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Technical analysis of the third biennial update report of Namibia submitted on 23 January 2019

Summary report by the team of technical experts

Summary

According to decision 2/CP.17, paragraph 41(a), Parties not included in Annex I to the Convention, consistently with their capabilities and the level of support provided for reporting, were to submit their first biennial update report by December 2014. Further, paragraph 41(f) of that decision states that Parties not included in Annex I to the Convention shall submit a biennial update report every two years, either as a summary of parts of their national communication in the year in which the national communication is submitted or as a stand-alone update report. As mandated, the least developed country Parties and small island developing States may submit biennial update reports at their discretion. This summary report presents the results of the technical analysis of the third biennial update report of Namibia, conducted by a team of technical experts in accordance with the modalities and procedures contained in the annex to decision 20/CP.19.

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Contents

Abbreviations and acronyms

AD	activity data
AFOLU	agriculture, forestry and other land use
BUR	biennial update report
CDM	clean development mechanism
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
EF	emission factor
GDP	gross domestic product
GEF	Global Environment Facility
GHG	greenhouse gas
HFC	hydrofluorocarbon
HWP	harvested wood products
ICA	international consultation and analysis
IPCC	Intergovernmental Panel on Climate Change
IPCC good practice guidance	*Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*
IPCC good practice guidance for LULUCF	*Good Practice Guidance for Land Use, Land-Use Change and Forestry*
IPPU	industrial processes and product use
LULUCF	land use, land-use change and forestry
MRV	measurement, reporting and verification
NA	not applicable
NAMA	nationally appropriate mitigation action
NC	national communication
NE	not estimated
NIR	national inventory report
NMVOC	non-methane volatile organic compound
non-Annex I Party	Party not included in Annex I to the Convention
NO_X	nitrogen oxides
N_2O	nitrous oxide
PFC	perfluorocarbon
REDD+	reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70)
Revised 1996 IPCC Guidelines	*Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
SO_X	sulfur oxides
TTE	team of technical experts
UNDP	United Nations Development Programme
UNFCCC guidelines for the preparation of NCs from non-Annex I Parties	"Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention"
UNFCCC reporting guidelines on BURs	"UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention"
2006 IPCC Guidelines	*2006 IPCC Guidelines for National Greenhouse Gas Inventories*

I. Introduction and process overview

A. Introduction

1. The process of ICA consists of two steps: a technical analysis of the submitted BUR and a facilitative sharing of views under the Subsidiary Body for Implementation, resulting in a summary report and record, respectively.

2. According to decision 2/CP.17, paragraph 41(a), non-Annex I Parties, consistently with their capabilities and the level of support provided for reporting, were to submit their first BUR by December 2014. In addition, paragraph 41(f) of that decision states that non-Annex I Parties shall submit a BUR every two years, either as a summary of parts of their NC in the year in which the NC is submitted or as a stand-alone update report.

3. Further, according to paragraph 58(a) of the same decision, the first round of ICA is to commence for non-Annex I Parties within six months of the submission of the Parties' first BUR. The frequency of developing country Parties' participation in subsequent rounds of ICA, depending on their respective capabilities and national circumstances, and the special flexibility for small island developing States and the least developed country Parties, will be determined by the frequency of the submission of BURs.

4. Namibia submitted its second BUR on 10 November 2016, which was analysed by a TTE in the eighth round of technical analysis of BURs from non-Annex I Parties, conducted from 22 to 26 May 2017. After the publication of its summary report, Namibia participated in the sixth workshop for the facilitative sharing of views, convened in Katowice, Poland, on 7 December 2018.

5. This summary report presents the results of the technical analysis of the third BUR of Namibia, undertaken by a TTE in accordance with the provisions on the composition, modalities and procedures of the TTE under ICA contained in the annex to decision 20/CP.19.

B. Process overview

6. In accordance with the mandate referred to in paragraph 2 above, Namibia submitted its third BUR on 23 January 2019 as a stand-alone update report. The submission was made more than two years after the submission of the previous BUR.

7. In its BUR, the Party clarified that the late release of funding from the GEF was the reason for the two-month delay in submitting the third BUR.

8. The technical analysis of the BUR took place from 2 to 6 September 2019 in Bonn and was undertaken by the following TTE, drawn from the UNFCCC roster of experts on the basis of the criteria defined in decision 20/CP.19, annex, paragraphs 2–6: Daniel Bretscher (Switzerland), Adelino Ricardo Jacintho Esparta (Brazil), Ngozi Eze (Nigeria), Olga Gavrilova (Estonia), Stephen King'uyu (former member of the Consultative Group of Experts from Kenya), Alyssa Ng (Singapore), Vishwa Bandhu Pant (India), David Glen Thistlethwaite (United Kingdom of Great Britain and Northern Ireland), Vute Wangwacharakul (former member of the Consultative Group of Experts from Thailand) and Oscar Zarzo Fuertes (Germany). Mr. Wangwacharakul and Mr. Zarzo Fuertes were the co-leads. The technical analysis was coordinated by Anna Sikharulidze and Gopal Raj Joshi (secretariat).

9. During the technical analysis, in addition to the written exchange, through the secretariat, to provide technical clarifications on the information reported in the BUR, the TTE and Namibia engaged in consultation[1] on the identification of capacity-building needs for the preparation of BURs and participation in the ICA process. Following the technical analysis of Namibia's third BUR, the TTE prepared and shared a draft summary report with Namibia on 25 November 2019 for its review and comment. Namibia, in turn, provided its feedback on the draft summary report on 11 February 2020.

[1] The consultation was conducted via videoconferencing.

10. The TTE responded to and incorporated Namibia's comments referred to in paragraph 9 above and finalized the summary report in consultation with the Party on 12 February 2020.

II. Technical analysis of the biennial update report

A. Scope of the technical analysis

11. The scope of the technical analysis is outlined in decision 20/CP.19, annex, paragraph 15, according to which the technical analysis aims to, without engaging in a discussion on the appropriateness of the actions, increase the transparency of mitigation actions and their effects and shall entail the following:

(a) The identification of the extent to which the elements of information listed in paragraph 3(a) of the ICA modalities and guidelines (decision 2/CP.17, annex IV) have been included in the BUR of the Party concerned (see chap. II.B below);

(b) A technical analysis of the information reported in the BUR, specified in the UNFCCC reporting guidelines on BURs (decision 2/CP.17, annex III), and any additional technical information provided by the Party concerned (see chap. II.C below);

(c) The identification, in consultation with the Party concerned, of capacity-building needs related to the facilitation of reporting in accordance with the UNFCCC reporting guidelines on BURs and to participation in ICA in accordance with the ICA modalities and guidelines, taking into account Article 4, paragraph 3, of the Convention (see chap. II.D below).

12. The remainder of this chapter presents the results of each of the three parts of the technical analysis of Namibia's BUR outlined in paragraph 11 above.

B. Extent of the information reported

13. The elements of information referred to in paragraph 11(a) above include the national GHG inventory report; information on mitigation actions, including a description of such actions, an analysis of their impacts and the associated methodologies and assumptions, and the progress made in their implementation; information on domestic MRV; and information on support needed and received.

14. According to decision 20/CP.19, annex, paragraph 15(a), in undertaking the technical analysis of the submitted BUR, the TTE is to identify the extent to which the elements of information listed in paragraph 13 above have been included in the BUR of the Party concerned. The TTE considers that the reported information is mostly consistent with the UNFCCC reporting guidelines on BURs. Specific details on the extent of the information reported for each of the required elements are provided in annex I.

15. The current TTE noted improvements in reporting in the Party's third BUR compared with that in the second BUR. Information on GHG inventories reported in the third BUR demonstrates that the Party has taken into consideration the areas for enhancing transparency noted by the previous TTE in the summary report on the technical analysis of the Party's second BUR.

C. Technical analysis of the information reported

16. The technical analysis referred to in paragraph 11(b) above aims to increase the transparency of mitigation actions and their effects, without engaging in a discussion on the appropriateness of those actions. Accordingly, the focus of the technical analysis was on the transparency of the information reported in the BUR.

17. For information reported on national GHG inventories, the technical analysis also focused on the consistency of the methods used for preparing those inventories with the

appropriate methods developed by the IPCC and referred to in the UNFCCC reporting guidelines on BURs.

18. The results of the technical analysis are presented in the remainder of this chapter.

1. Information on national circumstances and institutional arrangements relevant to the preparation of national communications on a continuous basis

19. As per the scope defined in paragraph 2 of the UNFCCC reporting guidelines on BURs, the BUR should provide an update to the information contained in the most recently submitted NC, including information on national circumstances and institutional arrangements relevant to the preparation of NCs on a continuous basis. In their NCs, non-Annex I Parties report on their national circumstances following the reporting guidance contained in decision 17/CP.8, annex, paragraphs 3–5, and they could report similar information in their BUR, which is an update of their most recently submitted NC.

20. In its third BUR, the Party provided an update on its national circumstances, including a description of its obligations under the Convention and the long-term vision for Namibia, and information on geographical characteristics, climate, water resources, agriculture and forestry, fisheries, mining, manufacturing, energy, transport, tourism, waste, economic indicators, population and health. Namibia reported that under Vision 2030, the strategy guiding the country's long-term development, Namibia aims at high, sustained economic growth to create employment and move the country towards increased income equality. Namibia, one of the driest countries in sub-Saharan Africa, is dependent on development sectors that are highly sensitive to climate change. The primary economic sectors are based on natural resources (e.g. agriculture, fisheries and mining) and account for about one third of the total GDP. Being a developing country, Namibia's economy achieved GDP growth rates of 6.5 and 5.3 per cent in real value in 2014 and 2015, respectively. The population has shown a small increase, with the intercensal (between 2001 and 2011) growth rate being 1.4 per cent. Migration from both rural and urban areas has been observed. More than half of the population depends on subsistence agriculture and in drought years, food shortages are a major concern in rural areas. Namibia is therefore highly vulnerable to climate change. These national circumstances and others affect Namibia's GHG emissions and its ability to deal with mitigating and adapting to climate change.

21. In addition, Namibia provided a summary of information regarding its national circumstances, in the form of figures and graphs, with reference to the climate, agriculture and forestry, fisheries, mining and other relevant areas.

22. Namibia described in its BUR the existing and planned institutional arrangements relevant to the preparation of its NCs and BURs on a continuous basis. The Cabinet of Namibia is the government entity entrusted with overall responsibility for the development of climate change policies. The National Climate Change Committee, established in 1999 by the Ministry of Environment and Tourism, oversees the implementation of the climate change policy, including the preparation of the reports for submission to the UNFCCC, and plays an advisory role to the Government on climate change issues. It consists of representatives of various ministries and other stakeholders, such as the private sector and non-governmental organizations. The Ministry of Environment and Tourism is the official government agency acting as the national focal point for the Convention and is responsible for coordinating and implementing climate change activities, including the preparation of NCs and BURs, to enable the country to meet its reporting obligations. This is done through the Climate Change Unit established within the Department of Environmental Affairs of the Ministry of Environment and Tourism.

23. Namibia further reported that existing institutional arrangements were no longer appropriate or suitable as a result of the enhancement of reporting requirements, the required higher standards for the reporting of NCs and the detailed information required for the reporting of BURs. Under these new circumstances, the Ministry of Environment and Tourism embarked on a comprehensive exercise of reviewing the existing institutional arrangements with a view to developing and implementing new and more robust arrangements for meeting the enhanced and more frequent reporting obligations, including with regard to the reporting of BURs. The Party reports that evidently the development and

implementation of robust institutional arrangements will take considerable time to become fully operational and effective. It is anticipated that the process will not be completed until after two or three more rounds of BURs and NCs.

24. Namibia reported on its proposed domestic MRV system. Namibia presented conceptual MRV systems in its first and second BURs, including its plans to implement them. The Party reported that, to date, some progress has been recorded but is still insufficient to meet the reporting requirements. Namibia has accorded high priority to closing this gap in the reporting framework, in line with the revision of the system for nationally determined contributions and its implementation in the post-2020 period. The proposed new concepts for the three MRV systems are presented in the third BUR and are intended to meet the requirements of the Paris Agreement. They have been designed at the national level and cover the following three main areas: MRV of emissions, MRV of mitigation (including NAMAs), and MRV of support needed and received. The Party reported that these MRV systems are based on the institutional structure for implementation of the national climate change policy. Information on the development and coordination of the MRV systems and the institutions engaged in the MRV process were also reported in the BUR.

2. National greenhouse gas emissions by sources and removals by sinks

25. As indicated in table 1 in annex I, Namibia reported information on its GHG inventory in its BUR mostly in accordance with paragraphs 3–10 of the UNFCCC reporting guidelines on BURs and paragraphs 8–24 of the UNFCCC guidelines for the preparation of NCs from non-Annex I Parties, contained in the annex to decision 17/CP.8.

26. Namibia submitted its third BUR in 2019, and the GHG inventory reported covers 2013 and 2014, which is more than four years prior to the date of submission. During technical analysis Party clarified that this is due to the delayed submission of BUR, as described in paragraphs 6–7.

27. Namibia submitted an NIR in conjunction with its third BUR. The relevant sections of the NIR were referenced in the BUR and the document was also made publicly available on the UNFCCC website.[2]

28. GHG emissions and removals for the BUR covering the time series of 1994-2014 were estimated using a mix of tier 1 and 2 methodologies from the 2006 IPCC Guidelines, while in some cases the IPCC good practice guidance and the IPCC good practice guidance for LULUCF were applied, as appropriate. The TTE commends the Party for using the 2006 IPCC Guidelines.

29. Information on methodologies was clearly reported, including information on which methodology had been used (tier 1 or tier 2) for specific sectors, categories and subcategories, the EFs used, as well as AD and their sources. Namibia applied the tier 2 methodology for some key source categories, such as the forest land category and enteric fermentation for both other cattle and dairy cows, while the tier 1 methodology was used for all other IPCC sectors or categories.

30. Information on the Party's total GHG emissions by gas for 2014 is outlined in table 1 in Gg CO_2 eq. It shows an increase in emissions (excluding removals) of 12.1 per cent since 1994 (18,889 Gg CO_2 eq in 1994 to 21,180 Gg CO_2 eq in 2014) and a decrease in net emissions (including removals) of 26.3 per cent in the same period (–77,770 Gg CO_2 eq in 1994 to –98,254 Gg CO_2 eq in 2014). Information on HFCs, PFCs and SF_6 was not reported. In the BUR and during the technical analysis, the Party clarified that information on AD and EFs for fluorinated gases was being compiled but was not fully available for reporting in the current BUR or NIR.

[2] https://unfccc.int/documents/192582.

Table 1
Greenhouse gas emissions and removals by gas for Namibia for 2014

Gas	*GHG net emissions (Gg CO_2 eq) including removals*	*Change (%) 1994–2014*
CO_2 (including removals)	–105 998	–22.6
CO_2 (excluding removals)	13 436	32.1
CH_4	5 079	–13.0
N_2O	2 665	–7.6
HFCs	NE	NA
PFCs	NE	NA
SF_6	NE	NA
Total (including removals)	**–98 254**	**–26.3**
Total (excluding removals)	**21 180**	**12.1**

31. Other emissions reported for 2014 include 38.2 Gg NO_X, 939.4 Gg CO, 24.5 Gg NMVOCs and 2.7 Gg SO_2.

32. The TTE noted that the information provided was comparable to the information required for tables 1 and 2 in decision 2/CP.17, annexed to decision 17/CP.8. Namibia applied notation keys in tables where numerical data were not provided. The use of notation keys was mostly consistent with the UNFCCC guidelines for the preparation of NCs from non-Annex I Parties. The Party used the following notation keys: "estimated" (X), "not applicable" (NA), "not occurring" (NO), "not estimated" (NE) and "estimated elsewhere" (EE). The TTE noted that although notation keys were extensively used in the reporting tables, there were some cells where dashes were used in place of notation keys, such as for category 2.H (other) in table 2.18 of the BUR. The TTE noted that applying notation keys in tables everywhere where numerical data were not provided and using the keys consistently with the UNFCCC guidelines for the preparation of NCs from non-Annex I Parties could facilitate a better understanding of the information reported.

33. Namibia reported comparable information addressing the tables included in annex 3A.2 to the IPCC good practice guidance for LULUCF and the sectoral reporting tables annexed to the Revised 1996 IPCC Guidelines.

34. The shares of emissions that different sectors contributed to the total GHG emissions excluding the land category (3.B) as calculated by the TTE using information in the BUR for 2014 are reflected in table 2.

Table 2
Shares of greenhouse gas emissions by sector for Namibia for 2014

Sector	*Net GHG emissions (Gg CO_2 eq)*	*Share[a] (%)*	*Change (%) 1994–2014*
Energy	3 234	28.3	120.9
AFOLU			
Livestock (3.A)	3 893	34.1	–34.1
Land (3.B)	–109 665	–	–11.8
Aggregate sources and non-CO_2 emissions sources on land (3.C)	3 610	31.6	36.5
IPPU	522	4.6	2 272.7
Waste	153	1.3	104.0

[a] Share of total without the land category (3.B).

35. Namibia reported information on its use of global warming potential values consistent with those provided by the IPCC in its Second Assessment Report based on the effects over a 100-year time-horizon of GHGs.

36. For the energy sector, GHG emissions amounted to 3,234 Gg CO_2 eq, solely from the fuel combustion activities, as there were no emissions from the other source categories fugitive emissions from fuels and CO_2 transport and storage. Historically, the transport sector contributes the largest share of energy emissions, increasing from 55 per cent in 1994 to 80 per cent in 2014.

37. For IPPU, the emissions reported amounted to 522 Gg CO_2 eq, from four out of eight source categories. Direct and indirect emissions were reported for the categories mineral industry, metal industry, non-energy products from fuels and solvent use, and other. In 2014 major contributors in the IPPU sector were cement production (58 per cent) and zinc production (34 per cent). Emissions were reported as not occurring for the source categories chemical industry and electronics industry. Emissions were not estimated for the source categories product uses as substitutes for ozone-depleting substances and other product manufacture and use, owing to a lack of AD.

38. For the agriculture sector, N_2O emissions from agricultural soils and CH_4 emissions from enteric fermentation were identified as key categories. Namibia used EFs from the 2006 IPCC Guidelines for all livestock categories, except for other cattle and dairy cows, for which country-specific EFs were derived. Namibia reported the key parameters used for tier 2 estimations of emissions from enteric fermentation and manure management. However, information on gross energy intake derived for estimating the CH_4 conversion factors for enteric fermentation for the tier 2 estimations was not reported. During the technical analysis, Namibia clarified that gross energy intake (MJ/day) for the cattle livestock categories was derived from country-specific information using equations contained in the 2006 IPCC Guidelines. Namibia also provided the worksheet used to estimate the methane conversion factor for cattle. The TTE noted that including information on gross energy intake derived for estimating the CH_4 conversion factors for enteric fermentation for the tier 2 estimations in subsequent BURs could facilitate a better understanding of the information reported on this sector.

39. For the AFOLU sector, Namibia reported GHG emissions and removals for 1994–2014. Overall, the net removals from the AFOLU sector fluctuated between a minimum of 79,331 Gg CO_2 eq in 1994 and a maximum of 106,072 Gg CO_2 eq in 2013. CO_2 emissions from HWP were reported as not estimated. During the technical analysis, Namibia explained that CO_2 emissions from HWP were not estimated because of the lack of AD. Furthermore, Namibia stated that emissions from this category would be included in the next inventory as the relevant data had now been assessed. The TTE noted that clearly specifying the barriers preventing the estimation and reporting of emissions from HWP could facilitate a better understanding of information reported in this sector.

40. For the waste sector, Namibia reported total emissions of 153 Gg CO_2 eq. CH_4 emissions from solid waste disposal sites (76.86 Gg CO_2 eq, or a 50.3 per cent share of emissions from the sector) and CH_4 emissions from wastewater treatment and discharge (26.75 Gg CO_2 eq, or a 17.5 per cent share) are the key categories. The sources of AD used, profiles of waste disposal and management, and estimation methods are clearly explained, including the information used for estimating emissions from open burning of waste.

41. The NIR provides an update to all GHG inventories reported in previous NCs and BURs. The update was carried out for all years in the period 1994–2014 using updated AD and the methodologies contained in the 2006 IPCC Guidelines, thus generating a consistent 21-year time series. The previous national inventory was reported in the second BUR, covered the years 2000–2012 and was prepared using the 2006 IPCC Guidelines.

42. Namibia described in its BUR the institutional framework for the preparation of its 2014 GHG inventory. The Climate Change Unit of the Ministry of Environment and Tourism is the governmental body responsible for climate change policies and is also responsible for the Party's GHG inventory. The inventory was prepared with the support of the UNDP, which assisted Namibia in designing its GHG inventory system. In its third BUR, Namibia clarified that part of its National Inventory Improvement Plan aimed to strengthen the existing

institutional framework (specifically the GHG inventory management system); establish a GHG inventory unit within the Department of Environmental Affairs; and establish a dedicated data collection and archiving system in order to ensure improved coordinated action for a smooth and continuous production of inventories.

43. Namibia reported that a key category analysis was performed for both the level of emissions and the trend in emissions. Four key categories were identified in the level assessment, namely: CO_2 emissions from forest land remaining forest land; CO_2 emissions from land converted to grassland; CH_4 emissions from enteric fermentation; and CO_2 emissions from road transportation. Six more categories emerged as key categories in the trend assessment, which covers the period 1994–2014.

44. The BUR provides information on quality assurance/quality control measures for all sectors. The TTE commends Namibia for providing this information in accordance with the IPCC good practice guidance.

45. Namibia reported information on CO_2 fuel combustion using both the sectoral and the reference approach, and the differences between the two approaches. Estimations from the previous NIR were revised under the reference approach as updated data sets on energy became available. Differences between the years varied from 27.4 per cent in 1996 to 1.5 per cent in 2014, with higher emissions for the reference approach for all years. In the NIR the Party clarified that differences are possibly due to the lack of import–export data on fuels for the years before 2003, and owing to difficulties in tracking rolling stocks from one year to the next. Additionally, Namibia noted that work was continuing to develop annual energy balances that would help to refine the figures in future reports.

46. Information was reported by gas for the period 1994–2014 on international aviation (total emissions of 109.7 Gg CO_2 eq in 2014, an increase of 49 per cent compared with the 1994 level) and marine bunker fuels (total emissions of 156.0 Gg CO_2 eq in 2014, an increase of 11 per cent compared with the 1994 level).

47. Namibia reported information on the uncertainty analysis of its national GHG inventory. The uncertainty analysis was based on the tier 1 approach and covers all source categories and all direct GHGs. Uncertainty levels for individual years in the period 1994–2014 varied from 26.0 to 29.1 per cent, while the trend uncertainty for the period 1994–2014 ranged from 35.7 to 44.7 per cent.

48. The TTE noted that the transparency of the information reported on GHG inventories could be further enhanced by addressing the areas noted in paragraphs 31, 38 and 39 above.

49. In paragraphs 28, 29, 32, 34, 36 and 37 of the summary report on the technical analysis of Namibia's second BUR,[3] the TTE noted where the transparency of reporting on the use of notation keys, the reporting of AD and other parameters used for emission estimations, and the reporting of a consistent time series back to years reported in previous NCs could be enhanced. The TTE noted that Namibia took into consideration this area for improvement in the NIR submitted together with the third BUR, and commends the Party for enhancing the transparency of the information reported.

3. Mitigation actions and their effects, including associated methodologies and assumptions

50. As indicated in table 2 in annex I, Namibia reported in its BUR, mostly in accordance with paragraphs 11–13 of the UNFCCC reporting guidelines on BURs, information on mitigation actions and their effects, to the extent possible.

51. The information reported provides a clear and comprehensive overview of the Party's mitigation actions and their effects. In its BUR, Namibia frames its national mitigation planning and actions in the context of its National Policy on Climate Change, its National Climate Change Strategy and Action Plan for the period 2013–2020 and its intended nationally determined contribution, which aims to reduce GHG emissions by approximately 89 per cent by 2030 compared with the business as usual scenario. Namibia has further reported that the projected GHG emissions that will be avoided by 2030 are expected to reach

[3] FCCC/SBI/ICA/2017/TASR.2/NAM.

around 20,000 kt CO_2 eq per year, including sequestration in the AFOLU sector and when compared with the business as usual scenario. Most of the mitigation actions are in the energy sector, although Namibia anticipates that emission reductions in the AFOLU sector will be the highest, at 18,693 kt CO_2 eq by 2030. Namibia reported that climate change has been mainstreamed and integrated into its medium- to long-term national development plans, including mitigation and adaptation, with the development of the National Climate Change Strategy and Action Plan for the period 2013–2020.

52. The Party reported a summary of its mitigation actions in tabular format in accordance with decision 2/CP.17, annex III, paragraph 11. A total of 54 mitigation actions in five groups were clearly presented in tables 3.2 to 3.6 of the BUR, with a summary of actions presented in table 3.7.

53. Consistently with decision 2/CP.17, annex III, paragraph 12(a), Namibia reported the names of mitigation actions, coverage (sector and gases) and progress indicators in tables 3.2 to 3.6 of the BUR. The information was reported in individual tables for each group of mitigation actions. The description of all mitigation actions was also provided, except for the Erongo wind farm (p.92). Information on the progress indicators and on quantitative goals was not clearly reported in the BUR. During the technical analysis, Namibia clarified that it had reported progress indicators according to its understanding of the reporting provision, and the information on quantitative goals was provided in the BUR where available, the presentation method chosen being dependent on whether the reported mitigation action was a project or a strategy. The TTE noted that including information on the progress indicators as metrics to indicate the implementation progress of the mitigation action and adding further explanations on quantitative goals for the relevant mitigation actions could facilitate a better understanding of the information provided.

54. Consistently with decision 2/CP.17, annex III, paragraph 12(b–d), Namibia reported information on overarching mitigation policies and strategies and for the mitigation actions in the energy, IPPU, waste and AFOLU sectors, included the objectives, status (implemented, ongoing or planned) and steps taken to implement these actions. Details on the steps envisaged were not provided for some of the mitigation actions across all sectors. Although the status of implementation was reported, details regarding the time-horizon were not clear for many of the mitigation actions in the energy, IPPU and waste sectors. The TTE noted that explaining the constraints and challenges encountered in reporting the steps envisaged and clearly outlining the time-horizon of the actions could facilitate a better understanding of the information reported.

55. For most of the mitigation actions reported across all sectors, the methodologies used for estimating the results achieved from implementing the actions were reported. Details on the underlying assumptions for estimating emission reductions were not clearly reported for any mitigation actions. The assumptions presented by Namibia relate mostly to the implementation risks of the mitigation actions. During the technical analysis, the Party clarified that the assumptions reported were based on its understanding of the reporting requirements. The TTE noted that specifying the methodological assumptions applied for estimating the results achieved for mitigation actions could facilitate a better understanding of the information reported.

56. The Party also reported information on the results achieved from the implementation of its mitigation actions, as estimated outcomes, mitigation co-benefits and emission reductions, to the extent possible. Details on the results achieved for some of the mitigation actions, across all sectors, were not reported in the BUR. During the technical analysis, the Party clarified that it faced constraints and challenges in reporting results for some of the mitigation actions in the energy, IPPU, AFOLU and waste sectors. The TTE noted that specifying these constraints for the relevant mitigation actions could facilitate a better understanding of the information reported.

57. The reported overarching mitigation policies and strategies are focused on promoting renewable energy efficiency and deployment, as well as improving energy access and efficiency. Most of these overarching policies are ongoing and the results are elaborated under specific actions in specific sectors. Namibia expects to achieve up to 17 kt CO_2 eq per year in emission reductions through the Namibia Energy Efficiency Programme in Buildings.

Through evaluating the investments and funds required to support emission mitigation in the energy sector, the Party expects to achieve up to 1,200 kt CO_2 eq per year in emission reductions by 2030. The National Renewable Energy Policy aims at increasing the share of renewable energy in the energy mix, and Namibia expects to achieve 740.0 kt CO_2 eq in emission reductions by 2030. The Party also reported co-benefits of its mitigation actions, including enhanced energy security, improved livelihoods and the creation of employment opportunities.

58. In the energy sector, the mitigation actions are mainly in the areas of improving energy efficiency and access and promoting renewable energy deployment and access. The Party reported that its mitigation measures were derived mostly from projects that have already been implemented or are ongoing, but that some projects were still at the planning stage. For some actions in the energy sector, information on the methodologies used for estimating the results achieved was not provided. During the technical analysis, the Party clarified that, unless otherwise specified, the methodology used for estimating the emission reductions is from the 2006 IPCC Guidelines. The TTE noted that specifying the methodology used for each reported mitigation action could facilitate a better understanding of the information reported in this sector.

59. In the energy sector, Namibia is drafting and developing proposals for two projects – one on mini-grids in rural areas and one on energy zone investment – to be submitted to the NAMA registry. Most of Namibia's mitigation actions relating to deploying solar, wind, biomass and hydropower energy sources are ongoing or in the planning stages. Namibia reported that the technology transfer action for concentrating solar power for electricity generation, which aims to develop the necessary technological framework and conditions for the successful transfer and deployment of technology for concentrating solar power for on-grid power generation, will avoid 482,944 t CO_2 eq emissions per year. Aside from actions related to electricity, the Party reported the replacement of coal by wood chips in a cement manufacturing facility and the plans to make urban transport sustainable in Windhoek, which are expected to achieve 43 and 510 kt CO_2 eq per year in emission reductions, respectively. The reported co-benefits of energy sector mitigation actions are similar to those of the overarching policies and strategies reported, and include improved energy security, the generation of employment and enhanced quality of life.

60. The information reported for the IPPU sector includes information on one planned mitigation action focused on reducing emissions from cement production by reducing the amount of clinker used. The Party reported that estimated emission reductions would be calculated when the project is implemented, however, the Party reported that the expected co-benefits include improved work environments and health.

61. The mitigation actions in the AFOLU sector are mainly in the areas of afforestation, reforestation and forest preservation. The Party reported that its mitigation measures were derived from projects that are mostly ongoing, with a few being planned. Its policies to increase and preserve carbon sinks and soil carbon storage through afforestation, reduced deforestation, reforestation, grassland restoration, reduced wood removal and the cultivation of fruit trees are expected to achieve 18,492 kt CO_2 eq collectively in emission reductions per year by 2030. Namibia's initiative to fatten 100,000 head of cattle through expanding feedlots is expected to reduce enteric fermentation by 201 kt CO_2 eq by 2030. The Party also reported co-benefits such as enhanced food security, the conservation of biodiversity and the generation of employment.

62. The mitigation actions in the waste sector are planned projects in the areas of converting waste to energy. Namibia expects its policy of converting waste from landfill and water treatment plants in Windhoek through a CDM project to achieve emission reductions of 7,869 t CO_2 eq. Namibia has also prepared proposals for two other CDM projects aimed at converting waste to energy from landfill and wastewater treatment plants. The Party reported co-benefits as the results achieved, including a cleaner environment, reduced health hazards, returns from trading carbon credits and the generation of employment.

63. Namibia reported information on its use of international market mechanisms in the waste sector as part of its reporting on mitigation actions (see para. 62 above).

64. Namibia reported information on its domestic MRV arrangements in accordance with decision 2/CP.17, annex III, paragraph 13. The information reported indicates that Namibia has in place a domestic MRV system for mitigation actions. Its mitigation working group comprises institutions responsible for collecting and reporting data related to mitigation actions by sector, which is currently linked to the MRV system for GHG emissions. Namibia has proposed developing an MRV system comprising stakeholders responsible for tracking the implementation of mitigation actions under the responsibility of the Climate Change Unit. Further, Namibia reported consistently with the voluntary general guidelines for domestic MRV of domestically supported NAMAs contained in decision 21/CP.19. Namibia outlined the institutional roles and responsibilities regarding implementation, data collection and monitoring, as well as internal and third-party verification. Namibia also reported on the details to be included in reporting templates, such as details of the activity, a description of the measuring systems, data parameters, default values and assumptions, details of the sampling plan and an estimation of emission reductions.

65. The TTE noted that the transparency of the information reported on mitigation actions and their effects could be further enhanced by addressing the areas noted in paragraphs 53–56 and 58 above.

4. Constraints and gaps, and related technology, financial, technical and capacity-building needs, including a description of support needed and received

66. As indicated in table 3 in annex I, Namibia reported in its BUR, fully in accordance with paragraphs 14–16 of the UNFCCC reporting guidelines on BURs, information on finance, technology and capacity-building needs and support received.

67. Namibia reported information on constraints and gaps, and related financial, technical and capacity-building needs, in accordance with decision 2/CP.17, annex III, paragraph 14. In its BUR, Namibia reported that it faced numerous challenges in its efforts to strengthen existing institutional arrangements. The most urgent challenges were insufficient capacity of the coordinating body and a lack of institutional and technical skills within the different thematic areas of the NC, difficulties in maintaining a motivated permanent coordinating body and personnel, a lack of availability of human resources in collaborating institutions owing to the overloaded schedules and high turnover of members of staff, and a lack of incentives and adequate funds to develop and maintain the system in place.

68. Namibia has provided an updated list of its technical and capacity-building needs since the submission of the second BUR. Namibia reported that its financial, technical and capacity-building needs are primarily for the implementation of mitigation actions and tracking their progress. Namibia further reported that the flow of technical and capacity-building support has been lower than for the first BUR, resulting in slow recorded progress on furthering its technical capabilities and capacity-building. Substantial funding is required to enable Namibia to meet its reporting obligations and implement the Convention. While it is recognized that the international community is providing some support through the implementing agencies of the GEF, the Party reports that these amounts are not adequate and problems often arise in the timing of the release of funds.

69. Namibia reported information on financial resources, technology transfer, capacity-building and technical support received in accordance with decision 2/CP.17, annex III, paragraph 15. In its third BUR, Namibia reported that it received USD 352,000 from the GEF, through the UNDP country office as the implementing agency, to support its preparation of the third BUR. The Government of Namibia, through the Division of Multilateral Environmental Agreements of the Department of Environmental Affairs of the Ministry of Environment and Tourism, contributed USD 50,000 in kind to complement the funding required to complete the third BUR. The information reported in the third BUR also indicates that Namibia received capacity-building and technical support from the UNDP to facilitate use of the 2006 IPCC Guidelines and software to prepare its sixth GHG inventory, which is presented as a stand-alone NIR as an accompanying document to the third BUR.

70. The TTE noted that in some cases information reported for some projects is not clear. For example, Namibia reported that the amount needed for the support of its Community-based Adaptation projects was USD 4,525,140, whereas the total amount of support exceeded that figure (USD 4,525,140 from the GEF and USD 4,125,140 from the Government).

During the technical analysis, the Party clarified that support needed should not include Government contributions, which are presented separately for all GEF projects.

71. Namibia reported information on technology needs with regard to the development and transfer of technology in accordance with decision 2/CP.17, annex III, paragraph 16. In its third BUR, Namibia reported that it has not been able to conduct an exhaustive assessment of its technology needs and transfer for either mitigation or adaptation to climate change, notwithstanding the cross-cutting issues, owing to a lack of resources. This exercise has been done piecemeal within the framework of the preparation of its NCs, when identifying potential mitigation and adaptation measures. The delay in the exhaustive assessment of national technology needs is preventing proper evaluation of vulnerability and adaptation to climate change, as well as an assessment of mitigation of climate change and the associated cross-cutting issues.

72. Regarding the technology support received, in table 5.3 of the BUR, Namibia reported various technology-related projects such as implementing photovoltaic pumps, promoting energy-efficient light bulbs and fuel switching to reduce fuelwood consumption. The status of these projects is marked as ongoing; however the support needed is stated as "Costing for territorial coverage", "Costing under way for completion of programme" and "Potential and costing to be done", and the meaning of these expressions is not clear. During the technical analysis, the Party clarified that ongoing status means that a study is under way but funding for the project has not been attained; thus no support has been received. The TTE noted that clearly defining the terminology used for describing the support needed and received could facilitate a better understanding of the information reported.

73. The TTE noted that the transparency of the information reported on needs and support received could be further enhanced by addressing the areas noted in paragraph 72 above.

5. Any other information

74. Namibia reported some information in its BUR on adaptation actions that may lead to GHG emission reductions.

75. Namibia reported that it is enhancing its capacity to participate in the REDD+ programme. One of the key preparatory activities to participating in REDD+, the development of an appropriate system to measure, report and verify changes in forest cover and related carbon emissions, is under way. Namibia is also participating in the REDD+ capacity-building project for the Southern Africa Development Community region, which aims to enhance the mitigation capacity of its members.

D. Identification of capacity-building needs

76. In consultation with Namibia, the TTE identified the following needs for capacity-building that could facilitate the preparation of subsequent BURs and participation in ICA:

(a) Enhancing capacity to use notation keys consistently with the UNFCCC reporting guidelines on NCs and the 2006 IPCC Guidelines;

(b) Building institutional capacity, with a focus on strengthening cooperation with relevant government bodies and improving the system for data collection, specifically for fluorinated gases, HWP and N_2O emissions from product use;

(c) Enhancing national capacities for a better understanding of the BUR reporting provisions for mitigation actions, developing a methodology to identify progress indicators and estimating quantitative goals;

(d) Developing institutional arrangements and technical capacity for domestic MRV agencies to highlight country-specific assumptions applied to methodologies when estimating emission reductions;

(e) Enhancing technical capacities and institutional arrangements for coordinating with implementation agencies to quantify the results achieved for all mitigation actions, focusing on mitigation actions in the energy sector;

(f) Enhancing the human capacity, access to financial resources and knowledge transfer for technology needs assessment and technology transfer;

(g) Building capacity in relation to the domestic MRV system:

(i) Strengthening institutional arrangements for MRV of emissions;

(ii) Developing and implementing MRV for mitigation and support;

(iii) Establishing a quality control system within the framework of inventory preparation;

(iv) Integrating climate change MRV into the National Planning Commission's monitoring and evaluation system;

(v) Establishing a centralized system for tracking all support received for funding, capacity development and technology transfer in relation to climate change.

77. The TTE noted that, in addition to those identified during the technical analysis, Namibia reported several capacity-building needs in table 5.1 (pp.116–119) of its BUR, covering the following areas:

(a) Preparation of BURs and NCs;

(b) International market mechanisms;

(c) Mitigation actions and their effects.

78. In paragraph 70 of the summary report on the technical analysis of Namibia's second BUR, the previous TTE, in consultation with Namibia, identified capacity-building needs. In its third BUR, Namibia reflected that some of those capacity-building needs have been addressed.

III. Conclusions

79. The TTE conducted a technical analysis of the information reported in the third BUR of Namibia in accordance with the UNFCCC reporting guidelines on BURs. The TTE concludes that the reported information is mostly consistent with the UNFCCC reporting guidelines on BURs and provides an overview of national circumstances and institutional arrangements relevant to the preparation of NCs on a continuous basis; the national inventory of anthropogenic emissions by sources and removal by sinks of all GHGs not controlled by the Montreal Protocol, including an NIR; mitigation actions and their effects, including associated methodologies and assumptions; constraints and gaps and related financial, technical and capacity-building needs, including a description of support needed and received; the level of support received to enable the preparation and submission of BURs; domestic MRV; and any other information relevant to the achievement of the objective of the Convention. The TTE concluded that the information analysed is mostly transparent.

80. Namibia reported information on the institutional arrangements relevant to the preparation of its BURs. The Ministry of Environment and Tourism is the official government agency acting as the national focal point for the Convention and is responsible for coordinating and implementing climate change activities, including the preparation of both the NCs and BURs to enable the country to meet its reporting obligations. This is done through the Climate Change Unit established within the Department of Environmental Affairs of the Ministry of Environment and Tourism. The National Climate Change Committee oversees the implementation of the climate change policy and plays an advisory role to the Government on climate change issues.

81. In its third BUR, submitted in 2019, Namibia reported information on its national GHG inventory for 1994–2014. This included GHG emissions and removals of CO_2, CH_4 and N_2O for all relevant sources and sinks, as well as the precursor gases. Estimates of fluorinated gases were not provided owing to difficulties in obtaining the necessary data, as clarified by the Party in its BUR. The inventory was developed on the basis of the 2006 IPCC Guidelines, although in some cases the IPCC good practice guidance or the IPCC good practice guidance for LULUCF were applied for individual key categories. The total GHG

net removals for 2014 were reported as 98,254 Gg CO_2 eq and the total GHG emissions were reported as 21,180 kt CO_2 eq. Four key categories were identified by level assessment, with CO_2 and CH_4 and the AFOLU and energy (road transport) sectors identified as the main gases and sectors, respectively.

82. Namibia reported information on mitigation actions and their effects, including the national context, which is framed by the National Policy on Climate Change, the National Climate Change Action Plan and its intended nationally determined contribution. Namibia reported actions that are planned, ongoing and already implemented, which occur within the energy, IPPU, waste and AFOLU sectors, as well as overarching mitigation policies and strategies. The key mitigation actions are promoting renewable energy deployment; improving energy efficiency and access; reducing emissions from cement production; afforestation, reforestation and forest preservation; and converting waste to energy. Among these, the reduction in deforestation by 75 per cent has the highest estimated emission reduction potential of 13.5 Gg CO_2 eq by 2030. Namibia reported that if the mitigation actions reported in its BUR are implemented, the cumulative GHG emission reductions achieved will be 20 Mt CO_2 eq in 2030. Co-benefits were also outlined by the Party and included generation of employment, improvement in quality of life, enhanced energy and food security, and a cleaner environment.

83. Namibia reported information on key constraints, gaps and related needs. Information on support received and needed was reported specifically regarding mitigation actions and the preparation of BURs and NCs. Namibia also reported the challenge of establishing a standardized and sustainable system for monitoring the financial support received. Namibia provided information on financial resources, technology transfer, capacity-building and technical support received. Information on technology needs and technology needed and received was also reported in the BUR.

84. The TTE, in consultation with Namibia, identified seven capacity-building needs listed in chapter II.D above and needs for capacity-building that aim to facilitate reporting in accordance with the UNFCCC reporting guidelines on BURs and participation in ICA in accordance with the ICA modalities and guidelines, taking into account Article 4, paragraph 3, of the Convention. Namibia prioritized all the capacity-building needs.

Annex I

Extent of the information reported by Namibia in its third biennial update report

Table 1
Identification of the extent to which the elements of information on greenhouse gases are included in the third biennial update report of Namibia

Decision	*Provision of the reporting guidelines*	*Yes/partly/no/NA*	*Comments on the extent of the information provided*
Decision 2/CP.17, paragraph 41(g)	The first BUR shall cover, at a minimum, the inventory for the calendar year no more than four years prior to the date of the submission, or more recent years if information is available, and subsequent BURs shall cover a calendar year that does not precede the submission date by more than four years.	No	Namibia submitted its third BUR in January 2019; the GHG inventories reported are for 1994–2014.
Decision 2/CP.17, annex III, paragraph 4	Non-Annex I Parties should use the methodologies established in the latest UNFCCC guidelines for the preparation of NCs from non-Annex I Parties approved by the Conference of the Parties or those determined by any future decision of the Conference of the Parties on this matter.	Yes	Namibia used the 2006 IPCC Guidelines, although in some cases the IPCC good practice guidance or the IPCC good practice guidance for LULUCF was applied.
Decision 2/CP.17, annex III, paragraph 5	The updates of the section on national inventories of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol should contain updated data on activity levels based on the best information available using the Revised 1996 IPCC Guidelines, the IPCC good practice guidance and the IPCC good practice guidance for LULUCF; any change to the EF may be made in the subsequent full NC.	Yes	
Decision 2/CP.17, annex III, paragraph 6	Non-Annex I Parties are encouraged to include, as appropriate and to the extent that capacities permit, in the inventory section of the BUR:		
	(a) The tables included in annex 3A.2 to the IPCC good practice guidance for LULUCF;	Yes	Comparable information was reported.
	(b) The sectoral report tables annexed to the Revised 1996 IPCC Guidelines.	Yes	Comparable information was reported.
Decision 2/CP.17, annex III, paragraph 7	Each non-Annex I Party is encouraged to provide a consistent time series back to the years reported in its previous NCs.	Yes	
Decision 2/CP.17, annex III, paragraph 8	Non-Annex I Parties that have previously reported on their national GHG inventories contained in their NCs are encouraged to submit summary information tables of inventories for previous submission years (e.g. for 1994 and 2000).	Yes	
Decision 2/CP.17, annex III, paragraph 9	The inventory section of the BUR should consist of an NIR as a summary or as an update of the information contained in decision 17/CP.8, annex, chapter III (National greenhouse gas inventories), including:	Yes	
	(a) Table 1 (National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors);	Yes	

Decision	*Provision of the reporting guidelines*	*Yes/partly/no/NA*	*Comments on the extent of the information provided*
	(b) Table 2 (National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6).	Yes	
Decision 2/CP.17, annex III, paragraph 10	Additional or supporting information, including sector-specific information, may be supplied in a technical annex.	Yes	The Party submitted an NIR (Republic of Namibia National GHG Inventory Report, 1994–2014, parts 1 and 2) as a stand-alone document.
Decision 17/CP.8, annex, paragraph 13	Non-Annex I Parties are encouraged to describe procedures and arrangements undertaken to collect and archive data for the preparation of national GHG inventories, as well as efforts to make this a continuous process, including information on the role of the institutions involved.	Yes	
Decision 17/CP.8, annex, paragraph 14	Each non-Annex I Party shall, as appropriate and to the extent possible, provide in its national inventory, on a gas-by-gas basis and in units of mass, estimates of anthropogenic emissions of:		
	(a) CO_2;	Yes	
	(b) CH_4;	Yes	
	(c) N_2O.	Yes	
Decision 17/CP.8, annex, paragraph 15	Non-Annex I Parties are encouraged, as appropriate, to provide information on anthropogenic emissions by sources of:		
	(a) HFCs;	No	
	(b) PFCs;	No	
	(c) SF_6.	No	
Decision 17/CP.8, annex, paragraph 16	Non-Annex I Parties are encouraged, as appropriate, to report on anthropogenic emissions by sources of other GHGs, such as:		
	(a) CO;	Yes	
	(b) NO_X;	Yes	
	(c) NMVOCs.	Yes	
Decision 17/CP.8, annex, paragraph 17	Other gases not controlled by the Montreal Protocol, such as SO_X, and included in the Revised 1996 IPCC Guidelines may be included at the discretion of Parties.	Yes	The Party reported on SO_2.
Decision 17/CP.8, annex, paragraph 18	Non-Annex I Parties are encouraged, to the extent possible, and if disaggregated data are available, to estimate and report CO_2 fuel combustion emissions using both the sectoral and the reference approach and to explain any large differences between the two approaches.	Yes	
Decision 17/CP.8, annex, paragraph 19	Non-Annex I Parties should, to the extent possible, and if disaggregated data are available, report emissions from international aviation and marine bunker fuels separately in their inventories:		
	(a) International aviation;	Yes	
	(b) Marine bunker fuels.	Yes	
Decision 17/CP.8, annex, paragraph 20	Non-Annex I Parties wishing to report on aggregated GHG emissions and removals expressed in CO_2 eq should use the global warming potential provided by the IPCC in its Second Assessment Report based on the effects of GHGs over a 100-year time-horizon.	Yes	

Decision	*Provision of the reporting guidelines*	*Yes/partly/no/NA*	*Comments on the extent of the information provided*
Decision 17/CP.8, annex, paragraph 21	Non-Annex I Parties are encouraged to provide information on methodologies used in the estimation of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol, including a brief explanation of the sources of EFs and AD. If non-Annex I Parties estimate anthropogenic emissions and removals from country-specific sources and/or sinks that are not part of the Revised 1996 IPCC Guidelines, they should explicitly describe the source and/or sink categories, methodologies, EFs and AD used in their estimation of emissions, as appropriate. Parties are encouraged to identify areas where data may be further improved in future communications through capacity-building:		
	(a) Information on methodologies used in the estimation of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol;	Yes	
	(b) Explanation of the sources of EFs;	Yes	
	(c) Explanation of the sources of AD;	Yes	
	(d) If non-Annex I Parties estimate anthropogenic emissions and removals from country-specific sources and/or sinks that are not part of the Revised 1996 IPCC Guidelines, they should explicitly describe:	NA	
	(i) Source and/or sink categories;		
	(ii) Methodologies;		
	(iii) EFs;		
	(iv) AD;		
	(e) Parties are encouraged to identify areas where data may be further improved in future communications through capacity-building.	Yes	
Decision 17/CP.8, annex, paragraph 22	Each non-Annex I Party is encouraged to use tables 1 and 2 of the guidelines annexed to decision 17/CP.8 in reporting its national GHG inventory, taking into account the provisions established in paragraphs 14–17. In preparing those tables, Parties should strive to present information that is as complete as possible. Where numerical data are not provided, Parties should use the notation keys as indicated.	Yes	
Decision 17/CP.8, annex, paragraph 24	Non-Annex I Parties are encouraged to provide information on the level of uncertainty associated with inventory data and their underlying assumptions, and to describe the methodologies used, if any, for estimating these uncertainties:		
	(a) Level of uncertainty associated with inventory data;	Yes	
	(b) Underlying assumptions;	Yes	
	(c) Methodologies used, if any, for estimating these uncertainties.	Yes	

Note: The parts of the UNFCCC reporting guidelines on BURs on reporting information on GHG emissions by sources and removals by sinks in BURs are contained in decision 2/CP.17, paras. 3–10 and 41(g). Further, as per para. 3 of those guidelines, non-Annex I Parties are to submit updates of their national GHG inventories in accordance with paras. 8–24 of the UNFCCC guidelines for the preparation of NCs from non-Annex I Parties, contained in the annex to decision 17/CP.8. The scope of such updates should

be consistent with the non-Annex I Party's capacity and time constraints and the availability of its data, as well as the level of support provided by developed country Parties for biennial update reporting.

Table 2
Identification of the extent to which the elements of information on mitigation actions are included in the third biennial update report of Namibia

Decision	*Provision of the reporting guidelines*	*Yes/partly/no*	*Comments on the extent of the information provided*
Decision 2/CP.17, annex III, paragraph 11	Non-Annex I Parties should provide information, in tabular format, on actions to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol.	Yes	
Decision 2/CP.17, annex III, paragraph 12	For each mitigation action or group of mitigation actions, including, as appropriate, those listed in document FCCC/AWGLCA/2011/INF.1, developing country Parties shall provide the following information, to the extent possible:		
	(a) Name and description of the mitigation action, including information on the nature of the action, coverage (i.e. sectors and gases), quantitative goals and progress indicators;	Partly	Information on the description, nature of the action, coverage, progress indicators and quantitative goals was not reported for some mitigation actions.
	(b) Information on:		
	(i) Methodologies;	Partly	Information on methodologies was not reported for some mitigation actions.
	(ii) Assumptions;	Partly	The assumptions reported by the Party relate to the risks of implementation and not to the underlying methodologies.
	(c) Information on:		
	(i) Objectives of the action;	Yes	
	(ii) Steps taken or envisaged to achieve that action;	Partly	Information on steps undertaken was provided, but information on the steps envisaged was not provided.
	(d) Information on:		
	(i) Progress of implementation of the mitigation actions;	Yes	
	(ii) Progress of implementation of the underlying steps taken or envisaged;	Partly	Information on the steps envisaged was not reported.
	(iii) Results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;	Partly	Information on the results achieved was not reported for some mitigation actions.
	(e) Information on international market mechanisms.	Yes	
Decision 2/CP.17, annex III, paragraph 13	Parties should provide information on domestic MRV arrangements.	Yes	

Note: The parts of the UNFCCC reporting guidelines on BURs on the reporting of information on mitigation actions in BURs are contained in decision 2/CP.17, annex III, paras. 11–13.

Table 3
Identification of the extent to which the elements of information on finance, technology and capacity-building needs and support received are included in the third biennial update report of Namibia

Decision	*Provision of the reporting requirements*	*Yes/partly/no*	*Comments on the extent of the information provided*
Decision 2/CP.17, annex III, paragraph 14	Non-Annex I Parties should provide updated information on:		
	(a) Constraints and gaps;	Yes	
	(b) Related financial, technical and capacity-building needs.	Yes	
Decision 2/CP.17, annex III, paragraph 15	Non-Annex I Parties should provide:		
	(a) Information on financial resources received, technology transfer and capacity-building received;	Yes	
	(b) Information on technical support received from the GEF, Parties included in Annex II to the Convention and other developed country Parties, the Green Climate Fund and multilateral institutions for activities relating to climate change, including for the preparation of the current BUR.	Yes	
Decision 2/CP.17, annex III, paragraph 16	With regard to the development and transfer of technology, non-Annex I Parties should provide information on:		
	(a) Nationally determined technology needs;	Yes	
	(b) Technology support received.	Yes	

Note: The parts of the UNFCCC reporting guidelines on BURs on the reporting of information on finance, technology and capacity-building needs and support received in BURs are contained in decision 2/CP.17, annex III, paras. 14–16.

Annex II

Documents and information used during the technical analysis

Reference documents

First, second and third BURs of Namibia. Available at http://unfccc.int/8722.php.

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Summary report on the technical analysis of the second BUR of Namibia. Available at http://unfccc.int/national_reports/non-annex_i_parties/ica/technical_analysis_of_burs/items/10054.php.