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

Summary

This report presents the results of the technical expert review of the first biennial transparency report of the Republic of Korea, conducted by a technical expert review team in accordance with the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement. The review took place from 16 to 20 March 2026 in Seoul.

* In the symbol for this document, 2025 refers to the year in which the original biennial transparency report was submitted, not to the year of publication.



Abbreviations and acronyms

A6.4ER	emission reduction under Article 6, paragraph 4, of the Paris Agreement
BTR	biennial transparency report
CER	certified emission reduction
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ eq	carbon dioxide equivalent
CRT	common reporting table
CTF	common tabular format
EEA	European Environment Agency
EMEP	Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
GHG	greenhouse gas
HFC	hydrofluorocarbon
IE	included elsewhere
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
ITMO	internationally transferred mitigation outcome
K-ETS	Emissions Trading System of the Republic of Korea
LULUCF	land use, land-use change and forestry
MOTIVE	Model of Integrated Impact and Vulnerability Evaluation of Climate Change
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
N ₂ O	nitrous oxide
NA	not applicable
NCCAP	National Climate Change Adaptation Plan of the Republic of Korea
NDC	nationally determined contribution
NE	not estimated
NF ₃	nitrogen trifluoride
NID	national inventory document
PaMs	policies and measures
PFC	perfluorocarbon
QA/QC	quality assurance/quality control
SF ₆	sulfur hexafluoride
TERT	technical expert review team
TMS	target management system of the Republic of Korea
VESTAP	Vulnerability Assessment Tool to Build Climate Crisis Adaptation Plan
WM	‘with measures’

I. Introduction and summary

A. Introduction

1. This report covers the technical expert review of the BTR1 of the Republic of Korea. The review was organized by the secretariat and conducted by the TERT in accordance with the MPGs,¹ particularly chapter VII thereof. The Republic of Korea, on a voluntary basis, requested the secretariat to organize a review of the information reported in the BTR1 pursuant to chapter IV of the MPGs as part of the technical expert review.² The outcome of the voluntary review is presented in annex I.

2. A draft version of this report was transmitted on 29 June 2026 to the Government of the Republic of Korea, which provided comments on 11 August 2026 that were taken into account, as appropriate, in this final version of the report.³

3. The review was conducted as an in-country review from 16 to 20 March 2026 in Seoul by the following team of nominated experts from the UNFCCC roster of experts: Mochamad Iqbal Alexander (Indonesia), Joe Val Alipin (New Zealand), Oksana Butrym (Ukraine), Hans Kolshus (Norway), Yu'e Li (China), Ee Sann Tan (Malaysia), Tshering Yangzom (Bhutan) and Alexander Zahar (Australia). Hans Kolshus and Yu'e Li were the lead reviewers. The review was coordinated by Jamie Howland (secretariat).

4. The Republic of Korea does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement, but nonetheless voluntarily reported information on financial, technology development and transfer, and capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement.⁴

B. Scope

5. The TERT conducted a technical expert review of the information reported in the BTR1 of the Republic of Korea as per the scope of the review defined in paragraph 146 of the MPGs and decision 9/CMA.4, consisting of:

- (a) Review of the consistency of the information submitted by the Party under Article 13, paragraphs 7 and 9, of the Paris Agreement with the MPGs (see chap. II.A below);
- (b) Consideration of the Party's implementation and achievement of its NDC under Article 4 of the Paris Agreement (see chap. II.B below);
- (c) Identification of areas of improvement⁵ for the Party related to implementation of Article 13 of the Paris Agreement (see chap. II.D below);
- (d) Voluntary review of the information reported by the Party pursuant to chapter IV of the MPGs (see annex I).

C. Summary

6. The Republic of Korea submitted its BTR1 on 10 February 2025, after the deadline of 31 December 2024 mandated in decision 18/CMA.1. The Republic of Korea submitted its

¹ Decision 18/CMA.1, annex.

² See decision 9/CMA.4, para. 1.

³ As per para. 162(e) of the MPGs.

⁴ As per para. 118 of the MPGs.

⁵ As referred to in paras. 7, 8, 146(d) and 162(d) of the MPGs.

NID as a stand-alone document, CRTs and CTF NDC tables on 30 September 2025, after the deadline.⁶ The TERT noted the delay in the submissions.

7. A list of the areas of improvement identified on the basis of the review of the consistency of the reported information with the MPGs can be found in the assessment tables.⁷

D. Information provided by the Party pursuant to paragraphs 143–145 of the modalities, procedures and guidelines

8. The Republic of Korea did not report information on support needed and received for implementing Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building.

II. Technical expert review⁸

A. Review of the consistency of the submitted information with the modalities, procedures and guidelines⁹

1. National inventory report¹⁰

9. The TERT assessed the information reported in the BTR1 of the Republic of Korea and identified areas of improvement relating to consistency with the MPGs, which are described in tables 2–7 of the assessment tables referred to in paragraph 7 above and summarized in table 1.

⁶ The technical expert review was conducted on the basis of the revised version of the BTR1 submitted on 30 September 2025 and the revised versions of the NID and CRTs submitted on 15 January 2026.

⁷ Contained in document FCCC/ETF/TERR.1/2025/KOR/Add.1, available at <https://unfccc.int/first-biennial-transparency-reports>.

⁸ As per para. 187 of the MPGs.

⁹ As per para. 146(a) of the MPGs.

¹⁰ As per para. 150(a) of the MPGs.

Table 1

Information reported in the Republic of Korea's national inventory report and review of consistency with the modalities, procedures and guidelines

<i>Element</i>	<i>Information to be reported</i>	<i>Response and summary as relevant</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
Submission type (para. 12 of the MPGs)	Has the national inventory report been submitted as a stand-alone document?	Yes	No areas of improvement relating to recommendations were identified
Time series (paras. 57–58 of the MPGs)	What years have been reported and is the time series in accordance with the MPGs?	1990–2022, in accordance with the MPGs	No areas of improvement relating to recommendations were identified
Metrics (para. 37 of the MPGs)	Has the Party used the 100-year global warming potential values from the IPCC Fifth Assessment Report?	Yes	No areas of improvement relating to recommendations were identified
	Has the Party used other metrics?	No	No areas of improvement relating to recommendations were identified
Gases (paras. 48–49 of the MPGs)	Which gases have been reported?	CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃	No areas of improvement relating to recommendations were identified
Indirect emissions (para. 52 of the MPGs)	Has the Party reported indirect CO ₂ emissions and national totals with and without indirect CO ₂ ?	No	No areas of improvement relating to recommendations were identified
	Has the Party reported indirect N ₂ O emissions from sources other than those in the agriculture and LULUCF sectors as a memo item?	No	NA
National circumstances and institutional arrangements (paras. 18–19 of the MPGs)	Has the Party reported information on the functions related to inventory planning, preparation and management?	Yes	No areas of improvement relating to recommendations were identified
Methodologies, parameters and data (paras. 20–24 of the MPGs)	Has the Party used the <i>2006 IPCC Guidelines for National Greenhouse Gas Inventories</i> ?	Partly	4.I.5, 5.A.1, 5.A.2, 6.L.1, 6.L.4, 6.L.5
	Has the Party used other IPCC methodological guidance?	Yes, the <i>2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands</i> , the <i>2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories</i>	No areas of improvement relating to recommendations were identified

<i>Element</i>	<i>Information to be reported</i>	<i>Response and summary as relevant</i> and the <i>Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
Key category analysis (paras. 25, 41 and 42 of the MPGs)	Has the Party reported a key category analysis?	Yes, a key category analysis was performed using approach 1 and a 95 per cent threshold for level and trend assessment for the starting inventory year (1990) and the latest reporting year (2022) and with and without LULUCF	No areas of improvement relating to recommendations were identified
Time-series consistency and recalculations (paras. 26–28, 43 and 57 of the MPGs)	Has the Party reported a consistent time series?	Yes	No areas of improvement relating to recommendations were identified
	Has the Party reported recalculations and provided justification and explanatory information for them?	No	NA
Uncertainty assessment (paras. 29 and 44 of the MPGs)	Has the Party reported the results of the uncertainty analysis and the methods used, underlying assumptions and trends?	Partly, including level and trend uncertainty at the most general level, reported using approach 2 for 1990 and the latest reporting year (2022)	2.G.2
QA/QC plan and procedures (paras. 34–36 and 46 of the MPGs)	Has the Party elaborated information on an inventory QA/QC plan, including information on the inventory agency responsible for implementing QA/QC, and current and future QA/QC procedures?	Yes, including information on the inventory agency responsible for implementing QA/QC, an inventory QA/QC plan and general QC procedures	No areas of improvement relating to recommendations were identified
Assessment of completeness (paras. 30–33, 45, 47 and 50 of the MPGs)	Have any areas of improvement for lack of completeness been identified for the following sectors?	Yes	2.G.3
	Energy	No	No areas of improvement relating to recommendations were identified
	IPPU	Yes	4.I.3, 4.I.4
	Agriculture	No	No areas of improvement relating to recommendations were identified
	LULUCF	Yes	6.L.2
	Waste	Yes	7.W.3

<i>Element</i>	<i>Information to be reported</i>	<i>Response and summary as relevant</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
Threshold for reporting significant categories (para. 32 of the MPGs)	Are the estimated emissions for all categories and in total for all gases and categories reported insignificant below the relevant thresholds?	Yes	No areas of improvement relating to recommendations were identified
	For categories reported as “NE” owing to insignificance, has information been reported showing that the likely level of emissions is below the threshold of significance?	No	NA
Methodologies, emission factors, parameters and activity data (paras. 39, 40 and 53–56 of the MPGs)	Has information been transparently reported on categories, gases, methodologies (including the rationale for selecting them), emission factors and activity data at a disaggregated level for the following sectors?		No areas of improvement relating to recommendations were identified
	Energy	Partly	3.E.3
	Has information been reported on international aviation and marine bunker fuel emissions as two separate entries and such emissions distinctly reported from national totals?	Yes	NA
	Has information been reported indicating how feedstocks and non-energy use of fuels have been accounted for in the inventory, under the energy or IPPU sector?	No	NA
	IPPU	Yes	No areas of improvement relating to recommendations were identified
	Agriculture	Partly	5.A.3, 5.A.4, 5.A.5, 5.A.6, 5.A.7
	LULUCF	Partly	6.L.3
	Waste	Partly	7.W.2

^a See document FCCC/ETF/TERR.1/2025/KOR/Add.1. The areas of improvement referred to in this table comprise only those relating to recommendations in that document.

2. Information necessary to track progress in implementing and achieving the nationally determined contribution¹¹

10. The TERT assessed the information reported in the BTR1 of the Republic of Korea and identified areas of improvement relating to consistency with the MPGs, which are described in tables 8, 10, 11 and 13 of the assessment tables referred to in paragraph 7 above and summarized in table 2.

Table 2

Information reported in the Republic of Korea's submission

<i>Topic</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
National circumstances and institutional arrangements (paras. 59–63 of the MPGs)	8.1
Description of the NDC under Article 4 of the Paris Agreement, including updates (para. 64 of the MPGs)	No areas of improvement relating to recommendations were identified
Information necessary to track progress in implementing and achieving the NDC under Article 4 of the Paris Agreement (paras. 65–79 of the MPGs)	10.1, 10.3, 10.4, 10.5
Mitigation PaMs, actions and plans related to implementing and achieving the NDC under Article 4 of the Paris Agreement (paras. 80–90 of the MPGs)	11.1, 11.3, 11.4
Summary of GHG emissions and removals (para. 91 of the MPGs)	No areas of improvement relating to recommendations were identified
Projections of GHG emissions and removals (paras. 92–102 of the MPGs)	13.3, 13.4

^a See document FCCC/ETF/TERR.1/2025/KOR/Add.1. The areas of improvement referred to in this table comprise only those relating to recommendations in that document.

3. Financial, technology development and transfer, and capacity-building support provided¹²

11. The Republic of Korea does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement. Nonetheless, in accordance with that Article, the Republic of Korea voluntarily reported information on financial, technology development and transfer, and capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement in its BTR1. In accordance with paragraph 150(c) of the MPGs, the Republic of Korea opted not to undergo a technical expert review of the information reported under Article 9, paragraph 2, of the Paris Agreement.

B. Consideration of the Party's implementation and achievement of its nationally determined contribution¹³

12. In considering the Republic of Korea's progress in implementing and achieving its NDC, the TERT noted that the NDC¹⁴ is defined as a reduction in annual national total GHG emissions of 40 per cent by 2030 compared with the 2018 level. The NDC is a single-year, economy-wide absolute GHG emission reduction target covering the sectors, as defined in the description of the NDC provided in the BTR, power generation, industry, building, transportation, agriculture/livestock farming/fisheries, LULUCF (referred to as "carbon sinks" in the BTR) and waste and the gases CO₂, CH₄, N₂O, HFCs, PFCs and SF₆. The Republic of

¹¹ As per para. 150(b) of the MPGs.

¹² As per para. 150(c) of the MPGs.

¹³ As per para. 146(b) of the MPGs.

¹⁴ The consideration of the Party's implementation and achievement of its NDC is in the context of the NDC submitted by the Republic of Korea on 23 December 2021. The TERT noted that the Party submitted a new NDC on 26 December 2025.

Korea plans to use voluntary cooperation under Article 6 of the Paris Agreement as a complementary measure to support the achievement of its NDC.

13. The indicator that the Republic of Korea selected to track progress in implementing and achieving its NDC is described in table 3.

Table 3

Description of the indicator selected by the Republic of Korea to track progress in implementing and achieving its nationally determined contribution

<i>NDC target</i>	<i>Indicator</i>	<i>Description</i>
Reduction in annual national total GHG emissions of 40 per cent by 2030 compared with the 2018 level	Annual national total GHG emissions (excluding LULUCF)	Annual emissions by sector including energy, IPPU, agriculture and waste, excluding LULUCF

Sources: The Republic of Korea's BTR1 and CTF tables 1–3, and information provided by the Party during the review.

14. The TERT noted that the contribution of LULUCF to achieving the NDC is not included in the Party's base-year level but will be included in the target-year level. The TERT also noted that the Party reported in CTF table 3 that it will assess the implementation and achievement of its NDC by comparing national total GHG emissions (excluding LULUCF) in the base year (2018) with national net GHG emissions (including LULUCF) in the target year (2030). The Republic of Korea reported that it plans to use cooperative approaches that involve the use of ITMOs under Article 6 of the Paris Agreement towards the achievement of its NDC.

15. Table 4 summarizes information on progress in implementing the NDC based on the indicator annual national total GHG emissions (excluding LULUCF) taking into account the type of the Republic of Korea's NDC target, including quantitative values for the base year, implementation period, including the most recent year available, and target year, and information on the contribution of LULUCF and use of ITMOs towards the implementation and achievement of the NDC, as applicable.

Table 4

Summary of information on the Republic of Korea's progress in implementing and achieving its nationally determined contribution based on annual national total greenhouse gas emissions (excluding land use, land-use change and forestry)

(Mt CO₂ eq)

	<i>Annual national total GHG emissions (excluding LULUCF)</i>	<i>Contribution of LULUCF, as applicable</i>	<i>ITMOs, A6.4ERs and/or CERs used towards NDC, as applicable</i>	<i>Indicator adjusted for contribution of LULUCF and ITMOs, A6.4ERs and/or CERs used towards NDC, as applicable</i>
NDC base year (2018)	732.90			
2021	690.80	NE	NA	NE
2022	671.20	NE	NA	NE
Target level (2030) ^a				439.74 ^b

Sources: The Republic of Korea's BTR1 and CTF table 4.

^a Target level corresponds to an unconditional NDC target.

^b Calculated by the TERT on the basis of the Party's 2024 national inventory report. The value may change if the values in the national inventory report are recalculated in the future.

16. According to the most recent information on annual national total GHG emissions (excluding LULUCF) provided in CTF table 4, in 2022 the Republic of Korea's annual national total GHG emissions (excluding LULUCF) were 671,200 kt CO₂ eq. The TERT noted that, in 2022, the contribution of LULUCF was not estimated and the use of ITMOs was not yet applicable. The indicator is 8.4 per cent (61,700 kt CO₂ eq) below the emission level corresponding to the base-year level and 52.6 per cent (231,460 kt CO₂ eq) above the

emission level corresponding to the target level in 2030. These figures do not, however, take into account the planned use of ITMOs or the contribution of the LULUCF sector.

17. The Republic of Korea reported information on the actions and PaMs that support the implementation and achievement of its NDC. Table 5 provides a summary of the reported information on the key PaMs of the Republic of Korea.

Table 5

Summary of information on key policies and measures reported by the Republic of Korea

<i>Sector</i>	<i>Key PaMs^a</i>	<i>Estimate of expected GHG emission reductions in 2030 (kt CO₂ eq)</i>	<i>Estimate of achieved GHG emission reductions in 2022 (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures	K-ETS ^b	IE	IE
	TMS ^b	IE	IE
Energy			
Power generation	Phasing down ageing coal power plants ^b	11 458	NE
	Continued operation of nuclear power plants	NE	NE
	Support for renewable energy facilities ^b	NE	NE
Buildings	Promotion of zero energy buildings ^b	114	354
	Green remodelling for existing buildings ^b	22	NE
Transport	Increasing mandatory biodiesel blend ratio ^b	1 880	NE
	Modal shift for freight transportation (from road to shipping) ^b	439	NE
	Promotion of eco-friendly vehicle distribution ^b	413	NE
Agriculture	Energy recovery in livestock manure treatment facilities	2 058	792
	Low-CH ₄ and low-nitrogen feed	751	NE
LULUCF and carbon capture	High value added timber utilization ^b	1 871	1 744
	Reforestation ^b	1 202	228
	Restoration and protection of coastal wetlands and management of marine protected areas	NE	NE
	Marine forest creation ^b	9	11
	Establishment of institutional framework for carbon capture, utilization and storage	NE	NE
Waste	Expansion of landfill CH ₄ capture ^b	NE	1 911
	Extended producer responsibility system ^b	NE	1 086

Sources: The Republic of Korea's BTR1 and CTF table 5, and information provided by the Party during the review.

^a Names of PaMs reproduced as reported in the Republic of Korea's BTR.

^b Included in the WM scenario projections.

18. The TERT noted that PaMs, actions and plans have started to have an impact on total GHG emissions in the Republic of Korea. GHG emissions from all sectors (as reported in

BTR1 table I-7), with the exception of the IPPU sector, decreased from 2018 to 2022. The PaMs reported in the BTR1 are key PaMs based on the First National Framework Plan for Carbon Neutrality and Green Growth, which outlines the NDC implementation strategy at the national level.

19. The K-ETS, which covers around 73.5 per cent of national GHG emissions, is the most important of the Republic of Korea's PaMs. The TMS aims to reduce the emissions of companies with substantial GHG emissions not covered by the K-ETS, and its coverage expands annually. The K-ETS and TMS encourage voluntary mitigation actions and investments from private entities, including businesses, and are primarily related to the power generation and industry sectors. The Government of the Republic of Korea has been actively supporting the implementation of these PaMs by expanding incentives for reducing emissions, increasing benchmark allocation for allowances and promoting research and development into carbon mitigation technologies.

20. The economy of the Republic of Korea is characterized by a high dependence on manufacturing and exports. Despite fluctuations over the past decade, manufacturing and exports remain highly important to the national economy. The GHG emission intensity (GHG emissions per unit of gross domestic product) was 367.9 t CO₂ eq/billion won in 2022, which represents a 46.2 per cent decrease from 683.9 t CO₂ eq/billion won in 1990 and a 4.7 per cent decrease from 386.2 t CO₂ eq/billion won in 2021. The gradual declining trend in the Republic of Korea's GHG emissions came after the emissions peaked in 2018. This peak was followed by a decoupling effect, where gross domestic product increased while emissions decreased.

21. The Republic of Korea reported projections for 2022–2040 under the WM scenario.¹⁵ The WM scenario reported by the Party includes PaMs implemented and adopted until 2021. The projected emission levels are presented in table 6. The TERT noted that information on GHG emission projections was not used in considering the Republic of Korea's progress in implementing its NDC.

Table 6

Summary of greenhouse gas emission projections for the Republic of Korea

	GHG emissions (kt CO ₂ eq/year)	Change in relation to 2020 level (%)	Change in relation to 2022 level (%)
Inventory data 2020	674 120		
Inventory data 2022	686 462	1.8	
WM projections for 2030	755 325	12.0	10.0
WM projections for 2040	805 130	19.4	17.3

Sources: The Republic of Korea's BTR1 and CRTs, and information provided by the Party during the review.

Note: The projections are for GHG emissions with LULUCF and excluding indirect CO₂ emissions.

22. The TERT assessed the Republic of Korea's progress towards achieving its target for 2021–2022. The TERT notes that a reduction of 231,460 kt CO₂ eq is needed to reach the target level compared with the level in the most recent reported year (2022). This figure does not, however, take into account the planned use of ITMOs or the contribution of the LULUCF sector, which cannot yet be calculated. The TERT also notes that there are not yet enough data to sufficiently assess the Party's progress in implementing the NDC, as it is early in the implementation period (2021–2030).

C. Consideration of the Party's support provided¹⁶

23. The Republic of Korea does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement, but nonetheless voluntarily reported information in its BTR1 on financial,

¹⁵ Note that, as per para. 93 of the MPGs, projections shall not be used to assess progress towards the implementation and achievement of an NDC under Article 4 of the Paris Agreement unless the Party has identified a reported projection as its baseline.

¹⁶ As per para. 146(c) of the MPGs.

technology transfer and development, and capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement (see para. 11 above). The Republic of Korea chose not to undergo a review of the reported information on financial support provided and, therefore, this information is not included in the consideration of the Party's support.

D. Identification of areas of improvement¹⁷

24. During the technical expert review, the TERT identified areas of improvement in relation to the Republic of Korea's implementation of Article 13 of the Paris Agreement, which are summarized in chapter II.A above and included in the assessment tables referred to in paragraph 7 above.

E. Assistance in identifying capacity-building needs¹⁸

25. The Republic of Korea, in consultation with the TERT, has not identified any needs for capacity-building.

III. Conclusions and recommendations

26. The TERT conducted a technical expert review of the information reported in the BTR1, NID, CRTs and CTF tables of the Republic of Korea in accordance with the MPGs.

27. The areas of improvement identified by the TERT on the basis of the review of the consistency of the information reported by the Republic of Korea with the MPGs are summarized in chapter II.A above and included in the assessment tables referred to in paragraph 7 above.

28. The TERT notes that a reduction of 231,460 kt CO₂ eq is needed to reach the target level compared with the level in the most recent reported year (2022). This figure does not, however, take into account the planned use of ITMOs or the contribution of the LULUCF sector, which cannot yet be calculated. The TERT also notes that there are not yet enough data to sufficiently assess the Party's progress in implementing the NDC, as it is early in the implementation period (2021–2030).

29. The TERT notes that PaMs, actions and plans have started to have an impact on total GHG emissions in the Republic of Korea. GHG emissions from all sectors (as reported in BTR1 table I-7), with the exception of the IPPU sector, decreased from 2018 to 2022. The PaMs reported in the BTR1 are key PaMs based on the First National Framework Plan for Carbon Neutrality and Green Growth, which outlines the NDC implementation strategy at the national level. The K-ETS, which covers around 73.5 per cent of national GHG emissions, is the most important of the Republic of Korea's PaMs. The TMS aims to reduce the emissions of companies with substantial GHG emissions not covered by the K-ETS.

30. The Republic of Korea does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement, but, in accordance with the MPGs, voluntarily reported information on financial, technology development and transfer, and capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement in its BTR1. In accordance with paragraph 150(c) of the MPGs, the Republic of Korea opted not to undergo a technical expert review of the information reported under Article 9, paragraph 2, of the Paris Agreement.

¹⁷ As per para. 146(d) of the MPGs.

¹⁸ As per para. 146(e) of the MPGs.

Annex I

Outcome of the review conducted on a voluntary basis of the information reported by the Party in its first biennial transparency report pursuant to chapter IV of the modalities, procedures and guidelines

I. Summary of reported information

1. In its BTR1 the Republic of Korea provided information related to climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the MPGs and, as per paragraph 1 of decision 9/CMA.4, on a voluntary basis, requested the secretariat to organize a review of that information as part of the technical expert review pursuant to chapter VII of the MPGs.

2. In accordance with chapter IV of the MPGs, the Republic of Korea provided information on its climate change impacts; risks and vulnerabilities; adaptation priorities and barriers to implementing adaptation action; and cooperation, good practices, experience and lessons learned in relation to climate change impacts and adaptation, which is summarized in table I.1.

Table I.1

Summary of information on vulnerability and adaptation to climate change reported by the Party

<i>Priority adaptation sector or area</i>	<i>Vulnerability and adaptation measures reported</i>	<i>Challenges and constraints</i>	<i>Cooperation, good practices, experience and lessons learned</i>
Coastal areas	Vulnerability: sea level rise is increasing flooding, inundation, coastal erosion and infrastructure damage in coastal areas. Ports are being exposed to more extreme weather events that damage facilities and disrupt operations Adaptation measure: strengthening coastal and port resilience by upgrading design standards, including by raising wave recurrence intervals, and reinforcing port infrastructure to reduce damage from extreme weather events and sea level rise	No specific challenges or constraints were identified for this area during the review	The Ministry of Oceans and Fisheries has enhanced port resilience through climate-adaptive design standards and infrastructure improvements. In 2021, the Ministry increased the design wave recurrence interval from 50 to 100 years to better protect ports and hinterlands from rising sea levels. A nationwide safety and flood vulnerability assessment of outer port facilities was conducted in 2023 using these enhanced standards
Ecosystems and biodiversity ^a	Vulnerability: impacts on ecosystem dynamics are driving shifts in disease vectors such as mosquitoes and ticks. A 55.7 per cent increase in tick-borne diseases was recorded between 2019 and 2022, raising concerns about the potential emergence of severe endemic malaria Adaptation measure: protecting ecosystems through strengthened monitoring, ecological disaster response, protection of vulnerable species and the promotion of biodiversity and stability	No specific challenges or constraints were identified for this area during the review	In 2023, the National Institute of Biological Resources expanded citizen participation in biodiversity monitoring by partnering with the public, parataxonomists and experts. Local citizen science teams monitored over 100 climate change bioindicator species, collecting 73,491 verified observations for tracking climate change impacts and predicting future species distribution
Food and agriculture ^a	Vulnerability: shifting of cultivation zones northward is increasing the	No specific challenges or	South Chungcheong Province developed climate-adaptive

<i>Priority adaptation sector or area</i>	<i>Vulnerability and adaptation measures reported</i>	<i>Challenges and constraints</i>	<i>Cooperation, good practices, experience and lessons learned</i>
	number of overwintering pests, invasive species and herbicide-resistant weeds. The impacts are particularly evident in high-altitude crops, where rising temperatures have significantly affected traditional farming areas. Cultivation areas for napa cabbage and radish have declined to approximately half their original size since the 2000s Adaptation measure: developing climate-adaptive agricultural practices, including the use of climate-smart technologies and resilient crop varieties	constraints were identified for this area during the review	rice varieties, including the Republic of Korea's first extra-early maturing, medium-glutinous varieties with improved taste that reduce CH ₄ emissions owing to shorter growing periods. It also bred high-yielding, blast-resistant varieties to address increasing risks from extreme weather events and diseases linked to climate change
Forests	Vulnerability: rising temperatures and more frequent extreme weather events are leading to reduced growth rates of key coniferous species and resulted in a 25 per cent decline in subalpine coniferous forests between 1990 and 2010, as well as an increased risk of forest fires, with fires occurring 5 per cent more frequently and affecting areas 25 per cent larger in 2023 compared with the 10-year average Adaptation measure: preventing forest-related disasters through proactive wildfire response, ecosystem protection and landslide damage mitigation and recovery	No specific challenges or constraints were identified for this area during the review	In 2023, the Korea Forest Service enhanced its forest fire management system through advanced information and communication technology applications, developing an artificial intelligence based forest fire prevention platform for the automatic detection and continuous monitoring of forest fires. The platform integrates surveillance cameras and closed-circuit television networks and specialist drone teams for supporting firefighting and surveillance in challenging conditions
Health ^a	Vulnerability: increasing heat-related mortality and illnesses, as well as growing risks from extreme weather events such as heatwaves, typhoons and heavy snow. In 2023, 2,818 cases of heat-related illness were reported during the summer heatwave monitoring period, representing an 80.2 per cent increase from the previous year Adaptation measure: strengthening public health measures and monitoring for extreme temperatures, enhancing research and response to climate-related diseases, and protecting vulnerable populations while reducing their energy burden	No specific challenges or constraints were identified for this area during the review	In 2023, the Korea Disease Control and Prevention Agency enhanced climate-related infectious disease surveillance by collaborating with over 70 hospitals and research institutes, providing weekly public updates on waterborne and food-borne diseases, as well as disease outbreak trends
Infrastructure and human settlements ^a	Vulnerability: heatwaves and tropical nights are driving higher electricity demand in buildings in summer, while extreme weather events, particularly heavy rainfall and typhoons, are increasing flood risks in urban residential areas, with vulnerable populations facing the greatest impact. In addition, land transportation infrastructure, including railways and	No specific challenges or constraints were identified for this area during the review	In 2023, the Ministry of Land, Infrastructure and Transport launched a project to enhance flood resilience in vulnerable housing, focusing on semi-basement dwellings and underground parking. As at November 2023, flood prevention measures, including barriers, drainage

<i>Priority adaptation sector or area</i>	<i>Vulnerability and adaptation measures reported</i>	<i>Challenges and constraints</i>	<i>Cooperation, good practices, experience and lessons learned</i>
	roads, is increasingly vulnerable to damage from extreme weather events Adaptation measure: improving disaster-resistant housing, upgrading urban and transportation infrastructure, and implementing climate-focused urban planning to strengthen resilience		pumps and backflow prevention devices, had been installed in 4,440 housing units in areas prone to recurrent flooding, with annual maintenance checks planned to ensure their continued operation
Marine and fisheries	Vulnerability: rising sea surface temperatures and accelerating ocean acidification are affecting the marine and fisheries sector. Waters around the Korean Peninsula have warmed by approximately 1.44 °C between 1968 and 2023, which is nearly twice the global average. In September 2023, record sea surface temperatures of 19.8 °C caused mass mortality in aquaculture species, including flatfish, abalones and sea squirts, resulting in estimated losses of 43.8 billion won Adaptation measure: enhancing climate-resilient marine and fisheries production through improved information systems, upgraded infrastructure, and the development of resilient technologies and species varieties	No specific challenges or constraints were identified for this area during the review	In 2023, Gyeonggi Province implemented nature-based solutions to address climate change impacts on fisheries by releasing 2 million juvenile fish of five native species and 5.9 million seedlings of seven marine species. The province also improved smelt reproduction through the direct release of juveniles and used a high-density seawater spray system to achieve stable mass production of manila clams and ark shells
Water ^a	Vulnerability: water resources are vulnerable to both severe droughts and extreme rainfall. Droughts reduce water availability and productivity, impacting residential, industrial and agricultural supplies, increasing waterborne pollution risks, causing riverbed desiccation, degrading ecosystems and reducing environmental flows. Extreme rainfall increases risks to dams, reservoirs and river systems and makes infrastructure maintenance more challenging Adaptation measure: strengthening water resource management and critical infrastructure such as dams and drainage systems and early warning systems for floods, droughts and climate-related disasters	No specific challenges or constraints were identified for this area during the review	In 2021, the Korea Meteorological Administration enhanced flood forecasting through improved inter-agency coordination with the Ministry of Climate, Energy and Environment, the River Flood Control Office and K-water. The system provides customized weather data for flood forecasting and dam operations, supported by specialist staff training, improved data-collection processes that have reduced observation intervals, and new monitoring equipment

^a Thematic target under the United Arab Emirates Framework for Global Climate Resilience.

3. The Republic of Korea provided a description of its adaptation strategies, policies, plans and goals; the actions it has taken to integrate adaptation into national policies and strategies; its progress in implementing adaptation action, and information on its monitoring and evaluation of adaptation actions and processes, which is summarized within the context of the iterative adaptation cycle in table I.2.

Table I.2

Summary of information on the iterative adaptation cycle reported by the Party

<i>Dimension</i>	<i>Information on progress reported</i>
Impact, vulnerability and risk assessment	Impact, vulnerability and risk assessment: the Republic of Korea conducts national climate risk assessments to identify climate change risks and inform adaptation planning. For the enhanced third NCCAP (2023–2025), expert consultations with 36 specialists identified 72 risks across the following seven sectors: water management; forestry; public health; housing, urban and infrastructure; ports and coastal areas; agriculture and fisheries; and ecosystems. The outcomes of this assessment informed the development of sector-specific adaptation measures and priorities within the enhanced third NCCAP. Multi-hazard early warning systems: the Republic of Korea has strengthened its climate observation and early warning capabilities since 2021, supported by the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, enacted in September 2021, which mandates the scientific monitoring and prediction of climate change patterns. These efforts support the systematic observation of climate-related data and timely responses to extreme weather events, including enhanced forecasting of floods, heatwaves, cold spells and forest fires; marine temperature monitoring based on the Internet of things; precipitation forecasting; and use of digital platforms providing climate-related risk information.
Planning	The Party implements climate adaptation through five-year NCCAPs as part of a multilevel governance framework extending from the central Government down to metropolitan and municipal governments, as well as public institutions. The Ministry of Climate, Energy and Environment leads and coordinates the NCCAP process across 15 ministries, which are responsible for planning, implementation, monitoring and evaluation. The enhanced third NCCAP (2023–2025) incorporates recent IPCC projections, strengthens responses to extreme weather events and establishes detailed implementation arrangements. The planning process involves multiple ministries, expert consultations and public engagement, ensuring a participatory, transparent and inclusive approach to national adaptation planning. Subnational adaptation planning is mandated under the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (Carbon Neutrality Act), which requires 17 metropolitan and 226 local governments to develop five-year plans tailored to their regional climate change impacts. In parallel, 62 public institutions responsible for critical infrastructure such as transportation and electricity are required to establish and implement their own five-year adaptation plans to strengthen resilience across essential services. Notably, in 2022, the National Human Rights Commission of the Republic of Korea recognized that protecting citizens' human rights in the light of climate change is a fundamental government responsibility, reinforcing the need to integrate human rights considerations into adaptation planning processes.
Implementation	The enhanced third NCCAP is being implemented with the overarching vision of making the Republic of Korea safe and climate resilient. Implementation is guided by core objectives and four strategic directions that strengthen adaptive capacity and resilience across sectors, including by: (a) Enhancing climate forecasting and public access to information; (b) Strengthening infrastructure resilience and disaster response capabilities; (c) Strengthening the resilience of the built and natural environment; (d) Strengthening institutional frameworks and multi-stakeholder collaboration to support vulnerable populations and build societal resilience.
Monitoring, evaluation and learning	The enhanced third NCCAP includes a monitoring and evaluation system that uses 18 policy indicators to track implementation progress and 15 people-centred indicators to assess adaptation outcomes. A multi-tiered evaluation system is used to perform annual, interim and comprehensive evaluations in the third and fifth years, including ministerial self-assessments and the evaluation of best practices. The Ministry of Climate, Energy and Environment consolidates the results of these evaluations into progress reports for review by the Presidential Commission on Climate Crisis Response,^a which oversees climate change adaptation and key

<i>Dimension</i>	<i>Information on progress reported</i>
	policies and implementation measures for achieving carbon neutrality and green growth. The results of this review shape ministries' implementation plans for the following year. Subnational governments submit to the Ministry of Climate, Energy and Environment annual self-assessments of their five-year plans, which are consolidated into a comprehensive progress report for reviewing preparedness, implementation performance and adaptation outcomes. In 2023, metropolitan governments established regional advisory groups composed of experts and citizens covering six sectors (water management; forestry and ecosystems; health; agriculture and fisheries; land and coastal areas; and industry and energy) to strengthen public engagement and integrate regional perspectives into adaptation policies.

^a Referred to in the BTR1 as the Presidential Commission on Carbon Neutrality and Green Growth, which was renamed the Presidential Commission on Climate Crisis Response, effective 1 January 2026, in accordance with the amended Carbon Neutrality Act of November 2025.

4. The Republic of Korea provided information on averting, minimizing and addressing loss and damage related to climate change impacts, as summarized in table I.3.

Table I.3

Summary of information related to averting, minimizing and addressing loss and damage reported by the Party

<i>Dimension</i>	<i>Information reported</i>
Observed and potential climate change impacts	Extreme events: the Republic of Korea conducts comprehensive scientific assessments of current and future climate change impacts to inform adaptation strategies, using tools such as MOTIVE, which performs sectoral impact and vulnerability assessments for areas including water management, forestry, health, agriculture, industry and ecosystems. Similarly, the Party uses VESTAP to identify vulnerable areas and support evidence-based adaptation planning. Slow onset events: sea level rise threatens coastal areas with increased flooding and inundation, infrastructure damage, and beach and tidal flat erosion, while also putting port operations at heightened risk from extreme weather events.
Activities	The Republic of Korea undertakes activities to avert, minimize and address loss and damage using national climate risk assessment tools, such as MOTIVE and VESTAP, which assess climate change impacts across sectors and identify highly vulnerable areas to help reduce future losses. The Party is also strengthening its early warning and forecasting systems, including flood forecasting, dam basin precipitation forecasting, real-time marine temperature monitoring and digital hazard information platforms, to help reduce climate-related losses. Internationally, at the Conference of the Parties at its twenty-eighth session, the Republic of Korea committed USD 7 million to the Fund for responding to Loss and Damage to support developing countries.
Institutional arrangements	Loss and damage are addressed within the national climate change adaptation framework. Under the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, the Ministry of Climate, Energy and Environment oversees the overall adaptation policy cycle, while relevant line ministries implement sectoral actions related to loss and damage. For example, the Ministry of the Interior and Safety manages and supports recovery from disasters caused by extreme weather events, while the Korean heritage service addresses the impacts of slow onset events on cultural and natural heritage.

II. Areas of improvement identified during the technical expert review of the reporting in the Party's first biennial transparency report on climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the modalities, procedures and guidelines

5. The TERT assessed the information reported on climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the MPGs in the BTR1 of the Republic of Korea and identified areas of improvement relating to consistency with the MPGs, which are described in table I.4. All encouragements contained in the table are for the next BTR, unless otherwise specified.

Table I.4

Areas of improvement of the reporting on climate change impacts and adaptation under Article 7 of the Paris Agreement

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with encouragement</i>
I.4.1	Specified in paragraph 107(c) of the MPGs	The Republic of Korea did not report detailed information in its BTR1 on the uncertainties and challenges associated with the approaches, methodologies and tools used to assess potential impacts of climate change. During the review, the Republic of Korea explained that its BTR1 focuses primarily on presenting the results of the climate change impact assessment and the approaches, methodologies and tools used. The Party indicated that providing detailed explanations of the uncertainties associated with each approach, methodology and tool would have significantly increased the length and complexity of the BTR1 and, therefore, such information was not included. The Party further explained that it used QC procedures to address uncertainties during the assessment process and that it will consider providing more information on uncertainties and limitations in future BTRs. The TERT encourages the Republic of Korea to report, as appropriate, information on the uncertainties and challenges associated with the approaches, methodologies and tools used to assess potential impacts of climate change, for instance by including information on data gaps affecting vulnerability assessments, methodological limitations in downscaling climate information and capacity constraints for applying the approaches, methodologies and tools. If the Republic of Korea deems that it is not possible to report this information, the TERT encourages the Party to describe the reasons for this in the BTR.
I.4.2	Specified in paragraph 108(b) of the MPGs	The Republic of Korea did not report detailed information in its BTR1 on adaptation challenges and gaps, and barriers to adaptation. During the review, the Republic of Korea explained that the primary challenge in reporting such information lies in the scale of interministerial coordination required. The Party clarified that most scientific assessments and implementation activities are carried out by individual ministries in accordance with their sectoral expertise and then integrated into a unified national framework for planning and evaluating adaptation activities. Aligning sectoral priorities within a consistent adaptation cycle therefore involves considerable coordination across multiple levels of government. Nevertheless, the Party reported that the adaptation system has become increasingly stable over successive cycles, most recently reflected by the establishment of the fourth NCCAP in December 2025 through this integrated process. The TERT encourages the Republic of Korea to report, as appropriate, information on adaptation challenges and gaps, and barriers to adaptation, for instance by reporting on the difficulties encountered across different stages of the iterative adaptation cycle, including institutional, financial, technical, data-related and capacity-related constraints. The information reported may include challenges related to the scale of coordination required, funding constraints for subnational plans, technical limitations of vulnerability assessment tools and data gaps for real-time monitoring. If the Republic of Korea deems that it is not possible to report this information, the TERT encourages the Party to describe the reasons for this in the BTR.

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with encouragement</i>
I.4.3	Specified in paragraph 109(c) of the MPGs	The Republic of Korea reported information in its BTR1 on how best available science and traditional and local knowledge are integrated into adaptation but did not report how gender perspectives and Indigenous knowledge are integrated into adaptation. During the review, the Republic of Korea provided information on its efforts to promote gender equality in adaptation-related initiatives. The Party explained that gender perspectives are widely incorporated into national policies and society more broadly. Rather than being addressed through stand-alone climate adaptation measures, gender considerations are embedded as a fundamental element of governance, overseen by the Ministry of Gender Equality and Family. The Party also explained that it does not have a separate category for Indigenous populations. Local and regional knowledge is reflected in adaptation efforts through a legally mandated, bottom-up system. Under the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, all 17 regional governments and 226 local authorities are required to develop and implement their own adaptation policies, ensuring that regional characteristics and local knowledge are systematically incorporated into the national adaptation framework. The TERT encourages the Republic of Korea to report, as appropriate, how gender perspectives are integrated into adaptation, for instance by elaborating on how these considerations are embedded into domestic planning, prioritization and implementation. If the Republic of Korea deems that it is not possible to report this information, the TERT encourages the Party to describe the reasons for this in the BTR.
I.4.4	Specified in paragraph 110(c) of the MPGs	The Republic of Korea did not report detailed information in its BTR1 on how it is implementing adaptation actions identified in past adaptation communications, including efforts towards meeting adaptation needs, as appropriate. During the review, the Republic of Korea explained that the enhanced third NCCAP released in June 2023 is not a new policy but rather an update to the original third NCCAP released in 2020. As the enhanced third NCCAP reinforces existing actions and strengthens targets set in the original third NCCAP, the Party did not consider it necessary to provide explicit cross-references to its adaptation communication. The TERT encourages the Republic of Korea to report, as appropriate, how it is implementing adaptation actions identified in past adaptation communications, including efforts towards meeting adaptation needs, for instance by providing cross-references to relevant sections of its adaptation communication and the NCCAP to enhance the systematic tracking of adaptation actions and to contribute to greater transparency and coherence in reporting. If the Republic of Korea deems that it is not possible to report this information, the TERT encourages the Party to describe the reasons for this in the BTR.
I.4.5	Specified in paragraph 113(c) of the MPGs	The Republic of Korea did not report detailed information in its BTR1 on the assessment of how adaptation increased resilience and reduced impacts, when adaptation is not sufficient to avert impacts and how effective the implemented adaptation measures are. During the review, the Republic of Korea explained that its current monitoring and evaluation framework focuses on procedural progress and the direct results of planned adaptation measures. The framework uses output indicators to facilitate the consistent tracking of implementation, but the indicators are limited in their ability to measure the direct outcomes and effectiveness of implemented actions. The Party added that research is under way to develop outcome-based indicators to better capture changes in resilience with the aim of incorporating such indicators into the monitoring and evaluation framework in future cycles. The TERT encourages the Republic of Korea to report, as appropriate, information on the assessment of how adaptation increased resilience and reduced impacts, when adaptation is not sufficient to avert impacts and how effective the implemented adaptation measures are. If the Republic of Korea deems that it is not possible to report this information, the TERT encourages the Party to describe the reasons for this in the BTR.

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with encouragement</i>
I.4.6	Specified in paragraph 115(c) of the MPGs	The Republic of Korea did not report detailed information in its BTR1 on institutional arrangements to facilitate the implementation of activities related to averting, minimizing and addressing loss and damage associated with the adverse effects of climate change. During the review, the Republic of Korea explained that activities related to loss and damage are not managed through separate institutional arrangements but are integrated into the national climate change adaptation framework. Under the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, the Ministry of Climate, Energy and Environment oversees the overall adaptation policy cycle, while specific adaptation actions, including those related to loss and damage, are carried out by the relevant line ministries. The TERT encourages the Republic of Korea to report, as appropriate, information on institutional arrangements to facilitate the implementation of activities related to averting, minimizing and addressing loss and damage associated with the adverse effects of climate change. If the Republic of Korea deems that it is not possible to report this information, the TERT encourages the Party to describe the reasons for this in the BTR.

Annex II

Documents and information used during the review

A. Reference documents

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

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

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

EEA. 2005. *EMEP/CORINAIR emission inventory guidebook – 2005*. Technical report no. 30. Copenhagen: EEA.

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

IPCC. 1997. *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*. JL Houghton, LG Meira Filho, B Lim, et al. (eds). Paris: IPCC/Organisation for Economic Co-operation and Development/International Energy Agency. Available at <https://www.ipcc-nggip.iges.or.jp/public/gl/invs1.html>.

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

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

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

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

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

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

“Reviews on a voluntary basis of the information reported pursuant to decision 18/CMA.1, annex, chapter IV, and respective training courses needed”. Decision 9/CMA.4. FCCC/PA/CMA/2022/10/Add.2. Available at <https://unfccc.int/documents/626570>.

B. Additional information provided by the Party

Responses to questions during the review were received from Donghyuk Shin (Ministry of Climate, Energy and Environment of the Republic of Korea), including additional material. The following references were provided by the Republic of Korea and may not conform to UNFCCC editorial style as some have been reproduced as received:

National Institute of Agricultural Sciences. 2017. *Development of CO₂ emission factor caused by use of urea and lime according to 2006 new guideline*.

Republic of Korea. 2015. *First Master Plan for National Greenhouse Gas Inventory (2015-2019)*.

Republic of Korea. 2020. *Second Master Plan for National Greenhouse Gas Inventory (2020-2024)*.

Republic of Korea. 2026. *Note for TERT (2024_NID_CRT)(Republic of Korea)_260128*.
