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Report on the technical expert review of the first biennial transparency report of Denmark

Addendum

Summary

This addendum to the report on the technical expert review of the first biennial transparency report of Denmark, 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 28 April to 2 May 2025 in Copenhagen.



Abbreviations and acronyms

2006 IPCC Guidelines 2006 IPCC Guidelines for National Greenhouse Gas Inventories

2019 Refinement to the 2006 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse

IPCC Guidelines Gas Inventories
AD activity data

BTR biennial transparency report

CH₄ methane CO₂ carbon dioxide

CRT common reporting table
CSC carbon stock change
CTF common tabular format

dm dry matter

EEA European Environment Agency

EF emission factor

EMEP Cooperative Programme for Monitoring and Evaluation of the Long-range

Transmission of Air Pollutants in Europe

ETF enhanced transparency framework under the Paris Agreement

EU European Union

Eurostat statistical office of the European Union

FAOSTAT statistical database of the Food and Agriculture Organization of the United

Nations

GHG greenhouse gas

HWP harvested wood products IE included elsewhere

IPCC Intergovernmental Panel on Climate Change

LiDAR Light Detection and Ranging MCF methane correction factor

MPGs modalities, procedures and guidelines for the transparency framework for

action and support referred to in Article 13 of the Paris Agreement

 $egin{array}{ll} N_2O & \mbox{nitrous oxide} \\ NA & \mbox{not applicable} \\ \end{array}$

NDC nationally determined contribution

NE not estimated

NID national inventory document
NIR national inventory report

NMVOC non-methane volatile organic compound

NO not occurring NR not reported

PaMs policies and measures
TERT technical expert review team
VOC volatile organic compound
WAM 'with additional measures'

Wetlands Supplement 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse

Gas Inventories: Wetlands

WM 'with measures'
WOM 'without measures'

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 Denmark 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
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

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
2.G.1	Specified in paragraphs 10(a), 20 and 38 of the MPGs	In its NID, the Party provided information on Denmark (chaps. 1–10), Greenland (chap. 11) and the Faroe Islands (chap. 12) and included one page on the aggregated GHG trends for the entire territory of the Kingdom of Denmark (chap. 13). However, the submitted CRTs cover the territorial scope of Denmark only (i.e. not including Greenland and the Faroe Islands). The 2006 IPCC Guidelines (vol. 1, section 1.1) states that a national inventory includes the territories over which the country has jurisdiction.
		During the review, the Party explained that the ETF GHG inventory reporting tool does not support multiple versions of CRTs. Instead of submitting four versions of the CRTs (i.e. for Denmark, Greenland, the Faroe Islands and the entire territory of the Kingdom of Denmark), only one version could be submitted using the ETF GHG inventory reporting tool. The Party decided to submit the CRTs covering the territorial scope of Denmark only, since that is the territory covered by the Party's current NDC. The Party provided the TERT with a hyperlink for the CRTs for Greenland and the Faroe Islands, which have not been officially submitted (https://cdr.eionet.europa.eu/dk/Air Emission Inventories/Submission UNFCCC/colz ox5q). CRTs for the entire territory of the Kingdom of Denmark are not available via the hyperlink, although Denmark's BTR contains a copy of CRT 10s6 for the Kingdom of Denmark (annex C4) and for Denmark (annex C1), Greenland (annex C2) and the Faroe Islands (annex C3).
		The TERT recommends that the Party report complete CRTs for the entire territory under the Paris Agreement (i.e. for the Kingdom of Denmark, comprising Denmark, Greenland and the Faroe Islands). The TERT notes that the Party may improve the transparency of its reporting by additionally providing hyperlinks in its NID for all CRT versions (i.e. for Denmark, Greenland and the Faroe Islands), complementing the GHG inventory information disaggregated for Denmark, Greenland and the Faroe Islands already reported in its NID.
2.G.2	Specified in paragraphs 25, 41 and 42 of the MPGs Key category analysis	In its NID, the Party reported key category analyses for both Denmark and Greenland. The Party explained that no key category analysis was carried out for the Faroe Islands (NID section 12.1.5), but that key categories for the Faroe Islands will be discussed and described in its next submission (NID section 12.9.4 on planned improvements).

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

² Decision 18/CMA.1, annex.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		During the review, the Party confirmed that it is still planning to carry out a key category analysis for the Faroe Islands, but it is not yet possible to confirm that this will be done for the next submission.
		The TERT recommends that the Party carry out and report a key category analysis for the entire territory of Denmark, Greenland and the Faroe Islands.
2.G.3	Specified in paragraphs 29 and 44 of the MPGs Uncertainty analysis	The Party reported uncertainty assessments for both Denmark and Greenland in its NID. It also reported that no uncertainty assessment was carried out for the Faroe Islands (NID section 12.1.7), but that an uncertainty assessment using IPCC approach 1 will be included in its next submission (NID section 12.9.4 on planned improvements).
		During the review, the Party confirmed that it is still planning to carry out an uncertainty assessment for the Faroe Islands, but it is not yet possible to confirm that this will be done for the next submission.
		The TERT recommends that the Party carry out and report an uncertainty assessment for the entire territory of Denmark, Greenland and the Faroe Islands.
2.G.4	Specified in paragraph 2 of decision 5/CMA.3 NID	The TERT noted that the outline of Denmark's NID does not follow the NID outline presented in annex V to decision 5/CMA.3. For example, in the executive summary, sections ES.5 (key category analysis) and ES.6 (improvements introduced) are missing. Furthermore, in the NID, uncertainties are not presented at the category level in dedicated sections on uncertainty and time-series consistency, as suggested in annex V to decision 5/CMA.3, but rather in 29 subsections on time-series consistency and completeness.
		During the review, the Party mentioned that it is not mandatory to follow the suggested outlines of the BTR and the NID as per paragraph 2 of decision 5/CMA.3. The Party also mentioned that the outline of its NID reflects country-specific preferences and contains the mandatory information required.
		Noting the completeness of Denmark's NID, the TERT encourages the Party to improve the comparability of its NID and make it easier to navigate by following more closely the NID outline presented in annex V to decision 5/CMA.3.

Table 3

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

3.E.1 Specified in paragraph 39 of the MPGs Energy – 1.A.3.a Domestic aviation –

Reporting requirement

liquid fuels (aviation

gasoline) - CH₄

ID#

Description of area of improvement with recommendation or encouragement

The Party reported in its NID (p.257) that the CH₄ EF for aviation gasoline (for piston engine aircraft) was derived from the CH₄ VOC EF provided in the *EMEP/EEA air pollutant emission inventory guidebook 2023* and an NMVOC/CH₄ split based on the split for conventional gasoline engines used in Danish road transport. However, the TERT noted that the Party did not report transparent information on the country-specific NMVOC/CH₄ split, and did not provide references to enable an understanding of the method used to derive the EF or facilitate its replication by the TERT.

During the review, the Party explained that the CH₄ EF for aviation gasoline (for piston engine aircraft) was derived from the piston engine VOC EF for Germany (18.867 g/kg fuel) provided in table 3-10 of the *EMEP/EEA air pollutant emission inventory guidebook 2023*. This VOC EF was converted to units of energy using the net calorific value of aviation gasoline (43.8 MJ/kg), amounting to 430.753 g/GJ. A country-specific CH₄/VOC split percentage of 2 per cent, derived from the VOC and CH₄ emission results for Danish conventional gasoline cars (2020 NIR), was then applied to the resulting VOC EF by unit of energy, leading to a CH₄ EF of 8.62 kg/TJ and an NMVOC EF of 422.1 g/GJ for piston engine aircraft.

The TERT recommends that the Party provide transparent documentation on the CH₄ EF for aviation gasoline used in domestic aviation, including descriptions, assumptions, references and sources of information used for the EF to estimate the emissions.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
3.E.2	Specified in paragraph 53 of the MPGs	The Party reported in its NID (p.671) that emissions from international aviation in Greenland were considered negligible and were therefore included under category
	Energy – 1.D.1.a International aviation and international navigation (international bunkers) and multilateral operations – liquid fuels – CO ₂ , CH ₄ , N ₂ O	1.A.3.a (domestic aviation), but new information had become available and the reporting will be changed for the 2025 submission. The TERT notes that, according to paragraph 53 of the MPGs and the 2006 IPCC Guidelines (vol. 2, section 3.6.3), emissions from international aviation should be reported separately from domestic aviation.
		During the review, the Party confirmed that, as stated in the 2024 NID, this improvement will be implemented in the 2025 submission.
		The TERT encourages the Party to report emissions from fuel used in international aviation sold in Greenland under category 1.A.1.d and follow the method provided in the 2006 IPCC Guidelines (vol. 2, section 3.6.3) for reporting domestic and international emissions separately.

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
NA	NA	No areas of improvement identified

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

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
5.A.1	Specified in paragraph 18 of the MPGs 3.D.1.a Inorganic nitrogen fertilizers – N ₂ O	In its NID, Denmark explained that two data sources were used for the AD for inorganic nitrogen fertilizers: sales statistics, managed by the Danish Agricultural Agency (for 1990–2008, 2017 and 2019–2022); and fertilizer accounts, controlled by the Danish Agricultural Agency (for 2009–2016 and 2018). The resulting time series for fertilizer use differs from the Danish data reported to Eurostat.
		During the review, the Party provided a spreadsheet containing the AD reported in

the review, the Party provided a spreadsheet containing the AD reported CRT 3.D (category 3.D.1.a) for Denmark (excluding Greenland and the Faroe Islands) and the corresponding Danish data reported to Eurostat. For 2021–2022, the Eurostat data are more than 10 per cent lower than the data reported in the CRT. In 2009-2020 the Eurostat data are on average 4 per cent lower. In 2008 and earlier years, there is no significant difference. The TERT noted that the Eurostat data will soon represent the official statistics for EU member States, following the adoption of the EU regulation regarding statistics on nutrients (regulation 2024/2212) in 2024. This regulation requires a mandatory annual submission by EU member States of statistical data on nitrogen quantities in inorganic fertilizers used for agriculture, with 2026 as the first reporting year. This recent change in legal arrangements may lead to a change in institutional and procedural arrangements, as specified in paragraph 18 of the MPGs, given the already existing discrepancies between the inventory data and Eurostat data.

The TERT encourages the Party to collaborate more closely with the Danish institute responsible for submitting the official statistical data on inorganic fertilizers to Eurostat in order to improve consistency between the inventory data reported in CRT 3.D for category 3.D.1.a and the Danish data reported to Eurostat.

5.A.2 of the MPGs 3.D.1.a Inorganic nitrogen fertilizers - N₂O

Specified in paragraph 29 In NID table 1.5, the Party reported an uncertainty of 3 per cent for the AD for inorganic nitrogen fertilizers (category 3.D.1.a). However, the data reported in NID figure 5.7 presenting the sales statistics and nitrogen fertilizer accounts imply a higher uncertainty.

> During the review, the TERT compared the national data collected by the Party (sales statistics, fertilizer accounts and the resulting inventory time series) with the Danish data reported to Eurostat, FAOSTAT and the International Fertilizer Association. After comparing these data sources, the TERT concluded that the uncertainty of the AD for inorganic nitrogen fertilizers (category 3.D.1.a) should be higher than 3 per cent.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		The TERT recommends that the Party update the uncertainty of the AD for inorganic nitrogen fertilizers (category 3.D.1.a) to a higher percentage than the 3 per cent reported in the NID.
5.A.3	Specified in paragraphs 27 and 39 of the MPGs 3.D.1.f Cultivation of organic soils (i.e. histosols) – N ₂ O	The recalculations performed for cultivation of organic soils (category 3.D.1.f) had the greatest impact on the estimates of agricultural emissions, with a decrease in estimated N_2O emissions of up to 34.8 per cent for $2011-2021$ (NID table 5.39). NID section 5.14.3 mentions that a new map of organic soils was constructed, without providing a description of the assumptions underlying the recalculations. These organic soil maps are constructed infrequently (1975, 2010, and 2022) and there was no description of the interpolation method used for the years without organic soil maps (1976–2009 and 2011–2021). It is also unclear which extrapolation method will be used for future years until a new organic soil map is available. During the review, the Party provided additional information, explaining that organic soils in the country consist of very thin layers and, consequently, disappear over time. For 1976–2009 a linear interpolation was applied on the basis of the organic soil map estimates for 1975 and 2010. For 2011–2021 an extrapolation method was applied on a yearly basis, with a recalculation of the entire time series when the estimates from the organic soil map for 2022 became available. The Party explained that the extrapolation for 2023 and later years will consider the downward trend in organic soil disappearance to minimize the recalculation when a new organic soil map becomes available (around 2030). The TERT recommends that the Party enhance the transparency of its next NID by describing the interpolation and extrapolation methods used to calculate the AD for cultivation of organic soils (category 3.D.1.f) in relation to the infrequent availability of the organic soil maps, for example by referencing the splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, section 5.3.3).

 $\label{eq:continuous} \textbf{Table 6} \\ \textbf{Areas of improvement of the reporting on greenhouse gas emissions and removals-land use, land-use change and forestry sector \\ \\ \textbf{Areas of improvement of the reporting on greenhouse gas emissions and removals-land use, land-use change and forestry sector \\ \\ \textbf{Areas of improvement of the reporting on greenhouse gas emissions and removals-land use, land-use change and forestry sector.} \\$

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
6.L.1	Specified in paragraph 21 of the MPGs 4.A.1 Forest land remaining forest land – CO ₂ 4.A.2 Land converted to forest land – CO ₂	Denmark applied default EFs from the Wetlands Supplement (chap. 2, p.11, table 2.1) to calculate CO ₂ emissions from drained organic soil carbon pools in forest land remaining forest land (category 4.A.1) and land converted to forest land (category
		4.A.2), which are key categories.
		During the review, the Party informed the TERT that there are currently no concrete plans to develop higher-tier EFs for drained organic soils in forest land.
		The TERT encourages the Party to make all efforts to move towards using country-specific or regional EFs for drained organic soils for forest land remaining forest land (category 4.A.1) and land converted to forest land (category 4.A.2).
6.L.2	Specified in paragraph 39 of the MPGs	Denmark reports net CSC from mineral soils as "NA" for forest land remaining forest land (category 4.A.1). In its NID, Denmark explained that the land conversion
	4.A.1 Forest land remaining forest land – CO ₂	period is 30 years and that a 100-year transition period was considered when modelling CSCs for mineral soils in forest land (NID p.530). Additionally, the Party reported in the NID (p.520) that the rationale for not calculating CSCs in mineral soils in forest land remaining forest land (category 4.A.1) is based on conclusions from a literature review and reasoning based on widely accepted knowledge on ecosystem functioning. However, this results in a 70-year gap in which CSCs in mineral soils for category 4.A.1 are underestimated because the Party did not report CSCs in mineral soils for this category or provide references for the literature review.
		During the review, the Party explained that considering a 100-year transition period for mineral soils in the estimation of CSCs for land conversions to forest land would require all land-use changes from 1890 onward to be modelled in order to gather the required information for the current model. Furthermore, the Party provided an updated explanation for not calculating CSCs in mineral soils for forest land remaining forest land (category 4.A.1), including a sufficient number of references

ID# Reporting requirement

Description of area of improvement with recommendation or encouragement

to justify the decision. The Party explained that it decided not to undertake modelling for category 4.A.1 given that the related CSCs are insignificant.

The TERT recommends that Denmark update the text in the NID and include the explanation for the rationale behind the decision not to conduct an estimation of CSCs in mineral soils for category 4.A.1 and justify the insignificance of those emissions.

6.L.3 Specified in paragraph 39 of the MPGs

4.B Cropland – CO₂

In its NID (p.547), Denmark provided the rationale for using different CO₂ EFs for drained organic soils depending on the AD source for cropland (category 4.B). The Party reported that, when areas of drained organic soils are covered by the Land Parcel Information System, country-specific EFs are used. For areas that are not covered by the Land Parcel Information System, tier 1 values from the Wetlands Supplement (chap. 2, p.11, table 2.1) are used. However, the rationale behind the decision to use tier 1 values for areas under cropland (category 4.B) not covered by the Land Parcel Information System was not transparently explained.

During the review, the Party explained that the NID text referred to by the TERT is outdated. It further explained that, since the update of the organic soils map took place in 2022, there is no need to differentiate between tiers for areas covered or not covered by the Land Parcel Information System.

The TERT recommends that Denmark include updated information on the methodologies used to estimate net emissions/removals from cropland (category 4.B) and delete the reference to the use of tier 1 values from the Wetlands Supplement for land-use areas under cropland (category 4.B) not covered by the Land Parcel Information System.

6.L.4 Specified in paragraph 39 of the MPGs

4.B.1 Cropland remaining cropland – CO₂

In its NID, the Party reported that it uses national average carbon stock values for living biomass (above- and below-ground) for wooden horticultural crops under cropland remaining cropland (category 4.B.1). Specifically, the different average carbon stock values for living biomass (mg dm/ha) per orchard tree species were reported in NID table 6.18 (p.536). However, the Party did not provide a clear and concise explanation of which data were used to derive the average living biomass carbon stock values in the NID.

During the review, the Party explained that, to derive the national average carbon stock values for living biomass per orchard tree species, it used data gathered by local experts, but these data are not published in any peer-reviewed publication. The Party further explained that, as these data are very similar to the updated values provided in the 2019 Refinement to the 2006 IPCC Guidelines (vol. 5, chap. 5, p.512, table 5.3), it decided to use national data instead of the tier 1 average carbon stock values provided in the 2019 Refinement to the 2006 IPCC Guidelines. The national data provided sufficient information on how the average carbon stock values were derived for wooden horticultural crops.

The TERT recommends that Denmark update the NID to include assumptions and data when explaining the rationale used for deriving the national average carbon stock values for wooden horticultural crops under category 4.B.1.

6.L.5 Specified in paragraph 39 of the MPGs

 $\begin{array}{l} 4.D.2 \ Land \ converted \ to \\ wetlands - CO_2 \\ 4.E.2 \ Land \ converted \ to \\ settlements - CO_2 \end{array}$

In its NID, the Party reported that it uses national average carbon stock values for above- and below-ground biomass for land converted to other wetlands (category 4.D.2.c) and land converted to settlements (category 4.E.2). For category 4.D.2.c, the values are 3,600 kg dm/ha for above-ground biomass and 1,200 kg dm/ha for below-ground biomass (NID p.558). For category 4.E.2, the values are 2,200 kg dm/ha for above-ground biomass and 2,200 kg dm/ha for below-ground biomass (NID p.562). However, the Party did not provide any references for the data source used to derive the average carbon stock values for above- and below-ground living biomass for categories 4.D.2.c and 4.E.2.

During the review, the Party explained that the 2006 IPCC Guidelines do not contain tier 1 default values for the average carbon stock values for above- and belowground biomass for category 4.D. Furthermore, the Party explained that there are no national data available to derive representative values of living biomass for category 4.D.2.c. The Party decided to base the average carbon stock values for living biomass on values for grassland, as these are provided in the *Good Practice Guidance for Land Use, Land-Use Change and Forestry* (chap. 3, p.3.109, table 3.4.2), and to add 50 per cent to the IPCC value of 2.4 t dm/ha and use 3.6 t dm/ha

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		for the calculations. In the absence of default values for average carbon stock values for above- and below-ground biomass for settlements (category 4.E), Denmark used expert judgment. The Party provided additional information on how the assumptions were made, as well as further information explaining that these values will be updated in two years using LiDAR and satellite data.
		The TERT recommends that Denmark update the NID to better explain the rationale and data used for deriving national average carbon stock values for living biomass in land converted to other wetlands (category 4.D.2.c) and land converted to settlements (category 4.E.2).
6.L.6	Specified in paragraph 40 of the MPGs 4.F.1 Other land remaining other land – AD	The Party reported the area of other land remaining other land (category 4.F.1) as 26,424 ha in its NID (p.564) and in CRT 4.1 for 2022. However, there is an inconsistency between the NID and CRTs 4.1 and 4.F, where the area for category 4.F.1 is reported as 0.056 kha.
		During the review, the Party confirmed that the data reported in the NID are correct. It explained that the inconsistency appeared because the area reclaimed from the sea should have been reported under settlements in category 4.E.2.e but was instead allocated to category 4.F.1.
		The TERT recommends Denmark correctly allocate the AD and any relevant CSC estimates from the area reclaimed from the sea under settlements in CRTs and explain any recalculation in the NID.
6.L.7	Specified in paragraph 31 of the MPGs 4.Gs2 HWP – AD	In CRT 4.Gs2, Denmark reported "NA" for imports of sawnwood, and paper and paperboard for 2018–2022 and for imports of wood panels for 2019–2022. However no reason for using the notation key "NA" is provided in the NID. The TERT also noted that no sectoral background data were provided for all HWP categories for 1961–1990. According to the HWP model provided in the 2006 IPCC Guidelines (vol. 4, chap. 12, p.12, equation 12.3), data from 1961 onward are required.
		During the review, the Party explained that respective import data were omitted from CRT 4.Gs2 by mistake. The Party provided the time series of data for all HWP categories for 1961–1990. However, the AD for sawnwood imports for 1961–1986 were still missing from the data provided by the Party. Denmark further explained that it will try to provide these data or an explanation for not including them in future submissions.
		The TERT recommends that Denmark include complete data for all HWP categories (sawnwood, wood-based panels, and paper and paperboard) from 1961 onward in CRT 4.Gs2, use notation keys where numerical data are not available when completing that CRT and include an explanation for the use of those notation keys.

 $Table\ 7 \\ \textbf{Areas of improvement of the reporting on greenhouse gas emissions and removals-waste sector}$

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
7.W.1	Specified in paragraph 20 of the MPGs 5.A Solid waste disposal – CH ₄	Denmark reported in its NID (p.599) that data on solid waste disposal for 2022 were not available at the time of preparing the submission. To derive the AD on waste disposal for 2022, the Party used the assumption that the same amount of solid waste was disposed in 2022 as in 2021, instead of using splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, section 5.3.3, pp.5.8–5.14) to fill the gap in the AD.
		During the review, Denmark explained that the waste statistics for 2022 have since been published by the Danish Environmental Protection Agency and stated that it would revise the AD on solid waste disposal for 2022 in the next submission accordingly.
		To enhance accuracy of the estimates in category 5.A, the TERT recommends that Denmark revise the AD on solid waste disposal for 2022 in its estimates of CH ₄ emissions from solid waste disposal by using the waste disposal statistics for 2022 published by the Danish Environmental Protection Agency. In case of any future gaps in the AD on solid waste disposal for certain years of the time series, the TERT encourages Denmark to use relevant splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, section 5.3.3, pp.5.8–5.14).

ID# Reporting requirement

Description of area of improvement with recommendation or encouragement

7.W.2 Specified in paragraph 21 of the MPGs 5.A Solid waste disposal – CH₄

Denmark reported in its NID (p.597, table 7.2.3) that the constant MCF of 1.0 was used to estimate CH₄ emissions from solid waste disposal sites for the whole time series of input data on waste disposal since 1940. No explanation was provided in the NID as to why Denmark used a constant MCF, which, in accordance with the 2006 IPCC Guidelines (vol. 5, chap. 3, p.3.14, table 3.1), should be applied only to anaerobic managed solid waste disposal sites with controlled placement of waste (i.e. waste directed to specific deposition areas, a degree of control of scavenging and a degree of control of fires) and include at least one of the following: cover material, mechanical compacting or levelling of the waste. The TERT noted that, according to a 2020 report by the Geological Survey of Denmark and Greenland (p.15), prior to 1973, gravel pits, depressions, wetlands and coastal areas were used for uncontrolled waste disposal, and despite advances in legislation and guidance, many landfills from the mid-1970s to the mid-1980s continued to be established in old gravel pits without a membrane and cover. The transition from uncontrolled to controlled landfills took place over a few years, despite the introduction of the requirement for environmental approval of landfills in 1973. Prior to 1973, solid waste disposal might have occurred at unmanaged solid waste disposal sites in Denmark in accordance with the definitions in the 2006 IPCC Guidelines.

During the review, Denmark agreed that solid waste disposal at unmanaged sites might have occurred in the country prior to 1973, and stated that it will consider the possibility of redistributing the amount of solid waste disposal between managed and unmanaged sites.

The TERT recommends that Denmark either provide a justification in its NID that waste has been landfilled solely at managed solid waste disposal sites since 1940 or revise its estimate of CH₄ emissions from solid waste disposal by redistributing the amount of disposed solid waste by type of solid waste disposal site, namely managed and unmanaged, and explain any recalculation in the NID.

7.W.3 Specified in paragraph 20 of the MPGs

5.B.1 Composting – CH₄ and N₂O

Denmark reported in its NID (pp.605–606) that data on composting of garden waste for 2021–2022 were not available at the time of preparing the submission. Similarly, data on composting of organic waste from households and other sources for 2020–2022, as well as data on composting of sludge for 2021–2022 were not available (NID p.606). To fill the gaps in AD, the Party used several assumptions instead of using the splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, section 5.3.3, pp.5.8–5.14). Specifically, the following assumptions were used by the Party without including any justification in the NID: (1) for composting of garden waste for 2021–2022, the average for 2018–2020 was used; (2) for composting of organic waste from households and other sources for 2020–2022, the average for 2017–2019 was used; and (3) for composting of sludge for 2021–2022, the average for 2018–2020 was used.

During the review, Denmark explained that the statistics on composting are published by the Danish Environmental Protection Agency and confirmed that statistical data on composting of garden waste for 2021–2022, organic waste from households and other sources for 2020–2022, and sludge for 2021–2022 were available at the time of the review.

To enhance the accuracy of the estimates for category 5.B.1, the TERT recommends that Denmark revise the AD on waste composting for 2020–2022 in its estimate of CH₄ and N₂O emissions from waste composting by using the waste composting statistics for 2020–2022 published by the Danish Environmental Protection Agency. In case of any future gaps in the AD on waste composting for certain years of the time series, the TERT encourages Denmark to use relevant splicing techniques provided in the 2006 IPCC Guidelines (vol. 1, section 5.3.3, pp.5.8–5.14).

7.W.4 Specified in paragraph 20 of the MPGs

 $\begin{array}{l} 5.B.1 \; Composting - \\ CH_4 \; and \; N_2O \end{array}$

The Party did not estimate CH_4 and N_2O emissions from category 5.B.1 composting in the Faroe Islands. Denmark reported in its NID (p.824) that composting in the Faroe Islands is primarily a small-scale activity in relatively few private households only. No further explanation was provided in the NID. The TERT noted that, in accordance with the 2006 IPCC Guidelines (vol. 1, section 1.4, pp.1.7–1.8, and Glossary, p.G.4), GHG emission estimates should include geographic coverage of areas within the scope of the GHG inventory.

During the review, Denmark explained that composting activity in the Faroe Islands is limited to an activity where citizens can choose to have their own composting

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		system in their garden, often in a ready-to-use plastic tank, or a simple self-build arrangement. An exception is the Vágs municipality, where a pilot test on composting biodegradable municipal solid waste took place from March 2020 to September 2021. As part of this test, organic waste was collected from 38 households and moved to a central composting plant. Denmark noted that CH ₄ and N ₂ O emissions associated with composting in the Faroe Islands have never been estimated, and that any emissions would fall very far below the threshold of significance. The Party also noted that AD on composting in the Faroe Islands are not available. The TERT noted that the 2006 IPCC Guidelines provide techniques to address the data gaps for the incomplete coverage of AD (vol. 1, section 2.2.3, p.2.10).
		The TERT recommends that Denmark estimate CH_4 and N_2O emissions from composting activity in the Faroe Islands using the methodology provided in the 2006 IPCC Guidelines (vol. 4, section 4.1, pp.4.4–4.6) or the already-used country-specific methodology, if relevant; report these emissions under category 5.B.1; and explain any recalculation in the NID.
7.W.5	Specified in paragraph 20 of the MPGs	The Party reported in the NID (p.824) that CH ₄ emissions from anaerobic digestion of waste at biogas facilities were not estimated for the Faroe Islands and
	5.B.2 Anaerobic digestion at biogas facilities – CH ₄	consequently not included in the total GHG emissions of the Faroe Islands for 1990–2022. On the same page of the NID, Denmark reported that the first biogas facility in the Faroe Islands, FÖRKA, opened in Hoyvík in 2020 and primarily receives organic waste from the aquaculture industry and from agriculture. The TERT noted that, in accordance with the 2006 IPCC Guidelines (vol. 1, section 1.4, pp.1.7–1.8, and Glossary, p.G.4), GHG emission estimates should include geographic coverage of areas within the scope of the GHG inventory.
		During the review, Denmark explained that including the corresponding CH ₄ emissions from anaerobic digestion of waste at the FÖRKA biogas facility is under consideration for the next NIR.
		The TERT recommends that the Party estimate CH ₄ emissions from anaerobic digestion of waste at the FÖRKA facility, and include these emissions and explain any recalculation in the NID.
7.W.6	Specified in paragraph 31 of the MPGs 5.B.2 Anaerobic digestion at biogas facilities – CH ₄	In CRT 5.B, Denmark reported anaerobic digestion AD that are numerically equal to the amount of CH ₄ produced from anaerobic digestion of organic waste reported in NID table 7.3.7 (p.612). For example, according to CRT 5.B, 495.20 kt dm waste was anaerobically digested in 2022, resulting in an abnormal constant CH ₄ EF in CRT 5.B for the whole time series (1990–2022) of 1,000.00 g CH ₄ /kg dm waste treated, compared with the default CH ₄ EFs from the 2006 IPCC Guidelines (vol. 5, chap. 4, table 4.1) that vary from 0 to 20 g CH ₄ /kg dm waste treated.
		During the review, Denmark explained that information on the amount of waste treated anaerobically at biogas facilities is not available for Denmark. Instead, emissions are calculated on the basis of the information on biogas production, expressed in petajoules.
		The TERT recommends that Denmark report the AD for anaerobic digestion under category 5.B.2 (anaerobic digestion at biogas facilities), expressed in annual waste amount treated (kt dm), or, if the AD are not available, to report "NE" in CRT 5.B and explain the issue in the documentation box of that CRT and in the NID.

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

 $\begin{tabular}{ll} Table 8 \\ Areas of improvement of the reporting on national circumstances and institutional arrangements \\ \end{tabular}$

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
8.1	Specified in paragraph 62 of the MPGs	Denmark provided a detailed description of the legal, institutional, administrative and procedural arrangements for implementation, monitoring, reporting, archiving of information and stakeholder engagement in section 2.1.16 of the BTR1. This

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		information was presented at the EU level with respect to the implementation of the joint EU NDC; however, no information was provided on the domestic arrangements, as specified in paragraphs 62–63 of the MPGs. Specifically, no information was reported on the management and coordination of stakeholder engagement, or the archiving of information related to the implementation and achievement of the joint EU NDC under Article 4 of the Paris Agreement.
		During the review, Denmark provided a reference to section 2.4 of the BTR1, where some information on the domestic legal, institutional and administrative arrangements in place is described. Denmark also provided further information on arrangements for stakeholder engagement and archiving procedures that was not included in the BTR1, such as on the Climate Partnerships, the Citizens Assembly and the Youth Climate Council, which are part of the domestic arrangements for developing and establishing legislation and policy. Denmark further clarified that, at the EU level, national reports are archived through the Central Data Repository, which forms part of the EU Reportnet architecture. This system stores information submitted by EU member States in accordance with relevant reporting obligations or agreements. At the national level, Denmark maintains its own filing system for archiving related information.
		The TERT recommends that the Party supplement the information provided in the BTR at the EU level and report information covering Denmark's legal, institutional, administrative and procedural arrangements for domestic implementation, monitoring, reporting, archiving of information and stakeholder engagement 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
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

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

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 82(h) of the MPGs	Denmark reported the start year of implementation for each action, policy and measure in tabular format in annex B2 to the BTR1. However, the TERT noted that this information is missing for some PaMs in CTF NDC table 5.
		During the review, Denmark explained that, as the updated information on some of the reported start years required additional explanation, and only integer numbers could be entered as start years in CTF NDC table 5, these cells were left empty.
		The TERT recommends that Denmark include the start year of implementation for all PaMs in CTF NDC table 5. The TERT notes that the Party may provide relevant additional information or custom footnotes to supplement the information provided in the cells on the start year of implementation of PaMs.
11.2	Specified in paragraph 83(a–c) of the MPGs	Denmark did not report information on the costs of each action, policy and measure reported, non-GHG mitigation benefits or how the mitigation actions interact with each other.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		During the review, Denmark explained that detailed information on the costs of PaMs, a systematic assessment of non-GHG mitigation benefits and an analysis of the interactions between mitigation actions for individual PaMs are not available in a comparable and consolidated format. Denmark also explained that, for the BTR1, the available resources were prioritized for the mandatory reporting requirements under the MPGs.
		The TERT encourages Denmark to provide information on the costs and non-GHG mitigation benefits and how the mitigation actions identified in paragraph 80 of the MPGs interact with each other.
11.3	Specified in paragraph 85 of the MPGs	Denmark reported the estimates of expected and achieved GHG emission reductions as "NE" for many of its PaMs in the BTR1 and in CTF NDC table 5. For PaMs where Denmark reported the information as "IE", no explanation was provided to indicate where this information could be found, and no custom footnotes were included.
		During the review, Denmark explained that, owing to an oversight, the footnotes to table 2.4(25) of the BTR1 (p.122) were not transferred as custom footnotes to CTF NDC table 5. Denmark further explained that, for its BTR1, estimates of expected and achieved GHG emission reductions for its PaMs were not available in a comparable and consolidated format. In many cases, estimates were produced when the PaMs were first proposed for a specific year, which was not necessarily for 2025 or 2030. Additionally, Denmark explained that, because the projection model estimates the overall effect, it was not possible to isolate and attribute emission reductions to individual PaMs.
		The TERT recommends that the Party include, to the extent possible, estimates of expected and achieved GHG emission reductions for its actions and PaMs and, where the notation key "IE" has been reported, specify which group of measures has been combined in the estimates. The TERT notes that Denmark may include footnotes to CTF NDC table 5, as added to table 2.4(25) of the BTR1 (p.122), to explain the use of the reported notation keys.
11.4	Specified in paragraph 90 of the MPGs	Denmark reported in its BTR1 that information on the assessment of the economic and social impacts of response measures is available in annex B3 to the BTR1 ("Methodologies and assumptions used to estimate the greenhouse gas emission reductions or removals"). The TERT noted that the information on the assessment of the economic and social impacts of response measures provided in annex B3 is limited to an external link to the "Guidelines for Socioeconomic Impact Assessments" developed by the Ministry of Finance, which are only available in Danish.
		During the review, Denmark confirmed that the methodologies for assessing the economic and social impacts of response measures are currently only available in Danish. The Party also explained that, since these guidelines were published in 2023, there is limited experience in relation to their application. As a result, information on the accomplication and social impacts of response measures is not

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

impacts of response measures.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
12.1	Specified in paragraph 91 of the MPGs	Denmark provided a summary of its GHG emissions and removals in tabular format in section 2.5 of the BTR1, as per paragraph 91 of the MPGs. Emission trends by gas are shown in table 2.5(1) and by sector in table 2.5(2). Some inconsistencies between these tables, CTF NDC table 6 and the CRTs were noted by the TERT during the review.
		During the review, Denmark clarified that these inconsistences were due to the use of the common reporting format for the BTR1 tables, rather than the new CRT format, leading to some reporting errors in tables 2.5(1) and 2.5(2). Denmark

information on the economic and social impacts of response measures is not

The TERT encourages the Party, to the extent possible, to provide detailed information, to the extent possible, on the assessment of the economic and social

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		provided a corrected version of the summarized GHG emissions and removals in tabular format during the review that is consistent with the information reported in the NIR.
		The TERT recommends that Denmark report a summary of GHG emissions and removals in its BTR that corresponds to the Party's most recent NIR.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
13.1	Specified in paragraph 94 of the MPGs	Denmark did not report WAM or WOM projections of GHG emissions and removals. The Party provided a detailed rationale for not including a WAM projection scenario, explaining in its BTR1 that new or additional PaMs are integrated into the WM scenario on an annual basis, making a separate WAM scenario unnecessary. With regard to the WOM scenario, the BTR1 references the Party's eighth national communication, which explains that the methodologies used for elaborating a WOM scenario are being consolidated and that a new WOM scenario might be included in future reporting.
		During the review, Denmark clarified that it has no planned PaMs, defined as PaMs with a high likelihood of adoption in the near future and with an allocated budget. As a result, there are no additional policies to include in a WAM scenario. According to paragraph 94 of the MPGs, a WAM scenario encompasses implemented, adopted and planned PaMs. Since Denmark has no planned PaMs, it WAM and WM projections can be considered to be identical. Denmark further clarified that there are no plans to include a WOM projection scenario in its future reporting, as it is not considered to be a useful tool for policy-setting or evaluation.
		The TERT encourages Denmark to improve the completeness of its reporting by including a WAM projection scenario, if there are planned measures that would render the WAM scenario applicable, and a WOM projection scenario, or by including an explanation as to why it does not consider the WOM scenario to be a useful tool for policy-setting.
13.2	Specified in paragraph 96(a) and (d) of the MPGs	Denmark provided information on the methodology used for developing the GHG projections reported in section 2.6.18 of the BTR1. However, the TERT noted that Denmark provided references to other parts of the BTR1 and external links in section 2.6.18 in order to describe the methodologies used for projecting GHG emissions, rather than including summary information in the BTR1 itself. Furthermore, Denmark did not provide a quantified sensitivity analysis for its WM projections in the BTR1. While section 2.6.16 on uncertainties and sensitivity

calculations offers some qualitative insights into potential sensitivities, the TERT noted that this section primarily identifies major uncertainties in the projections and does not include an assessment of the sensitivity of the WM scenario to key assumptions. Given the identified uncertainties in the implementation of PaMs, the TERT considers that a more detailed sensitivity analysis would help to understand the overall potential impact on emissions under the WM scenario.

During the review, the Party provided an overview of how the models interact and provided a diagram entitled "Denmark's Climate and Energy Model" to illustrate this. The TERT notes that this overview of model interactions, including how they relate to the estimated impacts of PaMs, is not currently presented in the BTR. With regard to the sensitivity analysis, Denmark provided clarification during the review that sensitivity calculations were performed to illustrate key uncertainties and the importance of the assumptions used for the projections. In addition, Denmark clarified that it is not possible to single out which of the input factors have the greatest impact on output variability, as this would require sensitivity analyses of all input parameters at a selected identical relative change (e.g. a 10 per cent increase) and a ranking of all the results of the isolated effect of each parameter and with/without taking into account overlapping effects. This would require a considerable amount of resources and would produce results that may be of interest to academia, but of limited use to policymakers. Therefore, such a project will likely not be initiated.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
<u>ID#</u>	Reporting requirement	The TERT encourages Denmark to provide further summary information in the BTR chapter on the methodologies used for the projections to reduce reliance on external reports. For example, this could include descriptive textual information on the interaction of the models used and a complete list of models, as provided in annex D to the BTR1. With regard to the sensitivity analysis, the TERT acknowledges that, given the complexity and number of models used to calculate the emission projections presented by Denmark, including a sensitivity analysis presented in terms of changes to total GHG emissions under the WM scenario would be challenging. However, the TERT encourages Denmark to provide further
		information in the BTR on the quantified assessments of sensitivity performed, as this would further enhance the transparency and robustness of the 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	
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

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
15.1	Specified in paragraph 119(b) of the MPGs	Denmark reported information on national circumstances and institutional arrangements relevant to reporting on the provision of support, as required under paragraph 119(a, c–d) of the MPGs. The TERT took note of the information provided in section 4.1 of the BTR1, as well as the description of the Party's use of the Creditor Reporting System of the Development Assistance Committee of the Organisation for Economic Co-operation and Development. However, the TERT noted that Denmark did not report in its BTR1 a description of challenges and limitations under paragraph 119(b) of the MPGs related to reporting information on the provision of support.
		During the review, Denmark mentioned that the process of identifying, tracking and reporting on support provided is done manually and involves comparing the information available from the Ministry of Foreign Affairs with the information verified by implementing agencies. This process is also validated by a team of external consultants to avoid double counting. Denmark explained that challenges and limitations arise owing to the small administrative capacity compared with the large portfolio of support activities the country needs to manage, which is further impeded by the complexity of the reporting requirements of the MPGs.
		The TERT recommends that the Party include a description of the challenges and limitations related to reporting information on the support provided and the process of compiling and categorizing the data required by the MPGs.

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

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
16.1	Specified in paragraph 121(l) of the MPGs	Denmark reported information for all subparagraphs under paragraph 121 of the MPGs, apart from subparagraph (l), which requires a description of the underlying assumptions, methodologies and definitions used to identify and report support as being climate-specific. The TERT noted that Denmark mentioned several methodologies included in the referenced external sources, such as the Converged Statistical Reporting Directives for the Creditor Reporting System and the annual

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		Development Assistance Committee questionnaire of the Organisation for Economic Co-operation and Development, and in the annual Finance Act process managed by the Ministry of Foreign Affairs. Moreover, the Party applied additional and national criteria to the referenced methodologies, such as the allocation of specific percentage markers, to produce a more granular picture of the financial support provided, but the information on assumptions, methodologies and definitions used with the application of national criteria was not included in the BTR1.
		During the review, the Party explained its procedure for reviewing the financial support provided, wherein an ex post assessment is conducted on a project-level basis and, depending on the availability of relevant data, a national project-specific factor is identified and applied, with a specific marker used to allocate the climate-specific shares of the support, enabling a much more granular analysis of the type of support provided.
		The TERT recommends that the Party include in its BTR the description of the underlying national assumptions, methodologies and definitions used to identify and report support as being climate-specific.

 $\begin{array}{c} \text{Table 17} \\ \textbf{Areas of improvement of the information on financial support provided under Article 9 of the Paris Agreement - bilateral, regional and other channels} \end{array}$

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
17.1	Specified in paragraph 123(b) of the MPGs and CTF tables III.1	Denmark reported information on the financial support provided to developing country Parties through bilateral, regional and other channels in tabular format in CTF tables III.1 (submitted two separate files for both 2021 and 2022 in each file), as well as various sections of its BTR (pp.200–201) and its annexes E1 and E2. In CTF tables III.1, Denmark provided information relating to all subparagraphs under paragraph 123 of the MPGs, apart from subparagraph (b), which requires Parties to report the amount of financial support provided in terms of the face value and the grant-equivalent value. In addition:
		(a) Denmark did not report the amount of financial support provided either in Danish kroner or in United States dollars for 338 of the 1,122 reported instances of financial support provided (committed and disbursed). The TERT noted numerical inconsistences between the total amount of support committed and disbursed reported in United States dollars in CTF tables III.1 and in summary tables E1(1) and E1(2) in annex E1 to the BTR1;
		(b) Denmark reported grant-equivalent values as "NR" in CTF tables III.1 but did not provide an explanation for doing so.
		During the review, the Party mentioned that these inconsistences are due to problems with the ETF support reporting tool, including restrictions on the use of notation keys. Furthermore:
		(a) The TERT recommends that the Party ensure correct reporting of financial support provided in CTF table III.1 in a single consolidated data set and ensure consistency between the reporting of the financial support committed and disbursed in United States dollars across the BTR, for example in tables E1(1) and E1(2) and in the CTF tables;
		(b) The TERT encourages the Party to report grant-equivalent values in CTF table III.1.

 $\begin{tabular}{ll} Table~18\\ Areas~of~improvement~of~the~information~on~financial~support~provided~under~Article~9~of~the~Paris~Agreement~-multilateral~channels \end{tabular}$

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
18.1	Specified in paragraph 124(c) and (k) of the MPGs and CTF tables III.2	Denmark reported information on the multilateral financial support provided to developing country Parties in tabular format in the submitted CTF tables III.2 as well as various sections of its BTR1 (pp.200–201) and annexes E1 and E2. In its CTF tables III.2, Denmark provided information in relation to all subparagraphs

ID# Reporting requirement

Description of area of improvement with recommendation or encouragement

under paragraph 124 of the MPGs, apart from subparagraph (c), which requires Parties to report the amount of financial support provided in terms of face value and grant-equivalent value, and subparagraph (k), which requires Parties to report information on the type of support. In addition:

- (a) Denmark did not report the amounts either in Danish kroner or in United States dollars for 32 of the 160 reported instances of financial support provided (committed and disbursed);
- (b) The Party reported the type of support as "NA" for some of the support provided in CTF tables III.2 but did not provide an explanation for using this notation key in its BTR1;
- (c) The TERT noted various inconsistencies between the numerical information reported in CTF tables III.2 and in tables E1(3) and E1(4) in annex E1 to the BTR1;
- (d) Denmark reported grant-equivalent values as "NR".

During the review, Denmark explained that the notation key "NA" was used to report the type of support in cases where there was no climate-specific share within the contribution provided to a multilateral institution. Denmark also stated that the information concerning multilateral projects was reported at a more granular level in tables E2(3) and E2(4) in annex E2 to the BTR1 (pp.304–305), which was not possible using the CTF data tools. With regard to the reporting of grant-equivalent values, Denmark noted that all of the support provided comprises grants; consequently, it did not report grant-equivalent values separately. The notation key "NR" was used as the ETF support reporting tool required this column to be filled in order to upload the data.

The TERT recommends that the Party:

- (a) Report all amounts of financial support provided through multilateral channels in CTF table III.2;
- (b) Report the type of support in the CTF tables or include an explanation of the notation key used in the BTR. The TERT notes that Denmark may consider defining a specific methodology to indicate which type of support a project contributes to;
- (c) Ensure consistency between the reporting of climate-specific total contributions across the BTR, for example in tables E1(1), E1(2), E1(3) and E1(4) and in the CTF tables;
- (d) Report grant-equivalent values in CTF table III.2.

Table 19 **Areas of improvement of the information on technology development and transfer provided under Article 10 of the Paris Agreement**

19.1 Specified in paragraph 126(b) and (f) of the MPGs

Reporting requirement

 $Description\ of\ area\ of\ improvement\ with\ recommendation\ or\ encouragement$

Denmark reported information on support provided for technology development and transfer in textual format as required by the subparagraphs under paragraph 126 of the MPGs. However, the TERT noted that the Party did not report information on the support provided at different stages of the technology cycle (para. 126(b)), and specific details on the knowledge generated through the support provided for technology development and transfer (para. 126(f)).

During the review, Denmark explained that the different stages of the technology cycle are not defined and information is not collected as part of its tracking and monitoring of technology development and transfer support activities. Denmark further explained that additional processes, such as the analysis of reviews and evaluation reports, are required in order to gather information on the knowledge generated. The Party noted that, as cross-cutting evaluations and reviews of Danish technology development and transfer support only take place approximately every five years, it will provide such information once all these activities are completed.

The TERT recommends that the Party include in its BTR, to the extent possible, specific information on how the technology development and transfer support provided is related to the different stages of the technology cycle, and make

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		additional efforts to identify, classify and report more specific information on knowledge generated.
19.2	Specified in paragraph 127(b-c) and (e-h) of the MPGs	Denmark submitted information on support for technology development and transfer in three CTF tables III.4 provided in separate files: "DNK CTF FTC 2024 V0.11 Dec 20 (Table III.1 2021 and Table III.4-5 2021).xls", "DNK CTF FTC 2024 V0.12 Dec 20 (Table III.1 2022 and Table III.4-5 2022).xls" and "DNK CTF FTC 2024 V0.13 Dec 20 (Table III.2 and Table III.4-5, 2021 and 2022).xls". However, the TERT noted that Denmark did not provide information in its CTF tables in relation to paragraph 127(b–c) and (e–h) of the MPGs, namely on the recipient entity, a description and objectives of the support provided, complete reporting of information on sectors, type of technology, status of the measure or activity, and whether the activity was undertaken by the public and/or private sector.
		During the review, the Party explained that it does not keep a record of this information and, in the case of reporting on sectors, it was not able to not define which sector each activity corresponds to, and therefore did not report this information in its CTF tables.
		The TERT recommends that the Party include quantitative and/or qualitative information on the recipient entity, a description and objectives of the support provided, complete reporting of information on sectors, type of technology, status of the measure or activity, and whether the activity was undertaken by the public and/or private sector for each measure or activity related to support provided for technology development and transfer in one consolidated CTF table, to the extent possible and as relevant. The TERT notes that establishing a systematic process for collecting this information could support the reporting process.

Table 20 Areas of improvement of the information on capacity-building support provided under Article 11 of the Paris Agreement

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
20.1	Specified in paragraph 128(b) and (e) of the MPGs	Denmark reported information on strategies employed to provide capacity-building support, policies that promote such support and the involvement of stakeholders, as required by paragraph 128(a), (c) and (d) of the MPGs. The TERT noted that Denmark mentioned very briefly in its BTR1 (p.210) that the documentation on each capacity-building support project is assessed, and that the methodology used by the Party determines which capacity-building elements are included in the project context, design and results framework. However, Denmark did not transparently report the information required by paragraph 128(b) of the MPGs on how the capacity-building support provided responds to the existing and emerging capacity-building needs, priorities and gaps identified by developing country Parties. Furthermore, the TERT noted that Denmark did not report specific information required by paragraph 128(e) of the MPGs on how support provided for capacity-building actions in developing country Parties promotes the sharing of lessons learned and best practices.

During the review, Denmark explained that all bilateral partnerships and support projects are designed in close collaboration with the partner country or organization, which often involves a comprehensive project formulation phase carried out jointly with the developing country, partner country or implementing organization. The specific capacity-building needs that will be addressed are identified during the project formulation and design process. With regard to the reporting requirement specified in paragraph 128(e) of the MPGs, the Party mentioned that it compiles information on the capacity-building initiatives being implemented or developed at the time of preparing the BTR and, therefore, it cannot yet provide detailed information on the related lessons learned or best practices.

The TERT recommends that the Party include in the BTR, to the extent possible, qualitative and/or quantitative information on how the capacity-building support provided responds to the existing and emerging capacity-building needs, priorities and gaps identified by the developing country Parties by including a description of

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		the collaboration between Denmark and developing country Parties shared with the TERT during the review, and on how the support provided for capacity-building actions in developing country Parties promotes the sharing of lessons learned and best practices.
20.2	Specified in paragraph 129(b), (c) and (e) of the MPGs	Denmark reported information on the title and the type of support of its capacity-building activities in three CTF tables III.5 in separate files: "DNK CTF FTC 2024 V0.11 Dec 20 (Table III.1 2021 and Table III.4-5 2021).xls", "DNK CTF FTC 2024 V0.12 Dec 20 (Table III.1 2022 and Table III.4-5 2022).xls" and "DNK CTF FTC 2024 V0.13 Dec 20 (Table III.2 and Table III.4-5, 2021 and 2022).xls". The TERT noted that the Party did not report information in CTF table III.5 on the recipient entity, a description and objectives of the support, and the status of the measure or activity, as required by paragraph 129(b), (c) and (e) of the MPGs respectively. In addition, the Party did not explain in the BTR1 the reason why it was not possible to report this information in the CTF tables.
		During the review, Denmark explained that the reason for not reporting information on the recipient entity, the description and objectives, and the status of the measure or activity is because it assumed that descriptive information would be automatically imported from CTF tables III.1 and III.2 for projects that are tagged as being relevant to capacity-building. Furthermore, the Party explained that it does not keep a record of this information outside the reporting process for its BTR.
		The TERT recommends that the Party report information on the recipient entity, a description and objectives of the support, and the status of the measure or activity in one consolidated CTF table, to the extent possible and as relevant. The TERT notes that establishing a systematic process for collecting the information on capacity-building support in the requested format could support the reporting process.

Annex

Documents and information used during the review

A. Reference documents

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

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

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B. Additional information provided by the Party

Responses to questions during the review were received from Erik Rasmussen (Ministry of Climate, Energy and Utilities of Denmark), including additional material. The following references were provided by Denmark and may not conform to UNFCCC editorial style as some have been reproduced as received:

Finansministeriet, 2023: Vejledning i samfundsøkonomiske konsekvensvurderinger (in Danish). Available at https://fm.dk/udgivelser/2023/juni/vejledning-i-samfundsoekonomiske-konsekvensvurderinger

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