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Technical analysis of the first biennial update report of Kyrgyzstan submitted on 23 December 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. 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 first biennial update report of Kyrgyzstan, 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	*2006 IPCC Guidelines for National Greenhouse Gas Inventories*
AD	activity data
AFOLU	agriculture, forestry and other land use
AR	Assessment Report of the Intergovernmental Panel on Climate Change
BUR	biennial update report
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2 eq	carbon dioxide equivalent
EF	emission factor
ETF	enhanced transparency framework under the Paris Agreement
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
HWP	harvested wood products
ICA	international consultation and analysis
IPCC	Intergovernmental Panel on Climate Change
IPCC good practice guidance	*Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*
IPCC good practice guidance for LULUCF	*Good Practice Guidance for Land Use, Land-Use Change and Forestry*
IPPU	industrial processes and product use
MRV	measurement, reporting and verification
N_2O	nitrous oxide
NA	not applicable
NC	national communication
NDC	nationally determined contribution
NE	not estimated
NIR	national inventory report
NMVOC	non-methane volatile organic compound
NO	not occurring
non-Annex I Party	Party not included in Annex I to the Convention
NO_X	nitrogen oxides
PFC	perfluorocarbon
QA/QC	quality assurance/quality control
Revised 1996 IPCC Guidelines	*Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*
SF_6	sulfur hexafluoride
TTE	team of technical experts
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"

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. The least developed countries and small island developing States may submit at their discretion.

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. This summary report presents the results of the technical analysis of the first BUR of Kyrgyzstan, 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

5. In accordance with the mandate referred to in paragraph 2 above, Kyrgyzstan submitted its first BUR on 23 December 2022 as a stand-alone update report. During the technical analysis, the Party clarified that the submission of the BUR was late owing to challenges arising from the coronavirus disease 2019 pandemic and in securing funding for BUR preparation.

6. The technical analysis of Kyrgyzstan's BUR was conducted from 2 to 6 October 2023 in Bonn and was undertaken by the following TTE, drawn from the UNFCCC roster of experts on the basis of the criteria defined in decision 20/CP.19, annex, paragraphs 2–6: Ijaz Ahmad (Pakistan), Javier Bolufé Torres (Cuba), Ruleta Camacho Thomas (former member of the Consultative Group of Experts from Antigua and Barbuda), Akram Hamza (Tunisia), Atsuko Hayashi (Japan), Traute Koether (Austria), Kakhaberi Mdivani (Georgia), Dingane Sithole (Zimbabwe), Koen E.L. Smekens (Belgium) and Christopher Roland Thorpe (Luxembourg). Traute Koether and Dingane Sithole were the co-leads. The technical analysis was coordinated by Marion Vieweg-Mersmann and Jeeyoon Jung (secretariat).

7. 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 Kyrgyzstan engaged in consultation[1] on the identification of capacity-building needs for the preparation of BURs and participation in the ICA process. Following the technical analysis of Kyrgyzstan's first BUR, the TTE prepared and shared a draft summary report with Kyrgyzstan on 11 January 2024 for its review and comment. Kyrgyzstan, in turn, provided its feedback on the draft summary report on 11 April 2024.

8. The TTE responded to and incorporated Kyrgyzstan's comments referred to in paragraph 7 above and finalized the summary report in consultation with the Party on 30 April 2024.

[1] The consultation was conducted via videoconferencing.

II. Technical analysis of the biennial update report

A. Scope of the technical analysis

9. 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).

10. The remainder of this chapter presents the results of each of the three parts of the technical analysis of Kyrgyzstan's BUR outlined in paragraph 9 above.

B. Extent of the information reported

11. The elements of information referred to in paragraph 9(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.

12. 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 10 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.

C. Technical analysis of the information reported

13. The technical analysis referred to in paragraph 9(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.

14. 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.

15. 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

16. 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.

17. Kyrgyzstan reported in its first BUR information on its national circumstances, including a description of its geography, demography, climate, natural resources (land, water, forest, fuel and energy), economy, State governance and economic development during 1990–2018. Kyrgyzstan transitioned to a parliamentary form of government in 2010 and is a sovereign State. Kyrgyzstan is a mountainous country, with an average territorial height of 2,630 m, and living conditions are comfortable in less than 20 per cent of its territory. Its population is extremely geographically dispersed and, as a result, personal transport is the dominant form of domestic transportation.

18. In addition, Kyrgyzstan provided a summary of relevant information regarding its national circumstances in tabular format and in maps and graphs.

19. Kyrgyzstan transparently reported in its first BUR information on its 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 legal status and roles and responsibilities of the overall coordinating entity, the involvement and roles of other institutions, QA/QC procedures, and provisions for public consultation and other forms of stakeholder engagement. The role of the national focal point to the UNFCCC and associated responsibilities transferred from the State Agency for Environmental Protection and Forestry to the Ministry of Foreign Affairs in 2020, and then to the Ministry of Natural Resources, Environment and Technical Supervision in 2021. Under the guidance of this Ministry, the Planning and Implementation Unit at the State Regulation Center on Environment Protection and Ecological Safety is responsible for the preparation of BURs and NCs.

20. Kyrgyzstan reported in its first BUR information on its domestic MRV arrangements. The description covers key aspects of the institutional arrangements and includes information on the GHG inventory system and preparation of the Party's fourth national GHG inventory and on the MRV of support needed and received. The domestic MRV system, which aligns with the existing MRV framework under the Convention, enables periodic reporting on GHG emissions, mitigation actions, and support (financial, technological and capacity-building). The domestic MRV system will be improved through the outputs from a 2013 project funded jointly by the Global Environment Facility and the United Nations Development Programme and from a 2018 project funded by the United Nations Economic Commission for Europe, the former of which fed into the latter. The projects focused on developing green growth indicators and strengthening institutional and legal capacities, which will improve the management of national environmental information and the implementation of a domestic MRV system.

21. Kyrgyzstan reported in its BUR (section ES6, p.25) information on areas for improvement of its domestic MRV system for compliance with requirements under the ETF. The initiatives relate to establishing an MRV system for climate finance and developing detailed MRV standards, rules, templates and tools. The TTE commends the Party for the clear and comprehensive reporting on its proactive approach to preparing for ETF implementation.

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

22. As indicated in table I.1, Kyrgyzstan 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.

23. Kyrgyzstan submitted its first BUR in 2022 and the GHG inventory reported is for 1990–2018. The GHG inventory is consistent with the requirements for the reporting time frame.

24. Kyrgyzstan submitted an NIR in conjunction with its first BUR. The relevant sections of the NIR were not referenced in the BUR, except for the uncertainty analysis, but the document was made publicly available on the UNFCCC website.[2]

25. GHG emissions and removals for the BUR covering the 1990–2018 inventories were estimated using mostly the tier 1 methodology from the 2006 IPCC Guidelines. The TTE commends the Party for using the 2006 IPCC Guidelines.

26. Information on the methodological tier used for each category was not clearly reported in Kyrgyzstan's BUR. The Party stated in the NIR that it used the tier 1 methodology for almost all categories, which indicates that it might have used a higher-tier method for some categories, but it did not clarify for which ones.

27. Information on AD and EFs used and their sources was reported in the BUR, including information on the use of default EFs from the 2006 IPCC Guidelines, energy resources and annual energy production, consumption of fuels, livestock and manure management, sources of some AD used for estimating N_2O emissions and associated precursors from managed soils, the amounts of synthetic and organic fertilizers applied to soils, the areas of forest land and cropland, crop production, economic activity in the IPPU sector, the population in 2018 and the amount of solid waste landfilled (complete time series).

28. The following information was not clearly reported in Kyrgyzstan's BUR: (1) for the energy sector, detailed information on energy AD by category as defined in the 2006 IPCC Guidelines, coal production by mining type, EFs for fugitive emissions, and parameters (e.g. net calorific values); (2) for the IPPU sector, the AD used; (3) for the agriculture sector, the AD used for category 3.C; (4) for the forestry and other land use sector, the AD (area other than forest land and cropland) used; and (5) for the waste sector, population data for the complete time series, waste generation per capita, composition of waste, fraction of waste incinerated and share of managed waste. During the technical analysis, the Party provided most of the missing AD for the waste sector only.

29. Information on the Party's total GHG emissions by gas for 1990–2018 is outlined in table 1 in Gg CO_2 eq. It shows a decrease in emissions of 61.6 per cent with land and HWP since 1990 (18,017.15 Gg CO_2 eq).

Table 1
Greenhouse gas emissions by gas of Kyrgyzstan for 2018

Gas	*GHG emissions (Gg CO_2 eq) including land and HWP*[a]	*% change 1990–2018*	*GHG emissions (Gg CO_2 eq) excluding land and HWP*[a]	*% change 1990–2018*
CO_2	474.48	–95.3	11 415.86	–43.8
CH_4	3 661.57	–4.8	3 661.57	–4.8
N_2O	2 587.30	–37.5	2 587.30	–37.5
HFCs	193.69	NA	193.69	NA
PFCs	NE	NE	NE	NE
SF_6	NE	NE	NE	NE
Other	NO	NO	NO	NO
Total	**6 917.04**	**–61.6**	**17 858.41**	**–36.9**

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

30. Information on other emissions was clearly reported, including 35.92 Gg NO_X, 266.70 Gg CO and 40.23 Gg NMVOCs.

31. Information on PFC and SF_6 emissions was not reported in Kyrgyzstan's BUR. However, the Party provided relevant clarification in its BUR, stating that PFC and SF_6 emissions in the country are negligible.

32. Kyrgyzstan did not apply notation keys in tables where numerical data were not provided and the reason for this was not clear to the TTE. The Party reported the value zero

[2] https://unfccc.int/BURs.

for categories that were not estimated and deleted the categories that were not occurring. During the technical analysis, the Party clarified that only emissions for categories that actually occur and are measurable with its current technical capacities were included in the reporting.

33. Fully comparable information addressing the tables included in annex 3A.2 to the IPCC good practice guidance for LULUCF was not reported and information on emissions and removals was not disaggregated by carbon pool (living biomass, dead organic matter, soils) or by gas, and the reason for this was not clear to the TTE. Kyrgyzstan reported comparable information addressing the sectoral reporting tables annexed to the Revised 1996 IPCC Guidelines but used categorization in accordance with the 2006 IPCC Guidelines.

34. Information on carbon stock changes for grassland, wetlands, settlements and other land was not reported in Kyrgyzstan's BUR. However, the Party provided relevant clarification in its BUR, namely that the long-term time series of data on land area, including data on land-use change and distribution of soil types, is under development and estimates will be included in the next GHG inventory.

35. The shares of emissions that different sectors contributed to the Party's total GHG emissions excluding land and HWP (category 3.B and, if reported, 3.D), as calculated by the TTE using information from the BUR, in 2018 are reflected in table 2.

Table 2
Shares of greenhouse gas emissions by sector of Kyrgyzstan for 2018

Sector	*GHG emissions (Gg CO_2 eq)*	*% share*[a]	*% change 1990–2018*
Energy	10 923.48	61.2	–46.8
IPPU	1 162.56	6.5	33.4
AFOLU	–5 745.03	NA	–49.8
Livestock (category 3.A)	2 926.15	16.4	5.0
Land (category 3.B)	–10 940.83	NA	–6.6
Aggregate sources and non-CO_2 emissions sources on land (category 3.C)	2 270.20	12.7	–37.8
HWP and other emissions (category 3.D)	–0.54	NA	92.7
Waste	576.04	3.2	27.5

[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)).

36. Kyrgyzstan reported information on its use of GWP values consistent with those provided by the IPCC in its AR2 based on the effects over a 100-year time-horizon of GHGs.

37. For the energy sector, information was clearly reported on GHG emissions for most categories, including time-series data, emission trends, methodological tier levels, annual production and consumption of fuels and the definitions of these fuels, EF sources and key categories. The main sources of emissions in the sector were road transport (1.A.3.b), the residential sector (1.A.4.b) and electricity and heat production (1.A.1.a). Between 2011 and 2018, the share of transport emissions of total energy sector emissions increased from 43 to 46 per cent and the share of other sector emissions (1.A.4) (including residential (1.A.4.b)) increased from 26 to 31 per cent, while the share of energy industries emissions (1.A.1) decreased from 22 to 13 per cent. Total emissions for the energy sector decreased between 1990 and 2000, after which emissions increased over recent years, reaching the 1993 level in 2018.

38. GHG emissions from petroleum refining (1.A.1.b), pipeline transport (1.A.3.e.i), off-road vehicles and other machinery (1.A.4.c.ii) and road transportation (cars (1.A.3.b.i), heavy-duty trucks and buses (1.A.3.b.iii), light-duty trucks (1.A.3.b.ii) and motorcycles (1.A.3.b.iv)) were not reported in Kyrgyzstan's BUR. During the technical analysis, the Party clarified that this information was not reported owing to a lack of complete time-series data for these categories.

39. For the IPPU sector, information was clearly reported on GHG emissions and their time series, emission trends, methodological tier levels, EF sources, key categories and economic activities. Emissions for the sector decreased between 1990 and 1995 but show a clear upward trend in recent years and have surpassed the 1990 level since 2013. Emissions were mostly from the mineral industry, particularly from cement and glass production. Emissions from HFCs have had an increasing share in sectoral emissions since the mid-1990s, although they dropped drastically between 2017 and 2018 owing to a drop in the use of HFC-227ea.

40. N_2O emissions from product uses (2.G.3) were reported as zero in Kyrgyzstan's BUR and the reason for this was not clear to the TTE. During the technical analysis, the Party clarified that N_2O is not produced in the country.

41. For 2006 IPCC Guidelines AFOLU categories 3.A and 3.C, categories 3.A.1 (enteric fermentation (CH_4)), 3.A.2 (manure management (N_2O)), 3.C.4 (direct N_2O emissions from managed soils (N_2O)) and 3.C.5 (indirect N_2O emissions from managed soils (N_2O)) were identified as key categories. The shares of emissions for these categories remained stable between 2011 and 2018, while total emissions increased by 20.8 per cent over that period.

42. For land and HWP (categories 3.B and 3.D), Kyrgyzstan reported annual GHG emissions and removals for 1990–2018. Overall, the net removals from land and HWP (categories 3.B and 3.D) fluctuated between a minimum of 9,914.32 Gg CO_2 eq in 2003 and a maximum of 10,941.37 Gg CO_2 eq in 2018.

43. Information on land converted from another land use, carbon stock changes in carbon pools for land-use categories other than forest land and cropland (i.e. grassland, wetlands, settlements and other land) and all land converted to a new land-use category was not reported in Kyrgyzstan's BUR. However, the Party provided relevant clarification in its BUR. The Party explained that it could not provide this information owing to differences in the categorization of land for different regions.

44. For the waste sector, information was clearly reported on GHG emissions and their time series, emission trends, methodological tier levels, urban/rural population distribution for 2018, sources and disposal of solid waste and key categories. Based on the recalculated time series, emissions for the sector increased by 27.5 per cent between 1990 and 2018. There are large differences in emission estimates for this sector compared with the previous GHG inventory, submitted in the NC3, owing to transition to the first-order decay calculation method.

45. Information on population data for the complete time series, per capita waste generation, composition of waste, fraction of waste incinerated, share of managed waste and methane correction factor was not reported in Kyrgyzstan's BUR and the reason for this was not clear to the TTE. During the technical analysis, the Party provided most of the missing AD (population data for the complete time series and distribution by income group, composition of waste, incineration and open burning of waste, per capita protein consumption, industrial waste production, wastewater treatment systems) and EFs and clarified that the lack of reporting of AD in the BUR and NIR was mainly due to the reporting in previous NCs, which did not describe in detail the data used for estimating emissions. The Party also clarified that the National Statistical Committee was unable to provide a reason for the unexpected increases or decreases in the volume of removed municipal solid waste during 1993–1994 and 2009. The Party explained that the decreasing trend in CO_2 emissions during 2016–2018 was due to a 27 per cent decrease in the volume of waste burned in 2018 compared with that burned in 2016.

46. The NIR and BUR provide an update to all GHG inventories reported in the Party's previous NCs. The information reported provides an update of the Party's NC1, NC2 and NC3, which address anthropogenic emissions and removals for 1990–2010. The update was carried out for 1990–2010 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 1990–2010 owing to changes in methodology, AD, EFs and relevant parameters. The Party reported that recalculations were performed using updated data, the 2006 IPCC Guidelines and the IPCC inventory software and resulted in a 3.2 per

cent decrease in estimated emissions for 1990 and a 15.7 per cent decrease in estimated emissions for 2010.

47. Kyrgyzstan provided in its BUR information on the definition of forest area used for 2018 that was not consistent with the definition of forest area used for 1990–2017 owing to changes in the forest code. In addition, the ongoing second national forest inventory provided new data for forest area, which led to a significant increase in the reported forest area for 2018.

48. Kyrgyzstan described in its BUR the institutional framework for the preparation of its 2018 GHG inventory. The Party reported that the Ministry of Natural Resources, Environment and Technical Supervision is the governmental body responsible for its GHG inventory, which was prepared with the support of the United Nations Development Programme. The Ministry was responsible for overall management of the GHG inventory preparation process, including interaction with stakeholders, while the Planning and Implementation Unit at the State Regulation Center on Environment Protection and Ecological Safety provided day-to-day management of the process and communicated with inventory information providers. Technical expert groups within the Planning and Implementation Unit were responsible for the different sectors (energy, IPPU, AFOLU and waste). The heads of these groups were responsible for technical planning, coordination and quality control of the work. A QA/QC plan was developed and implemented by the Planning and Implementation Unit. A group of independent experts who did not participate in the preparation of the inventory reviewed the data and documentation. During the technical analysis, the Party explained that there is a need to strengthen the MRV system for its national GHG inventories.

49. Kyrgyzstan clearly reported that a key category analysis was performed for the level of emissions for 2018 and the trend in emissions for 1990–2018, including land and HWP (categories 3.B and 3.D). The Party identified 15 key categories by level that account for 93.9 per cent of total emissions and 18 categories by trend. Three key categories and main gases were identified in both level and trend assessments: forest land remaining forest land (CO_2), cropland remaining cropland (CO_2) and road transportation (CO_2).

50. The BUR provides information on general QA/QC measures for all sectors. The QA/QC process is organized in eight stages under the inventory preparation process, which include various data-checking procedures and an external review. The Party reported that the QA/QC measures have helped it to improve its reporting. The TTE commends Kyrgyzstan for providing information in accordance with the IPCC good practice guidance.

51. Kyrgyzstan reported information on CO_2 fuel combustion emissions using only the sectoral approach. The information reported indicates that the combustion emissions estimated under the sectoral approach are 10,434.20 Gg CO_2.

52. Information on CO_2 fuel combustion emissions using the reference approach was not reported in Kyrgyzstan's BUR and the reason for this was not clear to the TTE.

53. Information was clearly reported on international aviation.

54. Information on marine bunker fuels was not reported in Kyrgyzstan's BUR and the reason for this was not clear to the TTE.

55. Kyrgyzstan reported information on the uncertainty assessment (level) of its national GHG inventory. The uncertainty analysis was based on the tier 1 approach and covers all source categories and all direct GHGs. The results obtained, as reported in the BUR, reveal that the level uncertainty for emissions is 61.3 per cent and the trend uncertainty is 22.9 per cent. The TTE commends Kyrgyzstan for providing in its BUR detailed information on the selected uncertainty values for AD and EFs and discussion of the associated uncertainties.

56. The TTE noted that the transparency of the information reported on GHG inventories could be enhanced by addressing the areas noted in paragraphs 28, 31–34, 38, 40, 43, 45, 47, 52 and 54 above, which could facilitate a better understanding of the information reported on GHG inventories.

57. Kyrgyzstan reported in its BUR (section 2.5.4) information on its National GHG Inventory Improvement Plan and accompanying procedures, which were developed under

the framework of preparation of the BUR. However, this plan has not yet been implemented. The Party also identified future improvements in its reporting such as implementation of the newly developed National GHG Inventory Improvement Plan for the preparation of its NC4.The Party's current initiatives for enhancing its GHG inventory reporting for compliance with requirements under the ETF relate to application of the 2006 IPCC Guidelines, including for recalculations. The TTE commends the Party for the reporting on its proactive approach to preparing for ETF implementation.

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

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

59. The information reported provides an overview of the Party's mitigation actions and their effects. In its BUR, Kyrgyzstan reported information on its national context and framed its national mitigation planning and actions in the context of its NDC. The reported mitigation actions are from the National Strategy for the Sustainable Development of the Kyrgyz Republic for 2013–2017, which outlined strategic guidelines, the main priorities and the 78 largest investment projects. All of the mitigation actions reported in the BUR are in the energy sector. Kyrgyzstan reported that, if all activities are sustained, the estimated minimum annual GHG emission reduction is 3,269.73 Gg CO_2 eq by 2020, with the transport sector being the main source of emission reductions.

60. The Party reported information on the emission reduction targets included in its first NDC. Kyrgyzstan's long-term goal is to not exceed per capita emissions of 1.23 t CO_2 eq with 66 per cent probability, or 1.58 t CO_2 eq with 50 per cent probability by 2050. To achieve this, the targets for domestic mitigation actions will comprise a reduction in emissions of 11.5 to 13.8 per cent by 2030 and 12.7 to 15.7 per cent by 2050 compared with the 'business as usual' scenario. With international support, the GHG emission reductions will be 29.0 to 30.9 per cent by 2030 and 35.1 to 36.8 per cent by 2050 compared with 'business as usual'. The Party also presented three indicative emissions scenarios up until 2100, which are based on projections developed using a range of population and economic growth assumptions as differentiating parameters. It clarified that these scenarios serve merely as an illustration of possible developments with a view to informing decision-making. The TTE commends the Party for providing such additional information. The TTE noted that Kyrgyzstan announced in its BUR that it will update its NDC and report on the update in its upcoming NC4. The TTE acknowledged the information, which is presented in this summary report as contextual without assessing the completeness and transparency of the information.

61. The Party reported a summary of its mitigation actions in tabular format in accordance with decision 2/CP.17, annex III, paragraph 11.

62. The TTE noted that BUR tables 3.1–3.2 contain only mitigation measures for the energy sector, that is, the Party did not report on mitigation measures for other sectors, and the reason for this was not clear to the TTE.

63. Consistently with decision 2/CP.17, annex III, paragraph 12(a), Kyrgyzstan reported the names of mitigation actions or groups of actions, coverage (sector and gases), quantitative goals and progress indicators in the BUR (tables 3.1–3.2). A description of mitigation actions, as well as information on quantitative goals, was provided in the BUR.

64. Information on the nature of the mitigation actions was not reported in Kyrgyzstan's BUR. The TTE noted that the goal of the mitigation actions with the greatest effect, namely in the transport sector, was described as "not defined". This was also the case for actions regarding biomass. The TTE also noted that a mix of qualitative and quantitative information was provided on progress indicators and the reason for this was not clear to the TTE. The TTE further noted that coverage by gas was reported by individual GHG (sometimes including precursor gases) and that the results were provided in CO_2 eq. The reason for the selection of individual GHGs for each reported mitigation action was not clear to the TTE.

65. The Party reported information on methodologies and assumptions and the objectives of the actions for all the reported mitigation actions in BUR table 3.1. The TTE noted that the Party listed in the BUR (p.199) the sources used to determine the effects of the reported measures as the intended nationally determined contribution, submitted in 2015, and the assessment of risks of the Kyrgyz Republic joining the Paris Agreement, published in 2019.

66. The mitigation actions focus only on the energy sector, with the measures relating to promoting low-carbon transport; reducing energy losses in buildings and power generation and distribution; and promoting the use of biomass and other renewables. In total, 11 categories comprising 13 mitigation actions in the energy sector were reported, of which 4 were reported as having resources mobilized, 4 as ongoing and 3 as a combination of the two. Mitigation actions in the transport category, which focus on road transport, account for the largest contribution to the estimated emission reduction in 2020, 1,395.8 Gg CO_2 eq, followed by mitigation actions to reduce losses in gas transport infrastructure at 860.0 Gg CO_2 eq and mitigation actions to enhance biomass use at 347.0 Gg CO_2 eq. Mitigation actions in four renewable energy categories together account for an anticipated reduction in emissions of 227.6 Gg CO_2 eq through enhanced generation of solar heat and electricity, geothermal heat and hydropower. The remaining mitigation actions together account for an estimated reduction in emissions of 388.2 Gg CO_2 eq.

67. Although the Party reported some information on methodologies or assumptions for all the reported mitigation actions in BUR table 3.1, it was not clear to the TTE which methodologies and assumptions were applied in estimating the reported effects of each measure because for some measures, assumptions were reported but not the methodologies used.

68. Although BUR table 3.1 contains a column for "Measures taken/envisaged", the information provided in that column does not provide details on the status of progress of the underlying actions or steps taken or envisaged for each reported mitigation action, which was, therefore, not clear to the TTE.

69. BUR table 3.1 contains a column called "Outcome"; however, the information provided represents the progress or implementation status of each reported measure, not the outcome. Furthermore, the BUR does not contain details of the status of the measures reported as being implemented between 2010 and 2020, which is by now a historical period, and the reason for this was not clear to the TTE. Information on the achieved results of mitigation measures for 2011–2018 was not reported in Kyrgyzstan's BUR. However, the Party provided relevant clarification in its BUR, explaining that this information was not available owing to the late adoption of a plan for long-term actions for achieving low GHG emissions in the Kyrgyz Republic until 2050, which covers systematic collection, implementation and monitoring. During the technical analysis, the Party further explained that this information, along with the information referred to in paragraphs 67–68 above and paragraph 69 below, could not be provided owing to institutional challenges.

70. The Party reported the results of implementing its mitigation actions, as estimated emission reductions in 2020. The total estimated emission reduction amounts to 3,269.7 Gg CO_2 eq, or a decrease of 23.2 per cent in relation to the 'business as usual' level for 2020. The anticipated reduction reflects the estimations of the measures included in the Party's first NDC, which were updated on the basis of its 2018 GHG inventory, as well as recalculated estimates of 2020 GHG emissions.

71. Kyrgyzstan provided no information on its involvement in international market mechanisms or non-market mechanisms. During the technical analysis, the Party clarified that it is not involved in international market mechanisms.

72. Kyrgyzstan reported information on its domestic MRV arrangements in accordance with decision 2/CP.17, annex III, paragraph 13. The information reported indicates that MRV is structured around three main areas: GHG emissions, mitigation and adaptation projects, and support needed and received. These are regulated by the Law on State Regulation and Policy in the Field of GHG Emissions and Removals. Kyrgyzstan further reported that it lacks the necessary by-laws, methodologies, guidelines and procedures, as well as human resources, to make the domestic MRV system successful.

73. The TTE noted that the transparency of the information reported on mitigation actions could be enhanced by addressing the areas noted in paragraphs 64, 67, 68, 69 and 71 above, which could facilitate a better understanding of the information reported on mitigation actions.

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

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

75. Kyrgyzstan 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. In its BUR, Kyrgyzstan identified the lack of institutional mechanisms to conduct regular inventories and lack of information to compile the GHG inventory, lack of emission forecasting capabilities, and lack of a national strategy and legislation to reduce emissions as constraints.

76. Kyrgyzstan reported that its financial, technical and capacity-building needs are primarily in the areas of conducting technical studies on sectoral emissions related to the GHG inventory, building the capacity of and training public authorities to use emission forecasting models, training staff in the use of MRV tools, and developing the necessary tools, standards and reporting formats. Its financial needs for achieving its NDCs are summarized in BUR table 4.3 and aggregated by category of mitigation measure, showing the internal and external funding amounts required, totalling USD 3.28 billion.

77. Kyrgyzstan reported information on financial resources, capacity-building and technical support received in accordance with decision 2/CP.17, annex III, paragraph 15. In its BUR, Kyrgyzstan reported that it received USD 853,000 from the Global Environment Facility for preparing both its first BUR and its NC4. It also received financial resources for capacity-building and technical support for 21 projects from a variety of international development partners. The project budgets were reported in United States dollars, euros and pounds sterling, although in some cases the currency was not provided. Kyrgyzstan reported that it received capacity-building support from numerous organizations, including from the United Nations Educational, Scientific and Cultural Organization to enhance adaptation to climate change through strengthening response capacities for disaster risk reduction; from the Green Climate Fund to develop a strategic framework and appoint a national designated authority to work with the Green Climate Fund; and from the Global Environment Facility to enhance understanding of how to report on the neutral balance of land degradation. Kyrgyzstan also reported that it received technical support from the German Federal Office for Agriculture and Food for bilateral research projects and knowledge exchange for international forest management.

78. 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, was not reported in Kyrgyzstan's BUR. During the technical analysis, the Party clarified that it is currently receiving support from the secretariat to conduct a nationally determined technology needs assessment.

79. The TTE noted that the transparency of the information reported on needs and support received could be further enhanced by addressing the area noted in paragraph 78 above, which could facilitate a better understanding of the information reported on needs and support received.

D. Identification of capacity-building needs

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

(a) Enhancing capacity to identify missing sources and sinks, and subsequently estimate GHG emissions by sources and removals by sinks across all relevant categories, including the use of appropriate notation keys;

(b) Enhancing capacity to develop and apply tier 2 or tier 3 methodologies, including the collection of AD and the selection and development of country-specific EFs and parameters for key categories across all sectors, as well as training on using the latest IPCC inventory software to apply higher-tier methods;

(c) Enhancing the technical capacity of the staff involved in preparing the GHG inventory and national reports (in narrative and tabular format) in accordance with the UNFCCC guidelines for the preparation of UNFCCC reporting, including the provision of reporting tables;

(d) Enhancing technical capacity for undertaking QA/QC activities in BUR and NIR preparation;

(e) Enhancing the technical capacity of the staff involved in preparing the GHG inventory to use the land-use conversion matrix;

(f) Enhancing capacity to identify missing sources of GHG precursors across all sectors, including use of the appropriate notation keys;

(g) Enhancing technical capacity to perform recalculations of carbon stock changes for forest land to ensure the consistency of the time series;

(h) Enhancing capacity for reporting on mitigation actions in accordance with the UNFCCC reporting guidelines and on GHG projections in future biennial transparency reports under the ETF in its reporting of the information necessary to track progress in implementing and achieving NDCs under Article 4 of the Paris Agreement;

(i) Enhancing capacity for identifying technology needs and ensuring that they are nationally determined, building on existing efforts.

81. The TTE noted that, in addition to those identified during the technical analysis, Kyrgyzstan reported the following capacity-building needs in its BUR:

(a) Enhancing the capacity of public authorities and experts involved in long-term forecasting, including macroeconomic, demographic and other projections;

(b) Strengthening technical capacity by training staff in the use of MRV tools.

III. Conclusions

82. The TTE conducted a technical analysis of the information reported in the first BUR of Kyrgyzstan 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; the level of support received to enable the preparation and submission of BURs; and domestic MRV. During the technical analysis, additional information was provided by Kyrgyzstan on the support it currently receives from the secretariat to conduct a nationally determined technology needs assessment and compile GHG inventory information for the waste sector. The TTE concludes that the information analysed is partially transparent.

83. Kyrgyzstan reported information on the institutional arrangements relevant to the preparation of its BURs. The information covers key aspects of the institutional arrangements, including the legal status and roles and responsibilities of the overall coordinating entity, the involvement and roles of other institutions, QA/QC procedures, and provisions for public consultation and other forms of stakeholder engagement. Kyrgyzstan also reported information on its domestic MRV arrangements, including a description of the institutional framework for the preparation of its first BUR and NC4, its GHG inventory (including details of the preparation of its fourth GHG inventory) and the MRV of support needed and received. It has taken a significant step in preparing for the transition to the ETF by including

information on areas for improvement of its domestic MRV system for compliance with reporting requirements under the ETF.

84. In its first BUR, submitted in 2022, Kyrgyzstan reported information on its national GHG inventory for 1990–2018. This included GHG emissions and removals of CO_2, CH_4, N_2O and HFCs for the main relevant sources and sinks as well as the precursor gases. The inventory was developed on the basis of the 2006 IPCC Guidelines. The total GHG emissions for 2018 were reported as 17,858.41 Gg CO_2 eq (excluding land and HWP) and 6,917.04 Gg CO_2 eq (including land and HWP). Three key categories and main gases were identified as forest land remaining forest land (CO_2), cropland remaining cropland (CO_2) and road transportation (CO_2) respectively. Estimates of PFCs and SF_6 were not provided owing to difficulties in obtaining the necessary data, as clarified by the Party in the BUR.

85. Kyrgyzstan reported information on mitigation actions and their effects in tabular format, including expected emission reductions in 2020, and framed its national mitigation planning and actions in the context of the National Strategy for the Sustainable Development of the Kyrgyz Republic for 2013–2017 and its NDC. Kyrgyzstan reported mitigation actions for 2010–2020 as ongoing and/or undergoing resource mobilization and covering only the energy sector, on both the supply and the demand side. The Party reported the expected results of mitigation actions. The greatest effect in 2020 was estimated in transport, 1,395.8 Gg CO_2 eq, followed by measures related to reducing losses in gas transport infrastructure, 860.0 Gg CO_2 eq. The Party reported on its domestic MRV arrangements, noting that it faces implementation issues. Kyrgyzstan did not report information on its involvement in international market mechanisms, but clarified during the technical analysis that it is not involved in such mechanisms. The Party did not clearly report the following information on mitigation actions or groups of actions in accordance with decision 2/CP.17, annex III: progress indictors and quantitative goals, methodologies and assumptions, objectives of the actions and steps taken to achieve the actions, progress of implementation of the mitigation actions and steps taken or envisaged, and results achieved. During the technical analysis, the Party explained that this information was not clearly provided owing to institutional challenges.

86. Kyrgyzstan reported information on key constraints and gaps, including a lack of institutional mechanisms to conduct regular inventories and lack of information to compile the GHG inventory, lack of emission forecasting capabilities and lack of a national strategy and legislation to reduce emissions, as well as its financial, technical and capacity-building needs. Its needs are primarily in the areas of conducting technical studies on sectoral emissions related to the GHG inventory, building the capacity of and training public authorities to use emission forecasting models, training staff in the use of MRV tools, and developing the necessary tools, standards and formats. The Party reported a summary of its financial needs with respect to achieving its NDC, aggregated by category of mitigation measure, including the internal and external funding amounts required, totalling USD 3.28 billion. The Party also reported that it received financial support of USD 853,000 from the Global Environment Facility for preparing its first BUR and NC4. Information on nationally determined technology needs with regard to technology development and transfer was not reported in Kyrgyzstan's BUR. During the technical analysis, the Party clarified that it is currently receiving support from the secretariat to conduct a nationally determined technology needs assessment.

87. The TTE, in consultation with Kyrgyzstan, 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. Kyrgyzstan prioritized the capacity-building need referred to in paragraph 80(b) above.

Annex I

Extent of the information reported by Kyrgyzstan in its first biennial update report

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

Decision	*Provision of the reporting guidelines*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
Decision 2/CP.17, paragraph 41(g)	The first BUR shall cover, at a minimum, the inventory for the calendar year no more than four years prior to the date of the submission, or more recent years if information is available, and subsequent BURs shall cover a calendar year that does not precede the submission date by more than four years.	Yes	Kyrgyzstan submitted its first BUR in December 2022; the GHG inventories reported are for 1990–2018.
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	Kyrgyzstan 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 IPCC good practice guidance and the IPCC good practice guidance for LULUCF; any change to the EF may be made in the subsequent full NC.	Partly	Updated data on activity levels were partly provided for the energy, AFOLU and waste sectors. No updated data were provided for the IPPU sector.
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;	Partly	Comparable information was not fully reported. Information on emissions and removals was not disaggregated by carbon pool (living biomass, dead organic matter) or by gas.
	(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 information for 1990–2018.
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 1994 and 2000.
	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	

Decision	*Provision of the reporting guidelines*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
Decision 2/CP.17, annex III, paragraph 9	chapter III (National greenhouse gas inventories), including:		
	(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 on a gas-by-gas basis in units of mass in the NIR (section 14).
	(b) Table 2 (National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6).	Partly	Comparable information was reported as aggregated HFCs in CO_2 eq in the NIR (section 14).
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 a stand-alone report along with 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 IPCC good practice guidance 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.	Yes	Information on institutional arrangements for the preparation of the national GHG inventory was 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	Information was not reported for all subcategories of the energy and AFOLU sectors.
	(b) CH_4;	Partly	Information was not reported for all subcategories of the energy sector.
	(c) N_2O.	Partly	Information was not reported for all subcategories of the energy sector.
Decision 17/CP.8, annex, paragraph 15	Non-Annex I Parties are encouraged, as appropriate, to provide information on anthropogenic emissions by sources of:	Yes	
	(a) HFCs;	Yes	
	(b) PFCs;	No	Information on PFCs was not reported but the Party clarified in its BUR that PFC emissions are negligible in the country.
	(c) SF_6.	No	Information on SF_6 was not reported but the Party clarified in its BUR that SF_6 emissions are negligible in the country.
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:		

Decision	*Provision of the reporting guidelines*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
	(a) CO;	Yes	
	(b) NO_X;	Yes	
	(c) NMVOCs.	Yes	
Decision 17/CP.8, annex, paragraph 17	Other gases not controlled by the Montreal Protocol, such as 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.	No	The information was reported only for the sectoral approach.
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	
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 GWP provided by the IPCC in its AR2 based on the effects of GHGs over a 100-year time-horizon.	Yes	The Party used the GWP provided in the AR2.
Decision 17/CP.8, annex, paragraph 21	Non-Annex I Parties are encouraged to provide information on methodologies used in the estimation of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol, including a brief explanation of the sources of EFs and AD. If non-Annex I Parties estimate anthropogenic emissions and removals from country-specific sources and/or sinks that are not part of the Revised 1996 IPCC Guidelines, they should explicitly describe the source and/or sink categories, methodologies, EFs and AD used in their estimation of emissions, as appropriate. Parties are encouraged to identify areas where data may be further improved in future communications through capacity-building:		
	(a) Information on methodologies used in the estimation of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol;	Yes	Kyrgyzstan used the 2006 IPCC Guidelines. Tier 1 methodology was used for most sectors.
	(b) Explanation of the sources of EFs;	Yes	
	(c) Explanation of the sources of AD;	Yes	
	(d) If non-Annex I Parties estimate anthropogenic emissions and removals from country-specific sources and/or sinks that are not part of the Revised 1996 IPCC Guidelines, they should explicitly describe:	NA	
	(i) Source and/or sink categories;		
	(ii) Methodologies;		

Decision	*Provision of the reporting guidelines*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
	(iii) EFs;		
	(iv) AD;		
	(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 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.	No	Notation keys were not 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;	Yes	
	(b) Underlying assumptions;	Yes	
	(c) Methodologies used, if any, for estimating these uncertainties.	Yes	

Note: The parts of the UNFCCC reporting guidelines on BURs on reporting information on GHG emissions by sources and removals by sinks in BURs are contained in decision 2/CP.17, paras. 3–10 and 41(g). Further, as per para. 3 of those guidelines, non-Annex I Parties are to submit updates of their national GHG inventories in accordance with paras. 8–24 of the UNFCCC guidelines for the preparation of NCs from non-Annex I Parties, contained in the annex to decision 17/CP.8. The scope of such updates should be consistent with the non-Annex I Party's capacity and time constraints and the availability of its data, as well as the level of support provided by developed country Parties for biennial update reporting.

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

Decision	*Provision of the reporting guidelines*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
Decision 2/CP.17, annex III, paragraph 11	Non-Annex I Parties should provide information, in tabular format, on actions to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol.	Yes	Information was reported in tabular format.
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	Partly	Information on the nature of the mitigation actions was not reported.

Decision	*Provision of the reporting guidelines*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
	gases), quantitative goals and progress indicators;		
	(b) Information on:		
	(i) Methodologies;	Partly	The methodologies or calculation tools used to estimate the effects of mitigation actions were not reported for all actions.
	(ii) Assumptions;	Partly	The assumptions used to estimate the effects of mitigation actions were reported for some but not all actions.
	(c) Information on:		
	(i) Objectives of the action;	Yes	
	(ii) Steps taken or envisaged to achieve that action;	Partly	Information on steps taken was provided for some but not all measures.
	(d) Information on:		
	(i) Progress of implementation of the mitigation actions;	Partly	Information on progress of implementation of the mitigation actions was provided for some but not all measures.
	(ii) Progress of implementation of the underlying steps taken or envisaged;	No	Information on the progress of implementation of the underlying steps taken or envisaged was not provided.
	(iii) Results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;	Yes	
	(e) Information on international market mechanisms.	No	
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 first biennial update report of Kyrgyzstan

Decision	*Provision of the reporting requirements*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
Decision 2/CP.17, annex III, paragraph 14	Non-Annex I Parties should provide updated information on:		
	(a) Constraints and gaps;	Yes	
	(b) Related financial, technical and capacity-building needs.	Yes	
	Non-Annex I Parties should provide:		

Decision	*Provision of the reporting requirements*	*Assessment of whether the information was reported*	*Comments on the extent of the information provided*
Decision 2/CP.17, annex III, paragraph 15	(a) Information on financial resources, technology transfer and capacity-building received;	Yes	
	(b) Information on technical support received from the Global Environment Facility, Parties included in Annex II to the Convention and other developed country Parties, the Green Climate Fund and multilateral institutions for activities relating to climate change, including for the preparation of the current BUR.	Yes	
Decision 2/CP.17, annex III, paragraph 16	With regard to the development and transfer of technology, non-Annex I Parties should provide information on:		
	(a) Nationally determined technology needs;	Yes	
	(b) Technology support received.	Yes	

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

Annex II

Reference documents

A. Reports of the Intergovernmental Panel on Climate Change

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B. UNFCCC documents

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NC1, NC2 and NC3 of Kyrgyzstan. Available at https://unfccc.int/non-annex-I-NCs.