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

Summary

This report presents the results of the technical expert review of the first biennial transparency report of Uzbekistan, 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, and capacity-building needs identified by the Party and by the technical expert review team in consultation with the Party during the review. The review took place from 8 to 12 December 2025 in Bonn.

* In the symbol for this document, 2024 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
AD	activity data
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
EF	emission factor
ETF	enhanced transparency framework under the Paris Agreement
FX	flexibility
GDP	gross domestic product
GHG	greenhouse gas
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
ITMO	internationally transferred mitigation outcome
JSC	joint stock company
LULUCF	land use, land-use change and forestry
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
NDC	nationally determined contribution
NE	not estimated
NID	national inventory document
PaMs	policies and measures
PPP	purchasing power parity
QA/QC	quality assurance/quality control
RES	renewable energy source(s)
TERT	technical expert review team
WAM	‘with additional measures’
WM	‘with measures’
WOM	‘without measures’

I. Introduction and summary

A. Introduction

1. This report covers the technical expert review of the BTR1 of Uzbekistan. The review was organized by the secretariat and conducted by the TERT in accordance with the MPGs,¹ particularly chapter VII thereof.
2. A draft version of this report was transmitted on 30 April 2026 to the Government of Uzbekistan, which provided comments, on 26 May 2026, that were taken into account, as appropriate, in this final version of the report.²
3. The review was conducted as a centralized review from 8 to 12 December 2025 in Bonn by the following team of nominated experts from the UNFCCC roster of experts: Oksana Butrym (Ukraine), Rana Humbatova (Azerbaijan), Valentina Idrissova (Canada), Vanessa Leonardi (Italy), Tigran Sekoyan (Armenia), Lilia Taranu (Republic of Moldova) and Martijn Verdonk (Kingdom of the Netherlands). Rana Humbatova and Martijn Verdonk were the lead reviewers. The review was coordinated by Tomoyuki Aizawa and Suriya Mues (secretariat).
4. Applying the flexibility provided to those developing country Parties that need it in the light of their capacities,³ Uzbekistan chose to undergo a centralized instead of an in-country review.

B. Scope

5. The TERT conducted a technical expert review of the information reported in the BTR1 of Uzbekistan as per the scope of the review defined in paragraph 146 of the MPGs, 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 taking into account the flexibility accorded to the Party under Article 13, paragraph 2, of the Paris Agreement (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 improvement⁴ for the Party related to implementation of Article 13 of the Paris Agreement (see chap. II.D below);
 - (d) Assistance in identifying capacity-building needs (see chap. II.E below).

C. Summary

6. Uzbekistan submitted its BTR1 on 29 December 2024, before the deadline of 31 December 2024 mandated in decision 18/CMA.1. Uzbekistan submitted its NID as a stand-alone document on 9 July 2024, before the deadline. Uzbekistan submitted its CRTs on 30 December 2024, before the deadline, and CTF tables on 29 December 2024, before the deadline.⁵

¹ Decision 18/CMA.1, annex.

² As per para. 162(e) of the MPGs.

³ As per paras. 158–159 of the MPGs.

⁴ As referred to in paras. 7, 8, 146(d) and 162(d) of the MPGs.

⁵ The technical expert review was conducted on the basis of the revised versions of the BTR1, NID and CTF NDC tables submitted on 11 March 2025, 30 October 2025 and 18 April 2025 respectively.

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.⁶

8. The Party applied flexibility as provided for those developing country Parties that need it in the light of their capacities pursuant to Article 13, paragraph 2, of the Paris Agreement in relation to the national inventory report of anthropogenic GHG emissions by sources and removals by sinks⁷ and the information necessary to track progress in implementing and achieving its NDC.⁸ Information on where the flexibility was applied is included in chapters II.A.1–II.A.2 below.

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

9. Uzbekistan reported information on support received for implementing Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building. The Party reported on support received for preparing reports pursuant to Article 13 of the Paris Agreement and addressing the areas of improvement identified by the TERT. Support has been received for preparing and submitting the BTR1, BTR2 and fifth national communication, establishing and managing a national transparency system and strengthening national institutional and technical capacity for producing, reporting and verifying estimates of emission reductions. Table 1 summarizes the information that Uzbekistan reported in CTF tables III.12–III.13 on support received. The TERT noted that the above-mentioned information reported by the Party is not subject to review as per the scope of the review defined in paragraph 146 of the MPGs.

Table 1

Summary of support needed and received by Uzbekistan for implementing Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building

(USD million)

<i>Status of support</i>	<i>Amount</i>
Support needed	Information not available at time of reporting
Support received from 2018 to 2024	4.40

Sources: Uzbekistan's BTR1 and CTF tables III.12–III.13.

II. Technical expert review⁹

A. Review of the consistency of the submitted information with the modalities, procedures and guidelines¹⁰

1. National inventory report¹¹

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

⁶ Contained in document FCCC/ETF/TERR.1/2024/UZB/Add.1, available at <https://unfccc.int/first-biennial-transparency-reports>.

⁷ The developing country Party applied flexibility in the light of its capacities with respect to the provisions in paras. 32 and 48 of the MPGs.

⁸ The developing country Party applied flexibility in the light of its capacities with respect to the provisions in paras. 85 and 95 of the MPGs.

⁹ As per para. 187 of the MPGs.

¹⁰ As per para. 146(a) of the MPGs.

¹¹ As per para. 150(a) of the MPGs.

Table 2

Information reported in Uzbekistan'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? ^b	CO ₂ , CH ₄ , N ₂ O, HFCs	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	No areas of improvement relating to recommendations were identified
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?	Partly	2.G.1
Methodologies, parameters and data (paras. 20–24 of the MPGs)	Has the Party used the 2006 IPCC Guidelines for National Greenhouse Gas Inventories?	Yes	2.G.2, 3.E.7, 4.I.1, 5.A.1, 5.A.2, 6.L.1, 6.L.4
	Has the Party used other IPCC methodological guidance?	No	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>	<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?	No	4.I.4, 4.I.5
	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?	Yes, including level and trend uncertainty, reported using approach 1 for the starting inventory year (1990) and the latest reporting year (2022)	No areas of improvement relating to recommendations were identified
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?	Partly, including information on the inventory agency responsible for implementing QA/QC and general QC procedures	2.G.5, 2.G.6, 2.G.7
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?		
	Energy	Yes	3.E.2
	IPPU	Yes	4.I.3
	Agriculture	Yes	5.A.6, 5.A.7
	LULUCF	Yes	6.L.2, 6.L.6, 6.L.7, 6.L.8
	Waste	Yes	7.W.2
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? ^b	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	No	NA

<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>
Methodologies, EFs, parameters and AD (paras. 39, 40 and 53–56 of the MPGs)	emissions is below the threshold of significance?		
	Has information been transparently reported on categories, gases, methodologies (including the rationale for selecting them), EFs and AD at a disaggregated level for the following sectors?	Partly. The inventory would benefit from clearer documentation of the methodologies, assumptions and notation keys used and the application of flexibilities in line with the MPGs. The Party may consider improving institutional arrangements, QA/QC procedures and archiving systems to ensure complete, traceable and reproducible reporting across the entire time series. Clear prioritization of higher-tier methods for key categories, supported by enhanced data collection and capacity-building, would improve the overall accuracy of the inventory	No areas of improvement relating to recommendations were identified
	Energy	No	3.E.3, 3.E.5
	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	No areas of improvement relating to recommendations were identified
	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?	Yes	No areas of improvement relating to recommendations were identified
	IPPU	Yes	No areas of improvement relating to recommendations were identified
	Agriculture	No	5.A.3, 5.A.4, 5.A.5, 5.A.8
	LULUCF	No	6.L.3, 6.L.5
	Waste	No	7.W.1

^a See document FCCC/ETF/TERR.1/2024/UZB/Add.1. The areas of improvement referred to in this table comprise only those relating to recommendations in that document.

^b The developing country Party applied flexibility in the light of its capacities with respect to this provision.

2. Information necessary to track progress in implementing and achieving the nationally determined contribution¹²

11. The TERT assessed the information reported in the BTR1 of Uzbekistan and identified areas of improvement relating to consistency with the MPGs, which are described in tables 10, 11 and 13 of the assessment tables referred to in paragraph 7 above and summarized in table 3.

Table 3

Information reported in Uzbekistan'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)	No areas of improvement were identified
Description of the NDC under Article 4 of the Paris Agreement, including updates (para. 64 of the MPGs)	No areas of improvement 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, 10.2, 10.3, 10.4
Mitigation PaMs, actions and plans related to implementing and achieving the NDC under Article 4 of the Paris Agreement ^b (paras. 80–90 of the MPGs)	11.1, 11.4
Summary of GHG emissions and removals (para. 91 of the MPGs)	No areas of improvement were identified
Projections of GHG emissions and removals ^b (paras. 92–102 of the MPGs)	13.1, 13.2, 13.4

^a See document FCCC/ETF/TERR.1/2024/UZB/Add.1. The areas of improvement referred to in this table comprise only those relating to recommendations in that document.

^b The developing country Party applied flexibility in the light of its capacities with respect to this provision.

3. Financial, technology development and transfer, and capacity-building support provided¹³

12. Uzbekistan does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement. Accordingly, the Party did not provide information on financial, technology development and transfer, or capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement in its BTR1.¹⁴

B. Consideration of the Party's implementation and achievement of its nationally determined contribution¹⁵

13. In considering Uzbekistan's progress in implementing and achieving its NDC, the TERT noted that the NDC¹⁶ is an unconditional commitment to reduce GHG emissions per unit of GDP by 35 per cent by 2030 compared with the 2010 level. The Party has selected a single target year (2030). The gases covered are CO₂, CH₄, N₂O and HFCs, and the sectors covered are energy, IPPU, agriculture, LULUCF and waste.

14. The Party also has what it describes as two 'additional targets', namely to increase the share of RES to 25 per cent of the total volume of electricity generated and to halve energy

¹² As per para. 150(b) of the MPGs.

¹³ As per para. 150(c) of the MPGs.

¹⁴ As per para. 118 of the MPGs.

¹⁵ As per para. 146(b) of the MPGs.

¹⁶ The consideration of the Party's implementation and achievement of its NDC is in the context of the NDC submitted by Uzbekistan on 30 October 2021. The TERT noted that the Party submitted a new NDC on 6 November 2025.

intensity of GDP compared with the 2018 level. The single-year target for both of these additional targets is 2030.

15. The indicators that Uzbekistan selected to track progress in implementing and achieving its NDC are described in table 4.

Table 4

Description of the indicators selected by Uzbekistan to track progress in implementing and achieving its nationally determined contribution

<i>NDC target</i>	<i>Indicator</i>	<i>Description</i>
Reduce emissions of GHGs per unit of GDP by 35 per cent by 2030 compared with the 2010 level	Main indicator: carbon intensity of GDP	Expressed as “kg CO ₂ eq per USD”, where the gases covered are CO ₂ , CH ₄ , N ₂ O and HFCs (excluding LULUCF) and GDP is in constant 2015 United States dollars and calculated as: (GHG emissions (excluding LULUCF)/value of GDP ₂₀₁₅)
Increase the share of RES to 25 per cent of the total volume of electricity generated by 2030	Additional indicator 1: share of RES in the total volume of electricity generated	Share of electricity generated by RES in total electricity generation, calculated as: (electricity generated from solar, wind and hydropower sources/total electricity generation in the country) × 100
Halve the energy intensity of GDP by 2030 compared with the 2018 level	Additional indicator 2: energy intensity of GDP	Expressed as “toe per 1000 USD”, where energy is total primary energy consumption (in toe) and GDP is in USD 1,000 on a PPP basis calculated as: (total energy supply (toe)/GDP _{PPP})

Sources: Uzbekistan’s BTR1 and CTF tables 1–3, and information provided by the Party during the review.

16. The TERT noted that the contribution of LULUCF to achieving the NDC is not included in the Party’s base-year level or target-year level and that Uzbekistan did not use ITMOs, A6.4ERs or CERs from cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement or the mechanism established by Article 6, paragraph 4, of the Paris Agreement towards the achievement of its NDC.

17. Tables 5–7 summarize information on progress in implementing the NDC based on the main indicator carbon intensity of GDP and the additional indicators share of RES in the total volume of electricity generated and energy intensity of GDP taking into account the type of Uzbekistan’s NDC targets, including quantitative values for the base year, implementation period, including the most recent year available, target year and information on the contribution of LULUCF and the use of ITMOs, A6.4ERs and CERs towards the implementation and achievement of the NDC, as applicable.

Table 5

Summary of information on Uzbekistan’s progress in implementing and achieving its nationally determined contribution based on carbon intensity of gross domestic product

(kg CO₂ eq/USD)

	<i>Main indicator: carbon intensity of GDP</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>
Base year (2010)	2.85			
2020	1.72	NA	NA	1.72
2021	1.81	NA	NA	1.81
2022	1.69	NA	NA	1.69
Target level (2030) ^a				1.85

Sources: Uzbekistan’s BTR1 and CTF table 4, and information provided by the Party during the review.

^a Target level corresponds to an unconditional NDC target.

18. According to the most recent information on carbon intensity of GDP provided in the BTR1 and CTF table 4, in 2022 the carbon intensity of Uzbekistan's GDP was 1.69 kg CO₂ eq/United States dollar. For 2022 the indicator is 40.7 per cent below the level corresponding to the base-year level and 8.6 per cent below the level corresponding to the target level in 2030. In addition, the indicator was below the target level in 2020, at the start of the NDC implementation period.

Table 6

Summary of information on Uzbekistan's progress in implementing and achieving its nationally determined contribution based on the share of renewable energy sources in the total volume of electricity generated
(%)

	<i>Additional indicator 1: share of RES in the total volume of electricity generated</i>	<i>ITMOs used towards NDC, as applicable</i>	<i>Indicator adjusted for ITMOs used towards NDC, as applicable</i>
Base year (2019)	10.2		
2020	7.5	NA	7.5
2021	7.0	NA	7.0
2022	9.3	NA	9.3
2023	9.7	NA	9.7
Target level (2030) ^a			25.0

Sources: Uzbekistan's BTR1 and CTF table 4, and information provided by the Party during the review.

^a Target level corresponds to an unconditional NDC target.

19. According to the most recent information on the share of RES in the total volume of electricity generated provided in the BTR1 and CTF table 4, in 2023 the share of RES in Uzbekistan's total electricity generation was 9.7 per cent. The indicator is 4.9 per cent below the level corresponding to the base-year level and 61.2 per cent below the level corresponding to the target level in 2030.

Table 7

Summary of information on Uzbekistan's progress in implementing and achieving its nationally determined contribution based on energy intensity of gross domestic product
(toe/USD 1,000)

	<i>Additional indicator 2: energy intensity of GDP</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>
Base year (2018)	0.200			
2020	0.168	NA	NA	0.168
2021	0.159	NA	NA	0.159
2022	0.139	NA	NA	0.139
2023	0.126	NA	NA	0.126
Target level (2030) ^a				0.100

Sources: Uzbekistan's BTR1 and CTF table 4, and information provided by the Party during the review.

^a Target level corresponds to an unconditional NDC target.

20. According to the most recent information on energy intensity of GDP provided in the BTR1 and CTF table 4, in 2023 Uzbekistan's energy intensity of GDP was 0.126 toe/USD 1,000. For 2023, the indicator is 37.0 per cent below the level corresponding to the base-year level and 26.0 per cent above the level corresponding to the target level in 2030.

21. Uzbekistan reported information on the actions and PaMs that support the implementation and achievement of its NDC. Table 8 provides a summary of the reported information on the key PaMs of Uzbekistan.

Table 8
Summary of information on key policies and measures reported by Uzbekistan

<i>Sector</i>	<i>Key PaMs^a</i>	<i>Estimate of expected or achieved GHG emission reductions (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures	Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for the Period 2019–2030	FX
	New Uzbekistan Development Strategy for 2022–2026	FX
Energy		
Energy efficiency	Improving Energy Efficiency of Industrial Enterprises	2 949.69 (already achieved)
	Clean Energy for Buildings in Uzbekistan	3 509.00 (annual reductions expected)
Energy supply and renewables	Construction and modernization of thermal power plants	13 068.90 (reductions expected over the lifetime of the implemented projects)
	Construction of large and small photovoltaic power plants and wind power plants	13 388.30 (reductions expected over the lifetime of the implemented projects)
	Measures for accelerating the construction and modernization of hydropower plants	4 600 (by 2028)
	Measures for modernizing and expanding the electricity grid	FX
Transport	Expansion of use of vehicles with improved energy efficiency and environmental performance	FX
	Renewal of the vehicle fleet	FX
	Promoting the use of electric transport, developing and improving efficient public transportation systems	FX
IPPU	Improvement of the energy efficiency of industrial enterprises	FX
	N ₂ O reduction projects at JSC Navoiyazot, JSC Farg'onaazot and JSC Maxam-Chirchik	FX
Agriculture	Improvement of agricultural soil fertility	FX
	Restoration of degraded pastures	FX
LULUCF	Sustainable soil management and restoration	FX
	Sustainable forest management, reforestation and afforestation	FX
Waste	Solid Waste Management Strategy	FX
Other (water)	Modernization of pumping stations	FX

Sources: Uzbekistan's BTR1 and CTF table 5.

^a Names of PaMs reproduced as reported in Uzbekistan's BTR1.

22. The TERT noted that PaMs, actions and plans have contributed to a decreasing trend in the carbon intensity of the Party's GDP, which is used as the main indicator for tracking progress towards its NDC target. Carbon intensity decreased by 40.7 per cent in 2010–2022,

against a backdrop of increasing emissions and strong GDP growth. However, in 2016–2022, carbon intensity decreased at a slower rate, indicating that Uzbekistan will need to continue efforts aimed at decoupling economic growth from rising emissions to maintain progress in the area of this indicator. In 2010–2022 Uzbekistan’s GDP (in constant 2015 United States dollars) more than doubled, rising from USD 60.88 billion to USD 124.97 billion. The service sector plays a central role in GDP development, accounting for some 40 per cent of the national economy.

23. National GHG emissions excluding LULUCF increased by 21.5 per cent between 2010 and 2022. An increasing trend can be observed in all sectors except LULUCF, where large-scale reforestation programmes have contributed to increased removals. The energy sector remains the principal source of GHG emissions, accounting for some 64.0 per cent of total emissions in 2022; however, the modernization of power and heating plants, energy efficiency improvements made by end users and increases in electricity production for RES kept the increase in emissions from the energy sector relatively small (4.9 per cent). Emissions from transport, and manufacturing industries and construction during this period increased by 36.1 and 201.5 per cent respectively owing to a rapidly growing economy, largely driven by population growth, rising living standards and increasing (foreign) investment. Increases in emissions from agriculture (50.4 per cent) were due mainly to a rise in livestock numbers.

24. The TERT noted that the Party is planning to implement additional mitigation actions as part of a long-term low-emission development strategy to address the trend of increasing emissions. This is also reflected in the latest NDC (submitted on 6 November 2025), which raised ambition by setting a target of halving the carbon intensity of GDP by 2035 compared with the 2010 level.

25. The TERT noted that PaMs, actions and plans have started to have an impact on the share of electricity produced from RES, which is an additional indicator for tracking progress towards Uzbekistan’s NDC. According to the Party’s BTR1, the share in 2023 was 9.7 per cent. At present, the contribution of RES to the total volume of electricity generated is predominantly influenced by hydropower, which is contingent on water availability, and generation in the rest of the grid, which is predominantly linked to thermal power plants. In 2021 the Party began substantially expanding large-scale photovoltaic power plants and RES projects, which are scheduled to be fully operational in the near future. There are plans to commission by 2026 27 solar and wind projects with a total capacity of 13.9 GW, capable of generating 36.6 billion kWh electricity. Investment in new hydropower plants, adding 749 MW capacity, is also expected. To meet increasing demand for power, the capacity of thermal power plants is also being enlarged and existing plants are being modernized. According to the investment programme for 2022–2026 and a presidential decree on measures for implementing the Party’s investment programme for 2023–2025, an additional 6.9 GW thermal power capacity is planned. However, despite plans to increase thermal power capacity, the projections indicate that the share of electricity produced from RES will reach 25.0 per cent in both 2025 and 2030. The TERT notes that the Party might consider continuing to closely monitor the share of electricity produced from RES and taking additional action as needed.

26. The TERT also noted that PaMs, actions and plans have started to have an impact on the energy intensity of GDP, which is an additional indicator for tracking progress towards Uzbekistan’s NDC. According to the BTR1, the energy intensity of the economy decreased by 37 per cent between 2018 and 2023. The dynamics appear similar to those associated with the main indicator; while toe (the numerator of the equation) generally remained stable, GDP based on PPP grew, leading to an overall downward trend for the indicator. There was a slight growth in toe, led by the transport sector; in contrast, the level decreased in the agriculture sector and mainly remained constant for the other sectors.

27. Uzbekistan reported projections for 2022–2030 under the WM scenario.¹⁷ In addition to the WM scenario, Uzbekistan reported the WAM and WOM scenarios. During the review

¹⁷ 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.

the Party clarified that the three scenarios named in the BTR1 as ‘inertial’, ‘realistic’ and ‘ambitious’ are intended to align with the WOM, WM and WAM scenarios respectively. However, the Party’s realistic (WM) scenario differs from the definition provided in the footnote to paragraph 94 of the MPGs in that it also includes measures and projects that are planned and financed for the near future. Nevertheless, the projected emission levels are presented in table 9. The TERT noted that information on GHG emission projections was not used in considering Uzbekistan’s progress in implementing its NDC.

Table 9

Summary of greenhouse gas emission projections for Uzbekistan

	GHG emissions (kt CO ₂ eq/year)	Change in relation to 2020 level (%)	Change in relation to 2022 level (%)
Inventory data 2020	184 958		
Inventory data 2022	201 154	8.76	
WOM projections for 2025	226 400	22.41	12.55
WM projections for 2025	208 500	12.73	3.65
WAM projections for 2025	197 200	6.62	–1.97
WOM projections for 2030	269 100	45.49	33.78
WM projections for 2030	219 600	18.73	9.17
WAM projections for 2030	195 000	5.43	–3.06

Sources: Uzbekistan’s BTR1 and CTF tables 6–9.

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

28. The TERT noted that projections were provided for three indicators: carbon intensity of GDP, share of RES in the total volume of electricity generated, and energy intensity of GDP. In contrast to Uzbekistan’s NDC target and main indicator, LULUCF was considered in the calculation of projections. This explains the slight discrepancy between the values for the main indicator reported in paragraph 29 below and those in table 5 and paragraph 18 above.

29. The TERT noted that, in the WM scenario, carbon intensity of GDP is projected to significantly decrease from 1.62 to 1.18 kg CO₂ eq/United States dollar between 2022 and 2030, corresponding to a 27.16 per cent decrease. The share of RES in the total volume of electricity generated is projected to significantly increase from 9.70 per cent in 2023 to 25.00 per cent in both 2025 and 2030, representing an increase of 158 per cent. The energy intensity of GDP is projected to significantly decrease from 0.126 to 0.092 toe/USD 1,000 between 2023 and 2030, representing a decrease of 26.98 per cent.

30. The TERT assessed Uzbekistan’s progress towards its 2030 NDC target. In 2022 the main indicator, carbon intensity of GDP, was 1.69 kg CO₂ eq/United States dollar excluding LULUCF. The 2030 target for this indicator is 1.85 kg CO₂ eq/United States dollar. Therefore, in 2022 the main indicator was 8.6 per cent below the 2030 target level. The TERT noted that the indicator was already below the target level in 2020, at the start of the NDC implementation period. The TERT considers that, while Uzbekistan started the NDC implementation period with the target being met and is therefore making progress towards implementing and achieving its NDC target, taking into account information on mitigation actions, it is essential that the Party maintain progress by continuing to promote economic growth while decoupling such growth from increasing GHG emissions.

31. Regarding the first additional indicator, the TERT notes that the share of electricity produced from RES in the total volume of electricity generated must increase by 15.3 percentage points by 2030 to reach the target level on the basis of the level reported for the most recently reported year (2023). Despite a recent upward trend for this indicator, the share of renewable electricity in 2023 (9.7 per cent) is below the 2019 reference level (10.2 per cent), highlighting the need for a rapid and substantial increase in solar photovoltaic capacity and in capacity for generating other forms of renewable electricity in the near term, especially considering the increase in thermal power planned for the coming years. The TERT also notes that there are not yet enough data to sufficiently assess the Party’s progress in

implementing the NDC on the basis of this indicator, as data are available only for early in the implementation period (2020–2030) and a detailed energy balance was not reported.

32. In 2023 the second additional indicator, energy intensity of GDP, was 0.126 toe/USD 1,000. The 2030 target for the second additional indicator is 0.100 toe/USD 1,000 and the projected level of the indicator for 2030 (WM scenario) is 0.092 toe/USD 1,000. The TERT considers that, on the basis of a comparison of information on energy intensity of GDP in the most recently reported years (2020–2023) with the target indicator level for 2030, and taking into account information on mitigation actions and projections, Uzbekistan is making progress towards achieving its NDC on the basis of the second additional indicator. To sustain this progress, it is essential that the Party continue to promote economic growth while ensuring that such growth is decoupled from increasing energy consumption.

C. Consideration of the Party's support provided¹⁸

33. Uzbekistan does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement and did not report information in its BTR1 on financial, technology transfer and development, and capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement (see para. 12 above).

D. Identification of areas of improvement¹⁹

34. During the technical expert review, the TERT identified areas of improvement in relation to Uzbekistan'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 needs²⁰

35. The TERT, in consultation with Uzbekistan, identified the following prioritized need for capacity-building to facilitate the Party's reporting in its BTR relating to the flexibilities applied by it as per the MPGs:²¹ enhancing the Party's institutional arrangements for data collection and enhancing the capacity of national experts to develop and/or apply methodologies for reporting on PaMs and actions. This relates to estimating the achieved and expected emission reductions associated with PaMs and actions, an area in which the Party applied flexibility, and to identifying affected gases, costs, non-GHG mitigation benefits, long-term impacts, interactions between PaMs and actions, and the impacts of response measures. Activities for strengthening institutional arrangements could include establishing interministerial working groups and memorandums of understanding with organizations and adopting legislation, as well as developing guidance and/or reporting formats with a view to facilitating the reporting of impacts of PaMs and actions. Activities for building the capacity of national experts could include sharing good practices with other Parties on ways to collect information and on approaches for developing country-specific methodologies and/or applying existing methodologies.

36. Furthermore, in order to facilitate continuous improvement in reporting, the following additional capacity-building needs were identified during the review:

(a) Enhancing the technical capacity of the national experts involved in developing the BTR and the NID to correctly identify and apply the flexibility provisions of the MPGs through training, which could include, for example, targeted guidance from

¹⁸ As per para. 146(c) of the MPGs.

¹⁹ As per para. 146(d) of the MPGs.

²⁰ As per para. 146(e) of the MPGs.

²¹ For a complete list of the capacity-building needs identified by the TERT in consultation with the Party, see table 15 in document FCCC/ETF/TERR.1/2024/UZB/Add.1.

technical support providers, in order to enhance the transparency of the Party's methodological choices and the clarity of the BTR;

(b) Providing tailored training for experts involved in the development of the BTR and the NID on the use of the BTR reporting tools. Training could include, for example, ETF clinics offered by the secretariat;

(c) Supporting the enhancement and implementation of institutional arrangements (such as a formal agreement or memorandum of understanding) for the preparation of the GHG inventory that defines the mandates, responsibilities and coordination mechanisms among all data providers, including structured procedures for collection, validation and transmission of data;

(d) Enabling national experts to understand the complex interlinkages between GHG inventory sectors (e.g. energy and agriculture), GHG inventory categories and CRTs through training;

(e) Enabling national experts to apply the IPCC guidelines on recalculations, specifically on consistency of AD and on implied EFs, through training.

37. Uzbekistan also identified several capacity-building support needs in its BTR1.

III. Conclusions and recommendations

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

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

40. The TERT considers that, on the basis of a comparison of information on carbon intensity of GDP for the most recent reported year (i.e. 2022) with the base-year level (2010) and the target level (2030), and taking into account information on mitigation actions, projections and relevant underlying drivers, Uzbekistan is making progress towards its NDC target. The TERT notes that both at the start of the NDC implementation period in 2020 and in 2022, the level for this key indicator was already below the 2030 target level and that it is essential for Uzbekistan to maintain progress by continuing to implement its various national plans for a low-emission economy.

41. Regarding the first additional indicator, the TERT notes that the share of electricity produced from RES must increase by 15.3 percentage points by 2030 to reach the target level on the basis of the level reported for the most recently reported year (2023). Achieving the 2030 renewable electricity target of a 25 per cent share will require a rapid and substantial scale-up of renewable electricity generation, as the share in 2023 remained below the reference level. The TERT notes that there are not yet enough data to sufficiently assess the Party's progress in implementing the NDC on the basis of this indicator, as data are available only for early in the implementation period (2020–2030), a detailed energy balance is missing and there is uncertainty around the role that weather plays in supporting the production of renewable energy.

42. Regarding the second additional indicator, Uzbekistan is making progress towards achieving its energy intensity target, with recent trends and projections indicating that the 2030 target level is likely to be achieved, provided that economic growth continues to be decoupled from energy consumption.

43. The TERT notes that PaMs, actions and plans have contributed to a decrease in the carbon intensity of GDP. Owing to GDP rising at a faster rate than GHG emissions, carbon intensity of GDP has fallen since the base year (2010). However, between 2016 and 2022 it fell at a slower rate, which indicates that Uzbekistan will need to continue working on improving the carbon intensity of its GDP. With regard to GDP, the service sector plays an important role, accounting for some 40 per cent of the Party's economy (between 2015 and

2023). GHG emissions are driven by the energy sector, which is responsible for some 64 per cent of Uzbekistan's GHG emissions.

44. Uzbekistan does not consider itself subject to the reporting obligations applicable to developed country Parties pursuant to Article 13, paragraph 9, of the Paris Agreement and, in accordance with the MPGs, did not report information on financial, technology development and transfer, or capacity-building support provided to developing country Parties under Articles 9–11 of the Paris Agreement in its BTR1.²²

45. Regarding the implementation of Article 13 of the Paris Agreement and transparency-related activities, the support received by Uzbekistan in 2018–2024 through various channels totalled USD 4.40 million. Uzbekistan did not report on support needed.

46. In consultation with Uzbekistan, the TERT identified reporting-related needs for capacity-building support relating to the flexibilities applied by the Party as per the MPGs that could facilitate the Party's preparation of subsequent BTRs. For Uzbekistan, the main reporting-related need for capacity-building support is related to enhancing its institutional arrangements for data collection and enhancing the capacity of national experts to develop and/or apply methodologies for reporting information on PaMs and actions.

²² As per para. 118 of the MPGs.

Annex

Documents and information used during the review

A. Reference documents

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

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

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B. Additional information provided by the Party

Responses to questions during the review were received from Sayyora Abdullaeva, Olga Belorussova and Lyudmila Shardakova (Ministry of Ecology, Environmental Protection and Climate Change of Uzbekistan), including additional material. The following references were provided by Uzbekistan and may not conform to UNFCCC editorial style as some have been reproduced as received:

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Umarov, N.U. (2013). *State of the Environment and Use of Natural Resources in the Republic of Uzbekistan (The Retrospective Analysis for 2008–2011)*. National Report of the State Committee for Nature Protection of the Republic of Uzbekistan, Tashkent.

World Bank, GDP (constant 2015 US\$), indicator code NY.GDP.MKTP.KD, World Bank Open Data, available at: <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD> (accessed 26 January 2026).
