



Technical analysis of the third biennial update report of Montenegro submitted on 7 February 2022

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 Montenegro, conducted by a team of technical experts in accordance with the modalities and procedures contained in the annex to decision 20/CP.19.



Abbreviations and acronyms

| | |
|---|--|
| 2006 IPCC Guidelines | <i>2006 IPCC Guidelines for National Greenhouse Gas Inventories</i> |
| AD | activity data |
| AFOLU | agriculture, forestry and other land use |
| BTR | biennial transparency report |
| BUR | biennial update report |
| CBIT | Capacity-building Initiative for Transparency |
| CH ₄ | methane |
| CO ₂ | carbon dioxide |
| CO ₂ eq | carbon dioxide equivalent |
| EF | emission factor |
| EU | European Union |
| FOLU | forestry and other land use |
| GCF | Green Climate Fund |
| GEF | Global Environment Facility |
| GHG | greenhouse gas |
| HFC | hydrofluorocarbon |
| HWP | harvested wood products |
| ICA | international consultation and analysis |
| IE | included elsewhere |
| IPCC | Intergovernmental Panel on Climate Change |
| IPCC good practice guidance for LULUCF | <i>Good Practice Guidance for Land Use, Land-Use Change and Forestry</i> |
| IPPU | industrial processes and product use |
| LULUCF | land use, land-use change and forestry |
| MRV | measurement, reporting and verification |
| N ₂ O | nitrous oxide |
| NA | not applicable |
| NC | national communication |
| NDC | nationally determined contribution |
| NE | not estimated |
| NIR | national inventory report |
| non-Annex I Party | Party not included in Annex I to the Convention |
| PaMs | policies and measures |
| PFC | perfluorocarbon |
| Revised 1996 IPCC Guidelines | <i>Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories</i> |
| SF ₆ | sulfur hexafluoride |
| 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” |
| WAM | ‘with additional measures’ |
| WEM | ‘with measures’ |
| WOM | ‘without measures’ |

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 a 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. Montenegro submitted its second BUR on 3 May 2019, which was analysed by a TTE in the fourteenth round of technical analysis of BURs from non-Annex I Parties, conducted from 2 to 6 September 2019. After the publication of its summary report, Montenegro participated in the ninth workshop for the facilitative sharing of views, conducted virtually from 24 to 27 November 2020.
5. This summary report presents the results of the technical analysis of the third BUR of Montenegro, 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, Montenegro submitted its third BUR on 7 February 2022 as a stand-alone update report. The submission was made more than two years after the submission of the second BUR.
7. During the technical analysis, the Party explained the reasons for submitting the BUR more than two years after the submission of the last BUR. Montenegro clarified that restrictions related to the coronavirus disease 2019 pandemic limited the availability of staff in the relevant institutions, which led to the submission of the third BUR being postponed.
8. A desk analysis of Montenegro's BUR was conducted in Bonn from 20 to 24 June 2022 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: Sorin Deaconu (Romania), Reza Fallah (Islamic Republic of Iran), Mostafa Hasaneen (member of the Consultative Group of Experts from Egypt), Mahendra Kumar (former member of the Consultative Group of Experts from the Marshall Islands), William L'Heudé (former member of the Consultative Group of Experts from France), Rosemary Lopez (Cuba), Brittany Meighan (Belize), Hamza Merabet (Algeria), Anne Nyatichi Omambia (former member of the Consultative Group of Experts from Kenya), Aglaia Obrekht (Canada), Robert Pismo (Cameroon), Mauro Meirelles de Oliveira Santos (Brazil), Virginia Sena Cianci (member of the Consultative Group of Experts from Uruguay) and Ching Tiong Tan (Malaysia). Sorin Deaconu and Mahendra Kumar were the co-leads. The technical analysis was coordinated by Luca Birigazzi, Jamie Howland, Keiichi Igarashi, Pedro Torres and Davor Vesligaj (secretariat).
9. During the technical analysis, in addition to the written exchange, in the virtual team room, to provide technical clarifications on the information reported in the BUR, the TTE

and Montenegro engaged in consultation¹ on the identification of capacity-building needs for the preparation of BURs and participation in the ICA process. Following the technical analysis of Montenegro's third BUR, the TTE prepared and shared a draft summary report with Montenegro on 25 August 2022 for its review and comment. Montenegro, in turn, provided its feedback on the draft summary report on 26 October 2022.

10. The TTE responded to and incorporated Montenegro's comments referred to in paragraph 9 above and finalized the summary report in consultation with the Party on 1 December 2022.

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 Montenegro'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 information on progress 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 the tables included in annex I.

15. The current TTE noted improvements in the reporting in Montenegro's third BUR compared with that in its previous BUR. Information on the GHG inventory, mitigation actions and their effects, methodologies and assumptions, and needs and support reported in the Party's third BUR demonstrates that it has taken into consideration the areas for enhancing the transparency of the extent of the information reported noted by the previous TTE in the summary report on the technical analysis of the Party's previous BURs.

¹ The consultation was conducted via videoconferencing.

16. Regarding the areas for enhancing understanding of the extent of the information reported in the BUR noted by the previous TTE in the summary report on the technical analysis of the Party's previous BUR, Montenegro identified the areas that were not addressed in its current BUR, noting them as areas for enhancing national capacity.

C. Technical analysis of the information reported

17. The technical analysis referred to in paragraph 11(b) above aims to increase the transparency of information reported by the Parties on 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.

18. 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. Montenegro submitted an NIR as a stand-alone document and, further to consultations with the TTE, requested a more detailed analysis and documentation of the findings contained in the NIR to be undertaken using the agreed GHG inventory tool.

19. 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

20. 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.

21. In its third BUR, Montenegro provided an update on its national circumstances, including on its geography, demographic and population trends, climate profile, water resources and land-use patterns. The Party provided recent economic and development data, which showed a fall in gross domestic product in 2020 owing to the coronavirus disease 2019 pandemic and its adverse effect on tourism, which is the country's key economic driver. The Party's description of national and regional development priorities, objectives and circumstances, including features of geography, climate and economy, contextualized its ability to deal with mitigating and adapting to climate change, and it also provided information regarding national circumstances and constraints on the specific needs and concerns arising from the adverse effects of climate change and/or the impact of the implementation of response measures, as referred to in Article 4, paragraph 8, and, as appropriate, Article 4, paragraphs 9–10, of the Convention.

22. In addition, Montenegro provided a summary of relevant information regarding its national circumstances in tabular format.

23. Montenegro transparently reported in its third BUR an update on its existing and planned institutional arrangements relevant to the preparation of its NCs and BURs on a continuous basis. The description covers key aspects of the institutional arrangements, including the organizations involved and their areas of responsibility for Montenegro's climate change management. The Climate Change Directorate of the Ministry of Ecology, Spatial Planning and Urbanism is responsible for submitting national reports to the UNFCCC. Until 2021, UNDP supported the Party in developing these reports, including by hiring experts, but the Ministry took over this role in 2022, with UNDP maintaining an oversight role. The Party reported that the structure and mandate of a high-level multi-institutional council, which will focus on the creation of a low-carbon society, are currently being developed.

24. Information on how the new arrangements will affect the development and monitoring of national reports was not reported in Montenegro's BUR and the reason for this was not clear to the TTE. During the technical analysis, Montenegro explained that, under new arrangements, it is implementing a CBIT project for strengthening national capacities in addressing climate change that is due for completion by the end of 2024.

25. The TTE noted that the transparency of the information reported on institutional arrangements could be enhanced by addressing the area noted in paragraph 24 above, which could facilitate a better understanding of the information reported on institutional arrangements since the submission of Montenegro's second BUR. During the technical analysis, Montenegro clarified that institutional arrangements will be fully operational by the end of 2024.

26. Montenegro reported in its third BUR an update on its domestic MRV arrangements. The Party's reporting on its MRV system covers all significant areas, including key institutional arrangements such as the steering committee responsible for improving and maintaining the MRV system and the national council for PaMs on adaptation and mitigation of climate change, GHG inventory preparation, mitigation actions, projections, support and climate finance. Actions in Montenegro's road map for improving its MRV system include developing systems to track climate mitigation and adaptation action, support and finance, and the wider impact of MRV improvement on sector-based national strategies and progress towards achieving the Sustainable Development Goals. The road map is geared towards supporting the development of the MRV system to enable key international outputs that attract development funds and require the development and updating of data managed by the MRV system, to be produced on time. Montenegro also reported that these output milestones provide a useful focus for the development of the MRV system.

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

27. As indicated in table I.1, Montenegro 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.

28. Montenegro submitted its third BUR in 2022 and the GHG inventory reported is for 1990–2019. The GHG inventory is consistent with the requirements for the reporting time frame.

29. Montenegro submitted an NIR in conjunction with its third BUR. The relevant sections of the NIR were referenced in the BUR and the document was made publicly available on the UNFCCC website.²

30. GHG emissions and removals for the BUR covering the 1990–2019 inventories were estimated using mostly tier 1 methodology from the 2006 IPCC Guidelines.

31. Information on AD and EFs used and their sources was clearly reported in the BUR, including AD provided by national sources, international organizations and literature relevant to the sector. The Party used interpolation, extrapolation and estimations based on expert judgments where relevant data were unavailable. Montenegro used approach 3 for land-use representation.

32. Information on the EFs used for aluminium production and CH₄ emissions from solid waste disposal sites was not clearly reported in Montenegro's BUR. During the technical analysis, the Party clarified that it lacks the capacity to assess estimations made by consultants.

33. Information on the Party's total GHG emissions by gas for 2019 is outlined in table 1 in Gg CO₂ eq. It shows a decrease in emissions of 69.8 per cent with land and HWP since 1990 (3,702.56 Gg CO₂ eq).

² <https://unfccc.int/BURs>.

Table 1
Greenhouse gas emissions by gas of Montenegro for 2019

| <i>Gas</i> | <i>GHG emissions (Gg CO₂ eq) including land and HWP^a</i> | <i>% change 1990–2019</i> | <i>GHG emissions (Gg CO₂ eq) excluding land and HWP^a</i> | <i>% change 1990–2019</i> |
|------------------|--|---------------------------|--|---------------------------|
| CO ₂ | 159.00 | –87.2 | 2 670.01 | –5.8 |
| CH ₄ | 608.51 | –32.6 | 605.78 | –32.7 |
| N ₂ O | 65.98 | –4.1 | 61.63 | –7.1 |
| HFCs | 248.35 | NA | 248.35 | NA |
| PFCs | 34.03 | –97.7 | 34.03 | –97.7 |
| SF ₆ | 3.44 | 341.0 | 3.44 | 341.0 |
| Other | NA | NA | NA | NA |
| Total | 1 119.31 | –69.8 | 3 623.24 | –31.5 |

^a 2006 IPCC Guidelines AFOLU category 3.B (land) and, if reported, 3.D (HWP (3.D.1) and other emissions (3.D.2)).

34. Information on indirect gases was not reported in the Party’s BUR, although it was reported in the NIR.

35. Montenegro 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.

36. The reporting of “IE” was not accompanied by information on where the corresponding emissions were reported and the reason for this was limited access to external experts who are in charge of updating Montenegro’s BUR.

37. Montenegro 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.

38. The shares of emissions that different sectors contributed to the Party’s total GHG emissions excluding land and HWP, as reported by the Party, in 2019 are reflected in table 2.

Table 2
Shares of greenhouse gas emissions by sector of Montenegro for 2019

| <i>Sector</i> | <i>GHG emissions (Gg CO₂ eq)</i> | <i>% share^a</i> | <i>% change 1990–2019</i> |
|--|---|----------------------------|---------------------------|
| Energy | 2 701.70 | 74.6 | –1.7 |
| IPPU | 376.89 | 10.4 | –77.9 |
| AFOLU | –2 232.36 | 7.5 | –130.5 |
| Livestock (category 3.A) | 260.09 | 7.2 | –57.1 |
| Land (category 3.B) | –2 364.29 | NA | 52.9 |
| Aggregate sources and non-CO ₂ emissions sources on land (category 3.C) | 11.48 | 0.3 | –21.9 |
| HWP and other emissions (category 3.D) | –139.64 | NA | 222.4 |
| Waste | 273.08 | 7.5 | 25.3 |

^a Share of total without 2006 IPCC Guidelines AFOLU category 3.B (land) and, if reported, 3.D (HWP (3.D.1) and other emissions (3.D.2)).

39. Montenegro reported information on its use of global warming potential values consistent with those provided by the IPCC in its fourth Assessment Report of the Intergovernmental Panel on Climate Change based on the effects over a 100-year time-horizon of GHGs. The Party identified improvements in its reporting such as the preparation of its first stand-alone NIR.

40. For the energy sector, information was clearly reported on GHG emissions in BUR tables 11–16. The sector accounted for 66.1, 72.7 and 74.6 per cent of total GHG emissions in 2010, 2015 and 2019 respectively. For 1990–2019, energy sector emissions peaked in 2008

(2,911.28 Gg CO₂ eq). The Party estimated emissions for the sector using the tier 1 approach from the 2006 IPCC Guidelines. AD were provided by the Statistical Office of Montenegro in accordance with requirements for the preparation of the BUR and the methodology for preparing national energy balances.

41. Information on CO₂ transport and storage was not reported in Montenegro's BUR owing to an editorial error, although the NIR indicates that those activities did not occur in the country.

42. For the IPPU sector, information was clearly reported on GHG emissions, methodological tier levels, AD and their sources, EFs, key categories and notation keys used, along with other information specific to the sector. Confidential data included those related to aluminium production parameters. HFCs and PFCs were also reported.

43. Information on aluminium production EFs was not clearly reported in Montenegro's BUR; two aluminium plants use the same technology, but their implied EFs differ significantly. During the technical analysis, the Party acknowledged that it has a capacity-building need in this area.

44. For 2006 IPCC Guidelines AFOLU categories 3.A and 3.C, enteric fermentation (CH₄) and manure management (CH₄) were identified as key categories and the most relevant emissions sources in the sector. Montenegro used default EFs from the 2006 IPCC Guidelines. During the technical analysis, the Party clarified that it lacks the capacity and institutional arrangements to provide complete information on these aspects.

45. For land and HWP (categories 3.B and 3.D), Montenegro reported annual GHG emissions and removals for 1990–2019. Overall, the net removals from land and HWP (categories 3.B and 3.D) fluctuated between a minimum of –716.71 Gg CO₂ eq in 2009 and a maximum of –2,827.94 Gg CO₂ eq in 2011.

46. For the waste sector, information was clearly reported on GHG emissions, methodological tier levels, AD and their sources, EFs, key categories and notation keys used, along with other information specific to the sector.

47. Information on emissions was not clearly reported by disposal site type in Montenegro's BUR. During the technical analysis, the Party clarified that it requires capacity-building in order to report the emissions separately using the parameters reported in section 7.2.2.2 of its NIR.

48. The BUR provides an update to all GHG inventories reported in the Party's NC3. The information reported provides an update of the Party's NC3, which addresses anthropogenic emissions and removals for 1990–2017. The update was carried out for 1990–2019 using the methodologies contained in the 2006 IPCC Guidelines, thus generating a consistent 29-year time series. The Party reported that it recalculated emissions for all sectors for 1990–2017 owing to an update to the energy balance, the use of the 2006 IPCC Guidelines, updated estimates of emissions and removals from land and the inclusion of HWP. However, changes of estimated emissions due to recalculations were not presented.

49. Montenegro described in its BUR the institutional framework for the preparation of its 2019 GHG inventory. The Party reported that the Ministry of Ecology, Spatial Planning and Urbanism is the governmental body responsible for its climate change policy and GHG inventory, which was prepared with the support of UNDP, which assisted Montenegro in designing its GHG inventory system.

50. Montenegro clearly reported that a key category analysis was performed for the level of and trend in emissions. The analysis of key categories and trend assessment was carried out in accordance with the 2006 IPCC Guidelines using a tier 1 approach, and identification of key categories was based on level and trend assessments that were performed with and without LULUCF. The three most significant categories in 2019 as reported in the BUR are 3.B.1 (CO₂ emissions and removals from total forest land), 1.A.1.a (CO₂ emissions from main activity electricity and heat production) and 1.A.3.b.iii (CO₂ emissions from heavy-duty trucks and buses).

51. Montenegro clearly reported information on CO₂ fuel combustion emissions using both the sectoral and the reference approach. The information reported indicates that the

combustion emissions estimated under the sectoral and reference approach for 2019 are 2,652.76 and 2,690.25 Gg CO₂ eq, respectively. The difference between the estimates calculated using the two approaches was reported as 37.49 Gg CO₂ eq, or 1.4 per cent.

52. Some information on international aviation and marine bunker fuels was reported. Emissions from international bunkers were reported in the BUR and were not included in the national totals. However, international navigation bunkers were reported as “NE” in Montenegro’s BUR and the reason for this was not clear to the TTE. During the technical analysis, the Party clarified that it did not estimate emissions from international navigation bunkers owing to a lack of AD.

53. Montenegro did not estimate uncertainties for some source and sink categories, and the BUR does not contain the overall uncertainties at the sectoral level and for the whole GHG inventory. During the technical analysis, the Party clarified that it has a capacity-building need in this area.

54. The TTE noted that the transparency of the information reported on GHG inventories could be enhanced by addressing the areas noted in paragraphs 32, 34, 36, 41, 43, 44, 47, 52 and 53 above, which could facilitate a better understanding of the information reported on GHG inventories.

55. In paragraph 47 of the summary report on the technical analysis of Montenegro’s second BUR, the previous TTE noted areas where the transparency of the reporting on GHG inventories could be enhanced. The current TTE noted the improvements referred to in paragraphs 39 and 49 above and commends the Party for enhancing the transparency of its reporting.

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

56. As indicated in table I.2, Montenegro 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.

57. The information reported provides an overview of the Party’s mitigation actions and their effects. In its BUR, Montenegro reported information on its national context and framed its national mitigation planning and actions in the context of its Law on the Confirmation of the Paris Agreement of 11 October 2017 and its revised NDC, which sets the emission reduction target of 35 per cent by 2030 compared with the 1990 level. Montenegro also reported that climate change has been mainstreamed in and integrated into its national development plans and that it is implementing regional initiatives, such as the EU strategy for the Western Balkans, which require countries to work together to tackle environmental issues and address climate change. Most of the mitigation actions reported by Montenegro are in the energy sector.

58. In its BUR, Montenegro reported that the mitigation actions were modelled using three scenarios, namely the WOM, WEM and WAM scenarios. Under the WOM scenario, emissions from all sectors are projected to fall by 23 per cent to 4,128 Gg CO₂ eq between 1990 and 2030, with the energy sector being the main source of emissions. Under the WEM and WAM scenarios, the total GHG emissions by 2030 are projected to decrease by 15.7 and 28.7 per cent, respectively, against the WOM scenario.

59. The Party reported a summary of its mitigation actions in tabular format in accordance with decision 2/CP.17, annex III, paragraph 11. BUR table 25 provides a brief overview of 25 PaMs, while annex 1 to the BUR describes them in detail in tabular format.

60. Consistently with decision 2/CP.17, annex III, paragraph 12(a), Montenegro clearly reported the names of mitigation actions or groups of actions, nature of the actions, coverage (sector and gases) and progress indicators in annex 1 to the BUR for the energy, IPPU, agriculture and waste sectors.

61. Montenegro clearly reported information on methodologies, general assumptions and assumptions for individual PaMs, and the objectives of the actions and steps taken and/or envisaged to achieve those actions for the 25 mitigation actions.

62. Montenegro reported 17 mitigation actions in the energy sector, which focus mainly on improving energy efficiency by developing a regulatory framework, providing financial incentives, adopting regulations on energy labelling and reducing power transmission losses, and also include individual energy efficiency measures, such as introducing district heating in Pljevlja and in public buildings and municipal enterprises. Montenegro also reported measures for promoting renewable energy sources and technologies, such as electric cars, and establishing carbon pricing for a thermal power plant in Pljevlja. The Party reported that three energy sector measures have the highest GHG emission reduction potential under the WEM scenario, namely the above-mentioned carbon pricing measure, a measure for “new renewable power plants” and a measure on “development and implementation of a regulatory framework for energy efficiency in buildings”, with projected emission reductions for 2022–2030 of 2,124,554 and 111 Gg CO₂ eq/year respectively.

63. In the IPPU sector, Montenegro reported three implemented mitigation actions. The mitigation action with the highest emission reduction potential is Podgorica Aluminium Plant electrolysis cell replacement and overhaul in the metal industry, with a projected PFC emission reduction of 494 Gg CO₂ eq/year for 2022–2030.

64. In the AFOLU sector, Montenegro reported two agricultural mitigation actions, namely “support for organic agricultural production”, which is aimed at increasing the number of farmers farming organically with a view to reducing direct and indirect N₂O emissions from managed soils, and “support for the manure management”, which is aimed at reducing the environmental impact of manure. These measures have an emission reduction potential of approximately 1 and 3 Gg CO₂ eq/year, respectively, for 2022–2030, and are also expected to support sustainable management of resources, reduce the adverse environmental impacts of agricultural practices, preserve biodiversity and reduce water pollution.

65. Montenegro did not report information on measures in the forestry sector in its BUR. During the technical analysis, the Party clarified that this was due to the absence of a clear strategic framework and relevant data. The Party further clarified that it faces constraints related to a functional mechanism for coordinating and facilitating the collection, analysis and reporting of data in the sector. The Party also clarified that, in an effort to address this constraint, the Ministry of Ecology, Spatial Planning and Urbanism and the Environmental Protection Agency of Montenegro took part in a project entitled “Development of an upgraded integrated tool and updating the inventory of air emissions for the period 2011–2019” with the aim of strengthening administrative capacity related to reporting GHG emissions.

66. In addition to the FOLU clarifications above, during the technical analysis Montenegro explained that it also participated in a project entitled “Strengthening the Montenegrin National Determined Contribution (NDC) and adaptation actions within the framework of transparency”. This project was expected to strengthen national institutions in the field of climate change, including through synergies on transparency and by adopting or improving methodologies (manuals) and improving data to increase transparency, in order to achieve low-carbon development. Montenegro informed the TTE that this project and the one mentioned in paragraph 65 above were also expected to improve its national capacity for reporting in all sectors, including FOLU.

67. Montenegro reported two implemented mitigation actions in the waste sector, namely “reduce the share of biowaste within municipal waste” and “construction of systems to connect to main sewerage systems and wastewater treatment plants”, with projected annual emission reductions of 220 and 92 Gg CO₂ eq respectively for 2022–2030. Additional impacts of these mitigation actions include shifting to a circular economy with material recovery and recycling, using waste as a renewable energy source, recycling biowaste through composting and reduced environmental discharge, reducing pollution of the aquatic environment and better sanitation.

68. Information on the progress of implementation and the underlying steps taken or envisaged was reported for all mitigation actions but information on the results achieved, such as estimated outcomes and emission reductions, was only reported for a few mitigation actions. During the technical analysis, the Party clarified that there were no available metrics

for results achieved during the reporting period owing to constraints related to technical capacity for facilitating reporting.

69. In its BUR, Montenegro provided for each individual action or measure information on the relevant plan, legal and regulatory act, the estimated cost of implementation, the source of financing, additional impacts that will be achieved, the implementing institution, risks and contribution to the achievement of the Sustainable Development Goals. The TTE commends the Party for providing this additional information.

70. Montenegro reported in its BUR that it has not taken part in any projects involving international market mechanisms. During the technical analysis, however, Montenegro provided additional information about its planned participation in the Partnership for Market Readiness and Implementation, focusing on designing and implementing carbon pricing instruments, which is supported by the World Bank Group and is due to start before the end of 2022.

71. Montenegro reported information on its domestic MRV arrangements in accordance with decision 2/CP.17, annex III, paragraph 13. The information reported indicates that Montenegro is in the process of improving its comprehensive domestic MRV system for mitigation actions. The Law on Protection against Adverse Impacts of Climate Change, adopted in December 2019, mandates the Government to create a national MRV system with a view to coordinating efforts to mitigate the effects of and adapt to the changing climate. At a regional level, Montenegro reported that it has met the opening benchmark of chapter 27 of the EU accession negotiations by adopting a national strategy and action plan for the transposition, implementation and enforcement of the EU acquis on the environment and climate change. The EU Climate Law, which entered into force in July 2021, sets out, among other measures, monitoring and reporting requirements which must align with existing frameworks.

72. Montenegro reported information in its BUR on its current MRV system, including on arrangements, systems, technical expertise and coordination. In addition to reporting on its progress in improving the existing MRV system, it provided detailed information on its current institutional arrangements for coordinating MRV. Furthermore, BUR table 27 contains an overview of the functional elements of and gaps in the MRV system across all sectors with regard to mitigation, adaptation, and support and finance. The Party included the improvement plan for its MRV system and a road map in annex 3 to the BUR, providing an overview organized and categorized by the main areas and MRV system components.

73. The TTE noted that the transparency of the information reported on mitigation actions could be further enhanced by addressing the areas noted in paragraphs 65, 66 and 68 above, which could facilitate a better understanding of the information reported on mitigation actions.

74. In paragraph 63 of the summary report on the technical analysis of Montenegro's second BUR, the previous TTE noted areas where the transparency of the reporting on mitigation actions could be enhanced. The current TTE noted the improvements referred to in paragraphs 69 and 71 above and commends the Party for enhancing the transparency of its reporting.

75. Montenegro reported in its BUR, under the section on the road map for developing its MRV system for adaptation, mitigation and support, information on its areas for improvement for future BURs and other international reporting obligations for compliance with requirements of the enhanced transparency framework under the Paris Agreement. The TTE commends the Party for the clear and comprehensive reporting on its proactive approach to preparing for implementation of the enhanced transparency framework under the Paris Agreement.

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

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

77. Montenegro clearly 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. The key challenges continue to relate to the ongoing requirement to build and enhance capacity to develop and implement climate policy in all areas, including in relation to the GHG inventory and reporting capacities, climate change mitigation and adaptation policies and the improvement of the current MRV system, including the MRV system for market mechanisms that contribute to GHG emission reductions, such as the emissions trading scheme which has been partially established in Montenegro. The Party continues to rely on technical assistance for modelling GHG emissions and the impacts of climate change at the national and local level. As these activities require specialist expertise and skills, and in the absence of a national education programme and training in this area, the national institutions are expected to continue to rely on technical assistance from international institutions. Montenegro reported that its financial, technical and capacity-building needs are primarily in the area of improving the current MRV system and enhancing capacity for developing the GHG inventory and reports identified in the transparency framework.

78. Montenegro reported information on financial resources, technology transfer, capacity-building and technical support received in accordance with decision 2/CP.17, annex III, paragraph 15. During the reporting period (2019–2021), Montenegro received USD 3,492,767 for the implementation of climate change projects, including USD 352,000 from the GEF to support the preparation of the third BUR, USD 1,721,932 from the GCF for a national adaptation plan project entitled “Enhancing Montenegro’s Capacity to Integrate Climate Change Risks into Planning” and USD 1,100,000 from the GEF for CBIT. The Party’s financial needs related to achieving the national 2030 GHG emission reduction target set by the revised NDC were estimated at EUR 2,655.31 million. The total value of projects proposed as priority activities for Montenegro’s cooperation with the GCF for 2021–2023 is USD 176 million, with the GCF expected to provide some USD 75.4 million in support, and the rest projected as co-financing.

79. The funds required to meet the environmental standards required for accession to the EU were estimated at EUR 482,996,838. For climate change specifically, an estimated EUR 87,348,790 is required, of which donors are expected to contribute EUR 2,145,000 in support. Although information on financial needs and support received were reported in Montenegro’s BUR, information on technology transfer and technical support received was not reported and the reason for this was not clear to the TTE.

80. Montenegro reported information on nationally determined technology needs with regard to the development and transfer of technology in accordance with decision 2/CP.17, annex III, paragraph 16. In its BUR, Montenegro reported that its first technology needs assessment was conducted in 2012. While the Party has not assessed its climate technology needs since then, those needs are implicit in the revised NDC and the planned mitigation and adaptation measures listed therein, most of which require investment in specific technologies in the energy, transport, waste and industry sectors. As Montenegro did not monitor or record technology support received in a continuous and systematic way, no historical national data were available for reporting.

81. 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 paragraphs 79–80 above, which could facilitate a better understanding of the information reported on needs and support received.

82. In paragraph 70 of the summary report on the technical analysis of Montenegro’s second BUR, the previous TTE noted areas where the transparency of the reporting on constraints, gaps, needs and support needed and received could be enhanced.

83. The TTE noted that Montenegro has already initiated activities related to the preparation of its first BTR under the enhanced transparency framework (annex 3 to the BUR, table 30, p.133). During the technical analysis, the Party explained that the Ministry of Ecology, Spatial Planning and Urbanism, in cooperation with UNDP, has begun implementing the project “Biennial Transparency Report (BTR) and the Fourth National Communication”, setting the tentative deadline of August 2024 for preparing the first BTR.

Montenegro is currently in the process of hiring experts who will work on the preparation of its first BTR.

5. Any other information

84. Montenegro provided detailed information clarifying its institutional arrangements, including a description of the working group for PaMs for climate change adaptation and mitigation. This working group is able, through a technical MRV system subgroup or steering committee, to support the continuous improvement of the MRV system. The Ministry of Ecology, Spatial Planning and Urbanism has developed a project proposal for “Strengthening the Montenegrin NDC and adaptation actions within transparency” through a CBIT project, which focuses on strengthening institutional capacity in relation to mitigation and adaptation PaMs. The Ministry will act as the focal point for MRV of adaptation action and related information. Montenegro has made significant progress in exploring the intersection of gender and climate change in its gender equality policy framework, namely the National Strategy for Gender Equality 2021–2025 and Action Plan 2021–2022. This strategy only explores the intersection of gender and climate change in the health sector; other climate-related sectors are not included.

D. Identification of capacity-building needs

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

- (a) Improving collection, analysis and reporting of data with regard to international navigation bunkers;
- (b) Enhancing the quality assurance/quality control plan and its implementation to minimize errors in reporting;
- (c) Using splicing techniques where data gaps exist;
- (d) Estimating emissions by waste disposal site type;
- (e) Estimating the overall uncertainty of the inventory;
- (f) Developing technical capacities for obtaining, recording, tracking and reporting AD for individual mitigation actions in the FOLU sector;
- (g) Developing technical capacities for establishing a clear strategic framework for guiding mitigation analysis in the FOLU sector;
- (h) Developing technical capacities to obtain, record, track and report results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions for individual mitigation actions;
- (i) Taking advantage of the available opportunities under the Technology Mechanism through the Climate Technology Centre and Network to facilitate the identification of nationally determined technology needs.

86. The TTE noted that, in addition to those identified during the technical analysis, Montenegro reported several capacity-building needs on pages 92 and 138 of its BUR covering the following areas:

- (a) Utilizing the existing coordination mechanisms in order to facilitate balanced capacity-building in all relevant institutions to avoid creating a bottleneck and slowing progress;
- (b) Developing the GHG inventory team.

87. In paragraphs 72–73 of the summary report on the technical analysis of Montenegro’s second BUR, the previous TTE, in consultation with Montenegro, identified capacity-building needs. In its third BUR, Montenegro reflected that some of those capacity-building needs have been addressed:

- (a) Assessing and reporting GHG sinks and sources in the LULUCF sector;

- (b) Enhancing national capacity to estimate emissions from the agriculture sector;
- (c) Enhancing national capacity to assess and report consistent time series for HFCs, PFCs and SF₆;
- (d) Enhancing national capacity to report information in a more structured format in order to better meet the requirements of the UNFCCC reporting guidelines on BURs.

III. Conclusions

88. The TTE conducted a technical analysis of the information reported in the third BUR of Montenegro in accordance with the UNFCCC reporting guidelines on BURs and concludes that the information reported is mostly consistent. It 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 removals 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; domestic MRV; adaptation; and gender equality. The TTE concluded that the information analysed is mostly transparent.

89. Montenegro reported an update on the institutional arrangements relevant to the preparation of its BURs. It has taken significant steps to establish institutional arrangements that enable sustainable preparation of its BURs, such as making organizational improvements, enhancing the national MRV system and establishing knowledge-sharing procedures to facilitate sectoral information transfer.

90. In its third BUR, submitted in 2022, Montenegro reported information on its national GHG inventory for 1990–2019. This included GHG emissions and removals of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆ for all relevant sources and sinks, as well as the precursor gases. The inventory was developed on the basis of specific EF values from the 2006 IPCC Guidelines. The total GHG emissions for 2019 were reported as 3,623.24 Gg CO₂ eq (excluding LULUCF) and 1,119.31 Gg CO₂ eq (including LULUCF). The three most significant key categories and main gases were identified as 3.B forest land (CO₂), 1.A.1.a main activity electricity and heat production (CO₂) and 1.A.3.b.iii heavy-duty trucks and buses (CO₂).

91. Montenegro reported information on most mitigation actions and their effects in tabular format, including the baseline and mitigation scenarios for 2022–2030 modelled under the WOM, WEM and WAM scenarios. Montenegro reported 25 planned and/or ongoing mitigation PaMs in the energy, IPPU, agriculture and waste sectors. The mitigation actions in the energy sector focus on energy efficiency and investment in renewable energy. In the IPPU sector, the actions focus on reducing PFC emissions in the metal industry and HFC emissions from refrigeration devices. In the agriculture sector, mitigation actions focus on organic agricultural production and manure management to reduce N₂O, while the waste sector PaMs focus on biowaste management and construction of sewerage systems to reduce CH₄ emissions.

92. Montenegro reported progress indicators for all mitigation actions, and results achieved, including emission reductions and estimated outcomes, for a few actions. The highest projected emission reduction was reported for the energy sector measure for implementing carbon pricing for a thermal power plant in Pljevlja (2,124 Gg CO₂ eq/year for 2022–2030). Montenegro reported the co-benefits of all 25 mitigation actions, including their contribution to the achievement of the Sustainable Development Goals. Montenegro reported in its BUR that, under the WAM scenario and including 21 mitigation policies or measures which are likely to be implemented, total GHG emissions by 2030 will decrease by 45.03 per cent compared with the 1990 level. During the technical analysis, the Party clarified that estimates of cumulative emission reductions in CO₂ eq were not provided owing to difficulties in obtaining the necessary data. The Party also reported in its BUR that it is not involved in international market mechanisms and provided comprehensive information on its MRV arrangements.

93. Montenegro reported information on key constraints, gaps and related needs. Information was reported on the financial, technical and capacity-building support received, including details of the support received, amounting to USD 3,492,767, for implementing five climate change projects. This sum included some USD 352,000 from the GEF for preparing the latest BUR, and a further USD 1,100,000 under CBIT. The Party reported that its technology needs were implicit in its NDC.

94. The current TTE noted improvements in the reporting in the Party's third BUR compared with that in its second BUR. The information reported demonstrates that the Party has taken into consideration the areas for enhancing the transparency of the information reported noted by the TTE in the summary report on the technical analysis of the second BUR. However, improvements are ongoing, and the Party has taken note of outstanding areas for future improvements.

95. The TTE, in consultation with Montenegro, identified the nine 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. Montenegro prioritized all the capacity-building needs.

Annex I

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

Table I.1

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

| <i>Decision</i> | <i>Provision of the reporting guidelines</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
|--|--|---|--|
| 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. | Yes | Montenegro submitted its third BUR in February 2022; the GHG inventories reported are for 1990–2019. |
| 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 | Montenegro used the 2006 IPCC Guidelines. |
| 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 Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories and the IPCC good practice guidance for LULUCF; any change to the EF may be made in the subsequent full NC. | Yes | Updated AD were reported for 2019. |
| 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 in chapter 6 of the first NIR. |
| | (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 | The time series reported in the BUR includes 1990–2019. |
| 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 | This information was reported for 1990–2019. |
| | 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, | Yes | |

| <i>Decision</i> | <i>Provision of the reporting guidelines</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
|---|--|---|---|
| Decision 2/CP.17, annex III, paragraph 9 | (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 | Comparable information was reported in NIR summary tables for 1990, 1995, 2000, 2005, 2010, 2015 and 2019, and in NIR tables 43–46 for all years. |
| | (b) Table 2 (National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF ₆). | Yes | Comparable information was reported in NIR summary tables for 1990, 1995, 2000, 2005, 2010, 2015 and 2019, and in NIR tables 43–46 for all years. |
| 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 as an annex to its BUR. |
| Decision 17/CP.8, annex, paragraph 12 | Non-Annex I Parties are also encouraged, to the extent possible, to undertake any key source analysis as indicated in the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories to assist in developing inventories that better reflect their national circumstances. | Yes | |
| 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. | Partly | Information on processes for official consideration and approval of the inventory was not reported. |
| 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 ; | Partly | Montenegro reported CO ₂ emissions as “NE” in some IPCC categories where IPCC methodologies are available. |
| | (b) CH ₄ ; | Partly | Montenegro reported CH ₄ emissions as “NE” in some IPCC categories where IPCC methodologies are available. |
| | (c) N ₂ O. | Partly | Montenegro reported N ₂ O emissions as “NE” in some IPCC categories where IPCC methodologies are available. |
| Decision 17/CP.8, annex, paragraph 15 | Non-Annex I Parties are encouraged, as appropriate, to provide information on anthropogenic emissions by sources of: | Partly | |
| | (a) HFCs; | Partly | Montenegro reported HFC emissions as “NE” in some IPPU categories where IPCC methodologies are available. |
| | (b) PFCs; | Partly | Montenegro reported PFC emissions as “NE” in some IPPU |

| <i>Decision</i> | <i>Provision of the reporting guidelines</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
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| | (c) SF ₆ . | Partly | categories where IPCC methodologies are available. Information on SF ₆ was not reported for some IPPU categories where IPCC methodologies are available. |
| 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) carbon monoxide; | Yes | |
| | (b) nitrogen oxides; | Yes | |
| | (c) non-methane volatile organic compounds. | Yes | |
| Decision 17/CP.8, annex, paragraph 17 | Other gases not controlled by the Montreal Protocol, such as sulfur oxides, and included in the Revised 1996 IPCC Guidelines may be included at the discretion of Parties. | Yes | The Party reported on other gases, such as sulfur oxides. |
| 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 | The information was reported for the sectoral and the reference approach and the Party explained the reason for a large difference between the two approaches. |
| 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. | No | The Party did not report emissions from marine bunker fuels. |
| 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. | NA | The Party used the global warming potential provided in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. |
| 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 | Yes | Montenegro used the 2006 IPCC Guidelines. Tier 1 methodology was mostly used for all sectors. |

| <i>Decision</i> | <i>Provision of the reporting guidelines</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
|---------------------------------------|--|---|--|
| | and removals by sinks of GHGs not controlled by the Montreal Protocol; | | |
| | (b) Explanation of the sources of EFs; | Yes | Montenegro used default EFs from the 2006 IPCC Guidelines. |
| | (c) Explanation of the sources of AD; | Yes | Montenegro used the 2006 IPCC Guidelines, with the AD provided by national sources, international organizations and literature. |
| | (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 | No country-specific sources and/or sinks were identified. |
| | (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 1–2 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 | Notation keys were used. |
| 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; | No | The Party did not report information on the assessment of the overall uncertainty (level and trend) of its national GHG inventory, nor did it report this information at the sectoral level. The Party reported information on the uncertainty assessment for some categories. |
| | (b) Underlying assumptions; | Yes | The Party reported information on the underlying assumptions for AD and EFs where its methodology involved the use of combined uncertainty. |
| | (c) Methodologies used, if any, for estimating these uncertainties. | Yes | The Party's methodology involved the use of combined uncertainty for some categories. |

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 I.2

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

| <i>Decision</i> | <i>Provision of the reporting guidelines</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
|---|--|---|--|
| 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. | Partly | The Party provided information in tabular format for 25 mitigation PaMs covering all sectors except the FOLU sector. |
| 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 name and description of the mitigation action, including information on the nature of the action, coverage (sectors and gases), quantitative goals and progress indicators, was not reported for the mitigation actions in the FOLU sector. |
| | (b) Information on: | | |
| | (i) Methodologies; | Partly | The Party provided information on the methodology used to estimate emissions under the WEM and WAM scenarios, and for some actions only under the WAM scenario, except for the FOLU sector, which was not reported in the BUR. |
| | (ii) Assumptions; | Yes | |
| | (c) Information on: | | |
| | (i) Objectives of the action; | Yes | |
| | (ii) Steps taken or envisaged to achieve that action; | Yes | |
| | (d) Information on: | | |
| | (i) Progress of implementation of the mitigation actions; | Yes | |
| | (ii) Progress of implementation of the underlying steps taken or envisaged; | Yes | |
| | (iii) Results achieved, such as estimated outcomes (metrics depending on type of | Partly | The Party did not report on emission reductions for |

| <i>Decision</i> | <i>Provision of the reporting guidelines</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
|---|--|---|---|
| | action) and estimated emission reductions, to the extent possible; | | most of the mitigation actions in all reported sectors. |
| | (e) Information on international market mechanisms. | Yes | The Party reported that it was not involved in any projects supported by international market mechanisms during the reporting period. |
| 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 I.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 Montenegro

| <i>Decision</i> | <i>Provision of the reporting requirements</i> | <i>Assessment of whether the information was reported</i> | <i>Comments on the extent of the information provided</i> |
|---|---|---|--|
| Decision 2/CP.17, annex III, paragraph 14 | Non-Annex I Parties should provide updated information on: (a) Constraints and gaps; (b) Related financial, technical and capacity-building needs. | Yes 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; (b) Information on technical support received from the GEF, Parties included in Annex II to the Convention and other developed country Parties, the GCF and multilateral institutions for activities relating to climate change, including for the preparation of the current BUR. | Yes 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; (b) Technology support received. | Partly No | The Party has not completed a technology needs assessment since 2012 and has not recorded technology received in a systematic way. The Party noted that technology received was not monitored or tracked owing to a lack of capacity. |

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

Reference documents

A. Reports of the Intergovernmental Panel on Climate Change

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