



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

Addendum

Summary

This addendum to the report on the technical expert review of the first biennial transparency report of New Zealand, 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. The review took place from 15 to 19 September 2025 in Wellington.

* 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	<i>2006 IPCC Guidelines for National Greenhouse Gas Inventories</i>
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
Frac _{GASF}	fraction of synthetic fertilizer nitrogen applied to soils that volatilizes as ammonia and nitrogen oxides
Frac _{GASF-UI}	fraction of synthetic fertilizer coated in urease inhibitors emitted as ammonia or nitrogen oxides
Frac _{GASM}	fraction of applied organic nitrogen fertilizer materials and of urine and dung nitrogen deposited by grazing animals that volatilizes as ammonia and nitrogen oxides
GHG	greenhouse gas
HFC	hydrofluorocarbon
HWP	harvested wood products
IE	included elsewhere
IPCC	Intergovernmental Panel on Climate Change
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 ₂ O	nitrous oxide
NA	not applicable
NDC	nationally determined contribution
NE	not estimated
Nex	nitrogen excretion rate
NF ₃	nitrogen trifluoride
NID	national inventory document
NO	not occurring
ODS	ozone-depleting substance(s)
PFC	perfluorocarbon
SF ₆	sulfur hexafluoride
TERT	technical expert review team

Areas of improvement¹ identified during the technical expert review of the Party's first biennial transparency report

Tables 1–20 present the results of the review of the consistency with the MPGs² of the information submitted by New Zealand in its BTR1. All recommendations and encouragements contained in the tables are for the next BTR or national inventory report, unless otherwise specified.

A. General reporting provisions

Table 1

Areas of improvement relating to general reporting provisions

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

B. Greenhouse gas emissions and removals

Table 2

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

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

Table 3

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
3.E.1	Specified in paragraph 31 of the MPGs 1. General (energy sector) – CO ₂ , CH ₄ and N ₂ O	<p>In the NID (p.27) New Zealand reported GHG emissions for subcategories 1.A.3.b.ii–iv road transportation other than cars for all fuels other than gasoline and diesel as “IE”. By contrast, in CRT 1.A(a)s3, AD and emissions for these subcategories and fuels were reported either as values or as “NO”. In addition, as explained in the NID (p.96), emissions for subcategory 1.B.1.a.1.iii abandoned underground mines do not occur on the country's North Island, and a study to determine such emissions for the South Island is ongoing; however, in CRT 1.B.1, the Party reported “NE” for AD and “NO” for CH₄ emissions for the subcategory.</p> <p>During the review, New Zealand explained that the text in the NID (table 1.7.2) is inaccurate and the notation keys reported in the CRT for the road transportation subcategories should be considered authoritative. Regarding abandoned underground mines, the Party explained that it had previously reported “NE” for both CO₂ and CH₄ emissions; however, in the 2021 inventory submission under the Convention, the notation key reported for CO₂ emissions was changed to “NO” following a recommendation of the expert review team. At the same time, without any recorded official intention, the notation key reported for CH₄ emissions was also changed to “NO”. New Zealand clarified that, as the study concerning the emissions for the South Island is ongoing, it may report “NE” for CH₄ emissions for this subcategory in its next inventory submission.</p> <p>The TERT recommends that New Zealand apply the appropriate notation keys for reporting GHG emissions for subcategories 1.A.3.b.ii–iv road transportation other than cars for all fuels other than gasoline and diesel and CH₄ emissions for subcategory 1.B.1.a.1.iii abandoned underground mines, and ensure that the same notation keys are reported consistently in the CRTs and the NID.</p>
3.E.2	Specified in paragraph 31 of the MPGs	New Zealand reported GHG emission estimates for other fossil fuels as “NE” and “NO” under the reference approach in CRTs 1.A(b) and 1.A(c).

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.

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
	Fuel combustion – reference approach – other fossil fuels – CO ₂	<p>During the review, the Party explained that subcategory 1.A.3.d other fossil fuels includes coal, and data on the production of coal are already included in the reference approach under solid fuels. Therefore, its emission estimates should be reported as “IE” in the reference approach.</p> <p>The TERT recommends that New Zealand apply the appropriate notation keys for reporting GHG emission estimates for other fossil fuels under the reference approach (e.g. “IE” if such emissions are included under other fuel types).</p>
3.E.3	Specified in paragraph 36 of the MPGs Fuel combustion – reference approach – other fossil fuels – CO ₂	<p>New Zealand reported GHG emissions from fuel combustion for other fossil fuels under the sectoral approach, while notation keys were used under the reference approach, resulting in a 100 per cent difference between the two methods (CRT 1.A(c)). In the NID, New Zealand explained that “other fossil fuels” included waste oil, tyre-derived fuel and the fossil fraction of biodiesel.</p> <p>During the review, New Zealand clarified that “other fossil fuels” comprise minor alternative fuels not covered in the national energy balance. For example, data on waste oil and used tyres are collected directly from companies that submit returns to the New Zealand Emissions Trading Scheme and used for estimates derived using a sectoral approach. As no data on the production of these fuels exist and supply data are not included in the national energy balance, a notation key was applied for the reference approach. In addition, New Zealand explained that coal use reported under “other fossil fuels” in subcategory 1.A.3.d of the sectoral approach was accounted for under “solid fuels” in the reference approach. Furthermore, category 1.A.4 of the sectoral approach also includes fireworks, which was not captured in the national energy balance.</p> <p>The TERT encourages the Party to explore the possibility of collecting data sourced from national statistics for estimating CO₂ emissions from combustion of other fossil fuels and to calculate the effects on the estimates made using the reference approach and on the difference in estimates between the reference and sectoral approaches. The TERT notes that improved availability of apparent consumption data for this fuel type could reduce the difference between estimates made using the two approaches.</p>

Table 4

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
4.I.1	Specified in paragraph 29 of the MPGs 2. General (industrial processes and product use) – HFCs	<p>The Party reported numerical values for uncertainties for subcategories 2.F.2 foam-blowing agents, 2.F.3 fire protection and 2.F.4 aerosols in the NID (section 4.7.3, table 4.7.4). However, the Party did not report qualitative information explaining the uncertainties for these subcategories.</p> <p>During the review, the Party provided additional qualitative information discussing the quantitative uncertainties reported, explaining that it uses country-specific and IPCC default EF uncertainties.</p> <p>The TERT recommends that the Party report the qualitative information, such as that provided during the review, to explain the respective uncertainties reported for subcategories 2.F.2 foam-blowing agents, 2.F.3 fire protection and 2.F.4 aerosols in the NID.</p>
4.I.2	Specified in paragraph 40 of the MPGs 2.B.9 Fluorochemical production – HFCs, PFCs, SF ₆ and NF ₃	<p>The Party reported in section 4.7.1 (description for category 2.F product uses as substitutes for ODS) of the NID that no HFCs or PFCs are manufactured in New Zealand, but this should have been reported in section 4.3 (on category 2.B chemical industry), which is the appropriate section for reporting on subcategory 2.B.9 fluorochemical production. Additionally, the Party did not report information on SF₆ or NF₃ production in the NID.</p> <p>During the review, the Party explained that SF₆ and NF₃ have never been manufactured in New Zealand.</p> <p>The TERT recommends that the Party explicitly report that no fluorinated gases have been manufactured in New Zealand in the section of the NID on category 2.B chemical industry.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
4.I.3	Specified in paragraph 40 of the MPGs 2.F.5 Solvents – HFCs and PFCs	<p>The Party did not report information on emissions for subcategory 2.F.5 solvents in section 4.7 of the NID (on category 2.F product uses as substitutes for ODS).</p> <p>During the review, the Party explained that checks with bulk HFC, PFC and solvent suppliers and the New Zealand Chemical Industry Council have indicated that there has never been any known use of solvents containing HFCs or PFCs in New Zealand.</p> <p>The TERT recommends that the Party transparently report that there is no use of solvents in New Zealand in the section of the NID on category 2.F product uses as substitutes for ODS.</p>

Table 5

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
5.A.1	Specified in paragraphs 21 and 39 of the MPGs 3.A.1 Cattle – CH ₄	<p>As reported in its NID, New Zealand used a lactation length of six months and a milk yield of 800 l/year/breeding beef cow and heifer for estimating CH₄ emissions for subcategory 3.A.1.b enteric fermentation for non-dairy cattle. The TERT noted that these values were derived from out-of-date data sources (e.g. a 2003 report by Clark et al. referencing Ministry of Agriculture and Forestry data from 1980). The Party did not justify using these values in the NID. The TERT noted that, as per the 2006 IPCC Guidelines (vol. 4, chap. 10), the parameters used to estimate CH₄ emissions from enteric fermentation using higher-tier methods should be based on current practices and livestock characteristics. This ensures that the emissions inventory is accurate and reflects the specific conditions in a country or region.</p> <p>During the review, the Party explained that there has been no new investigation to reassess or update the assumed milk yield and lactation length for beef cattle. It reiterated that the current estimates are based on historical values (a yield of 800 l milk over a six-month lactation period) derived from a Ministry of Agriculture and Forestry report from 1980 for Angus cows. The Party stated that these parameters have not been prioritized for revision owing to their relatively minor influence on total agricultural emissions. While no updated information has been gathered, the Party indicated that the issue has been noted for future methodological improvements and that quality assurance/quality control procedures are in place to ensure overall methodological consistency for categories 3.A enteric fermentation and 3.B manure management.</p> <p>The TERT recommends that the Party review the relevance and representativeness of the assumed milk yield and lactation length parameters for breeding beef cows and heifers, and update the parameters as necessary using national data or other sources (e.g. literature, expert judgment or regional values) as relevant. The TERT also recommends that the Party clearly document in the NID the rationale for selecting the milk yield and lactation length parameters for breeding beef cows, in accordance with the 2006 IPCC Guidelines (vol. 4, chap. 10), and include descriptions and assumptions, as well as references for sources of information used, related to methodology.</p>
5.A.2	Specified in paragraph 39 of the MPGs 3.B.1 Cattle – N ₂ O	<p>The Nex values for dairy cattle for 2022 that the Party reported in the NID (table 5.3.3) and CRT 3.B(b) are different (113.9 and 118.53 kg N/head/year respectively).</p> <p>During the review, the Party explained that emissions from dairy cattle are calculated on a subnational (regional) basis, and unique Nex values are assigned to each region. Emissions are first calculated at the regional level and then aggregated to the national level. The value reported in the NID reflects the mean regional value, while the value in the CRT was derived using a national-level assumption. Furthermore, the Party clarified that neither of these values (113.9 or 118.53 kg N/head/year) was used in the actual emission calculations. Instead, region-specific Nex values were used to estimate emissions per manure management system.</p> <p>The TERT recommends that the Party clearly explain in the NID why the Nex values reported in the NID and CRT 3.B(b) are different; clarify in the NID and the CRT (e.g. in an explanatory note or footnote) that these representative values are not used in the emission calculations; and consider providing more detailed Nex</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		values (by region and subcategory) in either the NID or other supporting documentation.
5.A.3	Specified in paragraph 39 of the MPGs 3.B.5 Indirect N ₂ O emissions – N ₂ O	<p>In CRT 3.B(b), New Zealand reported indirect N₂O emissions for subcategory 3.B.5 manure management (leaching and run-off) as “NE”. In the NID it explained that such emissions are considered insignificant owing to a lack of default estimation methods and country-specific EFs. However, the TERT noted that the Party reported a value of 1.81 kt CO₂ eq for subcategory 3.D.2.b indirect N₂O emissions from managed soils (N leaching and run-off), while noting in the NID (p.192) that indirect N₂O emissions from manure management are included under subcategory 3.D.2.b direct and indirect N₂O emissions from agricultural soils.</p> <p>During the review, the Party explained that indirect N₂O emissions from manure applied to soils are reported under subcategory 3.D.2.b direct and indirect N₂O emissions from agricultural soils. By contrast, emissions from actively managed manure systems (e.g. anaerobic lagoons) were not estimated owing to limited data and lack of country-specific EFs. The Party noted that N leaching and run-off from such systems is likely insignificant in New Zealand and cited an expert judgment to support this assumption.</p> <p>The TERT recommends that the Party clarify in the NID and CRT 3.D that subcategory 3.D.2.b indirect N₂O emissions from managed soils (N leaching and run-off) does not include indirect N₂O emissions from actively managed manure systems.</p>
5.A.4	Specified in paragraphs 22 and 39 of the MPGs 3.D.2.a Atmospheric deposition – N ₂ O	<p>In CRT 3.D, New Zealand reported indirect N₂O emissions from volatilization under subcategory 3.D.2.a indirect N₂O emissions from managed soils – atmospheric deposition as 2.81 kt N₂O–N, and volatilized N from agricultural inputs of N as 178,922.75 t N/year. However, the TERT calculated these values using the parameters provided in the NID and CRT 3.D as 2.91 kt N₂O–N and 185,223 t N/year respectively.</p> <p>During the review, the Party explained that the discrepancy between the values reported in the CRT and those calculated by the TERT is due to the incorporation of the mitigation impact of urease inhibitors into the reported values. Approximately 55.1 per cent of urea fertilizer applied in 2022 included urease inhibitors, resulting in reduced volatilization and indirect N₂O emissions. The Party quantified this mitigation effect at approximately 0.1 kt N₂O (or nearly 26.2 kt CO₂ eq). The Party explained that supporting details are provided in the NID, including the values for Frac_{GASF} (0.1), Frac_{GASF-UI} (0.055) and Frac_{GASM} (0.1), and the application of a value for EF₄ (0.010). The Party provided further information on how it calculated the reported estimates.</p> <p>The TERT recommends that the Party provide transparent information in the NID on how mitigation technologies, such as urease inhibitors, are incorporated into the estimates reported in the CRT for subcategory 3.D.2.a indirect N₂O emissions from managed soils – atmospheric deposition.</p>

Table 6

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
6.L.1	Specified in paragraphs 21, 35 and 39 of the MPGs 4. General (LULUCF) – all carbon pools – CO ₂ , CH ₄ and N ₂ O	<p>The Party used land-use maps for 2012, 2016 and 2020 to generate AD on land use and land-use change across the time series. In the NID (annex A5.2.1), the Party presented an error matrix derived using a rigorous independent accuracy assessment of the 2012 land-use map. However, the Party did not carry out a statistically robust accuracy assessment of the 2016 and 2020 maps. The TERT noted that the lack of a consistent and statistically rigorous validation of each land-use map used to derive AD on land use and land-use change across the time series introduces an unquantified uncertainty into the land-use change time series. The TERT also noted that, as per the 2006 IPCC Guidelines (vol. 4, chap. 3, annex 3A.3.3), it is good practice to assess the potential impact of misclassifying land-use categories using ground truth data. The Party reported in the NID (annex A5.2.1, p.67) that many areas of grassland with woody biomass were not captured, leading to an underestimation of its total extent for the 2012 land-use map. The TERT noted that</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
6.L.2	Specified in paragraphs 35 and 39 of the MPGs 4. General (LULUCF) – all carbon pools – CO ₂ , CH ₄ and N ₂ O	<p>this implies that this land-use category was undermapped (i.e. its areas were underestimated). Furthermore, the Party did not clarify whether this bias has been quantified and corrected in the 2016 and 2020 maps.</p> <p>During the review, New Zealand explained that the accuracy of the 2016 and 2020 land-use maps was not assessed owing to lack of funding. However, an accuracy assessment of the 2020 land-use map will be completed in the current financial year (2025–2026). The Party further explained that grassland with woody biomass is difficult to map and assess because it includes a wide variety of vegetation, such as sparse shade trees in grassland, mixed shrubland and grassland, and continuous shrubland cover. The extent of these areas is manually mapped and many challenges arise in creating an appropriate assessment framework for them. Modern systematic mapping techniques and vegetation height data offer promise for improving the accuracy and repeatability of the mapping of this class of vegetation when the 2025 land-use map is produced in 2026–2027.</p> <p>The TERT recommends that the Party assess the accuracy of all the land-use maps used for generating AD on land use and land-use change (e.g. the 2016 and 2020 maps), and that it use the results of these assessments to correct any biases in land classification. The TERT also recommends that the Party include transparent information in the NID on all such accuracy assessments of land-use maps. The TERT encourages the Party to include such assessments in the sector-specific quality control procedures.</p> <p>In the NID (annex A5.2.1, p.62) the Party reported the successful use of a deep learning model to identify and correct a significant area (8,600 ha) of misclassified pre-1990 exotic forest. The Party further reported that the deep learning model was trained on the existing 2016 land-use map, but did not clarify how it validated the model predictions before implementing the changes for the whole time series; how it confirmed that there were no other land-use classes (e.g. indigenous forests, wetlands) that may also be persistently misclassified in the unchanged portions of the map; and how it ensured that the model was not learning from the misclassification and simply reinforcing existing biases in the 2016 map.</p> <p>During the review, the Party clarified that all areas of possibly misclassified exotic forest were confirmed in Sentinel-2 imagery and current aerial imagery. The Party explained that, while the final output yielded useful areas of missed forest, it also generated many false positives and areas of uncertain land cover (744 valid areas of missed forest from an initial target set of 5,698). For this reason, manual checking of the output was a crucial step in using the mapping derived from this experiment. The Party further explained that, if there were simple mapping biases within the land-cover map used for the training then, to a certain extent, these biases would be trained into the model. However, given the amount of manual mapping in the land-use matrix, particularly of new planting areas, it is more likely that the model was trained on a wide range of valid representations and errors in forest mapping. A key requirement of the deep learning approach was to not overtrain the model, in which case the predicted map would faithfully reproduce the input map. The Party clarified that the deep learning approach showed the most promise for forest mapping. Accuracy for mapping grassland and wetlands was considerably lower. Wetland mapping is periodically corrected using independent mapping completed by regional councils. Areas of all land-use classes are cross-compared with the national land-cover map at regular intervals to identify persistent errors in the land-use matrix map series.</p> <p>The TERT recommends that the Party:</p> <ul style="list-style-type: none"> (a) Clearly document the robust validation protocol for any machine learning-based corrections to the land-use matrix used to derive the AD on land use and land-use change and apply it before the model results are integrated into the estimations; (b) Include transparent information in the NID on the strategies employed to avoid any biases when using an existing land-use map as a training source (i.e. how the model identifies actual errors rather than reinforcing existing biases from an earlier map).
6.L.3	Specified in paragraphs 26–28 and 57 of the MPGs	The Party reported in the NID (annex A5.2.5, p.98) that the total harvested and deforested forest area (“destocking area”) for all planted forest (both pre-1990 and post-1989) for 1990–2012 was based on National Exotic Forest Description survey

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
4. General (LULUCF) – all pools – CO ₂ , CH ₄ and N ₂ O	<p>data (adjusted), supplemented by mapped deforestation data, whereas the total destocking area for 2013–2022 was based on data from a model that combines yield tables, age profiles and roundwood volume statistics. The Party further reported that the change in approach for 2013 onward was due to concerns about the completeness of the National Exotic Forest Description survey. The TERT noted that the shift from a predominantly survey-based method to a model-based method for 2013 onward could potentially lead to a lack of time-series consistency. The Party did not clarify how it maintained consistency when using two methods for data collection, or whether a quantitative analysis was performed to ensure time-series consistency.</p> <p>During the review, the Party explained that the significant methodological shift in its approach to estimating forest destocking area was needed because of the declining reliability of its primary survey data. The Party provided a comparative analysis that revealed that the new model-based method produces estimates that are systematically lower (on average 11 per cent lower) than the old survey-based figures for the same historical period. Annual differences can be as high as 24 per cent. The Party acknowledged that, while the two methods show broadly comparable trends and reasonable agreement on areas for recent years, the change in approach has led to time-series inconsistency. To address this, the Party is planning a full review of its methodology and considering transitioning to a remote sensing approach in future to improve accuracy and consistency.</p> <p>The TERT recommends that the Party report a consistent time series of emissions. The TERT encourages the Party to investigate methods that will enable time-series consistency or use the data-splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, chap. 5.3.3) to derive a consistent time series (e.g. by overlap or extrapolation techniques).</p>	
6.L.4 Specified in paragraphs 21 and 39 of the MPGs 4. General (LULUCF) – soil organic matter – CO ₂	<p>The Party reported in the NID (annex A5.2.4, pp.90–91) that the calibration data set for the soil carbon stock model used to estimate carbon stock changes in mineral soils includes over 1,200 samples for grassland but only 3 for other land. The Party did not clarify if there is a plan to conduct sampling for the underrepresented land uses to address this bias.</p> <p>During the review, the Party explained that it is in the final year of a four-year soil carbon stock improvement research programme, which includes collecting samples for underrepresented land uses for use in the soil carbon stock model. This includes a statistically robust spatial sampling programme to identify candidate sampling points and determine 10 candidate sampling sites on other land, which will be sampled before June 2026. Land under the other land category is being examined to isolate areas of rock and permanent ice using existing spatial layers. It can be safely assumed that these areas will contain no soil carbon and will not need to be sampled to improve the accuracy of the carbon stock value assigned to other land. The remaining other land is also being examined using a statistically robust spatial sampling programme to identify candidate sampling points and determine 10 candidate sampling sites, which will be sampled before June 2026. This will enable the calculation of a more accurate estimate of standard errors within this land-use class. In addition, the number of samples for wetlands will be increased from 24 to 66 to match the number of samples for perennial cropland (the land-use class with the next smallest number of samples). Since the existing wetland samples are clustered, the new locations will account for undersampled regions, giving optimal spatial representation of land-use categories and more accurate estimates of soil carbon stock. The Party has also developed methods to include in the sampling programme more historic and legacy data sets, as well as an updated soil carbon stock model, which has resulted in more sample points for all land-use categories and more accurate soil carbon stock estimates.</p> <p>The TERT recommends that the Party estimate carbon stock changes in mineral soils for relevant land-use categories by enhancing the representation of underrepresented land-use categories in the sampling design to calibrate the soil carbon stock model (e.g. by implementing the four-year soil carbon stock improvement research programme), and include detailed information thereon in the NID.</p>	

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
6.L.5	Specified in paragraph 39 of the MPGs 4.A.1 Forest land remaining forest land – all pools – CO ₂ , CH ₄ and N ₂ O	<p>The Party reported in the NID (annex A5.2.5, p.99) that the harvested area of forest established since 1989 (“post-1989 forest”) reported for 2005–2007 is based on personal communication with industry experts. The Party did not provide the names or affiliations of the experts, the methodology used to derive the estimate, the data on which the estimate is based, or a quantitative assessment of the uncertainty associated with this expert judgment.</p> <p>During the review, the Party explained that the harvest data for post-1989 forest for 2005–2007 were derived using expert elicitation because the activity was limited and involved only one company. The Party clarified that the data were acquired through direct consultation between the Land Use and Carbon Analysis System programme lead and the company, resulting in the reported figures. The Party expressed “reasonably high confidence” in the numbers owing to their direct source.</p> <p>The TERT recommends that the Party document this expert elicitation procedure in accordance with the 2006 IPCC Guidelines (vol. 1, chap. 2, annex 2A.1), including relevant information (e.g. the contact person, the basis of the estimate (e.g. “from internal harvest ledgers”) and a quantitative uncertainty range (e.g. ±20 per cent)).</p>
6.L.6	Specified in paragraphs 26–28 and 57 of the MPGs 4.A.1 Forest land remaining forest land – all pools – CO ₂ , CH ₄ and N ₂ O	<p>The Party reported in the NID (annex A5.2.5, p.99) that it used three methods to determine harvested areas for post-1989 forest within the same time series: expert communication (for 2005–2007); mapping (for 2008–2020); and the application of a harvest fraction model (for 2021 onward). The Party did not clarify why it used different methods or how it maintained time-series consistency. The TERT noted that the use of three methods to derive AD for across the time series resulted in a lack of time-series consistency.</p> <p>During the review, the Party explained that three distinct methods were used to estimate harvest areas in post-1989 forest because each method represents the most reliable data source available for each period as harvest rates are related to forest age class, which is not uniform across the time series. For 2005–2007, the Party relies on expert communication, as one company was harvesting post-1989 forests during that period. For 2008–2020, the Land Use and Carbon Analysis System land-use map is considered the most accurate source and its data form the core of the time series. For 2021 onward, until the next land-use map is completed, a harvest fraction model provides the best available estimate for extrapolation. The Party stated that model-based estimates are replaced with mapped data as they become available for future inventory submissions. However, the TERT noted that using three sources of data may lead to time-series inconsistency.</p> <p>The TERT recommends that the Party report a consistent time series of emissions. The TERT encourages the Party to use the data-splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, chap. 5.3.3) to derive a consistent time series (e.g. overlap or extrapolation).</p>
6.L.7	Specified in paragraph 21 of the MPGs 4.A.1 Forest land remaining forest land – biomass – CO ₂	<p>The Party reported in the NID (annex A5.2.5, p.107) that changes in carbon stock in biomass in natural forest established since 1989 (“post-1989 natural forest”) were estimated by sampling 20 plots for the first time in 2012, and 25 plots (of which 13 had already been measured in 2012) in 2019. The Party did not provide information on how it ensured that these 25 plots are spatially representative of the entire national area of post-1989 natural forest. The TERT noted that, owing to the limited number of plots and the lack of stratification, the sampling design does not reflect the variability of forest types in post-1989 natural forest and their carbon stocks in the country, which may lead to bias in the estimates of carbon stock.</p> <p>During the review, the Party explained that its sampling strategy for post-1989 natural forest was designed to address its small and fragmented nature. As such, a denser 4 km grid was used to increase the potential number of sample plots compared with the 8 km grid used for pre-1990 forest. However, the Party acknowledges that its current plot network is not fully representative. The target sample size was not achieved from the outset owing to land access issues. Furthermore, the Party explicitly stated that the continual expansion of this forest category has rendered the total 25 plots “insufficient”. High internal variability compounds this problem: the category contains fundamentally different forest types (e.g. fast-growing wilding exotic species and slow-growing indigenous species) with vastly different carbon sequestration rates, which a small sample cannot</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
6.L.8	Specified in paragraphs 21 and 39 of the MPGs 4.E Settlements – soil organic matter – CO ₂	<p>reliably capture. The Party recognizes this as a high priority for improvement and has stated that improving the sampling methodology for this category is a priority. There is a funded review planned to determine adequate sample size and with a view to potentially stratifying the category into separate forest types.</p> <p>The TERT recommends that the Party estimate the carbon stock changes in biomass in forest land by revising the sampling method (e.g. by stratifying the post-1989 natural forest category into separate homogeneous forest types, such as native regeneration and wilding exotic species, and increasing the number of sample plots) so that it produces unbiased estimates representing the natural variability with lower uncertainties than current estimates.</p> <p>New Zealand assigned the soil organic carbon stock in mineral soils in “high producing grassland” to the entire settlements land-use category on the assumption that the green spaces within settlements may have elevated carbon. The TERT noted that this assumption may not be valid given that areas classified as settlements comprise impervious surfaces (e.g. buildings, roads, pavements) where the soil carbon stock can reasonably be assumed to be zero. The Party did not provide the percentage of the total area classified as settlements comprising impervious surfaces.</p> <p>During the review, the Party clarified that, although it does not have any immediate plans to sample soil from settlements for its GHG inventory, some 36 sites for urban parks and reserves are part of the State of the Environment reporting on soil quality, which includes carbon percentage measurements for topsoil that could potentially be extrapolated to soil carbon stocks. The Party explained that studies of the percentage of impervious surfaces have been completed for a few larger cities (e.g. by the New Zealand Parliamentary Commissioner for the Environment). The Party clarified that, while it does not have an adequate estimate of the percentage of impervious surfaces across all the areas mapped as settlements, it will develop a more accurate approach to quantifying the soil carbon stock changes occurring with land-use change in settlements following the development of methods to derive an urban green space indicator for New Zealand, including applying machine learning techniques to identify trees, shrubs, grassland and impervious surfaces in aerial imagery. Once a representative sample of towns and cities has been mapped, the Party will incorporate the findings into the carbon model.</p> <p>The TERT recommends that the Party estimate the carbon stock changes in soil organic carbon in settlements by refining its estimation methods (e.g. by modelling the soil organic carbon stocks with the help of percentage-based topsoil data, a national map of impervious surface areas developed using readily available satellite imagery and geospatial techniques (such as geographic indication system analysis), and classified urban land-cover information derived using machine learning). The TERT also recommends that the Party include transparent information in the NID on the method used for estimating carbon stock changes in soil organic carbon in settlements.</p>
6.L.9	Specified in paragraph 21 of the MPGs 4.G HWP – CO ₂	<p>New Zealand estimated carbon stock changes in the HWP pool using half-lives and market proportions for exported wood products that are based on data from a single year (2015). The TERT noted that, because those data are eight years out of date, they do not reflect potentially significant shifts in export market structures, product types or end-use patterns that have likely occurred since then. The Party did not provide details of its plan to update these data.</p> <p>During the review, the Party acknowledged that the data from 2015 used to determine the half-lives and market proportions for exported wood products are out of date and may not reflect significant shifts in export markets or product use. It explained that a proposal to update those data has been submitted for consideration for funding in the next round of the Greenhouse Gas Inventory Research Fund, noting that any plan to incorporate more recent data is contingent upon resource availability.</p> <p>The TERT recommends that the Party estimate carbon stock changes in the HWP pool using half-lives and market proportions for exported wood products that reflect potentially significant shifts in export market structures, product types or end-use patterns (e.g. by developing a detailed, time-bound plan to collect and</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		incorporate recent data on trade and end-use of HWP into the estimation methodology).
6.L.10	Specified in paragraphs 21 and 39 of the MPGs 4(IV) Biomass burning – CH ₄ and N ₂ O	<p>New Zealand reported in the NID that no information is available on the extent of burning associated with deforestation in the country. Therefore, it is assumed that 30 per cent of forest conversions involve burning to clear residues. The Party did not provide the basis for this assumption (e.g. whether it has been validated against any expert opinion or regional data) or explain whether it considered the assumption to remain constant over the time series (1990–2022). In addition, the Party reported in the NID that it used a survey carried out in 2011 to estimate AD (area of land-use change) for controlled burning for forest land. The TERT noted that the study is more than 10 years old and may not reflect current practices.</p> <p>During the review, the Party explained that the assumption that 30 per cent of forest conversions involve burning to clear residues was derived from an estimate that 30 per cent of deforested land was historically used for dairy farming, which typically includes burning residues. However, the Party acknowledged that this figure is out of date, noting that the proportion of deforestation taking place for land conversion for dairy farming has decreased significantly and is projected to be only 4 per cent in 2024–2030. As such, the assumption used likely leads to an overestimate of current burning activity. The Party acknowledged that updated research to determine proportion of forest area subject to controlled burning would be desirable, recognizing that burning practices have declined over time and the current methodology lacks clarity.</p> <p>The TERT recommends that the Party update the information in the NID to clarify its assumptions for how emissions from biomass burning have been estimated and encourages the Party to obtain updated AD on controlled burning activities occurring in forest land conversions to reflect actual practices.</p>

Table 7

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
7.W.1	Specified in paragraphs 39–40 of the MPGs 5.A Solid waste disposal on land – CH ₄	<p>The Party did not include in the NID transparent information on AD, methods and assumptions used for the emission estimation, management practices, categorization of landfills or terminology used in relation to category 5.A solid waste disposal on land.</p> <p>During the review, the Party provided additional information about management practices, including on the solid waste disposal site closing practices and the oxidation factor, the landfill gas recovery equipment used at closed landfills, the method used to estimate CH₄ emissions from solid waste disposal on land, improper categorizations of landfills (landfills under the New Zealand Emissions Trading Scheme and waste levy, and closed landfills), and the terminology used for managed and unmanaged landfills (“municipal” and “non-municipal”).</p> <p>The TERT recommends that the Party provide transparent and comprehensive descriptions of its landfills (covering, e.g., categorization, management practices and status) and the methods and assumptions used (e.g. tiers, models and approaches) to estimate CH₄ emissions from solid waste disposal on land.</p>
7.W.2	Specified in paragraphs 21 and 47 of the MPGs 5.A.3 Uncategorized waste disposal sites – CH ₄	<p>The Party stated in the NID that for 1950–1995 the AD on solid waste disposal for subcategory 5.A.3 uncategorized waste disposal sites were estimated as a fixed fraction (10 per cent) of the difference between the national total of solid waste disposal and the amount of solid waste disposal for sites with landfill gas recovery. For 1995–2010 this fraction is zero, and AD for uncategorized waste disposal sites were reported as “NO” for 2010 onward. However, the TERT noted that the assumptions regarding solid waste disposal for uncategorized landfills that the Party used are not consistent with the definition provided in the 2006 IPCC Guidelines (vol. 5, chap. 3.2.3), which state that landfills should only be identified as uncategorized if a country cannot categorize its solid waste disposal sites into any of the four categories of managed and unmanaged solid waste disposal sites listed in those Guidelines (vol. 5, chap. 3.2.3, table 3.1). The NID does not contain transparent information on the assumptions regarding uncategorized waste disposal sites.</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
7.W.3	Specified in paragraphs 31, 45 and 47 of the MPGs 5.B.2 Anaerobic digestion at biogas facilities – CH ₄ and N ₂ O	<p>During the review, the Party explained its categorization of solid waste disposal sites and its assumption that uncategorized landfills have not been used since 2010 owing to a regulation banning such landfills. However, they still generate CH₄ emissions.</p> <p>The TERT recommends that the Party ensure that its definition of uncategorized solid waste disposal sites is consistent with the definition provided in the 2006 IPCC Guidelines (vol. 5, chap. 3.2.3, table 3.1), and include transparent information on the categorization of solid waste disposal sites in the NID.</p> <p>The Party reported CH₄ and N₂O emissions for subcategory 5.B.2 anaerobic digestion at biogas facilities as “NE” and “NO” respectively, and the AD for both subcategories as “NE”.</p> <p>During the review, the Party explained that both notation keys are incorrect and should be changed in the next inventory submission to a quantitative estimate for CH₄ emissions and “NE” for N₂O emissions. This is as per the default assumption that N₂O emissions from anaerobic digestion at biogas facilities are negligible from the 2006 IPCC Guidelines (vol. 5, chap. 4.1.3, table 4.1).</p> <p>The TERT recommends that the Party report quantitative estimates for CH₄ emissions for subcategory 5.B.2 anaerobic digestion at biogas facilities and a notation key (e.g. “NE”) for N₂O emissions that is in line with the 2006 IPCC Guidelines.</p>
7.W.4	Specified in paragraph 31 of the MPGs 5.C Incineration and open burning of waste – CH ₄ and N ₂ O	<p>The Party stated in the NID that there is no incineration of municipal solid waste in New Zealand. However, it reported CH₄ and N₂O emissions for subcategory 5.C.2.b.i incineration of municipal solid waste as “NE” instead of “NO” in CRT 5.B.</p> <p>During the review, the Party acknowledged the error and explained that the incorrect notation key was used because the categorization was changed during the transition from using the common reporting format tables to the CRTs.</p> <p>The TERT recommends that the Party report emissions as “NO” for subcategory 5.C.1.b.i incineration of municipal solid waste.</p>
7.W.5	Specified in paragraphs 31, 45 and 47 of the MPGs 5.C.2 Open burning of waste – CO ₂ , CH ₄ and N ₂ O	<p>The Party reported in the NID that emissions for subcategory 5.C.2 open burning of waste at schools in remote rural areas were not estimated owing to a lack of data. However, the TERT noted that this subcategory is not reflected in CRT 5.C.</p> <p>During the review, the Party explained that the emissions were not estimated owing to the unavailability of data. However, the TERT noted that the unavailability of data should not be the reason for omitting a subcategory from the CRTs. Instead, the subcategory should be added under subcategory 5.C.2.b.ii other and specified in CRT 5.C, with “NE” reported for the corresponding emissions if data are not available.</p> <p>The TERT recommends that the Party report emissions from open burning of waste at remote rural schools under subcategory 5.C.2.b.ii other in CRT 5.C. If it is not possible to do so owing to a lack of data, the TERT recommends that the Party report the emissions as “NE” under subcategory 5.C.2.b.ii other in CRT 5.C.</p>
7.W.6	Specified in paragraphs 39–40 of the MPGs 5.D Wastewater treatment and discharge – CH ₄ and N ₂ O	<p>The Party did not provide in the NID a comprehensive description of the country’s wastewater treatment plants and practices, including the volume of wastewater treated in large plants, and the CH₄ recovery and nutrient-removal capacities of the plants, or information on the methods and data used to estimate CH₄ and N₂O emissions from the plants and septic tanks.</p> <p>During the review, the Party provided additional information on large wastewater treatment plants and the differences in the technical capacities of their wastewater treatment practices.</p> <p>The TERT recommends that the Party include in the NID a transparent description of the country’s wastewater treatment plants and practices, including the volume of wastewater treated in large plants, and the CH₄ recovery and nutrient-removal capacities of the plants, as well as information on the methods and data used to estimate CH₄ and N₂O emissions from the plants and septic tanks.</p>
7.W.7	Specified in paragraph 47 of the MPGs	<p>The Party stated in the NID that CH₄ recovery and flaring takes place at eight wastewater treatment plants in New Zealand. However, the Party did not estimate</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
	5.D Wastewater treatment and discharge – CH ₄	<p>CH₄ emissions from recovery and flaring for subcategory 5.D.1 domestic wastewater or flaring for subcategory 5.D.2 industrial wastewater, reporting them as “NE” in CRT 5.D while CH₄ recovery for energy purposes for subcategory 5.D.2 industrial wastewater was reported as “IE”.</p> <p>During the review, the Party explained that CH₄ recovery and emissions from flaring for wastewater treatment and discharge were not estimated owing to the unavailability of comprehensive and consistent data on recovery volumes, flare efficiency and plant-level implementation. The data were unavailable because they are commercially sensitive and subject to voluntary (non-compulsory) reporting requirements.</p> <p>The TERT encourages the Party to collect the necessary data to estimate and report CH₄ recovery for subcategory 5.D.1 domestic wastewater and clearly indicate the subcategory of the energy sector where CH₄ recovered for energy purposes from subcategory 5.D.2 industrial wastewater is included.</p>
7.W.8	Specified in paragraph 47 of the MPGs 5.D Wastewater treatment and discharge – N ₂ O	<p>The Party stated in the NID that there are a few large plants for domestic wastewater treatment in New Zealand equipped with modern systems. The Party reported N₂O emissions for subcategories 5.D.1 domestic wastewater and 5.D.2 industrial wastewater for effluent, but it did not report N₂O emissions from plants for these subcategories in CRT 5.D. The TERT noted that direct (plant) N₂O emissions may be significant in large wastewater treatment plants and, as such, these emissions should be estimated and reported.</p> <p>During the review, the Party explained that, of the eight large wastewater treatment plants operating in New Zealand, covering 57 per cent of the population, only the Auckland wastewater treatment plant is known to have nutrient-removal technologies installed. The Auckland wastewater treatment plant covers 21 per cent of the population.</p> <p>The TERT encourages the Party to identify whether nutrient-removal technologies are installed at the large wastewater treatment plants other than in Auckland, and to report direct N₂O emissions from subcategory 5.D.1 domestic wastewater including all such plants.</p>
7.W.9	Specified in paragraphs 21 and 39 of the MPGs 5.D Wastewater treatment and discharge – N ₂ O	<p>The Party used an out-of-date country-specific value for protein consumption per capita (36.135 kg/person/year) to estimate N₂O emissions for category 5.D wastewater treatment and discharge. The Party explained in the NID that this represented the maximum value that it reported to the Food and Agriculture Organization of the United Nations, but the TERT noted that this value does not represent the current national circumstances and therefore needs to be updated.</p> <p>During the review, the Party acknowledged that the value of 36.135 kg/person/year needs to be updated. It explained that, since a national study on protein consumption has not been conducted since 2008–2009, the maximum value was supposed to reflect socioeconomic development since then.</p> <p>The TERT recommends that the Party estimate N₂O emissions for category 5.D wastewater treatment and discharge using appropriately updated values for country-specific annual protein consumption that reflect the national circumstances relevant to specific years in the time series and clearly describe the assumptions behind the estimates.</p>

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

Table 8

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

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

Table 9

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

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

Table 10

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
10.1	Specified in paragraphs 71 and 75(a) of the MPGs	<p>In its BTR1 New Zealand reported that its NDC target is to reduce net GHG emissions to 50 per cent below the gross 2005 emission level by 2030. The achievement of the NDC target is managed using a multi-year emission budget. New Zealand described its progress against the emission budget, including the narrowing of the abatement gap and the remaining budget until 2030. However, the method used to calculate the budget for the NDC period was not clearly described in the BTR1.</p> <p>During the review, New Zealand confirmed that it plotted a trajectory to calculate this budget. The starting point of the trajectory is the net target accounting emissions in 2020, and the end point is the targeted value of those emissions in 2030 (50 per cent below the gross 2005 emission level).</p> <p>The TERT recommends that the Party clearly report the method used to calculate its emission budget.</p>
10.2	Specified in paragraph 77(a) of the MPGs	<p>New Zealand's NDC target is to reduce net GHG emissions to 50 per cent below the gross 2005 emission level by 2030, the achievement of which is managed using a multi-year emission budget. In CTF table 4, New Zealand reported the target level (43,307 kt CO₂ eq) for annual net target accounting emissions and the target year (2030) corresponding to the NDC target. The TERT noted that this led to a lack of clarity as to whether the NDC was to be tracked against the target level for annual net target accounting emissions or the emission budget.</p> <p>During the review, New Zealand explained that the multi-year emission budget is the key measure for its NDC achievement. The TERT noted that this approach was not clearly reflected in the information reported in CTF table 4, and the communication of the emission budget recalculation based on the most recent national inventory could also be improved.</p> <p>The TERT recommends that the Party improve clarity in CTF table 4 by reporting progress towards a single-year target that is managed using an emission budget approach, and including information on any recalculation of the emission budget that is based on the most recent national inventory. For example, the TERT notes that the target level could correspond to the NDC emission budget, and the target year could be replaced with the target period (2021–2030).</p>

Table 11

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

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

Table 12

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

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

Table 13

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
13.1	Specified in paragraph 96(a) and (d) of the MPGs	<p>New Zealand provided information in the BTR1 on the models and/or approaches as well as the key underlying assumptions and parameters used for its projections. New Zealand also provided a sensitivity analysis for its projections. However, in some cases, the information provided is limited and therefore does not facilitate a clear understanding of the models and/or approaches used for the projections or the underlying assumptions applied for the sensitivity analysis. For instance, in table 2.5.15 of the BTR1, New Zealand provided the assumptions used for the sensitivity analysis for projections but, in many cases, a very general description (such as “lower” or “higher” emissions) was provided rather than quantitative values.</p> <p>During the review, New Zealand provided more detailed information on the models used as well as an updated table with quantitative information on the assumptions forming the basis of the sensitivity analysis.</p> <p>The TERT encourages the Party to provide specific details on the models and/or approaches used for projections, and quantitative information on the assumptions used for the sensitivity analysis.</p>

Table 14

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

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

D. Financial, technology development and transfer, and capacity-building support provided under Articles 9–11 of the Paris Agreement

Table 15

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

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

Table 16

Areas of improvement of the reporting on underlying assumptions, definitions and methodologies relating to financial, technology development and transfer, and capacity-building support provided under Articles 9–11 of the Paris Agreement

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

Table 17

Areas of improvement of the information on financial support provided under Article 9 of the Paris Agreement – bilateral, regional and other channels

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

Table 18

Areas of improvement of the information on financial support provided under Article 9 of the Paris Agreement – multilateral channels

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

Table 19

Areas of improvement of the information on technology development and transfer provided under Article 10 of the Paris Agreement

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

Table 20

Areas of improvement of the information on capacity-building support provided under Article 11 of the Paris Agreement

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
20.1	Specified in paragraph 128(b–e) of the MPGs	<p>The Party did not report in its BTR1 information on how the capacity-building support provided by it responds to the existing and emerging capacity-building needs, priorities and gaps of developing country Parties in the areas of mitigation, adaptation, and technology development and transfer; policies that promote capacity-building support; stakeholder involvement and the different types of stakeholder engaged in capacity-building; and how the support provided for capacity-building actions in developing country Parties promotes the sharing of lessons learned and best practices.</p> <p>During the review, New Zealand explained that, for responding to existing and emerging needs and priorities, capacity-building activities are designed and developed closely with regional and bilateral partners. The Party also explained that its International Cooperation for Effective Sustainable Development policy sets out the principles for the allocation and delivery of International Development Cooperation funding. The Party further explained that different types of stakeholder are involved in capacity-building at different stages, and that regional partners receive support for sharing best practices and lessons learned across the Pacific.</p> <p>The TERT recommends that the Party report, to the extent possible, on how the capacity-building support provided by it responds to the existing and emerging capacity-building needs, priorities and gaps of developing country Parties in the areas of mitigation, adaptation, and technology development and transfer; policies that promote capacity-building support; stakeholder involvement and the different types of stakeholder engaged in capacity-building; and how support provided for capacity-building actions in developing country Parties promotes the sharing of lessons learned and best practices.</p>

Annex

Documents and information used during the review

A. Reference documents

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

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

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

“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>.

“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>.

B. Additional information provided by the Party

Responses to questions during the review were received from Alice Ryan (Ministry for the Environment of New Zealand), including additional material.
