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# Technical analysis of the first biennial update report of Montenegro submitted on 13 January 2016

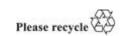
### Summary report by the team of technical experts

#### **Summary**

According to decision 2/CP.17, paragraph 41(a), Parties not included in Annex I to the Convention (non-Annex I Parties), consistent with their capabilities and the level of support provided for reporting, were to submit their first biennial update report (BUR) by December 2014. The least developed country Parties and small island developing States may submit BURs at their discretion. Further, according to paragraph 58(a) of the same decision, the first round of international consultation and analysis (ICA) will be conducted for non-Annex I Parties commencing within six months of the submission of the Party's first BUR. The process of ICA consists of two steps: the technical analysis of the submitted BUR, followed by a workshop for the facilitative sharing of views under the Subsidiary Body for Implementation. This summary report presents the results of the technical analysis of the first BUR 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.

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## FCCC/SBI/ICA/2016/TASR.1/MNE

# Contents

				Paragraphs	Page
	I.	Intr	oduction and process overview	1–6	3
		A.	Introduction	1–2	3
		B.	Process overview	3-6	3
I	II.	Tec	hnical analysis of the information reported in the biennial update	report7–71	4
		A.	Scope of the technical analysis	7–8	4
		B.	Overview of the elements of information reported	9–17	4
		C.	Technical analysis of the information reported	18–69	11
		D.	Identification of capacity-building needs	70–71	20
II	II.	Con	clusions	72–73	21
Annex					
		Doc	numents and information used during the technical analysis		23

## I. Introduction and process overview

#### A. Introduction

- 1. According to decision 2/CP.17, paragraph 41(a), Parties not included in Annex I to the Convention (non-Annex I Parties), consistent with their capabilities and the level of support provided for reporting, were to submit their first biennial update report (BUR) by December 2014. The least developed country Parties and small island developing States may submit BURs at their discretion. Further, according to paragraph 58(a) of the same decision, the first round of international consultation and analysis (ICA) will be conducted for non-Annex I Parties commencing within six months of the submission of the Party's first BUR. The process of ICA consists of two steps: the technical analysis of the submitted BUR, resulting in a summary report for each BUR analysed, followed by a workshop for the facilitative sharing of views under the Subsidiary Body for Implementation.
- 2. This summary report presents the results of the technical analysis of the first BUR of Montenegro undertaken by a team of technical experts (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

- 3. Montenegro submitted its first BUR on 13 January 2016. During the technical analysis the Party explained why its BUR was submitted after the due date, clarifying that relevant institutions needed time to become familiar with the procedures and modalities for the development of the BUR. They also had to undertake procedures, such as selecting the implementing partner, before beginning to develop the BUR. Following approval of the project document, Montenegro experienced no major difficulties in implementing the project activities to produce its BUR.
- 4. The technical analysis of the BUR took place from 13 to 17 June 2016 in Bonn, Germany, 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: Mr. Stephen King'uyu (member of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) from Kenya), Ms. Julia Meisel (member of the CGE from the United States of America), Ms. Sekai Ngarize (United Kingdom of Great Britain and Northern Ireland), Mr. Igor Ristovski (the former Yugoslav Republic of Macedonia) and Mr. Tan Ching Tiong (Malaysia). Mr. King'uyu and Ms. Meisel were the co-leads. The technical analysis was coordinated by Ms. Alma Jean (secretariat).
- 5. 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 Montenegro engaged in consultation via e-mail on the identification of capacity-building needs for the preparation of BURs and participation in the ICA process. Following the technical analysis of the BUR, the TTE prepared and shared a draft summary report with Montenegro on 17 August 2016 for its review and comment. Montenegro, in turn, provided its feedback on the draft summary report on 23 November 2016.
- 6. The TTE responded to and incorporated the Party's comments referred to in paragraph 5 above and finalized the summary report in consultation with Montenegro on 2 December 2016.

# II. Technical analysis of the information reported in the biennial update report

#### A. Scope of the technical analysis

- 7. 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 chapter II.B below);
- (b) A technical analysis of the information reported in the BUR, specified in the "UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention" (hereinafter referred to as the UNFCCC reporting guidelines on BURs) contained in annex III to decision 2/CP.17, and any additional technical information provided by the Party concerned (see chapter 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 chapter II.D below).
- 8. 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 7 above.

#### B. Overview of the elements of information reported

- 9. The elements of information referred to in paragraph 7(a) above include: the national greenhouse gas (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; and information on domestic measurement, reporting and verification (MRV), and support received.
- 10. Further, 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 9 above have been included in the BUR of the Party concerned. The results of that analysis are presented in tables 1, 2 and 3 below.

#### 1. National greenhouse gas inventory

11. 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, paragraph 41(g), and paragraphs 3–10 of the UNFCCC reporting guidelines on BURs. Further, as per paragraph 3 of those guidelines, non-Annex I Parties are to submit updates of their national GHG inventories in accordance with paragraphs 8–24 of the "Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention" 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.

12. Table 1 presents the results of the identification of the extent to which the elements of information on GHGs are included in the first BUR of Montenegro in accordance with the relevant parts of the UNFCCC reporting guidelines on BURs.

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

		_		
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	Yes		
Decision 2/CP.17, annex III, paragraph 5	The updates of the sections on the 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 emission factor may be made in the subsequent full national communication	Yes	The 2006 IPCC Guidelines were used	
Decision 2/CP.17, annex III, paragraph 9	The inventory section of the BUR should consist of a national inventory report 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	Comparable information was provided	
	(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)	NA	Table 1 was not reported; however, tables based on the 2006 IPCC Guidelines were reported and contained comparable information	
	(b) Table 2 (National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF <sub>6</sub> )	NA	Table 2 was not reported; however, tables based on the 2006 IPCC Guidelines were reported and contained comparable information	
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) Tables included in annex 3A.2 to chapter 3 of the IPCC good practice guidance for LULUCF	NA	The tables were not included; however, Montenegro reported	

Decision	Provision of the reporting guidelines	Yes/ Partly/No/NA	Comments on the extent of the information provided	
			comparable information on CO <sub>2</sub> emissions from forest land and cropland using the 2006 IPCC Guidelines	
	(b) The sectoral report tables annexed to the Revised 1996 IPCC Guidelines	NA	The tables were not included as Montenegro used the 2006 IPCC Guidelines and reported comparable information in annex 5 to its BUR	
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 the previous national communications	Yes	A time-series inventory for 1990–2013 was provided	
Decision 2/CP.17, annex III, paragraph 8	Non-Annex I Parties that have previously reported on their national GHG inventories contained in their national communications 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 10	Additional or supporting information, including sector-specific information, may be supplied in a technical annex	Yes	Supporting information, including sector-specific information, was included in annex 5 to the BUR	
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 the following gases by sources and removals by sinks:			
	(a) CO <sub>2</sub>	Yes		
	(b) CH <sub>4</sub>	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 HFCs, PFCs and SF <sub>6</sub>	Yes		
Decision	Non-Annex I Parties should, to the extent			

Decision	Provision of the reporting guidelines	Yes/ Partly/No/NA	Comments on the extent of the information provided	
17/CP.8, annex, paragraph 19	possible, and if disaggregated data are available, report emissions from international aviation and marine bunker fuels separately in their inventories:			
	(a) International aviation	Partly	Information on net emissions was not provided. CH <sub>4</sub> and N <sub>2</sub> O emission factors for the subcategory jet fuel were provided in table 16 in annex 5 to the BUR and activity data on fossil fuel consumption for jet fuel for international aviation (bunkers) in table 18 in annex 5 to the BUR	
	(b) Marine bunker fuels	Partly	Information on net emissions was not provided. CH <sub>4</sub> and N <sub>2</sub> O emission factors for the subcategory jet fuel were provided in table 16 in annex 5 to the BUR and activity data on fossil fuel consumption for jet fuel for international aviation (bunkers) in table 18 in annex 5 to the BUR	
Decision 17/CP.8, annex, paragraph 16	Non-Annex I Parties are encouraged, as appropriate, to report on anthropogenic emission by sources of other GHGs, such as:  (a) CO (b) NO <sub>x</sub> (c) NMVOCs	No	Emissions were not estimated owing to technical problems encountered when using the E <sup>2</sup> Gov software	
Decision 17/CP.8, annex, paragraph 17	Other gases not controlled by the Montreal Protocol, such as SO <sub>x</sub> , included in the Revised 1996 IPCC Guidelines may be included at the discretion of the Parties	No	Emissions were not estimated owing to technical problems encountered when using the E <sup>2</sup> Gov software	
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 <sub>2</sub> fuel combustion emissions using both the sectoral and the reference approach, and to explain any large differences between the two approaches	Partly	This information was not reported for 2011	
Decision	Non-Annex I Parties are encouraged to	Yes	The Party used the 2006	

Decision	Provision of the reporting guidelines	Yes/ Partly/No/NA	Comments on the extent of the information provided
17/CP.8, annex, paragraph 21	provide information on methodologies used in the estimation of anthropogenic		IPCC Guidelines; explanations of methods
	emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol, including a brief explanation of the sources of emission factors and activity data. 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, emission factors and activity data 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:		used and sources of emission factors and activity data were provided in annex 5 to its BUR
	(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 emission factors	Yes	
	(c) Explanation of the sources of activity data	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	Montenegro did not report anthropogenic emissions and removals from country-specific sources and/or sinks that are not part of the Revised 1996 IPCC Guidelines
	(i) Source and/or sink categories		
	(ii) Methodologies		
	(iii) Emission factors		
	(iv) Activity data		
	(e) Parties are encouraged to identify areas where data may be further improved in future communications through capacity-building	No	
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	Yes	Information on

Decision	Provision of the reporting guidelines	Yes/ Partly/No/NA	Comments on the extent of the information provided
	with inventory data		uncertainty assessment was provided for all inventory sectors in annex 5 to the BUR
	(b) Underlying assumptions	No	
	(c) Methodologies used, if any, for estimating these uncertainties	Yes	A general description indicated that IPCC good practice guidance tier 1 methodologies were used

Abbreviations: BUR = biennial update report, GHG = greenhouse gas, 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, NA = not applicable, NMVOC = non-methane volatile organic compound, Revised 1996 IPCC Guidelines = Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories, 2006 IPCC Guidelines = 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

#### 2. Mitigation actions and their effects

- 13. The parts of the UNFCCC reporting guidelines on BURs on the reporting of information on mitigation actions in BURs are contained in paragraphs 11–13 of the UNFCCC reporting guidelines on BURs.
- 14. Montenegro reported on mitigation actions in its first BUR. The information on mitigation actions reported is provided in tabular format.
- 15. Table 2 presents the results of the identification of the extent to which the elements of information on mitigation actions are included in the first BUR of Montenegro in accordance with the relevant parts of the UNFCCC reporting guidelines on BURs.

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

Decision	Provision of the reporting guidelines	Yes/ Partly/No	Comments on the extent of the information provided
Decision 2/CP.17, annex III, paragraph 12	For each mitigation action or groups 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	Yes	
	(b) Information on:		
	(i) Methodologies	No	
	(ii) Assumptions	Yes	
	(c) Information on:		

Decision	Provision of the reporting guidelines		Yes/ Partly/No	Comments on the extent of the information provided
	(i)	Objectives of the action	Yes	
	(ii)	Steps taken or envisaged to achieve that action	Partly	Information on steps taken and/or envisaged was not reported for 12 of the 20 mitigation actions
	implementhe under the result outcomes action) ar	ormation on the progress of nutation of the mitigation actions and alying steps taken or envisaged, and s achieved, such as estimated (metrics depending on type of and estimated emission reductions, to t possible:		
	(i)	·	Yes	
	(ii <sub>,</sub> un	) Progress of implementation of the derlying steps taken or envisaged	Partly	Information on the implementation of the steps taken and/or envisaged was reported for only 2 of the 20 actions reported
	on en	i) Results achieved, such as timated outcomes (metrics depending type of action) and estimated hission reductions, to the extent ssible	Yes	The information reported captures emission reductions for 3 mitigation actions and co-benefits for the other 13 actions
	(e) Informechanis	ormation on international market oms	Yes	This information was reported in the context of the intended nationally determined contribution of Montenegro, which was presented as an annex 1 to the biennial update report
Decision 2/CP.17, annex II, paragraph 13	description	nould provide information on the on of domestic measurement, and verification arrangements	Yes	

#### 3. Finance, technology and capacity-building needs and support received

- 16. 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 paragraphs 14–16 of the UNFCCC reporting guidelines on BURs.
- 17. Table 3 presents the results of the identification of the extent to which the elements of information on finance, technology and capacity-building needs and support received are included in the BUR of Montenegro in accordance with the relevant parts of the UNFCCC reporting guidelines on BURs.

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 first biennial update report of Montenegro

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 constraints and gaps, and related financial, technical and capacity-building needs:		
	(a) Constraints and gaps	Yes	
	(b) Related financial, technical and capacity-building needs	Partly	
Decision 2/CP.17, annex III, paragraph 15	Non-Annex I Parties should provide updated information on financial resources, technology transfer, capacity-building and technical support received from the Global Environment Facility, Annex II Parties 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 biennial update report	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 technology needs, which must be nationally determined, and technology support received:		
	(a) Technology needs, which must be nationally determined	Yes	
	(b) Technology support received	No	

#### C. Technical analysis of the information reported

- 18. The technical analysis referred to in paragraph 7(b) above aims to increase the transparency of mitigation actions and their effects, without engaging in discussion on the appropriateness of those actions. Accordingly, the technical analysis focused on the transparency of the information reported in the BUR.
- 19. 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 Intergovernmental Panel on Climate Change (IPCC) and referred to in the UNFCCC reporting guidelines on BURs.
- 20. 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

21. 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 national communication, including, among other things, information on national circumstances and institutional arrangements relevant to the preparation of national

communications on a continuous basis. For their national communications, non-Annex I Parties report on their national circumstances following the reporting guidance contained in decision 17/CP.8, annex, paragraphs 3–5.

- 22. In accordance with decision 17/CP.8, annex, paragraph 3, Montenegro, in its BUR, reported the following information on its national circumstances: a description of its national and regional development priorities and circumstances, including information on features of its geography, climate, demographics and economy that may affect its ability to deal with mitigating climate change.
- 23. As encouraged in decision 17/CP.8, annex, paragraph 4, Montenegro provided a summary of relevant information regarding its national circumstances in tabular format. The Party provided tables and figures that transparently describe its national circumstances, in particular the geography, climate, population and economy of Montenegro.
- 24. Montenegro provided information on its general, economic and social characteristics, such as the mountainous topography from a Mediterranean to a subalpine climate, the abundance of water resources, its rich biodiversity and forest cover of 60 per cent of the territory. The gross domestic product is 41 per cent of the European Union (EU) average and the economy has generally been improving since 2000. However, the global financial crisis revealed structural vulnerabilities in the economy, following strong growth after Montenegro gained independence in 2006. Fossil fuels play a dominant role in the consumption of energy and account for as much as 70 per cent of the total energy consumption. Between 27 and 46 per cent of the country's primary energy production originates from renewable sources, mainly hydropower, which accounts for between 21 and 37 per cent. Tourism is a significant part of the economy and a key development priority.
- 25. Montenegro described in its BUR the country's institutional and legal framework relevant to climate change. The description identifies the overall coordinating entity and the involvement and roles of other institutions.
- 26. Montenegro reported that EU accession is a national priority that influences the national legal framework. The Ministry of Sustainable Development and Tourism has key climate change responsibilities, which include preparing policies and adopting relevant regulations. The Environmental Protection Agency functions as an executive administration body and plays a significant role in the implementation of climate change policies. The designated national authority for the approval of clean development mechanism projects was established in 2008 within the Ministry of Spatial Planning and the Environment. The Ministry of Economy also has an important role in the area of climate change, by creating policies and establishing objectives and measures to increase energy efficiency. The department responsible for energy efficiency and renewable energy sources is housed within that ministry. The National Council for Sustainable Development and Climate Change is in the final stage of determining requirements for coordinating climate change activities.
- 27. Montenegro also reported on the institutional arrangements for the monitoring and reporting of GHGs, the EU Emissions Trading System, carbon dioxide capture and storage, and fuel quality, among others.
- 28. Although institutions were identified, the relationship between them in terms of information and/or data exchange, their ability to meet the requirements for the preparation of national communications and BURs on a continuous basis and future improvement plans were not reported. The transparency of the reporting could have been enhanced if Montenegro had reported in its BUR how the institutional arrangements are or will be able to meet the requirements for the preparation of national communications and BURs on a continuous basis, and future improvement plans.

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

- 29. As indicated in table 1 above, Montenegro reported information on its GHG inventory in its BUR, in accordance with paragraphs 3–10 of the UNFCCC reporting guidelines on BURs and paragraphs 8–24 of the "Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention" contained in the annex to decision 17/CP.8.
- 30. Montenegro described the institutional and organizational structure for the national inventory system and indicated that the legal and institutional framework for the national GHG inventory in Montenegro is provided under the Environment Law and the Air Protection Law. The Environment Law stipulates the requirements for the development of the national GHG inventory through the National Climate Change Mitigation and Action Plan, administered by the Ministry of Sustainable Development and Tourism. The Air Protection Law, though primarily targeting air pollutants that have an impact on climate change, stipulates secondary legislation for the monitoring of GHG emissions by the Environmental Protection Agency. In addition, Montenegro adopted the Rulebook on the List of Gases and Method of Developing GHG Inventories and Exchange of Information, which includes the development of the quality assurance/quality control plan for GHG inventories. The rulebook is in line with the Air Protection Law and in accordance with the guidelines for reporting to the UNFCCC, the EU and the IPCC. The TTE commends Montenegro for establishing these institutional arrangements.
- 31. Montenegro reported in its BUR information on its national GHG inventories covering GHG emissions and removals for 1990–2013 using the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (hereinafter referred to as the IPCC good practice guidance) and the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (hereinafter referred to as the 2006 IPCC Guidelines). Montenegro highlighted that the chapter of its BUR on GHG inventories was prepared in accordance with the revised "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories", contained in the annex to decision 18/CP.8. The TTE commends Montenegro for using the 2006 IPCC Guidelines.
- 32. The information reported in the BUR covers the GHG inventories for 2012 and 2013 and an update of the inventories for the period 1990–2011. The total GHG emissions reported in the BUR, including sinks from the forestry and agriculture sectors, were 3,657.27 gigagrams of carbon dioxide equivalent (Gg CO<sub>2</sub> eq) for 1990 and 956.67 Gg CO<sub>2</sub> eq for 2013. The total GHG emissions reported excluding sinks were 5,238.52 Gg CO<sub>2</sub> eq for 1990 and 3,178.28 Gg CO<sub>2</sub> eq for 2013, which indicates a reduction in GHG emissions from 1990 to 2011. The reported GHG emissions cover carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride. Carbon monoxide, nitrogen oxide, non-methane volatile organic compounds and sulphur dioxide were not reported owing to technical problems encountered when using the E<sup>2</sup>Gov software that was applied to estimate emissions for the GHG inventory.
- 33. Montenegro reported information on all of the sectors covered in the GHG inventory, including contributions by sector and the estimated emissions and removals across the entire time series for 1990–2013. The TTE commends Montenegro for its comprehensive reporting. Energy and industrial processes represent key sources of GHG emissions for the entire period. Montenegro reported that the consumption of energy-generating products and the level of industrial production influenced both the increase and the decline in emissions between 1990 and 2013.

- 34. Montenegro provided mostly transparent and comprehensive explanations of the methods and data used to prepare the national GHG inventory, including information regarding the tier level applied to different categories, and indicated where IPCC defaults or country-specific factors were applied. Tables 1 and 2 as per decision 2/CP.17, annex III, paragraph 9, were not reported in the BUR. However, as reported in the BUR, Montenegro used the 2006 IPCC Guidelines and produced comparable information in the tables reported in annex 5 to its BUR. The TTE commends Montenegro for providing those tables containing estimates of GHG emissions calculated using the 2006 IPCC Guidelines.
- 35. Information on areas for improvement was not reported in the BUR; however, during the technical analysis Montenegro identified areas for improvement, including the development of activity data for the agriculture, forestry and other land use (AFOLU) sector and synthetic gases.
- 36. A general description of sectoral, category-specific uncertainty assessment for each gas was reported in the BUR, calculated using IPCC good practice guidance tier 1 methodologies. However, information on the assumptions used to estimate uncertainty was not reported. The TTE notes that the transparency of the reporting could be further enhanced if such information were reported in the BUR.
- 37. Several key categories were identified, such as enteric fermentation, refrigeration and air conditioning HFCs and perfluorocarbons, fuel combustion manufacturing industries and road transport. Montenegro reported that IPCC tier 2 methodologies were used for estimating emissions from energy industries and aluminium production. The TTE commends Montenegro for reporting on the key category analysis of emissions for 1990 and 2013.
- 38. Emissions from the energy sector totalled 2,352.61 Gg CO<sub>2</sub> eq in 1990 and 2,415.87 Gg CO<sub>2</sub> eq in 2013. The energy sector represented the greatest share in the total CO<sub>2</sub> emissions, ranging between 76 and 97 per cent between 1990 and 2013. The methods and data used to estimate emissions from the energy sector are clearly outlined in annex 5 to the BUR. Activities relating to electricity and heat production contributed the largest share of emissions from the energy sector. A significant reduction in GHG emissions was reported for the period 1994–1995 for the energy sector. During the technical analysis Montenegro clarified that the thermal power plant Pljevlja was out of operation and accounted for the reported reduction in GHG emissions. Montenegro reported information on the calculated missing energy balances (for the period 1991–1996) but did not report on the sources of information used for the recalculation. During the technical analysis the Party provided information on the data sources used for the calculation, including International Energy Agency and Eurostat methods. The TTE notes that transparency could be enhanced if that information were reported in the BUR.
- 39. Montenegro reported estimates of GHG emissions from fuel combustion calculated using both the reference and sectoral approaches in annex 5 to its BUR. According to the information reported, the difference between the estimates calculated using the sectoral and reference approaches was minimal, ranging from 0.16 to 1.70 per cent for the years 1990, 2012 and 2013. Montenegro did not report estimates of GHG emissions from fuel combustion calculated using both the reference and sectoral approaches for 2011. During the technical analysis the Party provided a table with information on the difference in estimates between the two approaches for 2011, which was very small (0.02 per cent).
- 40. Emissions from international aviation (jet fuel) were not reported; however, Montenegro provided information on CH<sub>4</sub> and N<sub>2</sub>O emission factors for the subcategory jet fuel in table 16 in annex 5 to its BUR and activity data on fossil fuel consumption for jet fuel for international aviation (bunkers) in table 18 in annex 5 to the BUR. Emissions from international marine bunker fuels were not estimated. During the technical analysis

Montenegro indicated that it calculated emissions from international aviation and marine bunker fuels for the purpose of the GHG inventories for 1990–2013 using energy balance data; however, information on net emissions from international and marine bunker fuels was not provided in the BUR. The TTE notes that reporting information on net emissions from international and marine bunker fuels as memo items would greatly enhance the transparency of the inventory.

- 41. GHG emissions from industrial processes totalled 2,272.87 Gg  $CO_2$  eq in 1990 and 282.93 Gg  $CO_2$  eq in 2013. GHG emissions from aluminium production dominated the total GHG emissions from the sector, with a share that ranged between 76.5 and 99.0 per cent over the entire time series 1990–2013. A decline in emissions in 1994 was reported; however, during the technical analysis Montenegro clarified that the level of emissions from the sector is related to the economic changes associated with the breakup of the former Yugoslavia and that, under the economic embargo, the production of the aluminium plant was at a low level owing to lack of raw materials.
- 42. GHG emissions from the waste sector were reported as 19.618 Gg CO<sub>2</sub> eq in 1990 and 199.26 Gg CO<sub>2</sub> eq in 2013, reflecting a steady increase across the time series. The Party indicated that the steady increase is associated with demographic fluctuations and changes in sewerage infrastructure (42 per cent of households connected to septic tanks). The solid waste disposal subcategory represents the biggest share of the sectoral emissions. The methods and data used to estimate emissions from the waste sector are clearly outlined in annex 5 to the BUR.
- 43. Montenegro estimated GHG emissions and removals from the AFOLU sector for 1990–2013 using the 2006 IPCC Guidelines, the IPCC good practice guidance and the IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry. The sector was a net sink from 1990 to 2013. Removals were reported as 1,583.79 Gg CO<sub>2</sub> eq in 2011. For the time series estimated, the amount of removals increased from 987.73 Gg CO<sub>2</sub> eq in 1990 to 1,941.39 Gg CO<sub>2</sub> eq in 2013. The information reported indicates that the high level of removals is the result of large forested areas in Montenegro; however, the incomplete estimation of emissions from the agriculture sector was due to a lack of statistical data.
- 44. Taking data availability into account, a tier 1 approach was applied for the estimation of emissions from the AFOLU sector. In its BUR, Montenegro reported that data from the statistical yearbooks of the Statistical Office of Montenegro (MONSTAT) were used for estimating GHG emissions from the agriculture subsectors. The information reported also pointed out that recalculations are to be undertaken in the future owing to the alignment of methodology with Eurostat recommendations and EU standards. For the forestry subsectors, the information reported indicates that multiple data sources were referred to, and includes elaboration of how those data sets were adapted and combined to estimate  $CO_2$  removals. The TTE commends Montenegro for the transparency shown in the elaboration of its activity data.
- 45. In its BUR, Montenegro reported information on emission factors for the subsectors enteric fermentation, manure management, biomass burning on forest land and  $N_2O$  emissions from managed soils. The reported information did not provide clarity on whether national or default emission factors were used. During the technical analysis Montenegro clarified that national emission factors were used only for timber volume, while default emission factors were applied for the other forestry subsectors.
- 46. Montenegro reported uncertainty analysis for the subcategories of enteric fermentation and manure management; however, the methodology used was not transparently reported. During the technical analysis Montenegro clarified that the analysis was performed on the basis of the 2006 IPCC Guidelines using the latest version of the IPCC software for activities related to livestock breeding. Montenegro also clarified that,

for the subsectors that were not analysed, there was a need for better input data, the use of higher-tier methodologies and the use of appropriate software for the assessment.

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

- 47. As indicated in table 2 above, Montenegro reported in its BUR, in accordance with paragraphs 11–13 of the UNFCCC reporting guidelines on BURs, information on mitigation actions and their effects, to the extent possible.
- 48. The information on mitigation actions and their effects was reported in chapter 3 of the BUR, within the framework of the National Climate Change Mitigation and Action Plan. Montenegro reported that it has a very low number of stationary installations, which represent the majority of the national GHG emissions: the Pljevlja coal-fired power plant and the Aluminijuma Plant Podgorica plant contribute a combined total of 90 per cent of the national GHG emissions. Montenegro also reported that it has a very high proportion of synthetic gases (fluorinated gases), which are associated with production levels at the aluminium plant. This is coupled with very high levels of CO<sub>2</sub> removals as a result of the large expanse of forests and forest areas (69.8 per cent of the total national territory in 2013). In 2013, for example, the total removals were 2,222 Gg against national emissions of 2,440 Gg CO<sub>2</sub> eq.
- 49. Montenegro reported information on 20 mitigation actions, on the basis of two realistic mitigation scenarios, namely 'with measures' (WM) and 'with additional measures' (WAM). WM includes measures laid down by national and/or EU legislation and strategies; while WAM includes the original WM scenario extended to include additional measures that are not required by EU legislation and/or measures for which EU legislation allows flexibility regarding certain quantified requirements. Montenegro reported that the majority of its mitigation actions are broadly categorized and will be implemented through projects to be prioritized using the criteria and methodology described in annex 4 to the BUR.
- 50. The 20 mitigation actions reported in the BUR were prioritized using a multi-criteria analysis tool for prioritizing nationally appropriate mitigation actions (NAMAs). Montenegro reported that the key criteria for the prioritization were: GHG reduction potential; financial sustainability; political support; institutional readiness for implementation; possibility of MRV; social acceptability (acceptance by the public); economic, social, and environmental effects; and effects on adaptation to climate change. The prioritization process generated three categories, namely top priority (six actions), high priority (seven actions) and low priority (seven actions). The TTE commends the Party for this effort, which is considered important for decision-making. Montenegro reported that not all of the possible mitigation actions were included; rather, its reporting was limited to priority actions that could be expected to result in a substantial reduction in GHG emissions in addition to co-benefits.
- 51. Furthermore, Montenegro reported that the full implementation of the WM scenario could lead to a gross GHG emission reduction of more than 375 Gg CO<sub>2</sub> eq/year by 2024 in comparison with the emission level in 2013. GHG emission reduction in the waste management sector was estimated at 80 Gg CO<sub>2</sub> eq/year by 2020 in comparison with the emission level in 2013. Moreover, there is potential to enhance GHG emission reduction by more than 200 Gg CO<sub>2</sub> eq in comparison with the emission level in 2013. Within the context of the WM scenario, Montenegro reported a total of 14 mitigation actions, including 5 in the energy sector, 2 in transport, 1 in each of forestry, agriculture, waste and tourism, and 3 awareness-raising actions. Within the context of the WAM scenario, the Party reported six additional mitigation actions: two each in the energy and transport sectors and one each in the tourism and waste sectors.

- 52. Montenegro provided a detailed description of the 20 mitigation actions reported in its BUR, including name and description, type of action, time frame, budget and expected GHG emission reduction under both scenarios.
- 53. Furthermore, Montenegro reported a description of the assumptions for each mitigation action reported in the BUR. A description of the underlying methodologies was, however, not reported. The TTE notes that the transparency of the reporting could be enhanced if, in subsequent BURs, the Party were to provide a description of the underlying methodologies for each mitigation action.
- 54. Montenegro reported complete information on the steps taken and/or envisaged to achieve an action for only 2 of the 20 actions reported in the BUR. The TTE considers that the transparency of the reported information could be enhanced by including information on such steps taken and/or envisaged for each mitigation action, in accordance with paragraph 12(c) of the UNFCCC reporting guidelines on BURs.
- 55. Montenegro provided a description of emission reductions for 3 mitigation actions and of co-benefits for the other 13 actions. The TTE notes that including information on the estimated outcomes and estimated emission reductions for all mitigation actions in subsequent BURs could further improve the transparency of the reporting.
- 56. Montenegro provided a description of international market mechanisms. The Party reported that it intends to sell carbon credits during the forthcoming period to contribute towards achieving its emission reduction objectives and views this as a cost-effective way of assisting the development of methods for and the implementation of low emissions. Montenegro also reported that the utilization of international market mechanisms will depend on having in place effective accounting rules, developed under the UNFCCC, to ensure the environmental integrity of the mechanisms. Montenegro did not report information on international market mechanisms that it is already engaged with. The transparency of the reporting could be improved by providing such information in subsequent BURs.

#### 4. Constraints and gaps, and related technology, financial, technical and capacitybuilding needs, including a description of support needed and received

- 57. As indicated in table 3 above, Montenegro reported in its BUR, in accordance with paragraphs 14–16 of the UNFCCC reporting guidelines on BURs, information on finance, technology and capacity-building needs and support received.
- 58. Montenegro reported that, despite the currently available financial, technical and capacity-building support, it is unable to meet the increasing requirements related to climate change. It noted that the information provided should not be considered exhaustive.
- 59. Montenegro reported the following needs in its BUR:
  - (a) A permanent and binding system for drafting national reports;
- (b) Strategies for attracting investment, especially in energy infrastructure development;
- (c) Funding to enhance public awareness of and private-sector involvement in climate change mitigation, and incentives, workshops and the dissemination of materials to motivate the public to reduce GHG emissions;
- (d) Public funds for energy efficiency and renewable energy development, for introducing alternative modes of transport and for adaptation activities at public facilities and plants;

- (e) Access to international funds and grants as well as to loans with relatively low interest rates;
- (f) Administrative and financial assistance for the GHG inventory development team, and capacity-building for drafting a low-carbon development strategy;
- (g) Loans, as the high level of public debt may pose a challenge to additional borrowing, and further support to develop technical and institutional capacity;
  - (h) Cross-border projects with regional cooperation and experience exchange;
- (i) A consolidated database for the data required when developing a GHG inventory, for reporting and developing NAMA project proposals and initiatives, and for recording data and results on projects;
  - (j) Enhancement of climate change research;
  - (k) Development of insurance services;
- (l) Integration of climate change consideration into national policies, programmes and plans, including those for fiscal stability;
- (m) Promotion and installation of solar photovoltaic systems for cattle breeders and farmers on their summer pastures;
- (n) Improved cooperation among experts from relevant institutions who are responsible for the implementation of intended measures;
- (o) Capacity-building for staff working in the relevant institutions to be involved in establishing and operating a national MRV system for NAMA projects.
- 60. The information reported in the BUR indicates that Montenegro conducts technology assessments regularly, and the Party clarified during the technical analysis that it intends to do so in the future subject to available resources. Montenegro explained that its main priorities are: technology to reduce GHG emissions and technology to facilitate adaptation to climate change, including energy-efficient technology in all sectors, housing and commercial sectors; renewable energy technology; and technology for the efficient use of natural resources. The Party highlighted specific initiatives such as small hydropower plants, energy audits, energy efficiency in public buildings, modern biomass heating, and 'smart' systems in consumption management and in network technology.
- 61. Montenegro reported that between 2006 and 2014 it received over EUR 490 million in official development assistance to respond to climate change from a number of partners, primarily the EU and its programmes, the United Nations and the Global Environment Facility. It also reported that it participates in the Environment and Climate Regional Accession Network, which provides training on topics selected to facilitate the drafting of national reports and climate change policies and the modelling and defining of NAMA project ideas. Montenegro estimated that, since becoming a Party to the Convention, it has provided EUR 15 million in domestic resources to address climate change (for projects for which data are available).
- 62. Montenegro provided information on its national financial contributions as well as on support received. Montenegro reported that, while it is not possible to give a precise overview of national co-financing (cash or in-kind), for the reviewed projects where financial data were available, such national contributions amounted to some EUR 15 million, with the actual contribution likely to be larger.

#### 5. Domestic measurement, reporting and verification

- 63. As indicated in table 2 above, Montenegro reported in its BUR, in accordance with paragraph 13 of the UNFCCC reporting guidelines on BURs, information on the domestic MRV arrangements.
- 64. Montenegro stated that it is in the process of developing its own MRV system. Montenegro, further, stated that it views the establishment of an MRV system as important for achieving national mitigation targets. It also indicated that the (proposed) system includes reporting national communications, BURs, GHG inventories and other relevant information on a regular basis.
- 65. The information reported in the BUR outlines the steps (or 'proposed pathway') for establishing an 'enhanced' MRV system, including: (1) precise definition of institutional arrangements and processes; (2) definition of GHG mitigation actions and accounting; (3) establishment of data collection and reporting responsibilities; (4) establishment of clear and transparent reporting obligations; and (5) verification and quality assurance.
- 66. In addition, Montenegro provided information on the proposed institutions, entities, arrangements and systems involved in the proposed MRV system. Furthermore, Montenegro reported information on how domestically supported NAMAs will be measured, including the collection and management of relevant and available information and the documentation of methodologies. The Party also reported information on the potential further indicators and NAMAs applicable to Montenegro with respect to the proposed MRV system.
- 67. Montenegro also described how domestically supported NAMAs will be verified, including by domestic experts, using domestically developed processes, thereby enhancing the cost-effectiveness of the verification process.
- 68. In the BUR Montenegro reports that all of the institutions involved in the proposed domestic MRV system are national ministries, departments and agencies, an indication of the Party's intention to use domestic experts and domestically developed processes.

#### 6. Any other information

- 69. The BUR contains a section on the assessment of gender-disaggregated data and recommendations for improvement in the collection of such data. Montenegro noted that collecting gender-disaggregated data would provide a better overview of mitigation measures and the design of policies and measures. The information reported indicates that mitigation strategies cannot rely exclusively on technology and markets, but should include a broad spectrum of structural and lifestyle changes. Montenegro provided some suggestions for achieving that goal:
- (a) Existing mechanisms for financing climate activities should include gender policies;
- (b) Women should be given equal representation in the decision-making process on climate change;
- (c) Those responsible for MRV should attend training on gender equality and gender issues related to climate change mitigation to ensure that the MRV activities relating to mitigation are gender-sensitive;
- (d) Women's participation should be more thoroughly considered and included both in existing and future national policies and in action plans for measures concerning sustainable development and climate change;

(e) Improved participation by women could be achieved through systematic gender analysis, the collection and use of gender-disaggregated data, setting gender indicators and developing practices that support a greater focus on and commitment to gender equality.

#### D. Identification of capacity-building needs

- 70. In consultation with Montenegro, the TTE identified the following capacity-building needs related to the facilitation of the preparation of subsequent BURs and participation in ICA:
- (a) Enhancing national capacity to establish long-term institutional arrangements to facilitate continuous reporting;
- (b) Enhancing national capacity to identify and implement the appropriate methodologies and software to carry out uncertainty assessment;
- (c) Enhancing national capacity to use historical data and to identify and use the most appropriate methodologies to generate data for land use and land-use change for the AFOLU sector and activity data on some synthetic gases;
- (d) Establishing the necessary institutional arrangements for generating and reporting categories and sources of data for the GHG inventory;
- (e) Enhancing national capacity to identify the most appropriate methodologies for developing mitigation actions and documenting the relevant steps taken and envisaged;
- (f) Enhancing national capacity to establish and implement a domestic MRV system;
- (g) Enhancing national capacity to track and report the technology support needed and received;
- (h) Enhancing national capacity to track, document and report financial support needed and received (including national resources) for climate change, in particular for mitigation.
- 71. In addition to the capacity-building needs identified during the technical analysis, Montenegro outlined specific needs in its BUR:
- (a) Establishment of and budgetary funding for a permanent system for drafting national reports;
- (b) Strategies for attracting investment, especially in energy infrastructure development;
  - (c) Regional cooperation and experience exchange;
- (d) Access to international funds and grants as well as to loans with relatively low interest rates;
- (e) A consolidated database for the data required when developing a GHG inventory, for reporting and developing NAMA project proposals and initiatives, and for recording data and results on projects;
- (f) Public funds for energy efficiency and renewable energy development, for introducing alternative modes of transport and for adaptation activities at public facilities and plants;
  - (g) Enhancement of climate change research;

- (h) Development of insurance services;
- (i) Funding to enhance public awareness of and private-sector involvement in climate change mitigation;
  - (j) Strategies to motivate the public to reduce GHG emissions;
- (k) Continuous development of capacity and improvement of expertise so as to be able to respond to changes in UNFCCC mechanisms and to new climate change mechanisms, methods and approaches;
- (l) Development of the expertise and skills required to implement mitigation measures, especially among staff working in the area of climate change in the Ministry of Sustainable Development and Tourism, the Environmental Protection Agency, the Ministry of Economy and the Ministry of Agriculture and Rural Development as well as in scientific institutions;
- (m) Increase in the involvement of scientific institutions in the assessment of technological capacity and information;
- (n) Improvement in cooperation among experts and institutions responsible for the implementation of intended measures and building the expertise and skills of those experts and institutions to set criteria for gathering information on mitigation projects, to measure and quantify GHG reduction measures, programmes and projects, to develop sectoral and intersectoral NAMA projects, to apply new technology, to finance climate change through donor involvement, to use various financial mechanisms under the Convention and to access the growing pool of public and private funds supporting climate preservation projects;
- (o) Capacity-building for staff working in the relevant institutions to be involved in establishing and operating a national MRV system for NAMA projects;
  - (p) Access to international support, especially loans;
- (q) Integration of climate change considerations into national policies, programmes and plans, including those for fiscal stability;
- (r) Promotion and installation of solar photovoltaic systems for cattle breeders and farmers on their summer pastures;
- (s) Administrative and financial assistance for the GHG inventory development team;
  - (t) Capacity-building for drafting a low-carbon development strategy.

#### **III.** Conclusions

#### 72. The TTE concludes that:

- (a) Most of the elements of information listed in paragraph 3(a) of the ICA modalities and guidelines have been included in the first BUR of Montenegro;
- (b) Montenegro provided context for its BUR in reporting on national circumstances and institutional arrangements. The transparency of the reporting on institutional arrangements could be enhanced by including information on the relationship between institutions, how the institutional arrangements are meeting or will be able to meet the requirements for the preparation of national communications and BURs on a continuous basis, mechanisms for information and data exchange, quality assurance/quality control

procedures, provisions for public consultation and other forms of stakeholder engagement, and future improvement plans;

- (c) Montenegro reported in its BUR information on its national GHG inventories covering GHG emissions and removals for 1990–2013 using the 2006 IPCC Guidelines. The TTE commends Montenegro for providing inventory estimates calculated using those guidelines and for transparently reporting a complete time series. The Party provided mostly transparent and comprehensive explanations of the methods and data used to prepare the national GHG inventory. During the technical analysis the Party indicated areas for improvement, which included methodologies for data generation for the AFOLU sector and the development of activity data for synthetic gases;
- (d) Montenegro reported, to the extent possible, information on mitigation actions and their effects. For some of the mitigation actions, however, there were gaps in the information reported. The transparency of the reporting could be enhanced if the Party reported in its subsequent BURs information not reported in the current BUR. With respect to international market mechanisms, Montenegro reported that it intends to sell carbon credits to contribute towards achieving its emission reduction objectives and that the utilization of international market mechanisms will depend on having in place effective accounting rules to ensure the environmental integrity of the mechanisms. In addition, Montenegro reported that it is in the process of developing a domestic MRV system, which will include reporting national communications, BURs, GHG inventories and other relevant information on a regular basis. In consultation with the Party, the TTE identified enhancing national capacity to establish and implement a domestic MRV system as one of Montenegro's capacity-building needs:
- (e) The Party's major capacity-building need is building expert and institutional capacity in relation to planning and implementing climate change activities. The transparency of the reporting on technology needs could be enhanced if Montenegro could provide more specificity on the types of technology needed, perhaps using the results of its technology needs assessments.
- 73. The TTE, in consultation with Montenegro, identified eight<sup>1</sup> 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. Montenegro further identified the following as the five prioritized capacity-building needs:
- (a) Enhancing national capacity to establish long-term institutional arrangements to facilitate continuous reporting;
- (b) Enhancing national capacity to identify and implement the appropriate methodologies and software to carry out uncertainty assessment;
- (c) Enhancing national capacity to use historical data and to identify and use the most appropriate methodologies to generate data for land use and land-use change for the AFOLU sector and activity data on some synthetic gases;
- (d) Establishing the necessary institutional arrangements for generating and reporting categories and sources of data for the GHG inventory;
- (e) Enhancing national capacity to establish and implement a domestic MRV system.

<sup>&</sup>lt;sup>1</sup> This refers to the number of capacity-building needs listed in chapter II.D above.

#### Annex

# Documents and information used during the technical analysis

#### **Reference documents**

"Composition, modalities and procedures of the team of technical experts for undertaking the technical analysis of biennial update reports from Parties not included in Annex I to the Convention". Annex to decision 20/CP.19. Available at

<a href="http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf">http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf</a>#page=12>.

"Modalities and guidelines for international consultation and analysis". Annex IV to decision 2/CP.17. Available at

<a href="http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf">http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf</a>.

"UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention". Annex III to decision 2/CP.17. Available at

<a href="http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf">http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf</a>.

"Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention". Annex to decision 17/CP.8. Available at <a href="http://unfccc.int/resource/docs/cop8/07a02.pdf#page=2">http://unfccc.int/resource/docs/cop8/07a02.pdf#page=2</a>.

First biennial update report of Montenegro. Available at <a href="http://unfccc.int/8722.php">http://unfccc.int/8722.php</a>.

Second national communication of Montenegro. Available at <a href="http://unfccc.int/national\_reports/non-annex\_i\_natcom/items/2979.php">http://unfccc.int/national\_reports/non-annex\_i\_natcom/items/2979.php</a>.