



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

Addendum

Summary

This addendum to the report on the technical expert review of the first biennial transparency report of Czechia, 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 9 to 13 March 2026 in Prague.

* 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>
2019 Refinement to the 2006 IPCC Guidelines	<i>2019 Refinement to the 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
COPERT	software tool for calculating road transport emissions
CRF	common reporting format
CRT	common reporting table
CTF	common tabular format
CZSO	Czech Statistical Office
EF	emission factor
EU	European Union
EU ETS	European Union Emissions Trading System
Eurostat	statistical office of the European Union
GHG	greenhouse gas
GWP	global warming potential
IE	included elsewhere
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
LULUCF	land use, land-use change and forestry
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
N	nitrogen
N ₂ O	nitrous oxide
NA	not applicable
NDC	nationally determined contribution
NE	not estimated
NID	national inventory document
NIR	national inventory report
NO	not occurring
NRB	National Development Bank of Czechia
PaMs	policies and measures
QA/QC	quality assurance/quality control
REZZO	Register of Emissions and Sources of Air Pollution
TERT	technical expert review team
UA	unavailable
UNDP	United Nations Development Programme

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 Czechia in its BTR1. All recommendations and encouragements contained in the tables are for the next BTR or NIR, unless otherwise specified.

A. General reporting provisions

Table 1

Areas of improvement relating to general reporting provisions

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

B. Greenhouse gas emissions and removals

Table 2

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
2.G.1	Specified in paragraph 19(c) of the MPGs Archiving	<p>Czechia listed in its NID (p.37) the materials archived by organizations responsible for sectoral GHG emission estimates: raw input data, files for transformation of original data to calculation sheets (if used), calculation sheets, outputs of CRTs and QA/QC documentation, and other relevant documents. However, the Party did not describe how the archiving system works or specify whether documentation related to AD generation (e.g. expert judgments or methodological assumptions) is archived. Furthermore, the Party did not report whether information on review results, including recommendations, or planned inventory improvements is archived as part of the inventory documentation system.</p> <p>During the review, the Party explained that the other relevant documents referred to in the NID include yearly budgets, agendas and notes from annual QA/QC meetings, annual EU ETS data from companies, data from CZSO, information on new EU or national regulations for GHG emissions, and a QC file comparing the CRTs and CRF tables. However, the Party confirmed that documentation related to expert judgment, for example, is not archived.</p> <p>The TERT recommends that Czechia archive all documentation related to generating and aggregating data, in particular by adding to the list of archived documents included in the NID the following documents: old technical expert review reports, expert judgments elicited using the protocol from the 2006 IPCC Guidelines (vol. 1, chap. 2, annex 2A.1), improvement plans and documentation of methodologies, and removing the other documents category from the list.</p>
2.G.2	Specified in paragraph 25 of the MPGs Key category analysis	<p>Czechia reported 30 key categories identified using a level assessment in CRT 7, whereas only 28 key categories were identified in NID table 1-14 (p.42). Furthermore, discrepancies were identified for the energy sector; namely, in CRT 7, CH₄ emissions for category 1.B.1 fugitive emissions from solid fuels and CO₂ emissions for category 1.B.2.b fugitive emissions from fuels – oil and natural gas – natural gas were identified as key categories by level assessment, which is not consistent with NID table 1-13 (p.41). Also, category 1.A.1 – liquid fuels – CO₂ was identified as a key category by level assessment in CRT 7, but not in NID table 1-13 (p.41). Furthermore, the Party did not identify key categories in the agriculture sector in NID tables 1.10–1.13 (pp.39–40) (e.g. categories 3.A (CH₄), 3.B and 3.D.1 (N₂O) using both types of assessment in accordance with IPCC guidelines.</p>

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

² Decision 18/CMA.1, annex.

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
2.G.3	Specified in paragraph 32 of the MPGs Notation keys	<p>During the review, the Party explained that discrepancies may have occurred owing to the migration to the new tools for reporting under the enhanced transparency framework under the Paris Agreement. Furthermore, the Party acknowledged that some removals (-28.18 kt CO₂ eq) were not accounted for in the CRTs and noted that since the key category analysis is continuously subject to improvement, the issue will be addressed in a future submission.</p> <p>The TERT recommends that the Party identify key categories, ensuring consistency between the NID and CRTs, for the starting year and the latest reporting year, including and excluding LULUCF categories, for both level and trend assessment by implementing a key category analysis consistently with the 2006 IPCC Guidelines (vol. 1, chap. 4), or explain the reasons for any differences between the NID and CRTs.</p> <p>Czechia indicated in its NID (annex 5, table A5-7, p.543) that 14 categories were reported as “NE”. The TERT noted that for some categories (e.g. CH₄ emissions for category 1.B.2.a.iii.1, CO₂ emissions for category 1.B.2.a.1 and NO₂ emissions for category 5.D.2), the Party provided an estimate of the likely level of emissions in accordance with the MPGs. However, for the other categories listed in the table, an assessment of significance was not conducted.</p> <p>During the review, the Party noted that it has begun, but not yet completed, the process of producing rough estimates of emissions for categories reported as “NE”. The Party explained that, during the annual QA/QC summary meetings, the issue of producing rough estimates for the remaining categories reported as “NE” will be raised with the sector experts. The Party also clarified that it does not expect all the estimates to be produced for the next submission since the experts may prioritize other improvements.</p> <p>The TERT encourages Czechia to assess and report the level of significance of the emission estimates related to all categories reported as “NE”.</p>
2.G.4	Specified in paragraph 35 of the MPGs QA/QC and verification	<p>Czechia reported in annex 5 to the NID (p.533) a table containing the general QC activities undertaken for the NID, and the form used for the QC procedures in each specific sector. However, the detailed checklist is not populated with findings from the QC process. Furthermore, the general QC procedures from the Party’s QC manual do not contain elements related to review of internal documentation and archiving or include information on institutional arrangements and responsibilities for implementing those activities. In this context, the TERT noted several inconsistencies in reporting. For example, emissions reported for 2022 are inconsistent between the NID tables and CRTs: total CO₂ emissions in NID table 3-2 were reported as 83,783 kt, while the corresponding value in CRT 1 is 83,773.44 kt; total GHG emissions were reported in NID table 3-3 as 87,917 kt CO₂ eq, while the corresponding value in CRT 1 is 87,907.24 kt CO₂ eq; and the total GHG emissions for the energy sector for 2022 reported in the NID are approximately 10 kt CO₂ eq higher than the corresponding value in the CRT. The TERT also noted that empty cells were reported (e.g. in CRTs 5.A and 5.D) and identified errors in the Party’s reporting (e.g. a typographical error in NID section 1.4 (p.39), which describes methodologies and data sources used across all sectors). The TERT shared these findings with the Party during the review.</p> <p>During the review, the Party explained that numerous QC activities are integrated into the sectoral calculation working files and other are registered in supporting documentation. The Party also shared the QC manual with the TERT. The Party acknowledged the discrepancies in the reporting and the typographical errors across sectors and provided clarifications.</p> <p>The TERT recommends that Czechia add relevant parts of the QA/QC plan descriptions from the NID related to the review of internal documentation and archiving, the information on institutional arrangements and responsibilities for implementing those activities and sector-specific QC procedures to its national QA/QC manual to ensure that all relevant QC procedures are documented and reported.</p>

Table 3

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
3.E.1	Specified in paragraphs 21 and 23 of the MPGs 1.A.4 Other sectors – solid fuels – CH ₄ ; liquid fuels – CO ₂ ; biomass – CH ₄	<p>Czechia reported in its NID (p.68) that CH₄ emissions from stationary combustion (category 1.A) is not a key category, so default EFs were used. However, this is not consistent with the key category analysis for the energy sector (NID table 3-1, p.55), which includes CH₄ emissions from solid fuels and biomass as key categories for category 1.A.4 other sectors. The tables in NID sections 3.2.18.1 and 3.2.19.1 indicate that tier 1 methods and default EFs were used for these key categories. Furthermore, CO₂ emissions from liquid fuels in category 1.A.4 other sectors is listed as a key category in NID table 3-1, but the tables in NID section 3.2.18.1 indicate that tier 1 methods and default EFs were used for all liquid fuels in this category except liquefied petroleum gas. Czechia explained in the NID (p.38) that, owing to difficulties associated with implementing higher-tier methods, higher-tier methods were only used for some key categories.</p> <p>During the review, Czechia acknowledged that the information in the text on page 68 of the NID is incorrect and explained that the misreporting was due to an error that will be corrected in the next submission. Czechia clarified that it faces difficulties since it does not have measurement data (e.g. direct measurements from boilers for solid fuels and biomass or laboratory analysis for liquid fuels and biomass) that could be used to establish country-specific EFs for the stationary combustion of solid fuels, liquid fuels and biomass. Czechia also clarified that work is under way to establish country-specific EFs for CH₄ from solid fuels and CO₂ from liquid fuels for stationary combustion, and that the establishment of country-specific EFs for biomass is planned for the future.</p> <p>The TERT recommends that Czechia use the appropriate methods from the 2006 IPCC Guidelines (vol. 2, chap. 2) to estimate CO₂ emissions from liquid fuels and CH₄ emissions from solid fuels and biomass for category 1.A.4 other sectors, which are key categories, and report the estimates, or document in the NID the reasons for not following the relevant decision tree from the 2006 IPCC Guidelines.</p>
3.E.2	Specified in paragraphs 21 and 23 of the MPGs 1.A.1 Energy industries – solid fuels – N ₂ O	<p>Czechia reported in its NID (p.68) that N₂O emissions from stationary combustion (category 1.A) is not a key category, so default EFs were used. However, this is not consistent with the key category analysis for the energy sector (NID table 3-1, p.55), which includes N₂O emissions from solid fuels under category 1.A.1 energy industries as a key category. The table in NID section 3.2.7.1 indicates that default EFs were used for this key category. Czechia explained in the NID (p.38) that, owing to difficulties associated with implementing higher-tier methods, higher-tier methods were only used for some key categories.</p> <p>During the review, Czechia acknowledged that the information in the text on page 68 of the NID is incorrect and explained that this misreporting was due to an error that will be corrected in the next submission. Czechia clarified that it does not have measurement data (e.g. direct measurements from boilers for brown coal and other bituminous coal) that could be used to establish a country-specific EF for this key category. Czechia also clarified that work is under way to establish country-specific EFs for N₂O emissions from stationary combustion of solid fuels.</p> <p>The TERT recommends that Czechia use the appropriate methods from the 2006 IPCC Guidelines (vol. 2, chap. 2) to estimate N₂O emissions from solid fuels for category 1.A.1 energy industries, which is a key category, and report the estimates, or document in the NID the reasons for not following the relevant decision tree from the 2006 IPCC Guidelines.</p>
3.E.3	Specified in paragraphs 39–40 of the MPGs 1.A.1.b Petroleum refining – solid fuels – CO ₂ , CH ₄ and N ₂ O	<p>Czechia reported in its NID (p.78) that no consumption of solid fuels occurred under category 1.A.1.b petroleum refining, and the methods and assumptions used to estimate emissions in this sector were therefore not reported. The TERT noted that this information is not consistent with CRT 1.A(a)s1, which indicates that solid fuel consumption occurred under category 1.A.1.b in 1993–1995, resulting in emissions of CO₂, CH₄ and N₂O in these years.</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
3.E.4	Specified in paragraphs 26 and 43 of the MPGs 1.A.2.b Non-ferrous metals – gaseous fuels – CO ₂ , CH ₄ and N ₂ O	<p>During the review, Czechia explained that the aforementioned text in the NID refers to the latest inventory year and confirmed that solid fuels were only consumed under category 1.A.1.b in 1993–1995.</p> <p>The TERT recommends that Czechia report information on the methods and assumptions used to estimate emissions for category 1.A.1.b petroleum refining for 1993–1995 in its NID.</p> <p>Czechia reported in its NID (table 3-22, p.88) recalculations from the 2023 inventory submission for gaseous fuels for subcategory 1.A.2.b non-ferrous metals, which were carried out owing to changes in the AD for natural gas. The TERT noted a large fall in the AD of over 56 per cent for 2021 between the 2023 and 2024 inventory submissions as a result of the recalculations, but no explanation was given in the NID for this significant change. Moreover, in its NID (pp.29–30), Czechia explained that data from independent sources, such as the EU ETS and REZZO (a national emission database) are compared with the AD coming from the national energy balance provided by CZSO as part of the QC process for the energy sector. Czechia further reported in its NID (p.70) that time-series consistency is regularly monitored by the energy sector inventory compiler and the results are used to identify potential errors, and that CZSO (the AD provider) does not currently have the capacity to systematically and consistently verify the time series of AD and analyse the causes of fluctuations in the energy balance.</p> <p>During the review, Czechia clarified that CZSO did not provide additional information on the changes in the AD for natural gas consumption, and that the significant change following the recalculation was most likely caused by an error in the AD reported in previous years. Further, Czechia explained that data from independent data sources such as the EU ETS do not include enough detail to allow for comparisons with the AD provided by CZSO at a subcategory level (e.g. for subcategory 1.A.2.b), as not all companies are covered by the EU ETS, meaning that the EU ETS is not fully consistent with the national inventory and a comparison would allow for the identification of major discrepancies only. Czechia stated that REZZO is only used occasionally as there are large differences between this register and the inventory. Czechia noted that possible outliers or errors in the AD are identified by monitoring trends for individual fuels and comparing with the approximate inventory. In addition, Czechia stated that the AD goes through repeated checks with CZSO and Eurostat prior to being used in the inventory; therefore, the possibility of errors is minimal.</p> <p>The TERT recommends that Czechia report explanatory information on how it calculates the full time series of estimates for subcategory 1.A.2.b non-ferrous metals (gaseous fuels), indicating relevant changes in estimations and their impact on the emission trends. The TERT encourages the Party to explain how it achieved time-series consistency between submissions for subcategory 1.A.2.b, including how emission trends are monitored and how potential errors or outliers are identified and assessed.</p>
3.E.5	Specified in paragraphs 40 and 47 of the MPGs 1.A.3.b Road transportation – CH ₄ and N ₂ O	<p>Czechia reported in its NID (pp.110–116) trends in fuel consumption and emissions for category 1.A.3.b road transportation by vehicle category. However, the drivers of the emission trends were not fully discussed in the NID and there were some inconsistencies in the visual representation of data. Figure 3-24, which shows the trend in fuel consumption, displays heavy-duty vehicles and buses as two separate vehicle categories, whereas the reporting on emission trends in figures 3-25, 3-27 and 3-30 combines heavy-duty vehicles and buses into a single category. The order in which vehicle categories appear in these figures and the colours used for the categories are also not consistent. Additionally, the colours used for N₂O emissions for heavy-duty vehicles and buses and L-category vehicles in figure 3-30 are very similar; as a result, it is difficult to differentiate between the trends in N₂O emissions for these two vehicle categories. Trends shown in the figures, such as the relatively small contribution of light-duty vehicles to CH₄ emissions compared with L-category vehicles (figure 3-27) and the increasing share of N₂O emissions from heavy-duty vehicles (figure 3-30), are not described in the NID. The data are reported for the time series 2000–2022 in the NID, and trends for 1990–1999 are not presented.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>During the review, Czechia explained that N₂O emissions from L-category vehicles remained very stable across the 2000–2022 time series, accounting for only 0.2–0.3 per cent of total N₂O emissions from road transport. Owing to their negligible contribution, emissions from L-category vehicles are not visible in figure 3-30. Czechia clarified that the figure shows the increasing share of heavy-duty vehicles, which are presented in a colour similar to that assigned to the emissions from L-category vehicles. In particular, emissions from diesel-fuelled heavy-duty vehicles exhibit an upward trend, with the vehicle category accounting for 30–43 per cent of total N₂O emissions from road transport in 2013–2022. Czechia acknowledged that the colour scheme used in the figure may lead to confusion, particularly between heavy-duty vehicles and buses, on the one hand, and L-category vehicles, on the other, and stated that the colour palette will be revised for the next submission to enable readers to clearly differentiate between emissions for all vehicle categories.</p> <p>The TERT recommends that Czechia include in its NID information on the assumptions used and additional contextual information on the fleet data for category 1.A.3.b road transportation, including breakdown of and information on trends at the most disaggregated level, considering that fleet data represent an important part of the AD inputs for the COPERT model used to estimate road transport emissions.</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 paragraphs 26 and 39 of the MPGs 2.A.4 Other process uses of carbonates – CO ₂	<p>Czechia reported in the NID (p.173) that it used tier 3 methods for estimating emissions for category 2.A.4.d flue gas desulfurization. It mentioned that AD for coal consumption for electricity production, sulfur content of coal and the effectiveness of sulfur removal units for 1996–2005 come from a single source, and EU ETS data were used in the estimations for 2006 onward. However, Czechia did not provide information on sulfur content or the effectiveness of sulfur removal units, or on the source of sulfur content values and the performance indicator for sulfur removal units for 1996–2005.</p> <p>During the review, the Party clarified that, for the historical GHG emission estimates for the years before EU ETS data became available, sulfur content was not itself a determining parameter. The calculation relied on the amount of limestone and dolomite used in flue gas desulfurization and the corresponding CO₂ EF, which is the relevant variable for GHG accounting. Czechia also explained that national legislation sets a limit for the sulfur content of solid fuels (1.9 g/MJ) under decree 206/1993 Coll. Historical coal catalogues used by operators also contain the mandated sulfur characteristics of fuels. In accordance with act 309/1991 Coll. on air protection and the subsequent act 86/2002 Coll. on air protection, operators reported fuel consumption and fuel quality parameters, including sulfur content, through the REZZO database, specifically in the Souhrnná provozní evidence reporting system. These data were published and used for air pollutant inventories, providing an additional source of information, where needed.</p> <p>The TERT recommends that Czechia clearly document in its NID the methodology and all assumptions, references and sources of information associated with the parameters and AD used to estimate emissions for category 2.A.4.d flue gas desulfurization for 1996–2005. The TERT encourages the Party to ensure a consistent time series by using the same methods and underlying AD and EFs for each reported year.</p>
4.I.2	Specified in paragraph 47 of the MPGs 2.A.4 Other process uses of carbonates – CO ₂	<p>Czechia reported in the NID (pp.173–175) emissions from urea use (denitrification) under category 2.A.4.d other process uses of carbonates. According to the 2006 IPCC Guidelines (vol. 3, chap. 3, box 3.3, p.3.16), CO₂ emissions from urea use should be accounted for in the corresponding sectors where the emissions occur.</p> <p>During the review, the Party explained that, historically, emissions from urea use for denitrification have been reported together with flue gas desulfurization under category 2.A.4.d, as both processes are closely related end-of-pipe abatement</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
		<p>technologies. Nevertheless, the Party plans to revise this allocation and reallocate CO₂ emissions from urea use to category 2.D.3 to ensure full consistency with the 2006 IPCC Guidelines.</p>
		<p>The TERT recommends that Czechia report emissions from urea use under category 2.D.3 to ensure consistency with the 2006 IPCC Guidelines.</p>
4.I.3	<p>Specified in paragraphs 21 and 23 of the MPGs 2.B.8 Petrochemical and carbon black production – CO₂</p>	<p>Czechia reported in its NID (annex 1, pp.430–462) that CO₂ emissions for category 2.B.8 petrochemical and carbon black production was identified as a key category. However, the Party applied a tier 1 methodology from the 2006 IPCC Guidelines to estimate emissions from ethylene, ethylene dichloride and styrene production (NID pp.188–189). The Party did not explain the rationale for not using the appropriate methodological tier from the 2006 IPCC Guidelines.</p> <p>During the review, the Party clarified that information on the annual production of petrochemicals was provided by CZSO for ethylene and ethylene dichloride production. AD for styrene production were derived from a national database under Czechia’s integrated reporting system related to reporting obligations or EU ETS reports. However, since neither plant-specific data nor AD on carbon flows were available for these petrochemical processes, a tier 1 method was used to estimate emissions. Czechia indicated that it will attempt to obtain additional data directly from the production facilities but noted that they are not legally obliged to provide such data.</p> <p>The TERT recommends that the Party use an appropriate method from the 2006 IPCC Guidelines (vol. 3, chap. 3) to estimate CO₂ emissions for category 2.B.8 or document in the NID the reasons for not following the relevant decision tree from the 2006 IPCC Guidelines.</p>
4.I.4	<p>Specified in paragraph 31 of the MPGs 2.B.10 Other (chemical industry) – CO₂</p>	<p>Czechia reported in CRT 2(I).A-H the AD and emissions for category 2.B.10.b non-selective catalytic reduction of output gases from nitric acid production for 1990–2007 as “IE”, with numerical values for AD and emissions reported only for 2008 onward. The Party did not report in CRT 9 any clarification of its reporting of “IE”.</p> <p>During the review, the Party explained that clarifications of the use of “IE” for this category were not correctly imported to CTF table 9 during the transfer of information from the CRF tables to the CTF table using the relevant tool for reporting under the enhanced transparency framework. Czechia noted that emissions for category 2.B.10.b were reported under category 1.A.2.c chemicals for 1990–2007 as no disaggregated data were available for reporting under category 2.B chemical industry. In 2008, the source data structure changed, enabling the identification of emissions from non-energy use, namely those associated with the non-selective catalytic reduction of output gases from nitric acid production.</p> <p>The TERT recommends that Czechia clearly report in the NID and relevant CRT on the allocation of CO₂ emissions for category 2.B.10.b other (non-selective catalytic reduction of output gases from nitric acid production), including the notation keys used and the rationale for their use, for 1990–2007.</p>
4.I.5	<p>Specified in paragraph 39 of the MPGs 2.C.1 Iron and steel production – CO₂</p>	<p>Czechia reported in NID table 4-20 the AD for coke, bituminous coal, coal tar, dolomite and limestone used as raw materials in the steel production process (category 2.C.1); however, an equation provided for estimating total carbon from the process also includes scrap, electrodes and steel (NID p.193 of the NID). In addition, the Party noted that the carbon content of raw materials is a key parameter for estimating CO₂ emissions, but no parameters or sources were reported.</p> <p>During the review, the Party clarified that the AD for scrap, electrodes and steel, as well as the carbon content parameters used in the calculations, were partly provided by CZSO under a confidentiality agreement. For this reason, the data were not included in the NID. The Party provided the TERT with the worksheet used for its emission estimates, AD and parameters. Czechia also explained that it used parameters from the 2006 IPCC Guidelines, the national monitoring and reporting guidelines and the EU regulation on the monitoring and reporting of GHG emissions pursuant to directive 2003/87/EC of the European Parliament and</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>the European Council (regulation 601/2012), as well as the country-specific EF for bituminous coal from the energy sector.</p> <p>The TERT recommends that Czechia clearly document in the NID all material flows included in the carbon balance used to estimate CO₂ emissions for category 2.C.1 iron and steel production, including the values of and sources for the carbon content of relevant input and output materials. The TERT also recommends that the Party include in the NID an explanation where data are considered confidential, while ensuring that sufficient information is reported to ensure the transparency and comparability of the reported emission estimates and allow them to be assessed.</p>

Table 5

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
5.A.1	<p>Specified in paragraphs 35 and 37 of the MPGs</p> <p>3. General (agriculture) – CH₄ and N₂O</p>	<p>The Party reported in CRT 3 CH₄ and N₂O emission estimates for categories 3.A.1 and 3.D.1 in CO₂ eq. However, the total GHG emissions in CO₂ eq do not match the respective emissions expressed in the unit of mass, taking into account the GWP values used. For example, for 1990, the Party reported emissions of 224.82 kt CH₄ for category 3.A.1, which, taking into account the 100-year time-horizon GWP value from the IPCC Fifth Assessment Report for CH₄ (28), should equal 6,295.08 kt CO₂ eq. Instead of this value, CRT 3 shows 6,672.71 kt CO₂ eq. Similar discrepancies occur for category 3.D.1. Despite this, the total GHG emissions from agriculture reported in CRT 3 are correct; therefore, these discrepancies may indicate issues with the implementation of QC procedures for CRT 3 (for 1990–2022).</p> <p>During the review, the Party acknowledged the discrepancies between the CRT 3 values and the calculations of the TERT for categories 3.A.1 and 3.D.1 and explained that these were likely caused by incorrect GWP values being applied in the reporting software. Czechia stated that it intends to address the discrepancies in future submissions.</p> <p>The TERT encourages Czechia to strengthen its category-specific QC procedures and recommends that it ensure the correct 100-year time-horizon GWP values from the IPCC Fifth Assessment Report are consistently applied in the CRTs for categories 3.A.1 and 3.D.1.</p>
5.A.2	<p>Specified in paragraph 31 of the MPGs</p> <p>3.B Manure management – CH₄</p>	<p>The Party reported in NID table 5-22 (p.249) on the types of poultry manure management systems, including values for the category other, whereas in the corresponding CRT (CRT 3.B(a)) “NO” was reported for 1990–2015 for other manure management systems. The TERT noted this inconsistency in the reported distribution of animal waste management systems and noted that the Party did not provide a rationale for its reporting of “NO”.</p> <p>During the review, the Party acknowledged that data for other animal waste management systems were reported in NID table 5.22 for 1990–2015 but incorrectly omitted from CRT 3.B(a). The Party clarified that this error does not affect the emission estimates for category 3.B.</p> <p>The TERT recommends that Czechia maintain consistency in its reporting of category 3.B in terms of the information reported in the NID and CRT 3.B(a) for 1990–2015 by ensuring consistency in the reported distribution of poultry manure management systems where emission estimates or AD are available, or by using the appropriate notation key.</p>
5.A.3	<p>Specified in paragraphs 26 and 39 of the MPGs</p> <p>3.D Direct and indirect N₂O emissions from agricultural soils – N₂O</p>	<p>Czechia reported in its NID (p.265) that, although agricultural soils is a key source, N₂O emissions therefrom were estimated and analysed using a tier 1 approach from the 2019 Refinement to the 2006 IPCC Guidelines. The TERT noted that the method and tier level used are not in accordance with the corresponding decision tree from the 2006 IPCC Guidelines (vol. 4, chap. 11, figure 11.2) for key categories.</p> <p>During the review, the Party explained that it implemented a methodological update in close cooperation with experts from the Czech Agrifood Research Center and the Global Change Research Institute of the Czech Academy of Sciences for N₂O emissions from managed soils, including through the implementation of</p>

ID#	Reporting requirement	Description of area of improvement with recommendation or encouragement
5.A.4	Specified in paragraphs 39 and 47 of the MPGs 3.D.1.a Inorganic N fertilizers – N ₂ O	<p>procedures from the 2019 Refinement to the 2006 IPCC Guidelines and the use of updated EFs F1, F4, N leaching and volatilization values, and climate data. Czechia confirmed that the updated methodology used for estimating N₂O emissions from managed soils constitutes a tier 2 method and was consistently applied across all components of this key category. The Party explained that the tier 2 characterization is based on a spatially disaggregated, regionally differentiated estimation framework, which uses regional level AD and calculations to reflect the variability in climatic conditions across Czechia.</p> <p>The TERT recommends that Czechia accurately report the methodological tiers used to reflect the updated methodology used for estimating N₂O emissions from managed soils for category 3.D, detailing the parameters and explaining the regional level AD and climatic variability used. The TERT encourages the Party to provide information on how time-series consistency was achieved under the methodological update.</p>
5.A.5	Specified in paragraphs 22 and 39 of the MPGs 3.D.1.d Crop residues – N ₂ O	<p>Czechia reported in its NID (section 5.4.2.2.1, p.266) a sharp decrease in synthetic N fertilizer consumption between 1990 (418 kt) and 1993 (180 kt), followed by a steady increase until 2016 and a subsequent decline after 2017. The TERT noted that the Party did not provide an explanation for the fluctuating emission trend.</p> <p>During the review, the Party clarified that the temporary increase in synthetic N fertilizer consumption in 2015–2017 was driven by favourable economic conditions, stable crop prices, expected high crop yields and partial compensation of N balances, while the decline after 2017 was due to drought, rising fertilizer prices, strengthened environmental regulations under the EU nitrates directive and wider adoption of precision application technologies. Czechia also clarified that the sharp decrease in fertilizer use from 418 to 180 kt between 1990 and 1993 was due to structural, economic and policy changes following the transition from a centrally planned form of government to a market economy, including the removal of subsidies, restructuring of agricultural enterprises, dissolution of state farms and land restitution, which increased input costs and created institutional uncertainty.</p> <p>The TERT recommends that Czechia transparently describe the underlying emission trends by explaining the reasons for the significant decrease in synthetic N fertilizer consumption between 1990 and 1993, including any relevant contextual information (e.g. on policy changes, economic circumstances and structural agricultural reforms), and document how changes are not the result of changes to methods or assumptions across the time series, but are instead due to emission drivers.</p> <p>Czechia reported in its NID (p.276) that the Global Nitrous Oxide Calculator was used to estimate N₂O emissions from rape cultivation and highlighted an absence of suitable parameters in methodologies from the 2006 IPCC Guidelines and the 2019 Refinement to the 2006 IPCC Guidelines for estimating the amount of N in rapeseed biomass. The TERT noted that Czechia did not explain the methodology applied or provide the data and/or parameters used for estimating N₂O emissions from rapeseed cultivation.</p> <p>During the review, the Party provided additional material, an Excel file (ID_63_agri.xlsx) containing AD, equation references and links. Czechia clarified that N₂O emissions from rapeseed were estimated using the Global Nitrous Oxide Calculator, applying IPCC tier 1 EF1 values with input data from EU regulation 2022/996 and crop-specific parameters from the Joint Research Centre’s annual report for 2019. Calculations were reviewed by the Directorate-General for Energy of the European Commission and validated by EU decision 2024/2624. Czechia confirmed that it will include in future submissions a methodological description and references to the NID to improve transparency.</p> <p>The TERT recommends that Czechia include a transparent description in its NID of the national methodological approach used to estimate N₂O emissions from rape cultivation, including the input data source, the underlying assumptions and references, as well as documentation to show that the estimates are consistent with the 2006 IPCC Guidelines.</p>

Table 6

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
6.L.1	Specified in paragraphs 21 and 39 of the MPGs Land representation – CO ₂	<p>The total national land area reported in the annual land-use matrix in CRT 4.1 is not constant across the GHG inventory time series, with a maximum difference of 1,400 ha between the base year and the latest inventory year. The TERT was not able to identify an explanation for these differences.</p> <p>During the review, Czechia explained that the minor variations in the land-use matrix are due to cadastral and administrative processes (e.g. reclassification, improved surveying and digitalization), and that the data from the Czech Office for Surveying, Mapping and Cadastre were applied consistently across the time series.</p> <p>The TERT recommends that Czechia apply appropriate methodologies from the 2006 IPCC Guidelines (vol. 4, chap. 3) to estimate the total national land area, as reported in the annual land-use matrix, and clearly describe in its NID the reasons for the fluctuations in total land area across the time series.</p>
6.L.2	Specified in paragraphs 29 and 44 of the MPGs 4. General (LULUCF) – CO ₂	<p>Czechia reported uncertainty estimates for key LULUCF categories in the NID (p.309) for 2022. However, the TERT was unable to identify a qualitative discussion relating to the uncertainty of the estimates for the starting year and the latest reporting year of the inventory time series.</p> <p>During the review, the Party clarified that it estimated uncertainty for all years of the time series, including the starting year (1990) (e.g. ±23 per cent for forest land), but did not provide any further information regarding the qualitative assessment.</p> <p>The TERT recommends that Czechia include in its NID a qualitative discussion of the uncertainty of the emission and removal estimates for all source and sink categories for at least the starting year and the latest reporting year of the inventory time series for all LULUCF categories.</p>
6.L.3	Specified in paragraphs 29 and 44 of the MPGs 4.A Forest land – CO ₂	<p>Czechia used a tier 3 estimation method (carbon budget model) for most LULUCF inventory categories (see NID table 6-8, p.297). The TERT noted that the uncertainty analysis for carbon stock change estimates is based on expert judgment and literature (NID p.309), and the total uncertainty of the reported emissions for the LULUCF sector is based on error propagation (equation 3.2 from the 2006 IPCC Guidelines (vol. 1, chap. 3)). However, the TERT was unable to find information on the underlying assumptions derived from the expert judgment used in the NID.</p> <p>During the review, the Party provided additional information in the form of a formal expert judgment documentation file (EJ-4A-2024-001.docx) and explained that quantifying the overall uncertainty of the outputs from the carbon budget model remains challenging, and it currently relies on the use of expert judgment and error propagation. The Party also shared that it plans to explore the possibility of using a Monte Carlo analysis as data availability improves, particularly under the NFI4LULUCF project (2026–2028).</p> <p>The TERT recommends that Czechia improve the transparency of its reporting by documenting in the NID all the underlying assumptions used for estimating uncertainty for LULUCF that are derived from expert judgment and archiving that information.</p>
6.L.4	Specified in paragraph 39 of the MPGs 4.A.2 Land converted to forest land – CO ₂	<p>According to the NID (p.305), Czechia estimated net carbon stock changes in dead organic matter for land converted to forest land (category 4.A.2) using a tier 2 method and used a 100-year transition period for deadwood instead of the default value (20 years) from the 2006 IPCC Guidelines (vol. 4). However, the TERT was unable to identify a justification for the use of the transition period selected by the Party in the NID.</p> <p>During the review, the Party clarified that the choice of a 100-year transition period for deadwood is supported by national chronosequence studies, which demonstrate that deadwood pools in temperate forests require more than 20 years to reach reference levels.</p> <p>The TERT recommends that Czechia explain the national methods, data and/or parameters selected for estimating changes in carbon stock in dead organic matter</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		pools in land converted to forest land (category 4.A.2) by including, for example, references to publications used.
6.L.5	Specified in paragraph 39 of the MPGs 4.B.1 Cropland remaining cropland – CO ₂	<p>Czechia estimated changes in biomass for category 4.B.1 cropland remaining cropland for perennial woody crops, noting in the NID (p.313) that changes in biomass can only be estimated for these crops. However, the TERT could not identify information on the assumptions underlying the decision not to estimate changes in biomass for annual crops.</p> <p>During the review, Czechia clarified that the increase in biomass stocks for annual crops is assumed to equal losses from harvest and mortality, resulting in no net biomass accumulation, and confirmed that it will report related information in its next NID.</p> <p>The TERT recommends that Czechia clearly report the assumptions used for producing estimates for category 4.B.1 cropland remaining cropland, including by explaining that the increase in biomass stocks for annual crops is assumed to equal losses from harvest and mortality, resulting in no net accumulation.</p>
6.L.6	Specified in paragraphs 30–31 of the MPGs 4.D.1 Wetlands remaining wetlands – CO ₂	<p>For category 4.D.1 wetlands remaining wetlands, Czechia reported in its NID (p.324) that peat extraction ceased in the early 1990s, except for peat used in balneology, and reported it as “NO” in CRT 4.D.1.a. However, the TERT was unable to conclude on the basis of the information provided in the NID whether this activity could be a source of emissions.</p> <p>During the review, the Party clarified that small-scale peat extraction for balneology occurs, but the peat is not combusted and is often regenerated and reused. The Party also explained that no reliable data exist on the quantities extracted, and emissions are considered negligible and not estimated as no specific IPCC methodology exists for this practice.</p> <p>The TERT encourages Czechia to clearly explain the rationale for not reporting peat used in balneology for category 4.D.1 wetlands remaining wetlands and recommends that the Party report “NA” in the relevant CRT.</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 paragraph 27 of the MPGs 5.A Solid waste disposal on land – CH ₄	<p>Czechia estimated and reported CH₄ emissions from industry under category 5.A solid waste disposal on land using an estimated value for industrial waste production of 21,760 t for 1990–2001 and 2003. However, during this period the Czech economy underwent significant structural changes as it transitioned to a market system, with many industries being restructured or ceasing activity. These changes likely resulted in substantial variations in industrial activity and waste generation. The Party did not justify the use of a constant value for the 1990–2001 time series in the NID.</p> <p>During the review, the Party provided information on more accurate estimates that could be derived for historical industrial waste production on the basis of information sources for relevant emission drivers, such as the index of industrial production.</p> <p>The TERT encourages Czechia to use surrogate data, extrapolation, interpolation and other methods consistent with splicing techniques contained in the 2006 IPCC Guidelines (vol. 1, chap. 5) to estimate emission values for the full 1990–2001 time series as a result of the lack of AD for industrial solid waste disposal under category 5.A.</p>
7.W.2	Specified in paragraph 47 of the MPGs 5.A.2 Unmanaged waste disposal sites – CH ₄	<p>Czechia reported in the NID (p.342) that emissions for category 5.A.2 unmanaged waste disposal sites were not relevant. In CRT 5, “NO” was reported for the entire time series (1990–2022). However, according to information provided by the Government of Czechia to the United Nations Commission on Sustainable Development, in 1995, 1,270 landfill sites were in operation, only 294 of which were operating under valid legal provisions.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>During the review, the Party explained that, although historically unmanaged waste disposal likely occurred, no data were available for estimating emissions from unmanaged sites.</p> <p>The TERT recommends that Czechia estimate emissions for category 5.A.2 unmanaged waste disposal sites to ensure the completeness of the emission estimates for the category.</p>
7.W.3	Specified in paragraph 29 of the MPGs 5.B.1 Composting – CH ₄ and N ₂ O	<p>Czechia reported in the NID (chap. 7.3.1.3, p.344) that default uncertainty values were reported for category 5.b.1 composting as only default EFs were used, and that the uncertainty of the reported AD was estimated to be low (+/- 5 per cent). However, the TERT was not able to identify a qualitative discussion of the uncertainty reported.</p> <p>During the review, the Party explained that no additional qualitative discussions of uncertainty had been carried out yet.</p> <p>The TERT recommends that Czechia qualitatively discuss the uncertainty of the emission and removal estimates for category 5.B.1 composting for at least the starting year and the latest reporting year of the inventory time series.</p>
7.W.4	Specified in paragraphs 27, 47 and 57 of the MPGs 5.C.1 Waste incineration – CO ₂ , CH ₄ and N ₂ O	<p>Czechia reported in the NID (p.349) that AD for estimating emissions for category 5.C.1 waste incineration are based on the Waste Management Information System database. The Party explained that the database has no data for years before 2002, and incineration data in the database are consistent for 2005 onward, when a new data-collection methodology was implemented. However, the Party did not provide in the NID a descriptive summary of underlying emission trends.</p> <p>During the review, the Party was unable to provide additional information on how it ensured time-series consistency for the data for 1990–2004 and 2005 onward.</p> <p>The TERT recommends that Czechia ensure time-series consistency and encourages the Party to use surrogate data, extrapolation, interpolation and other methods consistent with splicing techniques contained in the 2006 IPCC Guidelines (vol. 1, chap. 5) to estimate missing emission values resulting from the lack of AD for category 5.C.1 waste incineration. The TERT also recommends that the Party provide a descriptive summary of the underlying emission trends for category 5.C.1.</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>
8.1	Specified in paragraphs 61–62 of the MPGs	<p>Czechia reported information on the institutional arrangements in place to track progress in implementing and achieving its NDC in its BTR1 (section 2.2.1, pp.43–44, and annex 2, pp.214–216). The Party also reported on institutional, administrative and procedural arrangements for the implementation of the NDC in its BTR1 (section 2.2.2, pp.44–45). However, these arrangements only relate to arrangements in place at the EU level, and the Party did not explain how they translate to the national level (domestic implementation) or how they are integrated into an existing national system for monitoring GHG emissions.</p> <p>During the review, Czechia explained that it also has specific national arrangements for tracking progress of the NDC, which relate to the achievement of national GHG targets based on EU legislation. Like other EU member States, Czechia prepares and submits a national energy and climate progress report every two years, which includes GHG data and information on the overall contribution of Czechia to the achievement of the EU NDC.</p> <p>The TERT recommends that Czechia provide a detailed description of its domestic institutional, administrative and procedural arrangements for tracking progress in the implementation and achievement of its NDC, including those used for tracking</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		internationally transferred mitigation outcomes, if applicable. The TERT also recommends that the Party provide details of the 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

<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>
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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
11.1	Specified in paragraph 82(f) of the MPGs	<p>Czechia did not report in CTF table 5 the sectors associated with the following PaMs: the Biomass Action Plan, the Modernisation Fund, the Rural Development Programme 2014–2020, emission limits under the Air Protection Act (201/2012 Coll.), the EU ETS and the State Programme on the Promotion of Energy Savings. However, the affected sectors were reported in the BTR1 for the Modernisation Fund, the Rural Development Programme 2014–2020, the EU ETS and the State Programme on the Promotion of Energy Savings.</p> <p>During the review, Czechia explained that information was not copied correctly for PaMs affecting more than one sector. It clarified that the Biomass Action Plan affects the agriculture, LULUCF and energy sectors; the Modernisation Fund is cross-cutting, affecting mainly the energy, transport and IPPU sectors; the Rural Development Programme 2014–2020 is relevant for the agriculture and LULUCF sectors; emission limits under the Air Protection Act (201/2012 Coll.) are most relevant to the energy and IPPU sectors; the EU ETS is most relevant to the energy and IPPU sectors; and the State Programme on the Promotion of Energy Savings covers the energy sector.</p> <p>The TERT recommends that the Party provide information in CTF table 5 on the affected sectors for its actions and PaMs, to the extent possible.</p>
11.2	Specified in paragraph 83(a–b) of the MPGs	<p>Czechia reported information in its BTR1 on costs for two mitigation policies: the Operational Programme Enterprise and Innovation: Eco-Energy (p.75) and Operational Programme Enterprise and Innovation for Competitiveness (2014–2020) (p.76). However, information on costs and non-GHG benefits was not provided for the remaining PaMs.</p> <p>During the review, Czechia explained that it is usually hard to obtain up-to-date quantified information regarding costs and non-GHG mitigation benefits from implementing entities unless the information is available from public reports, as is the case for the two above-mentioned Operational Programmes. The Party also explained that it is working on improving the monitoring and reporting systems for PaMs, which would enable more information to be collected.</p> <p>The TERT encourages Czechia to provide information on costs and non-GHG benefits for the reported PaMs or to provide the rationale for not reporting this information, where applicable.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
11.3	Specified in paragraph 85 of the MPGs	<p>Czechia did not report in CTF 5 estimates of achieved GHG emission reductions for its actions and PaMs. Furthermore, there were discrepancies in the reported estimates of expected GHG reductions for 2025 between the BTR1 and CTF table 5. For example, the estimate of the expected emission reduction for the Operational Programme Enterprise and Innovation for Competitiveness for 2025 was reported as 857 kt CO₂ eq in CTF table 5, compared with 1,160.04 kt CO₂ eq in the BTR1 (p.77). Similar discrepancies were identified for other PaMs, such as the Strategy for Growth in the agriculture sector.</p> <p>During the review, Czechia explained that for CTF table 5 it used the estimates of expected emission reductions from its official reporting of PaMs to the European Commission in March 2023. Some of the PaMs listed in the table are framework measures whose mitigation impact is either accounted for under other PaMs or not available. For some measures Czechia was able to update the information reported in the text of the BTR1 on their mitigation effect on the basis of specific available information for some indicators, but CTF table 5 still contains the preliminary calculation of mitigation effects.</p> <p>The TERT recommends that Czechia, to the extent possible, consistently report estimates of expected and achieved GHG emission reductions for its actions and PaMs in CTF 5 and clarify whether there are discrepancies in the information reported between the BTR and CTF tables. If the Party deems that it is not possible to report in accordance with paragraph 85 of the MPGs, the TERT recommends that the Party provide an explanation in the BTR.</p>
11.4	Specified in paragraph 90 of the MPGs	<p>Czechia did not provide detailed information on the assessment of the economic and social impacts of response measures.</p> <p>During the review, Czechia explained that the consideration of economic and social impacts and consequences of PaMs is a key component of policymaking at the EU level, where a comprehensive impact assessment is carried out for all initiatives expected to have significant environmental, economic or social impacts. There is specific guidance for analysing the possible impacts of EU initiatives on developing countries. Czechia also strives to implement its commitments under the Paris Agreement in a way that minimizes adverse impacts on developing country Parties. The Party explained that it did not include a subchapter on response measures in the BTR1 but it plans to do so in the BTR2.</p> <p>The TERT encourages Czechia to provide, to the extent possible, detailed information on the assessment of economic and social impacts of response measures in the BTR.</p>

Table 12

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

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
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 95 of the MPGs	<p>Czechia indicated in its BTR1 (p.104) that 2020 was selected as the base year for the GHG emission projections, except for energy sector categories 1.A.1 and 1.A.4, for which 2019 was selected as the base year. The TERT noted that this is inconsistent with paragraph 95 of the MPGs, which states that projections must start from the most recent inventory year (2022 for the BTR1). The TERT also noted that models may still be calibrated to an earlier base year (e.g. 2020), provided that the reported projections align with the latest inventory year.</p> <p>During the review, Czechia provided additional details for the projections, clarifying that 2019 was not chosen as the base year for some categories in order to avoid bias related to the coronavirus disease 2019 pandemic and its impact on 2020 emissions, particularly for sectors that were more likely to have been affected by</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>the pandemic. The Party also clarified that the projections were made before the 2022 GHG inventory submission, which, unlike the projections, reflects the pandemic.</p> <p>The TERT recommends that Czechia ensure that its projections begin from the most recent year in its NIR and improve the transparency of its reporting by providing additional details on the assumptions used to select the base year(s) for the projections.</p>
13.2	Specified in paragraph 96(a) and (c) of the MPGs	<p>Czechia reported in its BTR1 (section 2.6, pp.104–156) information on projections. However, the TERT noted that, firstly, information on key underlying assumptions and parameters was reported in more detail for some sectors, and the corresponding CTF table (CTF table 11) was left blank. Secondly, the Party did not clearly report the assumptions on PaMs included in the ‘with measures’ projections and ‘with additional measures’ projections.</p> <p>During the review, Czechia provided detailed additional technical information on the projections. The Party noted that it faced a technical issue when preparing the CTF tables for the BTR that prevented it from providing all the requested data. The Party also provided the TERT with the completed version of CTF table 11.</p> <p>The TERT encourages Czechia to enhance the transparency of its reporting by (1) systematically reporting key underlying assumptions and parameters used for projections by filling in CTF table 11 and (2) more clearly identifying which PaMs are included in the projection scenarios by clarifying which ones are included in the projection scenarios and/or by explaining more explicitly why projections were not directly related to the expected mitigation effects achieved by PaMs.</p>
13.3	Specified in paragraph 101 of the MPGs	<p>Czechia provided partial and random information in CTF tables 7 and 8 and reported no information in CTF tables 10 and 11.</p> <p>During the review, the Party noted that it encountered a technical issue when preparing the CTF tables for the BTR that prevented it from providing all the requested data, and provided the TERT with completed versions of CTF tables 7, 8, 10 and 11.</p> <p>The TERT recommends that Czechia complete CTF tables 7, 8, 10 and 11, noting that if it encounters technical issues for subsequent submissions, the Party should contact the secretariat’s technical support team with a view to implementing a viable solution.</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>
15.1	Specified in paragraph 119(a) and (c) of the MPGs	<p>Czechia reported some information on its national circumstances and institutional arrangements relevant to reporting on the provision and mobilization of support in the BTR1 (section 4.1, pp.192–193). However, the TERT was unable to identify information on:</p> <p>(a) The reporting system and processes used to identify, track and report on support provided, including on the relationship and allocation of responsibilities between the Ministry of Foreign Affairs, Development Cooperation of Czechia, International Development Cooperation and NRB;</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>(b) Experience and good practices in relation to public policy and regulatory frameworks to incentivize further private climate financing and investment.</p> <p>During the review, Czechia clarified that the Ministry of Foreign Affairs handles the statistical information related to both official development assistance and total official support for sustainable development. The Party explained that the Ministry gathers all relevant data on international development cooperation and climate-related support from one of its departments and the Czech Development Agency, which is the implementing agency for bilateral development cooperation; NRB is responsible for development finance, instruments and guarantees; and the Ministry also produces the chart of relevant organizations. In addition, the Party highlighted as an example of experience and good practice the NRB Guarantee Programme, which is the joint responsibility of the Ministry of Foreign Affairs and NRB and leverages private finance capital which has been extended by Development Cooperation in partnership with the International Development Cooperation to de-risk and/or risk-sharing with private investments from 2023.</p> <p>The TERT recommends that Czechia provide in its BTR (1) a description of its reporting system and processes used to identify, track and report on support provided, including the relationships and allocation of responsibilities between ministries and national institutions, and (2) information on experience and good practices in relation to public policy and regulatory frameworks to incentivize further private climate financing and investment.</p>
15.2	Specified in paragraph 120 of the MPGs	<p>Czechia did not report information in its BTR1 on national circumstances and institutional arrangements for the provision of technology development and transfer and capacity-building support.</p> <p>During the review, Czechia explained that there are no specific national arrangements or systems in place for the provision of technology development and transfer and capacity-building support.</p> <p>The TERT recommends that Czechia include in its BTR information, if available, on national circumstances and institutional arrangements for the provision of technology development and transfer and capacity-building support, or clarify in the BTR why this information is not available.</p>

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>
16.1	Specified in paragraph 121(p–s) of the MPGs	<p>Czechia reported in its BTR1 (section 4.2, pp.193–195) information on underlying assumptions, definitions and methodologies. However, Czechia did not report information on:</p> <p>(c) How it seeks to ensure that support provided and mobilized through public interventions effectively addresses the needs and priorities of developing country Parties for the implementation of the Paris Agreement, as identified in country-driven strategies and instruments, such as BTRs, NDCs and national adaptation plans;</p> <p>(d) How it seeks to ensure that support provided and mobilized through public interventions is in line with the long-term goals of the Paris Agreement;</p> <p>(e) New and additional financial resources that have been provided, and how it was determined that such resources are new and additional;</p> <p>(f) How the information provided reflects progression from previous levels in the provision and mobilization of finance under the Paris Agreement.</p> <p>During the review, Czechia explained that:</p> <p>(a) No information is available on how support provided through public interventions effectively addresses the needs and priorities of developing country Parties. However, the Party noted that there are relevant good practices, such as the Czech–UNDP partnership programme for co-finance;</p> <p>(b) No information is available on the alignment of support with the long-term goals of the Paris Agreement;</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>(c) Information on support mobilized through public interventions was not successfully received or collected;</p> <p>(d) All climate finance was provided through official development assistance and there are no new and additional funding resources, and a relevant definition does not exist. Czechia explained that, compared with the previous year, climate finance increased in 2021, decreased in 2022 and increased again in 2023.</p> <p>The TERT recommends that Czechia improve the completeness and transparency of its reporting by including in the BTR information on:</p> <p>(a) How it seeks to ensure that support provided and mobilized through public interventions effectively addresses the needs and priorities of developing country Parties for the implementation of the Paris Agreement;</p> <p>(b) How it seeks to ensure that support provided and mobilized through public interventions is in line with the long-term goals of the Paris Agreement;</p> <p>(c) New and additional financial resources that have been provided, and how it was determined that such resources are new and additional;</p> <p>(d) How the information provided reflects progression from previous levels in the provision and mobilization of finance under the Paris Agreement, preferably in both textual and graphical format.</p>
16.2	Specified in paragraph 122 of the MPGs	<p>Czechia did not report information in its BTR1 on the underlying assumptions, definitions and methodologies used to provide information on technology development and transfer, and capacity-building support.</p> <p>During the review, Czechia explained that there are no specific national arrangements or systems for tracking the provision of technology development and transfer, and capacity-building support, and therefore no information on the underlying assumptions, definitions and methodologies can be reported. The Party noted that it will collect relevant information for inclusion in the next BTR.</p> <p>The TERT recommends that Czechia describe the underlying assumptions, definitions and methodologies used to provide information on technology development and transfer, and capacity-building support.</p>

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>
18.1	Specified in paragraph 124(j) of the MPGs	<p>In CTF table III.2, Czechia reported “UA” for the financial instrument in relation to contributions to the International Bank for Reconstruction and Development, the International Finance Corporation and the International Development Association. However, the TERT was not able to identify an explanation for this reporting in the BTR1.</p> <p>During the review, Czechia explained that information was probably lost when the data were transferred or imported from the national database to the CTF table. The Party clarified that the type of financial instrument for the contributions to the International Bank for Reconstruction and Development and the International Development Association is capital subscription on a deposit basis, which should be classified as “other” according to the EU internal reporting regulation.</p> <p>The TERT recommends that Czechia specify the financial instrument related to the contributions to the International Bank for Reconstruction and Development, the International Finance Corporation and the International Development Association, or, if such information is not available, provide an explanation in the BTR and report “UA” in the CTF tables.</p>

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>
19.1	Specified in paragraph 126 of the MPGs	<p>Czechia did not report in its BTR1 information on support provided for technology development and transfer, nor did it include a dedicated section on technology development and transfer provided in line with the suggested outline for the BTR contained in annex IV to decision 5/CMA.3. In particular, Czechia did not report on:</p> <ul style="list-style-type: none"> (a) Strategies employed to support technology development and transfer, including case studies; (b) Support provided at different stages of the technology cycle; (c) Support for the development and enhancement of endogenous capacities and technologies of developing country Parties; (d) Efforts to encourage private sector activities related to technology development and transfer and how such efforts support developing country Parties; (e) Efforts to accelerate, encourage and enable innovation, including research, development and deployment efforts, and collaborative approaches to research and development; (f) Knowledge generated. <p>During the review, Czechia explained that:</p> <ul style="list-style-type: none"> (a) Support for technology development and transfer was primarily provided through bilateral development cooperation instruments, the Czech–UNDP Challenge Fund and expert partnerships, as well as projects such as early warning system projects in Cambodia, the Lao People’s Democratic Republic and the Philippines; pilot projects for climate-relevant technologies; and a project relating to the use of innovative hydrogel for trees in South Africa; (b) Czech development cooperation covers the full technology cycle, including research and diagnostics, piloting and field testing, adaptation and localization, deployment and institutional integration, sustainability and maintenance capacity-building; (c) Its efforts to strengthen national systems for technology uptake cover, inter alia, training, transfer of analytical methods and tools, joint research and co-production; (d) It encourages private sector activities related to technology development and transfer through the Czech–UNDP Challenge Fund and NRB Guarantee Programme for Development Cooperation, which incentivize private sector participation; (e) Efforts to accelerate, encourage and enable innovation include promoting applied research partnerships, demonstrating technologies, piloting activities, and endorsing long-term cooperation between Czech academic institutions and partner-country agencies; (f) Generated knowledge includes 25 methodological guidelines related to organic agriculture, landscape management plans and climate risk models, as well as training curricula, e-learning platforms and demonstration plots for climate-resilient agriculture. <p>The TERT recommends that Czechia, as a Party that considers itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement, provide information pursuant to Article 10 of the Paris Agreement. The TERT also recommends that Czechia report the information provided during the review and provide, to the extent possible, complete information, in textual and/or tabular format, on support for technology development and transfer provided under Article 10 of the Paris Agreement in accordance with paragraph 126 of the MPGs.</p>
19.2	Specified in paragraph 127(b), (c), (f), (g) and (h) of the MPGs	<p>When reporting on measures or activities related to support for technology development and transfer implemented or planned since the previous report, Czechia primarily reported “UA” in CTF table III.4 for the recipient entity, description and objectives, type of technology, status of measure or activity, and whether the activity was undertaken by the public and/or private sector. The Party did not include any additional explanation.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
		<p>During the review, Czechia explained that the information was probably lost when the data were transferred or imported from the national database to the CTF table, and for future BTRs it will conduct a detailed check of the transferred or imported data or manually enter the data in CTF table III.4.</p> <p>The TERT recommends that Czechia strengthen the QA/QC procedures for collecting data and transferring them to the CTF tables and improve the transparency of its reporting by providing, to the extent possible and as relevant, quantitative and/or qualitative information in CTF table III.4 on the recipient entity, description and objectives, type of technology, status of measure or activity, and whether the activity was undertaken by the public and/or private sector for measures or activities related to support for technology development and transfer implemented or planned since the previous report, or, if such information is not available, provide an explanation in the BTR and report “UA” in the CTF tables.</p>

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 of the MPGs	<p>Czechia did not provide any qualitative or quantitative information on capacity-building support provided under Article 11 of the Paris Agreement in textual format in its BTR1. In particular Czechia did not report on:</p> <ul style="list-style-type: none"> (a) Strategies employed to provide capacity-building support, including case studies; (b) How capacity-building support that was provided responds to the existing and emerging capacity-building needs, priorities and gaps identified by developing country Parties in the areas of mitigation, adaptation, and technology development and transfer; (c) Policies that promote capacity-building support; (d) Involvement of stakeholders; (e) How support provided for capacity-building actions in developing country Parties promotes the sharing of lessons learned and best practices. <p>During the review, Czechia explained that:</p> <ul style="list-style-type: none"> (a) Capacity-building is delivered through long-term institutional partnerships, technical assistance and targeted expert deployment, and provided several examples of good practice, including a case study on the co-development of a management and operational plan for a protected area in Georgia; (b) Its support directly addresses priorities of developing country Parties in the areas of climate-smart agriculture, watershed and landscape management, organic and ecological agriculture, disaster risk reduction and early warning systems, and institutional frameworks for climate adaptation; (c) Policies that promote capacity-building support are embedded in the Czech Development Cooperation Strategy, a Ministry of Foreign Affairs and Czech Development Agency work programme, and the Party’s cooperation policy with UNDP; (d) Most projects systematically involve stakeholders at the national, regional and/or local administrative level, as well as private sector, academic and community representatives; (e) Knowledge-sharing is typically supported through the use of regional workshops and training events, demonstration farms and pilot sites, e-learning and digital platforms, guidelines, expert exchanges and study visits, and joint technical teams. <p>The TERT recommends that Czechia, as a Party that considers itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement, provide information pursuant to Article 11. The TERT also recommends that the Party report the information shared during the review and provide transparent information in textual format on capacity-building support provided under Article 11 of the Paris Agreement, including, to the extent possible, qualitative and/or quantitative information on the elements listed in paragraph 128 of the MPGs.</p>

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
20.2	Specified in paragraph 129(b), (c) and (e) of the MPGs	<p>With regard to measures or activities related to capacity-building support implemented or planned since the previous report, Czechia mostly reported “UA” in CTF table III.5 for the recipient entity, description and objectives, and status of the measure or activity, and did not include any additional explanations in the BTR1.</p> <p>During the review, Czechia explained that the information was probably lost when the data were transferred or imported from the national database to the CTF table and noted that for future BTRs it will either conduct a detailed check of the transferred or imported data or manually enter the data into CTF table III.5.</p> <p>The TERT recommends that Czechia strengthen the QA/QC procedures for collecting data and transferring them to the CTF tables and improve the transparency of its reporting by providing, to the extent possible and as relevant, quantitative and/or qualitative information in CTF table III.5 on the recipient entity, description and objectives, and status for measures or activities related to capacity-building support implemented or planned since the previous report, or, if such information is not available, provide an explanation in the BTR and report “UA” in the CTF tables.</p>

Annex

Documents and information used during the review

A. Reference documents

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

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

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

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

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

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

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

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

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

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

NDC of Czechia. Available at <https://unfccc.int/NDCREG>.

NDC of the EU. Available at <https://unfccc.int/NDCREG>.

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

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

Report on the technical expert review of the BTR1 of the EU.

FCCC/ETF/TERR.1/2024/EU and Add.1. Available at <https://unfccc.int/first-biennial-transparency-reports>.

B. Additional information provided by the Party

Responses to questions during the review were received from Michal Daňhelka and Kateřina Suchá (Ministry of the Environment of Czechia) and Jitka Slámová (Czech Hydrometeorological Institute), including additional material. The following references were provided by Czechia and may not conform to UNFCCC editorial style as some have been reproduced as received:

Emil Cienciala. 2024. *Expert judgement form. Estimation of the uncertainty of carbon stock change estimates from CBM model in category 4.A Forest land*. (File: ID_7_EJ-4A-2024-001).

Emil Cienciala. 2026. *Mean Deviation Analysis of the Total Area of the Czech Republic (1990–2022)*. Provided as evidence of a consistent land use time series (File: ID_3_LULUCF_area_deviation_response.doc).

Emil Cienciala. 2026. IFER – Institute of Forest Ecosystem Research. *In-country review 2026. Response to Review Issues. LULUCF Inventory*. Czech Republic. (LULUCF_TERT_Review_Response.pptx)

Risto Saarikivi, 2023, *Quality manual for the Czech greenhouse gas inventory, tk02010056-v*, version Prague 15th February 2023, Czech Hydrometeorological Institute (file: id_21_quality manual for the czech greenhouse gas inventory.doc)

United Nations Commission on Sustainable Development, 1995 (<https://www.un.org/esa/earthsummit/czech-cp.htm#chap21>).
