and waste sectors of 0.0 kt CO_2 eq for 1994, whereas the corresponding text in the BTR1 for agriculture and LULUCF (p.43) and waste (p.44) indicates that emissions for 1994 were not estimated. The TERT considers that estimates for years for which emissions or removals have not been estimated should not be presented as 0.0 kt CO_2 eq in the figures, as this may incorrectly imply that estimates were made and that the resulting emissions or removals were close to zero, rather than not estimated. During the review, the Party agreed that reporting “0.0” for years for which emissions have not been estimated may be misleading and indicated that appropriate notation keys (e.g. “NE”) will be applied in future inventory submissions. The TERT recommends that the Party use appropriate notation keys for reporting categories for which emissions and removals were not estimated, or for which data are not available, and indicate why data could not be reported for those categories.
2.G.6	Specified in paragraph 32 of the MPGs Completeness	The Party reported several categories as “NE” in BTR1 table 1.2. However, the TERT was unable to identify information on the likely level of emissions for the categories reported as “NE” to justify their insignificance. The TERT was also unable to identify information on the total national aggregate of estimated emissions for all categories considered insignificant. During the review, the Party clarified that “NE” was reported primarily where AD or other information required for estimating emissions were unavailable, rather

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		than on the basis of an assessment of insignificance. Therefore, the Party was unable to confirm that the categories reported as "NE" meet the insignificance thresholds specified in the MPGs. The Party indicated that, once more detailed AD are available at the national level, it will assess the likely level of emissions for categories currently reported as "NE" and quantify the aggregate emissions for categories considered insignificant, where feasible. The TERT encourages the Party to use approximated AD and default IPCC EFs to derive a likely level of emissions for categories currently reported as "NE" and to assess whether these categories meet the insignificance thresholds referred to in the MPGs. Further, the TERT recommends that the Party ensure that the total national aggregate of estimated emissions for all gases for categories considered insignificant remains below 0.1 per cent of the national total GHG emissions excluding LULUCF.
2.G.7	Specified in paragraphs 34 and 46 of the MPGs QA/QC and verification	The Party reported in its BTR1 (section 1.2.6, p.33) that the QA/QC plan established for previous inventory submissions (its NC1–NC3 and first biennial update report) was implemented for the preparation of its BTR1. It also reported in the same section that an internal QA/QC plan, outlining the roles and responsibilities of the GHG inventory team members, had been developed. However, upon reviewing the internal QA/QC plan, the TERT was unable to identify several key elements of the QA/QC plan recommended in the 2006 IPCC Guidelines (vol. 1, chap. 6.5), including QA/QC activities, institutional arrangements and responsibilities for implementing those activities, and the schedule and time frame for conducting QA/QC throughout the inventory preparation process, from the initial development of the inventory to final reporting. During the review, the Party confirmed that the internal QA/QC plan was followed in developing the BTR1 in accordance with the 2006 IPCC Guidelines. The plan includes general QA/QC activities such as verification of AD, regular checking of calculations, AD units and unit conversions, use of notation keys, completeness of reporting and consistency of methodologies used across the time series, and review of inventory documentation. Verification activities include cross-checking of AD with source agencies, comparison of the latest inventory data with historical trends and external data sets where available, and internal technical reviews of sectoral emission estimates. The MECDM coordinated the inventory preparation and implementation of QA/QC activities, while sectoral ministries and data providers were responsible for validating AD and a technical consultant was responsible for identifying any inconsistencies and reviewing sectoral estimates. The TERT recommends that the Party elaborate and report a QA/QC plan in accordance with the 2006 IPCC Guidelines, including information on QA/QC activities, the inventory agency responsible for implementing QA/QC, and the schedule and time frame for conducting QA/QC activities within the inventory preparation process.
2.G.8	Specified in paragraph 35 of the MPGs QA/QC and verification	The Party did not report information on the application of category-specific QC procedures for any key categories or the implementation of QA procedures through a basic expert peer review of the inventory in accordance with the 2006 IPCC Guidelines (vol. 1, chap. 6). During the review, the Party explained that strengthening the inventory QA/QC system was identified as a priority improvement and it expects to progressively enhance general and category-specific QA/QC procedures and independent technical reviews over the upcoming inventory cycles. Planned improvements include developing standardized QA/QC checklists and documentation, strengthening relevant institutional arrangements and technical capacity, establishing a centralized inventory archiving system and implementing more systematic internal reviews throughout the inventory preparation process. The TERT encourages the Party to apply category-specific QC procedures and implement QA procedures by conducting a basic expert peer review of the inventory in accordance with the 2006 IPCC Guidelines.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
2.G.9	Specified in paragraphs 35 and 38 of the MPGs QA/QC and verification	The TERT noted that the total GHG emissions excluding LULUCF presented in BTR1 figures 2.1 and 2.3 are inconsistent with those reported in BTR1 table 2.2. The TERT also noted that CRTs 7, 9 and 10s1–10s6 are identical for each year in the reported time series. The TERT identified several inconsistencies between the BTR1 and the CRTs; for example, (1) the data in the tables in annex I to the BTR1 presenting the results of the key category analysis excluding and including LULUCF are inconsistent with CRT 1 for categories 1.A.1 energy industries (N_2O), 1.A.3.b road transportation (CH_4 and N_2O), 1.A.3.d domestic navigation (CH_4 and N_2O) and 1.A.4 other sectors (N_2O); (2) for category 2.F.1 refrigeration and air conditioning, the BTR1 (section 4.2.2, p.70) indicates that a tier 1a estimation method was used, whereas CRT summary 3 indicates a tier 2 method; (3) the table in annex II to the BTR1 presenting uncertainty assessment reports CH_4 and N_2O emissions for category 5.D of 12.14 and 9.95 kt CO_2 eq respectively, whereas CRT 5 reports 12.60 and 10.32 kt CO_2 eq respectively. During the review, the Party confirmed that the discrepancy between BTR1 figures 2.1 and 2.3 and table 2.2 is due to inconsistencies in use of units in column headings. Some values were reported in kt gas rather than kt CO_2 eq. The Party stated that it will correct these inconsistencies by applying IPCC GWPs consistently when calculating CO_2 eq values and harmonizing use of units across all reporting tables. The Party acknowledged that there are inconsistencies between the BTR1 and the CRTs and stated that it will strengthen the implementation of QA/QC procedures to prevent such inconsistencies in future. The TERT recommends that the Party report numerical values and information regarding the national GHG inventory consistently within and across the BTR and the CRTs. Noting the flexibility applied to paragraph 35 of the MPGs by the Party, the TERT encourages the Party to enhance the implementation of general QC procedures.
2.G.10	Specified in paragraphs 47 and 57 of the MPGs Completeness	The Party applied the flexibility provided for to choose 1994 as the starting year of the time series. However, for 1994 it did not report estimates of emissions and removals for the agriculture, LULUCF or waste sectors in either the BTR1 or the CRTs. During the review, the Party explained that the absence of estimates for the agriculture, LULUCF and waste sectors for 1994 is due primarily to lack of reliable and accurate historical AD. The Party envisages developing or constructing historical data sets using proxy sources or statistical methods and calculating relevant emissions and removals using tier 1 methods, with the intention of including the estimates in future inventory submissions. The TERT recommends that the Party report estimates of emissions and removals for all relevant categories, gases and, where applicable, carbon pools in the agriculture, LULUCF and waste sectors for 1994 on a gas-by-gas basis in units of mass at the most disaggregated level, in accordance with the 2006 IPCC Guidelines, to ensure the reporting of a consistent time series.
2.G.11	Specified in paragraph 52 of the MPGs Completeness	The TERT was unable to identify information in the BTR1 on indirect N_2O emissions from sources other than the agriculture and LULUCF sectors. During the review, the Party confirmed that indirect N_2O emissions from sources other than the agriculture and LULUCF sectors were not estimated. The Party intends to assess these emissions and improve data collection to enable their estimation for future inventory submissions. The TERT encourages the Party to estimate and report as a memo item in the CRTs indirect N_2O emissions from sources other than the agriculture and LULUCF sectors.

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 paragraphs 31 and 53 of the MPGs	For category 1.D.1.b international navigation (marine bunkers) the Party reported in CRT 1.D emission estimates for 2011–2022 but “NO” for 1994–2010.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
	International bunkers and multilateral operations – aviation gasoline, jet kerosene and gas/diesel oil – CO_2, CH_4 and N_2O	During the review, the Party confirmed that emissions from international navigation occurred prior to 2011 but explained that, since relevant AD were available only for 2011 onward, emissions were reported for 2011–2022. The Party indicated that additional information on international bunker fuels will be provided in future inventory submissions. The TERT encourages the Party to estimate and report emissions for international navigation (marine bunkers) for all reported years of the time series, including 1994, 2000, 2005 and 2010. If it is not possible to report emission estimates for these years, the TERT recommends that the Party report the appropriate notation key and indicate why emissions from this source were not reported.
3.E.2	Specified in paragraphs 31 and 47 of the MPGs 1.A.4.b Residential – biomass – CO_2, CH_4 and N_2O	The Party reported in CRT 1.A(a)s4 "NO" and "NA" for biomass consumption in the residential sector, but reported in its BTR1 (p.63) that the major fuels consumed in the residential sector in the country are firewood, liquefied petroleum gas and kerosene/dual purpose kerosene (jet kerosene). During the review, the Party clarified that biomass, particularly fuelwood, might be being used in the country by a proportion of households for cooking and other domestic purposes, especially in rural areas. However, relevant data are not clearly recorded in the national energy statistics. The current national GHG inventory is based on official national energy statistics, which primarily capture data on commercial energy sources and do not systematically include data on non-commercial biomass consumption. Consequently, biomass consumption in the residential sector was not estimated for the current inventory. The notation keys applied in CRT 1.A(a)s4 reflect the absence of reliable AD required for the estimation rather than the absence of biomass use. The Party acknowledged this data gap and stated that it intends to improve collection of data on traditional biomass use through household energy surveys and national energy statistics to enable reporting on biomass consumption in future inventory submissions consistently with the 2006 IPCC Guidelines. The TERT recommends that the Party estimate and report CH_4 and N_2O emissions from biomass consumption in the residential sector in CRT 1.A(a)s4 as well as CO_2 emissions as a memo item in CRT 1. While emissions cannot be estimated because of lack of AD, the TERT recommends that the Party report the appropriate notation key and indicate why emissions from this source were not reported.
3.E.3	Specified in paragraphs 31 and 47 of the MPGs 1.A.2 Manufacturing industries and construction – diesel, liquefied petroleum gas, kerosene and residual fuel oil – CO_2, CH_4 and N_2O	The Party reported in CRT 1.A(a)s2 "NO" for category 1.A.2 fuel combustion for manufacturing industries and construction for 2022. However, the BTR1 (p.7) indicates that the country's industry sector comprises mining, quarrying, manufacturing, utilities (electricity and water) and construction, and that emissions from manufacturing industries and constructions are included under category 1.A.4.a commercial/institutional. During the review, the Party noted that fuel combustion could be occurring within manufacturing industries and construction activities in the country. However, its manufacturing and industrial sector is relatively small and detailed fuel consumption data for these activities are not readily available in the national energy statistics. In the available AD, fuel use across commercial, institutional, small-scale industrial and construction activities is not disaggregated by IPCC source category. Consequently, emissions associated with fuel combustion for such activities have been included under category 1.A.4.a, which was considered the most appropriate category given the available data. The reporting of "NO" for category 1.A.2 therefore reflects an emission reporting and allocation issue arising from data limitations, rather than the absence of manufacturing or construction activities in the country. As more disaggregated energy statistics become available, the Party will allocate the emissions from fuel combustion for these activities to the appropriate IPCC source categories in accordance with the 2006 IPCC Guidelines. The TERT recommends that the Party report emission estimates for fuel combustion for manufacturing industries and construction separately from those for fuel combustion for commercial/institutional. While emission estimates cannot be disaggregated because of lack of AD, the TERT recommends that the Party

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		report the emissions for fuel combustion for manufacturing industries and construction as "IE" and explain where they have been included.
3.E.4	Specified in paragraphs 40 and 47 of the MPGs 1.A.3 Transport – diesel, gasoline and jet kerosene – CO_2, CH_4 and NO_2	The Party reported in CRT 1.A(a)s3 aggregate AD for the entire road transportation subsector (category 1.A.3.b) but did not provide the most disaggregated AD for this subsector. During the review, the Party noted that fuel consumption data for transport were calculated by subtracting the fuel consumption data provided by the electricity generation sector (Solomon Power) from the total fuel data from the Customs and Excise Division of the Ministry of Finance and Treasury, the National Statistics Office and fuel suppliers, and that it is taking measures to improve the data collection from the relevant parties to be able to report the most disaggregated AD for subcategory 1.A.3.b. The TERT recommends that the Party report in CRT 1.A(a)s3 AD for road transportation at the most disaggregated level, to the extent possible.

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 paragraphs 40 and 49 of the MPGs 2.F.1 Refrigeration and air conditioning – HFCs	The Party reported in CRT 2(II).B-Hs2 for 2022 estimates of emissions from stocks of refrigerants in refrigeration and air-conditioning equipment that are significantly larger than the corresponding amount of each gas stored in the operating systems. For example, for 2022, BTR1 table 4.2 reports 0.00062 t HFC-32 "in equipment" and annual leakage of 0.000062 t, but CRT 2(II).B-Hs2 reports 0.041974 t HFC-32 emitted from stocks. The TERT noted that in CRT 2(II).B-Hs2 emissions should be reported by mass of each gas listed (i.e. in t), and they are then converted to CO_2 eq by multiplying by the relevant GWP value for reporting in CRT 2(I). However, the Party multiplied HFC emissions in the unit of mass by the relevant GWP value for reporting in CRT 2(II).B-Hs2 and again for reporting in CRT 2(II). During the review, the Party explained that there are no inconsistencies between the AD reported in BTR1 table 4.2 and in CRT 2(II).B-Hs2. The reported emissions in the CRT (e.g. 0.041974 t HFC-32) constitute the emissions in CO_2 eq obtained by multiplying the emissions in units of mass by the relevant GWP values from the IPCC Fifth Assessment Report. The TERT recommends that the Party report in CRT 2(II).B-Hs2 actual emissions of each HFC from refrigeration and air conditioning, providing disaggregated data by chemical and category in units of mass.

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 paragraphs 26, 39 and 57 of the MPGs 3. General (agriculture) – CH_4 and N_2O	The Party reported in the BTR1 (p.77) that livestock population data for 2011–2022 were obtained from the Ministry of Agriculture and Livestock. However, it did not provide information on the source of the livestock population data for 2000, 2005 and 2010. The TERT noted substantial differences between the livestock populations reported for 2011–2022 and those reported for 2000, 2005 and 2010 in table 5.1 of the BTR1 (p.76). For example, according to the reported data, the cattle population decreased by 84 per cent in 2010–2011, while the swine population increased by 217 per cent. In addition, no poultry population was reported for 2010, whereas a population of 438,583 heads was reported for 2011. The TERT noted that the Party did not explain whether the same methods and a consistent approach were applied across the different data sources used to estimate livestock populations for the entire time series. During the review, the Party explained that the livestock population data for 2000, 2005 and 2010 were taken from the national GHG inventory reported with the second national communication. The Party confirmed that multiple data

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		sources were used for AD and that efforts were made to harmonize the data sources to ensure their comparability and avoid inconsistencies over the time series. The TERT recommends that the Party provide the source of the livestock population data reported for 2000, 2005 and 2010. The TERT encourages the Party to use the same methods and a consistent approach for determining livestock populations for the reported years.
5.A.2	Specified in paragraphs 40 and 47 of the MPGs 3. General (agriculture) – CH_4 and N_2O	The Party did not report the AD and EFs used for estimating CH_4 emissions for category 3.A enteric fermentation and CH_4 and N_2O emissions for category 3.B manure management at the most disaggregated level. For example, it did not report livestock populations by subcategory, such as dairy cattle, non-dairy cattle, breeding swine and market swine. In addition, the CH_4 EF for swine manure management was reported as 24 kg CH_4/head/year in the BTR1 (p.81), which corresponds to the default value for breeding swine provided in the 2006 IPCC Guidelines (vol. 4, chap. 10, table 10A.8). Without livestock populations reported by subcategory, it is not possible to assess the appropriateness of the applied EF. The TERT noted that the Party plans to conduct a livestock census on a regular basis as part of its national inventory improvement plan (see BTR1 p.108). However, the planned livestock census will not include collecting details on livestock subcategories, such as dairy and non-dairy cattle by age group, or information required for estimating feed intake and applying higher-tier estimation methods, such as on body weight, average daily weight gain, milk production, feed digestibility by subcategory and use of manure management systems. During the review, the Party confirmed that efforts are under way to improve the collection of data on livestock through a future census with the aim of capturing more detailed population data by livestock subcategory (e.g. dairy and non-dairy cattle) and that, where feasible, key parameters required for using higher-tier estimation methods, such as data on body weight, productivity, feeding practices and use of manure management systems, may be captured progressively. The TERT recommends that the Party report, to the extent possible, GHG emissions from enteric fermentation and manure management, as well as the corresponding AD and EFs, at the most disaggregated level in accordance with the 2006 IPCC Guidelines.
5.A.3	Specified in paragraphs 21 and 39 of the MPGs 3.B Manure management – N_2O	The Party reported N excretion rates for cattle, swine and poultry as 500, 460 and 820 kg N/head/year in CRT 3.B(b). The TERT noted that these values appear to be extremely high. For example, assuming a body weight of 180 kg for breeding swine (2006 IPCC Guidelines, vol. 4, chap. 10, table 10A-8) and an N excretion rate of 0.46 kg N/1,000 kg animal mass/day (2006 IPCC Guidelines, vol. 4, chap. 10, table 10.19) for the oceanic region, the TERT estimated that the N excretion rate for swine would be 30.22 kg N/head/year. The TERT also noted that N excretion per manure management system was not reported in CRT 3.B(b). During the review, the Party indicated that it will revise its N excretion rate calculations using the appropriate IPCC equations and default parameters, including proper consideration of animal weight and daily excretion rates, and report N excretion per manure management system. The estimates of N_2O emissions from manure management will also be recalculated to ensure accuracy. The TERT recommends that the Party apply correct N excretion rates for its estimations and report in CRT 3.B(b) N excretion per manure management system and N_2O emissions from manure management for cattle, swine and poultry.
5.A.4	Specified in paragraphs 21 and 39 of the MPGs 3.B.4 Other livestock – N_2O	The Party reported a default value of 12 per cent for the fraction of N loss due to volatilization of NH_3 and NO_X from poultry manure management systems. However, the 2006 IPCC Guidelines (vol. 4, chap. 10, table 10.22) recommend default values of 55 per cent for poultry without litter and 40 per cent for poultry litter and anaerobic lagoon systems.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		During the review, the Party explained that the value of 12 per cent used for the fraction of N loss due to volatilization of NH_3 and NO_X was taken from the 2006 IPCC Guidelines (vol. 4, chap. 10, table 10.22), but for the solid storage manure management system applicable to other livestock rather than for poultry manure. The Party indicated that it will revise this parameter for future inventories by applying the appropriate IPCC default values (40–55 per cent), depending on the manure management system, and update the emission estimates accordingly. The TERT recommends that the Party use the appropriate IPCC default values for the fraction of N loss from manure management systems due to volatilization of NH_3 and NO_X for poultry manure management systems when estimating N_2O emissions from manure management.
5.A.5	Specified in paragraphs 31 and 47 of the MPGs 3.D Direct and indirect N_2O emissions from agricultural soils – N_2O	The Party reported in the BTR1 (p.83) that direct and indirect N_2O emissions from the application of synthetic N fertilizers to agricultural soils were estimated, but did not explain why N_2O emissions from other N inputs to soils, such as organic N fertilizers, urine and dung deposited by grazing animals and crop residues, were excluded from the estimations for category 3.D. N_2O emissions for categories 3.D.1.b–3.D.1.g were reported as "NO" in CRT 3.D. During the review, the Party explained that, in practice, livestock manure is often deposited directly onto agricultural or grazing land, where it remains unmanaged, and crop residues may be left on fields or incorporated into soils. These practices contribute N inputs that can drive nitrification and denitrification processes, resulting in direct and indirect N_2O emissions. However, the lack of consistent and quantifiable AD prevented the Party from estimating these emissions. The Party indicated that it plans to improve the collection of data on manure and crop residue management to enable direct and indirect N_2O emissions from managed soils to be estimated for future reporting. The TERT recommends that the Party estimate and report emissions and removals for all subcategories of 3.D, including N_2O emissions from N inputs, such as unmanaged livestock manure, to soils. If this is not possible, the TERT recommends that the Party report the emissions and removals using an appropriate notation key and provide the reasons, such as data gaps, for the lack of completeness of the estimates.

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 paragraphs 30 and 47 of the MPGs 4. General (LULUCF) – CO_2 and N_2O	The Party reported in its BTR1 (p.89) that it classified its national land use into the six categories in the 2006 IPCC Guidelines (i.e. forest land, cropland, grassland, wetlands, settlements and other land). Only emissions and removals from forest land remaining forest land were reported, while the rest of the land-use categories and all land-use change categories were reported as "NO" in CRTs 4.A–4.F. During the review, the Party explained that a reliable and complete data set was available only for forest land remaining forest land; for the other land-use and all land-use change categories data were either limited or unavailable. Emissions and removals from cropland remaining cropland were not estimated because national data on the annual areas of perennial crops and harvested area were unavailable. For grassland remaining grassland, the tier 1 method assumes no annual change in biomass carbon stocks; therefore, emissions and removals were assumed to be zero. Similarly, for settlements remaining settlements, the tier 1 method assumes that biomass growth and losses are in equilibrium, resulting in no net change in living biomass carbon stocks and consequently zero emissions and removals. For land converted to settlements, national estimates of annual biomass carbon stock changes were not available and the required data on annual biomass growth and losses were insufficient for estimating emissions and removals. The Party indicated that efforts will be made to improve data availability in this regard and expand the scope of future inventories to include additional land-use and all land-use change categories, where feasible.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		The TERT recommends that the Party estimate and report emissions and removals for all land uses and land-use changes occurring within the national territory, including those currently reported as "NO", in accordance with the 2006 IPCC Guidelines and provide information on the land uses and carbon pools occurring in the country and the tier 1 methods and default assumptions used for estimating associated emissions and removals. The TERT encourages the Party to indicate sources and sinks that do not occur within the national territory and provide information supporting the identification of land-use categories and carbon pools as not occurring nationally.
6.L.2	Specified in paragraphs 20–21 and 39 of the MPGs Land representation – CO_2 and N_2O	The Party reported the total land area of Solomon Islands as 2.8 million ha in the BTR1 (p.88) but did not provide information on the areas of managed and unmanaged land in the BTR1 or CRT 4.1. During the review, the Party explained that a national assessment to distinguish between managed and unmanaged land, consistently with the 2006 IPCC Guidelines, has not yet been undertaken. Owing to limited data availability and the absence of a national land management classification system, managed and unmanaged land were not separately identified and reported in the BTR1 or the CRTs. The Party acknowledged the importance of distinguishing managed from unmanaged land, and noted that it intends to strengthen the national land representation system and develop country-specific criteria for identifying managed land for future inventory submissions. The TERT recommends that the Party provide information in the BTR and the CRTs on the methodology and criteria used to distinguish managed from unmanaged land, including the national approach adopted and the land areas identified as managed and unmanaged, and revise the calculation of the GHG emission estimates if necessary.
6.L.3	Specified in paragraphs 39–40 of the MPGs Land representation – CO_2 and N_2O	The TERT noted that the AD reported in the BTR1 (p.92) for forest land remaining forest land for 2011–2022 were estimated using land-use data for 2018 and forest-cover land-use change statistics reported in the 2019 submission of the *Solomon Islands National Forest Reference Level*. The Party did not provide information on the methodological steps taken to derive annual AD for forest land remaining forest land from the 2018 data set, how the FRL data were integrated into the time series or how time-series consistency was ensured when combining data sets. During the review, the Party explained that, in the absence of country-specific annual land-use data, annual areas of forest land remaining forest land for 2011–2022 were estimated using data reported in the national FRL submission. The distribution of forest types was derived from the land-use subdivision proportions reported in the FRL submission, while annual changes for each forest subcategory were based on the corresponding land-use change estimates (in ha/year). Interpolation and extrapolation techniques were applied, where necessary, to construct a complete annual time series. Time-series consistency was ensured by consistently applying the same land-use subcategories, forest type classifications and approach for estimating emissions for the entire period. The TERT recommends that the Party provide a detailed description of the methods, assumptions, data sources and procedures used to derive annual AD for forest land remaining forest land and ensure time-series consistency when combining multiple data sets.
6.L.4	Specified in paragraph 39 of the MPGs 4.A Forest land – CO_2	The Party estimated CO_2 removals from forest land by applying the gain–loss method with tier 1 default factors and log export volume data (see BTR1 p.91). However, the Party did not provide information on the methodology used to convert log export volumes into biomass carbon removals, including any assumptions and parameters used. During the review, the Party explained that the log export volume was converted to biomass of carbon using equation 2.12 (annual carbon loss in biomass of wood removals) from the 2006 IPCC Guidelines (vol. 4, chap. 2). Merchantable log export volumes were converted to total biomass removals using the IPCC default biomass conversion and expansion factor (1.89, from table 4.5) and the default root-to-shoot ratio (0.37, from table 4.4). Biomass was then converted to carbon using the default carbon fraction (0.47, from table 4.3) and subsequently converted

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		to CO_2 by applying the molecular weight ratio of 44/12. The Party further explained that the key assumption underlying this approach is that the total export volume is representative of total harvested biomass, with domestic wood consumption considered negligible. The TERT recommends that the Party provide more detailed information on the methodology used to convert log export volumes into biomass carbon removals, including any assumptions and parameters used.
6.L.5	Specified in paragraphs 21, 40 and 47 of the MPGs 4.A Forest land – CO_2 and N_2O	The Party reported in the BTR1 (p.90) that it did not classify the soils in the forests in the country into the soil types provided in the 2006 IPCC Guidelines (vol. 4, chap. 3). However, no further information was provided on the soil classification, soil types or stratification of forests, nor on the soil classification and types for the other land-use categories. During the review, the Party explained that there are currently no data available on the various soil types and categories owing to the lack of national soil classification maps and limited information at the national level on soil carbon. The Party acknowledged that it needs to develop national soil maps with soil classifications and types that are aligned with IPCC categories. The Party further explained that, in the absence of national soil maps, emissions from soils will be estimated using IPCC default factors. The TERT recommends that the Party progressively improve the characterization of forest soil types in the country by developing national soil classification data sets aligned with IPCC categories to support the selection of appropriate soil types and default factors, and the estimation and reporting of emissions and removals from soil carbon pools.

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 paragraph 39 of the MPGs 5.A Solid waste disposal on land – CH_4	The Party reported in its BTR1 (p.101) that emissions for category 5.A solid waste disposal on land were recalculated due to methodological refinement, which resulted in a decrease in the estimated emissions of approximately 90 per cent compared with the submission of is first biennial update report. The TERT noted that the 2023 National Waste Audit Analysis Report used for AD specifies a waste generation rate of 71.5 kg/person/year, compared with 354 kg/person/year reported in the 2019 Honiara City Council Solid Waste Management Plan for 2018–2027. Any methodological difference between the waste audits that may explain the large decrease in waste generation reported was not explained in the BTR1. During the review, the Party explained that the recalculation of the emissions for category 5.A was based on data from the 2023 National Waste Audit Analysis Report, which represents the most recent and nationally representative source of waste generation data available at the time of preparing the BTR1. The TERT recommends that the Party transparently report methods used, including the rationale for the choice of methods, and any descriptions and assumptions in the AD used to estimate GHG emissions.
7.W.2	Specified in paragraph 47 of the MPGs 5.C.2 Open burning of waste – CO_2, CH_4 and N_2O	The Party reported in its BTR1 (p.96) that open burning is one of the primary waste management practices in Solomon Islands. The TERT noted that in CRT 5.C category 5.C.2 open burning of waste was reported as "NO", but in CRT 9 it was explained that category 5.C was reported as "NE" owing to AD not being available. During the review, the Party explained that "NE" was reported due to lack of AD. Also, owing to financial, capacity and technical constraints, the Party does not have reliable and consistent data on waste burned; hence "NE" was reported on the basis that open burning is known to occur, but insufficient data are available for estimating the associated emissions.

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		The TERT recommends that the Party report emissions from open burning of waste or report the appropriate notation key consistently and with an accompanying explanation.

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 61 of the MPGs	The TERT noted the information on government institutional structure for implementing climate change mitigation policy provided in the BTR1 (pp.8–10). However, Solomon Islands did not report in its BTR1 information on the institutional arrangements in place for tracking progress in implementing and achieving its NDC. During the review, Solomon Islands explained that the MECDM is the national nodal agency responsible for tracking NDC progress. The Party also explained the newly launched integrated MRV tool, designed to enhance its capacity for tracking NDC progress. The Party further explained that, given financial and technological constraints, institutional arrangements for tracking progress in implementing and achieving the NDC need to be strengthened, with coordination led by the MECDM and the involvement of sectoral agencies. The TERT recommends that the Party report information on the institutional arrangements in place for tracking progress in implementing and achieving its NDC.
8.2	Specified in paragraph 62 of the MPGs	The Party provided information in its BTR1 (pp.141–144) on institutional and administrative arrangements for domestic implementation and reporting of information and stakeholder engagement related to the implementation and achievement of its NDC. However, information on legal and procedural arrangements was not reported. During the review, Solomon Islands explained that there is currently limited information available on the legal and procedural frameworks for supporting NDC implementation. Such arrangements are under development and being integrated into national climate policies. Further details will be elaborated in future reporting once the arrangements have been formalized. The TERT recommends that the Party report information on legal and procedural arrangements related to the 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), (c) and (e) of the MPGs	Solomon Islands provided a description of its NDC in its BTR1 (table 1, p.124) and the CTF appendix table. However, there is ambiguity in the information on targets; reference point(s), level(s), baseline(s), base year(s) or starting point(s), and their respective value(s); and scope and coverage: (a) The unconditional NDC targets are described as being to reduce GHG emissions by 14 per cent by 2025 and 33 per cent by 2030 below the 2015 level compared with a 'business as usual' scenario. However, it is unclear whether GHG emissions are being compared to the 'business as usual' level in 2015 or 'business as usual' values for the target years. The conditional NDC targets are described as being an additional 27 per cent reduction by 2025 and 45 per cent reduction by 2030 below the 2015 'business as usual' level, which is unclear whether it is additional to the unconditional targets or not;

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		(b) The Party reported the NDC base year as 2015, but it is not clear how it relates to the NDC targets, or how the information on estimated emission reductions (unconditional: ~6,770.8 t CO_2 eq annually; conditional: ~55,347.31 t CO_2 eq annually by 2025 and ~246,793.73 t CO_2 eq annually by 2030) is meant to be used as reference levels; (c) The coverage of the NDC is reported as including LULUCF whereas the indicator for tracking progress towards the NDC targets is defined as national GHG emissions excluding LULUCF. Furthermore, the Party reported the scope of the NDC to include non-IPCC sectors, such as coastal and marine ecosystems, and the gases covered as primarily CO_2. During the review, Solomon Islands clarified the NDC targets: its unconditional targets are to reduce GHG emissions by 14 per cent by 2025 and 33 per cent by 2030 compared with the 'business as usual' scenario in 2025 and 2030 respectively; its conditional targets are to reduce GHG emissions by 27 per cent by 2025 and 45 per cent by 2030 compared with the 'business as usual' scenario in the target years. The Party also clarified that the base year (2015) is the starting point of projecting the 'business as usual' scenario, but information on the values of the 'business as usual' trajectory was not archived, which resulted in there being no information on reference level for each target year. The estimated emission reductions are derived from the NDC; they were not calculated for the BTR1 because they are not relevant information. Further, the Party clarified that the NDC targets cover the energy, IPPU, agriculture and waste sectors, and CO_2, CH_4, N_2O and fluorinated gases reported under the IPPU sector in the GHG inventory. The TERT recommends that the Party provide a clear description of its NDC, especially for targets, reference level, and scope and coverage, in the BTR and the CTF tables.

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 paragraphs 67 and 77(a)(i) of the MPGs	Solomon Islands reported its indicator for tracking progress in implementing and achieving its NDC as total national GHG emissions excluding LULUCF in kt CO_2 eq. Total national GHG emissions excluding LULUCF in 2015 is indicated as the reference level in table 2 of the BTR1 (p.126) and CTF table 4. The TERT noted that the same information is reported elsewhere in the BTR1 (table 6, p.137, and chapter II on the national GHG inventory). However, the Party's NDC reports an emission reduction target compared with the 'business as usual' scenario and defines the NDC target years as 2025 and 2030. During the review, Solomon Islands confirmed that its unconditional NDC targets are to reduce total national GHG emissions excluding LULUCF by 14 per cent by 2025 and 33 per cent by 2030 compared with the 'business as usual' scenario in each target year. The Party also clarified that the base year 2015 is the starting point of projecting the 'business as usual' scenario. The TERT recommends that the Party report correct information for the reference levels for the NDC, for example by reporting the total national GHG emissions excluding LULUCF under the 'business as usual' scenario (in kt CO_2 eq) in the target years 2025 and 2030 in the BTR and CTF table 4.
10.2	Specified in paragraphs 68 and 77(a)(ii)(iii) of the MPGs	The NDC implementation period is reported as 2020–2030 in the Party's BTR1 (table 1, p.124) and CTF table 4. However, Solomon Islands reported the most recent information available for the selected indicator for tracking NDC progress for 2021–2022, with no data reported for 2020. During the review, Solomon Islands acknowledged that the NDC implementation period covers 2020–2030. However, the information presented in CTF table 4 was intended to provide the most recent available information on the selected indicator at the time of preparing the BTR1. Consequently, values for 2021–2022 were reported; 2020 was not included, but this was not intended to exclude the first year of the NDC implementation period. The Party noted that it will consider including

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		a complete time series of values for the selected indicator, beginning from 2020 where data are available, in future inventory submissions to provide a more comprehensive picture of progress throughout the NDC implementation period. The TERT recommends that the Party report the most recent information available for the selected indicator for tracking NDC progress for each year of the NDC implementation period in its BTR and CTF table 4.
10.3	Specified in paragraph 69 of the MPGs	Solomon Islands reported "FX" in CTF table 4 for progress towards the NDC targets, which is determined by comparing the most recent information for each selected indicator with the reference point(s), level(s), baseline(s), base year(s) or starting point(s). However, the MPGs do not provide any flexibility in this regard. During the review, the Party clarified that "FX" was reported in CTF table 4 because, although recent values for the selected indicator were available, a quantitative assessment of progress towards the NDC by comparing these values against the reference level had not been undertaken at the time of preparing the BTR1. Current limitations in relation to data availability, analytical methodologies and technical capacity prevented a robust assessment of progress. The Party stated that, as national MRV systems and data management frameworks are strengthened, it intends to undertake quantitative assessments of progress towards the NDC targets against the reference levels and to report this information in future inventory submissions. The TERT recommends that the Party compare the most recent value available for the selected indicator of NDC progress (i.e. the total national GHG emissions excluding LULUCF in the most recent year) with the reference levels (i.e. 'business as usual' level for each target year) and report them in the BTR and CTF table 4.
10.4	Specified in paragraphs 74–75 of the MPGs	The Party provided the information referred to in paragraphs 74–75 of the MPGs in the BTR1 and CTF table 3. For example, the 'business as usual' projections are based on extrapolation of fossil fuel consumption data from 1994 to 2010, the model used is reported as an Excel-based statistical model using the applicable guidance for estimating projected GHG emissions, and the IPCC guidelines used are reported as the 2006 IPCC Guidelines, the IPCC *Good Practice Guidance and Uncertainty Management in National GHG Inventory* and the IPCC *Good Practice Guideline for Land Use, Land-Use Change, and Forestry*. However, the information does not include a clear description of the methodology and/or accounting approach used for estimating the GHG emission levels of the target years for the NDC, the construction of the 'business as usual' scenario or the indicator (national GHG emissions excluding LULUCF), including key parameters, assumptions, definitions, data sources, models and metrics used. During the review, Solomon Islands explained that the accounting approach used in relation to the NDC targets is to compare the total national GHG emissions excluding LULUCF in kt CO_2 eq and the 'business as usual' value for each target year (i.e. 2025 and 2030). Also, the Party clarified that the values for total national GHG emissions excluding LULUCF according to the 'business as usual' projections and how they were estimated, including assumptions, were not archived and there is no information on them. Further, the Party explained that the indicator is a consistent value of total national GHG emissions excluding LULUCF reported in the GHG inventory, which covers the energy, IPPU, agriculture and waste sectors, and CO_2, CH_4, N_2O and fluorinated gases covered in the IPPU sector. The TERT recommends that the Party provide, in relation to the NDC, a clear explanation of the methodology or accounting approach used for estimating the GHG emissions levels of the target years for the NDC, the construction of the 'business as usual' scenario and the progress indicator (national GHG emissions excluding LULUCF), including key parameters, assumptions, definitions, data sources, models and metrics used, in the BTR and the 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 80 of the MPGs	The Party provided information on PaMs in CTF table 5, listing 18 policies and strategies, and table 4 of the BTR1 (p.132), outlining 22 individual mitigation actions in the energy sector. Furthermore, in the narrative part of the BTR1 (pp.127–132) Solomon Islands described seven overarching strategies and policies, namely the LT-LEDS, the National Development Strategy 2016–2035, the National Climate Change Policy 2023–2032, the National Energy Policy for 2014 and for 2019, the National Forest Policy 2020 and the Renewable Energy Roadmap 2021, most of which were included in the list of PaMs in CTF table 5. However, no information was reported in the BTR1 on how the mitigation actions in BTR1 table 4 correspond to the policies and strategies listed in CTF table 5, how it was determined which policies and strategies to include in CTF table 5 and/or the narrative part of the BTR1, or whether a focus on reporting the PaMs with the most significant GHG emission mitigation impact was considered. In addition, the Party reported steps identified in the LT-LEDS to transition Solomon Islands to a low-emission, equitable growth and resilient pathway in table 3 of the BTR1 (p.128), and a list of mitigation and adaptation opportunities identified as part of the NDC investment plan in table 5 of the BTR1 (p.136), without indicating whether these are early project ideas or PaMs that can be considered among the PaMs that support the implementation and achievement of the NDC. During the review, the Party clarified that the tables serve different purposes, with BTR1 table 4 focusing on sectoral analysis of PaMs and CTF table 5 on implementation-based mitigation tracking. The Party further clarified that the PaMs listed in BTR1 tables 3 and 5 are a list of potential PaMs, some for which feasibility studies have been conducted and which are being considered for inclusion in future planning. The TERT recommends that the Party provide in its BTR and CTF table 5 consistent information on its PaMs, focusing on those that have the most significant impact on GHG emissions or removals and those affecting key categories in the national GHG inventory, including any linkages and differences between the sectoral mitigation actions and the policies and strategies reported in the BTR, and the PaMs reported in CTF table 5.
11.2	Specified in paragraph 81 of the MPGs	The Party reported in CTF table 5 actions and PaMs under sectors such as cross-cutting, mitigation, biodiversity and maritime ecosystems rather than the sectors specified in the MPGs (i.e. energy, transport, IPPU, agriculture, LULUCF, waste management and other). During the review, the Party explained that it did not prioritize reporting actions and PaMs according to the MPGs, as the MPGs specify reporting “to the extent possible”. However, the Party indicated that efforts are under way to align future reporting on PaMs more closely with the prescribed sectoral structure. The TERT recommends that the Party organize the reporting of actions and PaMs by sector as specified in the MPGs (i.e. energy, transport, IPPU, agriculture, LULUCF, waste management and other), to the extent possible.
11.3	Specified in paragraph 83(a) and (c) of the MPGs	The Party did not report information on the cost associated with each action, policy or measure. Furthermore, it did not report how the mitigation actions interact with each other, as appropriate. During the review, the Party explained that the non-reporting of mitigation action costs and interactions was due to data and analytical constraints. It noted the need to develop appropriate assessment approaches to enable reporting on these aspects in future inventory submissions. The TERT encourages the Party to provide information for its reported PaMs on costs and interactions between PaMs, as appropriate.
11.4	Specified in paragraph 85 in combination with paragraph 6 of the MPGs	The Party applied the flexibility provided for and did not report expected or achieved GHG emission reduction estimates for its PaMs in CTF table 5. The TERT noted, however, that the Party provided expected GHG emission reduction estimates for mitigation actions in table 4 of the BTR1 (pp.132–135).

ID#	*Reporting requirement*	*Description of area of improvement with recommendation or encouragement*
		During the review, the Party explained that the reporting of the notation key "FX" in CTF table 5 for expected and achieved GHG emission reductions for actions and PaMs was due to the limited availability of the quantitative data and modelling tools needed to estimate mitigation impacts. The Party indicated that addressing this issue will require the adoption of an integrated MRV system for monitoring and reporting quantitative information on the impacts of mitigation PaMs, together with improvements to data-collection systems and analytical and modelling capacity at the national level. Noting the flexibility applied by the Party, the TERT encourages the Party to report, to the extent possible, estimates of expected and achieved GHG emission reductions for its PaMs in CTF table 5.
11.5	Specified in paragraph 88 of the MPGs	The Party did not explicitly report policies, actions or measures for addressing GHG emissions from international transport. However, the TERT notes that LT-LEDS may include measures related to the decarbonization of aviation and maritime transport. During the review, the Party clarified that its LT-LEDS includes mitigation measures related to renewable energy, transport decarbonization, energy efficiency, low-carbon technologies and priority sectors including agriculture and waste. The Party highlighted that efforts are being made to develop measures to improve the efficiency of maritime transport and promote the deployment of zero-emission technologies and infrastructure. It indicated that further information on these measures will be provided in future inventory submissions. The TERT encourages the Party to identify PaMs that influence GHG emissions from international transport, including any relevant elements from its LT-LEDS.
11.6	Specified in paragraph 89 of the MPGs	The Party did not provide information on how its actions and PaMs are modifying long-term trends in GHG emissions and removals. The reported measures appear to focus mainly on adaptation, economic development and sectoral sustainability, particularly for agriculture and energy, rather than on mitigation impacts. During the review, the Party acknowledged the importance of reporting information on how its actions and PaMs are expected to influence long-term trends in GHG emissions and removals. It explained that the current reporting focuses on qualitative impacts owing to the limited quantitative assessment undertaken and modelling capacity at the national level. The Party highlighted the need to incorporate such analysis as relevant data availability and analytical tools improve. The TERT encourages the Party to provide information on how its actions and PaMs are modifying longer-term trends in GHG emissions and removals, to the extent possible.
11.7	Specified in paragraph 90 of the MPGs	The Party did not provide information on the economic and social impacts of its response measures, such as their potential effects on economic activity, employment and livelihoods and other social outcomes. During the review, the Party explained that a detailed assessment of the socioeconomic impacts of its actions and PaMs has not yet been undertaken owing to technical capacity and financial constraints. The Party highlighted its need to develop appropriate methodologies for assessing such impacts on livelihoods, employment and economic activity for inclusion in future inventory submissions. The TERT encourages the Party to provide detailed information, to the extent possible, on the assessment of the economic and social impacts of its 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 96(c) in conjunction with paragraph 102 of the MPGs	The Party reported in its BTR1 (p.137) a brief explanation of the emissions scenarios used for its projections, including 'business as usual' or 'without measures', WM and WAM. However, it did not transparently provide information on the assumptions on PaMs included in the WM and WAM projections. During the review, the Party explained that the WM scenario reflects the implementation of mitigation actions and policies that the Party already committed to in the NDC (submitted in 2021), and existing national strategies, particularly in the energy sector. The mitigation actions, policies and strategies include increasing the share of renewable energy in electricity generation, improving energy efficiency, expanding access to electricity through renewable energy systems and implementing actions identified in the Renewable Energy Roadmap. Noting that Solomon Islands applied the flexibility provided for in paragraph 102 of the MPGs to report a less detailed methodology for its projections, the TERT encourages the Party to report the basic assumptions on PaMs included in the WM and WAM projections.

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	Specified in paragraphs 20, 79, 80, 91 and 101 of the MPGs	Training for GHG inventory compilers on using the IPCC inventory software and the GHG inventory tool for reporting under the enhanced transparency framework under the Paris Agreement, and tracking progress in implementing and achieving the NDC (high priority)
NIR – general		
2.G_CBN.1	Specified in paragraph 18 of the MPGs	Building capacity to develop legal and procedural arrangements for the continued estimation, compilation and timely reporting of the GHG inventory, including legal mandates for data providers, effective policies and procedures to facilitate collaboration, and standard operating procedures for reporting (high priority)

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

ID#	*Reporting requirement*	*Area in which capacity-building is needed*
2.G_CBN.2	Specified in paragraph 19 of the MPGs	Enhancing institutional arrangements and national capacity for developing, managing and carrying out all activities in the GHG inventory cycle (e.g. allocating and planning the different tasks involved in the GHG inventory preparation, collecting AD, calculating uncertainty, performing recalculations, implementing QA/QC procedures, performing key category analysis, implementing the national inventory improvement plan, and approving and archiving the inventory) and institutionalizing focal points for each inventory sector across all institutions involved in data collection for the GHG inventory (high priority)
2.G_CBN.3	Specified in paragraph 19 of the MPGs	Establishing a permanent national GHG inventory management system that is cohesive with the national integrated MRV platform (medium priority)
2.G_CBN.4[a]	Specified in paragraphs 35 and 46 of the MPGs	Strengthening institutional arrangements and technical capacity for developing and implementing general and category-specific QA/QC tools and procedures, including standardized QA/QC checklists and manuals, more systematic internal reviews and basic peer reviews, and providing training to inventory compilers as well as experts contributing to the data collection for the GHG inventory in order to enhance the implementation of QA/QC (high priority)
2.G_CBN.5[a]	Specified in paragraph 57 of the MPGs	Strengthening institutional arrangements and technical capacity for collecting AD – prioritizing AD for key categories – from relevant national data providers and for applying methodologies for ensuring time-series consistency, including gap-filling and estimating missing historical data, to support the development of a complete national GHG inventory (high priority)
NIR – energy		
3.E_CBN.1	Specified in paragraphs 18–19 of the MPGs	Strengthen institutional arrangements and enhancing data-sharing mechanisms and collaboration among the Climate Change Division of the MECDM, the Ministry of Mines, Energy and Rural Electrification, Solomon Power, Customs and Excise Division of the Ministry of Finance and Treasury, the National Statistics Office, fuel importers, provincial authorities and the maritime or port authority in order to establish a sustainable institutional system for annual inventory data collection and reporting (high priority)
3.E_CBN.2	Specified in paragraph 21 of the MPGs	Enhancing the capacity of the National Statistics Office, local government units and community-based organizations to collect, analyse and report data on household energy use (i.e. fuelwood combustion for category A.1.4 other sectors), including by developing survey instruments, applying sampling techniques and applying socioeconomic variables to improve data accuracy (medium priority)
3.E_CBN.3	Specified in paragraph 26 of the MPGs	Enhancing the technical capacity of stakeholders involved in the collection of AD, net calorific values and other parameters, and the use of EFs – with a particular focus on tracking evolving energy system characteristics, including distributed renewable electricity generation, battery storage, transport electrification and off-grid energy projects – with a view to ensuring the completeness of the energy balance data and a consistent time series for all energy subsectors (high priority)
3.E_CBN.4	Specified in paragraphs 26 and 39 of the MPGs	Improving the evidence base and time-series consistency for the allocation of fuel consumption across transport modes, commercial, institutional and residential buildings, and manufacturing industries and construction, including through the collection of AD and the application of higher-tier methods for estimating associated GHG emissions (medium priority)
NIR – IPPU		
NA	NA	No capacity-building needs identified

ID#	*Reporting requirement*	*Area in which capacity-building is needed*
NIR – agriculture		
5.A_CBN.1	Specified in paragraph 24 of the MPGs	Developing country-specific EFs for key categories at the most disaggregated level where feasible (medium priority)
5.A_CBN.2	Specified in paragraph 54 of the MPGs	Strengthen institutional arrangements with the Ministry of Agriculture and Livestock Development, provincial agricultural offices and the National Statistics Office in order to improve livestock statistics (e.g. by collecting disaggregated AD for key categories, especially cattle and swine populations by type and age), data on fertilizer use, rice production (if applicable), crop residue burning and agricultural soils, and the allocation of manure by manure management system and livestock category(high priority)
NIR – LULUCF		
6.L_CBN.1	Specified in paragraphs 20–21 of the MPGs	Enhancing technical capacity to the existing national forest monitoring system by further integrating a national forest inventory into the system, remote sensing (including satellite imagery), a geographic information system, mangrove and coastal blue carbon monitoring, and enhanced collaboration among the Ministry of Forestry and Research, Ministry of Lands, Housing and Survey, MECDM and provincial governments to support a nationally consistent land representation system, the compilation of annual land-use and land-use change data sets, and the systematic assessment of natural disturbances for the GHG inventory (high priority)
6.L_CBN.2	Specified in paragraphs 23–24 of the MPGs	Strengthening technical capacity to improve estimation of carbon stock changes in the LULUCF sector by applying higher-tier methods and developing country-specific EFs for forests (prioritizing the key land-use category forest land remaining forest land), mangroves and agroforestry (high priority)
NIR – waste		
7.W_CBN.1	Specified in paragraph 21 of the MPGs	Applying tier 2 methods for estimating emissions for the key categories 5.A solid waste disposal on land, by using and expanding on the national waste audit analysis, and 5.D wastewater treatment and discharge, by using IPCC guidance (vol. 5, chaps. 3 and 6) (low priority)
7.W_CBN.2	Specified in paragraphs 28 and 31 of the MPGs	Explaining the methodologies used for the recalculation of emission estimates for category 5.A solid waste disposal on land due to methodological refinements, and use of “NE” for reporting category 5.C incineration and open burning of waste (medium priority)
7.W_CBN.3	Specified in paragraph 40 of the MPGs	Strengthening technical capacity to expand the collection of data on waste, including data on landfill management, waste characterization, wastewater, healthcare waste and open burning practices, beyond Honiara to provincial centres and rural areas, and strengthening coordination between Honiara City Council, provincial governments and water authorities to support these effort (high priority)
Information necessary to track progress in implementing and achieving the NDC under Article 4 of the Paris Agreement		
9_CBN.1	Specified in paragraphs 64–90 of the MPGs	Strengthening understanding of the MPGs, especially the provisions relevant to the description of the NDC and the information necessary for tracking progress in implementing the NDC (high priority)
9_CBN.2	Specified in paragraphs 64–79 of the MPGs	Strengthening technical capacity for operation and maintenance of the national integrated MRV system for annual NDC tracking, developing indicators for tracking sectoral targets, institutional reporting protocols and data verification procedures, and integrating reporting under the enhanced transparency framework under the Paris Agreement with national development planning and reporting on the Sustainable Development Goals (high priority)

ID#	*Reporting requirement*	*Area in which capacity-building is needed*
11_CBN.1[a]	Specified in paragraph 85 of the MPGs	Enhancing capacity for MRV of mitigation measures and actions in order to track progress in implementing the NDC, including through improved data collection, verification procedures and a tracking framework for ex post evaluation of mitigation policies; conducting cost-effectiveness analysis of PaMs; estimating expected and achieved GHG emissions reductions associated with PaMs; tracking climate finance; and developing standardized methodologies for measuring the mitigation impact of PaMs (high priority)
13_CBN.1	Specified in paragraphs 85, 90 and 94 of the MPGs	Build national capacity to develop robust 'business as usual', WM and WAM scenarios, using modelling tools such as the Low Emissions Analysis Platform, assessing mitigation potential and evaluating economic impacts and co-benefits of PaMs (high priority)
13_CBN.2[a]	Specified in paragraph 102 of the MPGs	Providing information on projections in accordance with paragraphs 93–101 of the MPGs (medium priority)
Information related to climate change impacts and adaptation under Article 7 of the Paris Agreement		
1_CBN.2	Specified in paragraphs 112, 113 and 115 of the MPGs	Monitoring adaptation actions, developing adaptation indicators, measuring adaptation effectiveness, applying vulnerability assessment methodologies, integrating Solomon Islands' integrated vulnerability assessment results into adaptation reporting and collecting data on loss and damage (medium priority)
Information on financial, technology development and transfer, and capacity-building support needed and received under Articles 9–11 of the Paris Agreement		
1_CBN.3	Specified in paragraphs 132 and 134 of the MPGs	Tracking climate finance needed and received, developing national climate finance databases, applying reporting methodologies of the Organisation for Economic Co-operation and Development Development Assistance Committee and the MPGs, and strengthening coordination between the MECDM, the Ministry of Finance and development partners to collect the relevant information for tracking climate finance (low priority)

[a] 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

BTR1 of Solomon Islands. Available at https://unfccc.int/first-biennial-transparency-reports.

BTR1 CTF tables of Solomon Islands. Available at https://unfccc.int/first-biennial-transparency-reports.

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

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

IPCC. 2014. *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. T Hiraishi, T Krug, K Tanabe, et al. (eds.). Geneva: IPCC. Available at https://www.ipcc.ch/publication/2013-supplement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories-wetlands/.

"Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement". Annex to decision 18/CMA.1. FCCC/PA/CMA/2018/3/Add.2. Available at https://unfccc.int/documents/184700.

NDC of Solomon Islands. Available at https://unfccc.int/NDCREG.

Solomon Islands Government. 2018. *Solomon Islands National Forest Reference Level*. Available at https://redd.unfccc.int/files/2019_submission_frel_solomon_islands.pdf.

B. Additional information provided by the Party

Responses to questions during the review were received from Henry Tufah and David Tufi (MECDM), including additional material. The following reference was provided by Solomon Islands and may not conform to UNFCCC editorial style as it has been reproduced as received:

Secretariat of the Pacific Regional Environment Programme, *Solomon Islands National Waste Audit Analysis Report, 2023*. Available at https://library.sprep.org/project/term/11197.