



UPDATED NATIONALLY DETERMINED
CONTRIBUTION OF THE REPUBLIC OF
UZBEKISTAN
(NDC 3.0)
for the period up to 2035
within the Framework of the Paris Climate
Agreement

Tashkent, 2025



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1. Introduction

According to international assessments, Uzbekistan is one of the most vulnerable countries to the climate change impact in the region. The rate of temperature increase in the country is higher than the global average. Every ten years, the average air temperature in Uzbekistan rises by 0.27°C.

The number of days with temperatures above 40 °C is growing in the country, especially in the Aral Sea region, and there is a higher risk of extreme water shortages and droughts, heat waves, floods, and other climate risks¹. According to the World Meteorological Organization (WMO)² estimates, each successive year over the last five years has been warmer than the previous one at the global level. It is forecasted that at least one year between 2025 and 2029 will be warmer than the warmest year in recorded history (currently, the “warmest year on record” is 2024). For Uzbekistan, 2025 was an extremely warm year³.

Global climate change and the high sensitivity of the country's natural resources to these climate changes requires the development of a consistent climate policy, which is being implemented in Uzbekistan over recent years.

Uzbekistan has joined the United Nations Framework Convention on Climate Change (UNFCCC) on June 20, 1993, and signed to the Paris Agreement on April 19, 2017. The Paris Agreement (PA) was ratified in 2018 with the adoption of Law of the Republic of Uzbekistan, “On the Ratification of the Paris Agreement”, No. LRU-491 of October 10, 2018.

As a party to the UNFCCC and the Paris Agreement, Uzbekistan is committed in supporting global efforts to keep the increase in the global average air temperature “well below” 2 °C and to “pursue efforts” to limit the temperature increase to 1.5 °C.

As per the Paris Agreement, each country should establish quantitative commitments to reduce greenhouse gas (GHG) emissions—a **nationally determined contribution (NDC)** - and review these commitments every five years to increase their level of ambition.

Uzbekistan, as a country non-included in the Annex I, has chosen a target linked to GDP per capita (carbon intensity of GDP) as its quantitative indicator for the economy as a whole. This option is most suitable for countries with high GDP growth rates.

The first nationally determined contribution (NDC 1) submitted by Uzbekistan to the UNFCCC Secretariat in 2017 was stated as the following – **to reduce specific GHG emissions per unit of GDP (carbon intensity of GDP) by 10 percent by 2030 from 2010 levels.**

In 2021, the Republic of Uzbekistan revised its quantitative commitments under the Paris Agreement. Uzbekistan has demonstrated its strong commitment to global climate actions through increasingly ambitious targets under the Paris Agreement, pledging in its NDC 2.0 **to reduce greenhouse gas (GHG) emissions intensity per unit of GDP (carbon intensity of GDP) by 35**

¹ Fourth National Communication on Climate Change of the Republic of Uzbekistan, 2024, https://unfccc.int/sites/default/files/resource/4NC_Uzbekistan_ENG_14%2010_SEC.pdf

² <https://wmo.int/news/media-centre/global-climate-predictions-show-temperatures-expected-remain-or-near-record-levels-coming-5-years>

³ <https://gov.uz/ru/hydromet/news/view/66518>

percent by 2030 compared to 2010 levels, which is a big increase from the original 10 percent target set in NDC 1.

By this document, Uzbekistan presents its updated quantitative commitment under the Paris Agreement – NDC 3.0 for the period up to 2035 in accordance with the requirements of the Paris Agreement.

Considering national circumstances and respective capacities, the Republic of Uzbekistan has committed to **“Achieving 50 percent reduction in specific GHG emissions (emissions’ intensity) per unit of gross domestic product by 2035 from 2010 levels”**.

This target reflects the Republic of Uzbekistan's commitment to demonstrating maximum effort by making a significant contribution to global climate change mitigation action through achieving a peak in GHG emissions as soon as possible and subsequently reduce them.

The numerical target set under the NDC appears achievable, as this contribution does not require an absolute reduction in GHG emissions, but rather focuses on limiting their growth. At the same time, the NDC does not hinder the country's economic growth. Moreover, the success of the NDC is directly linked to the degree to which low-carbon development measures are effectively integrated into government strategies and programs.

The updated version of NDC 3.0 is aligned with the National Sustainable Development Goals (SDGs) and socio-economic development priorities, by considering the current national circumstances. The document emphasizes the key role of structural reforms as a tool for long-term transformation of the state policy. Particular emphasis is placed on measures aimed at improving energy efficiency, expanding the use of renewable energy sources, and introducing resource-saving technologies in key sectors of the economy and social sphere.

2. Process of updating NDC 3.0

Revising/updating quantified NDC commitments is a requirement of the Paris Agreement. Under the Paris Agreement provisions, countries must review their commitments every five years, starting from 2020. Moreover, each subsequent NDC must demonstrate progress compared to the previous one and be as ambitious as possible.

NDC 3.0 was elaborated by the Interdepartmental Working Group on Coordination of NDC Formulation, which was developed under the Ministry of Ecology, Environment Protection and Climate Change with technical assistance from the United Nations Development Programme (UNDP) in Uzbekistan, and with participation of international development organizations such as FAO, UNICEF, GIZ and others, civil society, women associations and youth. The Third Nationally Determined Contribution (NDC 3.0) is planned to be presented in 2025 at the 30th Conference of the Parties (COP 30) to the United Nations Framework Convention on Climate Change (UNFCCC).

The methodological basis for the revision of the NDC was the guidance developed by the UNFCCC entitled “Information for clarity, transparency, and understanding of NDC (ICTU)” (Decisions 1/CP.19 and 1/CP.20, paragraph 8 of the UNFCCC).

NDC 3.0 was developed in full accordance with the objectives of “Uzbekistan-2030”⁴, Strategy and the State Program on its implementation during the “Year of Environmental Protection and Green Economy”⁵. The strategy sets out comprehensive climate goals for key sectors of the national economy and calls for accelerated action to combat climate change.

The Strategy sets ambitious targets, including increasing renewable energy capacity to 25,000 MW. The country plans to increase the share of energy generated using renewable sources to 54 percent over the next five years, which will cut greenhouse gas emissions by 16 million tons.⁶ There are also plans to **double energy efficiency in all sectors of the economy**, achieve 95 percent coverage of the solid waste collection system with 35 percent of waste used for energy generation, and expand the forest cover up to 6.1 million hectares, including 2.3 million hectares of afforestation areas in the Aral Sea region. The “Uzbekistan-2030” Strategy also identifies measures such as expanding protected areas to 12 percent to ensure sustainable biodiversity conservation. Expansion of protected natural areas up to 14.5 percent is envisaged in 2025 as part of the State Program for the Implementation of the “Uzbekistan-2030” Strategy within the “Year of Environmental Protection and Green Economy”.

The “Uzbekistan-2030” Strategy also provides an opportunity for the rapid introduction and implementation of Uzbekistan’s Long-Term Low Carbon Development Strategy until 2055, the draft of which is currently being discussed in the country.

NDC 3.0 of the Republic of Uzbekistan sets economy-wide targets. These targets cover all national GHG emissions, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), as well as the sectors required by the Intergovernmental Panel on Climate Change (IPCC): “Energy”, “Industrial Processes and Product Use” (IPPU), “Agriculture”, “Land Use, Land-Use Change, and Forestry” (LULUCF), and “Waste”.

The long-term goal is expected to be achieved with support of international organizations and financial institutions, and access to advanced energy-saving and environmentally friendly technologies and climate finance resources. Uzbekistan's funding needs for effective climate change mitigation and adaptation remain significant. Mobilizing climate finance has become critical to achieving bolder climate ambition.

The goal of climate change adaptation in NDC 3.0 is to further intensify efforts to strengthen climate adaptation capacity of the most vulnerable sectors. The "Adaptation" section of NDC 3.0 presents measures for climate adaptation in agriculture and water management, social sphere, healthcare, ecosystems, strategic infrastructure, and production systems, as well as actions to mitigate the consequences of the Aral Sea crisis.

In recent years, the country has significantly intensified efforts on adaptation to climate change impact, particularly through establishing a process for developing and implementing national sectoral and regional adaptation plans (NAPs), creating an appropriate institutional structure, developing a mechanism for coordinating adaptation measures and actions, designing a financial mechanism, attracting climate finance resources, and securing donor support.

⁴ Decree of the President of the Republic of Uzbekistan “On “Uzbekistan-2030” Strategy”, No. PD-158 of 11.09.2023, <https://lex.uz/ru/docs/6600404>

⁵ Decree of the President of the Republic of Uzbekistan “On the state program for the implementation of the strategy “Uzbekistan — 2030” in the “Year of environmental protection and green economy”, No. PD-16 of January 30, 2025, <https://lex.uz/ru/docs/7375421>

⁶ <https://kun.uz/ru/news/2025/04/04/uzbekistan-sokratit-vybrosy-parnikovyx-gazov-na-16-mln-tonn>

Uzbekistan has developed **sectoral** adaptation plans for the five most vulnerable sectors of the economy: water resources, agriculture, healthcare, emergency situations, and buildings, covering the period up to 2030.

Adaptation measures constitute a part of the national contribution to the global efforts to combat climate change in accordance with the Paris Agreement.

The **developed NDC 3.0** and monitoring of its implementation are based on the adopted Decree of the President of Uzbekistan "On Measures to Implement a National Transparency System in the Transition to a "Green" Economy in the Republic of Uzbekistan"⁷. This decision is founded on the country's commitments under the Paris Agreement and provides for the establishment of a transparent system for monitoring, reporting, and verification of greenhouse gas emissions.

Additionally, when developing its NDC 3.0, the Government of Uzbekistan considered the results of the first Global Stocktake (GST1).

3. Global Stocktake

All states that have ratified the Paris Agreement have committed to making efforts to limit the increase in global average temperature to at least no more than 2 °C above pre-industrial levels. However, as the first Global Stocktake has shown, the collective actions of states at the current stage are still insufficient to achieve this goal.

The UNEP's 2024⁸ Emissions Gap Report notes that countries' current commitments for 2030 are not being met. Even if they were to be fulfilled, the temperature increase would be limited to only 2.6-2.8 °C. Continuing the current policy will lead to a catastrophic temperature increase of 3.1 °C. The consequences for people, the planet, and the economy will be detrimental. To achieve the goal of limiting warming within 1.5 °C, it is necessary to reduce the global temperature by 42 percent by 2030, and by 57 percent by 2035.

According to GST1⁹, even though greenhouse gas emissions remain stable after 2030, they cannot be reduced sufficiently quickly to achieve the targets set by the IPCC in its Sixth Evaluation Report. The IPCC emphasizes that global greenhouse gas emissions should decrease by 43 percent by 2030 and by 60 percent by 2035 compared to 2019 levels to align with the global warming limiting trajectory, which is 1.5 °C.

Rapid and targeted reduction of methane emissions and other short-lived climate pollutants (SLCPs) not related to CO₂ also plays a significant role, complementing efforts toward deep decarbonization. Reducing SLCP emissions can decrease warming by 0.5 °C by 2050.

GST1 also emphasized the importance of addressing climate and biodiversity issues through joint efforts, since conservation, protection, and restoration of the environment and ecosystems are key to achieving the goal of the Paris Agreement.

Along with calls to phase out fossil fuels in energy systems, triple the use of renewable energy sources for power generation, and double energy efficiency worldwide by 2030, the GST1 document also acknowledges the need to reach peak global emissions by 2025. Additionally, Global Stocktake emphasized the urgent necessity to intensify climate adaptation action.

⁷ Resolution of the President of the Republic of Uzbekistan "On Measures to Implement a National Transparency System in the Transition to a "Green" Economy in the Republic of Uzbekistan," No RP-213 of 05.06.2024

⁸ <https://www.unep.org/ru/resources/doklad-o-razryve-v-urovne-vybrosov-za-2024-god>

⁹ <https://unfccc.int/topics/global-stocktake/about-the-global-stocktake/outcome-of-the-first-global-stocktake#:~:text=The%20first%20global%20stocktake%20outcome,goals%20of%20the%20Paris%20Agreement.>

For Uzbekistan, based on the goals and requirements of the GST1, and considering the country's young population, the potential of renewable energy, and the dynamic development of the economy, NDC3.0 provides a unique opportunity to bring climate strategies to a higher level, as the country has enormous potential for transitioning to a "green" and just path of the country's development.

4. Transparency

The progress in the implementation of NDC 3.0 and the evaluation of the effectiveness of the implemented measures and strategies will be tracked within the relevant component of the Monitoring, Reporting and Verification System (MRV) and will be reflected in the subsequent Biennial Reports on Transparency of Uzbekistan.

In connection with the adoption of the NDC and the need to track progress achieved, the role and requirements for transparency in preparing national climate change reports are being strengthened. In 2024, Uzbekistan presented its First Biennial Transparency Report (BTR1) and National Greenhouse Gas Inventory Report (NIR) for 1990-2022¹⁰.

As part of the CITEPA program, the National Transparency System is launching the online platform "RISQ" to support the reporting elements of the MRV system, adapted to the conditions of Uzbekistan.

Transparency of climate change mitigation and adaptation actions in the implementation of NDC 3.0 is ensured through:

- Implementation of an integrated MRV system for tracking the progress of NDC implementation, including monitoring of greenhouse gas emissions, implementation of climate change mitigation measures, climate adaptation measures and actions, and financial support, in accordance with Article 13 of the Paris Agreement (Decision 18/CMA.1).
- Maintenance of a Greenhouse Gas Emissions Inventory and submission of national greenhouse gas inventory reports.
- Engagement of the broader public in the reporting process (inclusive approach).

5. National Circumstances

5.1. Consistence of NDCs with Sustainable Development Goals and national priorities

The updated NDC 3.0 is overall aligned with the National Sustainable Development Goals (SDGs), through their integration into national strategies and planning frameworks, including goals for ensuring access to clean energy (SDG 7), sustainable infrastructure development, industrialization and innovation (SDG 9), transition to responsible consumption and production (SDG 12), combating climate change (SDG 13), and preserving terrestrial ecosystems (SDG 15). Furthermore, the document considers the goals of the country's socio-economic development, with considering current national circumstances.

NDC 3.0 acknowledges the crucial role of structural reforms in ensuring long-term policy changes, prioritizing measures to enhance energy efficiency and expanding the use of renewable energy sources for power generation. It also emphasizes the implementation of resource-saving and

¹⁰ https://unfccc.int/sites/default/files/resource/NIR_BTR_kadastrGHG_Uzbekistan_0.pdf

energy-efficient technologies in key economic sectors and the social sphere, both in terms of economic benefits and climate change mitigation and adaptation.

The Climate Change Adaptation section of NDC 3.0 contributes to the implementation of the SDGs by strengthening benchmarks for enhancing climate risk resilience and reducing the risks of natural disasters related to climate change (SDG target 1.5), sustainable water management (SDG targets 6.4-6.5), ecosystem conservation (SDG targets 6.6, 15.2-15.3) and climate action integration into the country's policy (SDG targets 13.2-13.3).

The implementation of tasks aimed at improving water use efficiency and expanding the scale of greening and reforestation efforts to combat desertification contributes not only to achieving climate goals and implementing national commitments within the framework of sustainable development but also supports the "Green Land" (Yashil Makon) Program launched in 2021. The Program aims to increase the share of green coverage from 8 percent to 30 percent by planting one billion trees and shrubs within five years. This initiative simultaneously contributes to achieving SDG 15 and is directed at restoring degraded landscapes, including reducing dust levels in vulnerable areas such as the territory of the previous Aral Sea Basin.

The National Committee of the Republic of Uzbekistan on Statistics, in collaboration with relevant ministries and agencies, has developed and approved a list of 190 SDG indicators reflecting priority areas for sustainable development in the context of the country's socio-economic realities. Uzbekistan is fully fulfilling its commitments to implement the UN's Program "2030 Agenda for Sustainable Development"¹¹.

The goals and objectives of NDC 3.0 are based on key strategic documents, including national, sectoral, and regional development strategies, concepts, and roadmaps covering the economic, social, and environmental development of the country and its regions, with considering climate change challenges. National documents such as the "New Uzbekistan" Development Strategy (2022-2026)¹² and the "Uzbekistan-2030" Strategy¹³ demonstrate a high level of commitment to the principles of sustainable development, which confirms the interconnected and systematic nature of state policy in this sphere.

According to the 2024 Global Sustainable Development Report, published by the international organization "Sustainable Development Solutions Network", Uzbekistan is ranked 81st (among 167 countries) with a score of 69.2. In the 2025 ranking, Uzbekistan improved its position by 3 positions and ranked 78th with a rating of 70.7 among 167 countries, reflecting the country's progress in implementing the Sustainable Development Goals.

5.2. Legal basis for updating the NDC

Issues related to the implementation of the provisions of Articles 4 and 12 of the UNFCCC concerning greenhouse gas emission inventories, as well as the provisions of Article 13 of the Paris Agreement, are directly or indirectly regulated by the current legislation of the Republic of Uzbekistan.

The list of legal acts that directly regulate these issues includes:

The Law of the Republic of Uzbekistan "On the Ratification of the Paris Agreement (Paris, December 12, 2015)" came into force in 2018¹⁴.

¹¹ "National indicators for achieving the Sustainable Development Goals in the Republic of Uzbekistan", <https://nsdg.stat.uz/>

¹² <https://lex.uz/ru/docs/5841077>

¹³ <https://lex.uz/ru/docs/6600404>

¹⁴ Law of the Republic of Uzbekistan "On the Ratification of the Paris Agreement (Paris, December 12, 2015)", No. LRU-491 of 02.10.2018.

The Resolution of the President of the Republic of Uzbekistan "On the approval of the Strategy for the transition of the Republic of Uzbekistan to a 'green' economy for the period 2019-2030".¹⁵ This Strategy considers the establishment of an MRV system as a necessary condition for continuous monitoring of the country's quantitative commitments under the Paris Agreement and ensuring reporting on greenhouse gas emissions.

The Decree of the President of the Republic of Uzbekistan "On the Development Strategy of 'New Uzbekistan' (2022-2026)"¹⁶ The strategy has been aligned with the objectives of transitioning to a "green" economy. Within the framework of seven key areas, 96 goals have been identified, each with a specific set of target indicators established. These include priority areas of particular importance for climate change mitigation and adaptation.

The Resolution of the President of the Republic of Uzbekistan "On Measures to Increase the Effectiveness of Reforms Aimed at Transitioning of the Republic of Uzbekistan to a "Green" Economy until 2030"¹⁷ was adopted in 2022 in order to implement the objectives defined in the "New Uzbekistan" Strategy, increase the effectiveness of measures taken to ensure "green" growth within the framework of the "Green" Economy Transition Strategy, as well as further expanding the use of renewable energy sources and resource-saving, which also approved the following documents:

- Program, Concept, and Action Plan for the transition to a "green" economy and ensuring "green" growth in Uzbekistan up to 2030.
- Target parameters for fuel and energy resource-saving for the period 2022-2026, aimed at reducing the energy intensity indicator of products manufactured by 25 leading enterprises by 20 percent in 2026 compared to 2022.

The Program for the Transition to a "Green" Economy and Ensuring "Green" Growth in Uzbekistan up to 2030 outlines six priority thematic areas:

- Sustainable and efficient use of natural resources.
- Strengthening the national economy's resilience to natural disasters and climate change.
- Ensuring "green" and low-carbon development of the national economy, particularly in industry.
- Implementing innovations and attracting effective "green" investments.
- Developing sustainable and inclusive "green" urbanization.
- Supporting the most vulnerable segments of the population and their habitats during the transition to a "green" economy.

The implementation of tasks in the above indicated areas is carried out alongside cross-sectoral measures aimed at building capacity, establishing effective institutions for the transition to a "green" economy, and increasing both external and internal flows of "green" financing. According to the Resolution:

- Infrastructure for state accounting and regulation of greenhouse gas emissions is being developed in stages, including the creation of a greenhouse gas registry and inventory procedures for implementing investment projects aimed at reducing greenhouse gas emissions.
- A modern MRV (Monitoring, Reporting, and Verification) system for greenhouse gas emissions is being implemented.

¹⁵ <https://lex.uz/docs/4539506>

¹⁶ <https://lex.uz/ru/docs/5841077>

¹⁷ <https://lex.uz/ru/docs/6303233>

- A procedure for implementing electricity storage systems with a capacity of at least 25 percent of the installed capacity of renewable energy sources is envisaged.

The Decree of the President of the Republic of Uzbekistan "On the "Uzbekistan-2030" Strategy",¹⁸ which came into force in 2023, ensures the achievement of all goals that have not lost their relevance, as well as the implementation of the urgent tasks defined in the "New Uzbekistan" Development Strategy, including the transition to a "green" economy through radical increase in renewable energy use indicators as its basis; preventing the negative impact of climate change; preventing emergencies and disasters induced by global climate change that pose a threat to human life.

The Law of the Republic of Uzbekistan "On Energy Saving, Its Rational Use and Increasing Energy Efficiency"¹⁹ adopted in 2024. This law aims to establish an effective energy consumption management system, reduce energy costs, and support the sustainable development of Uzbekistan's economy.

The Decree of the President of the Republic of Uzbekistan "On Measures to Implement a National Transparency System in the Transition to a 'Green' Economy in the Republic of Uzbekistan"²⁰ This decree was adopted in 2024 to accelerate the development of a "green" economy in the country, significantly increase the level of transparency in this area, and effectively and timely implement the tasks outlined in the measures to enhance the effectiveness of reforms aimed at transitioning the Republic of Uzbekistan to a "green" economy by 2030. The decree approved the Concept for Implementing a National Transparency System in the Transition to a "Green" Economy.

The Decree of the President of the Republic of Uzbekistan "On the Establishment of the Climate Council under the President of the Republic of Uzbekistan"²¹ adopted in 2024, according to which a Climate Council was established in the country, which is the highest advisory body on climate change mitigation and adaptation. Its tasks include, among others, monitoring the fulfillment of the country's commitments arising from the provisions of the UN Framework Convention on Climate Change and the Paris Agreement.

The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On Approving the Concept for Implementing a National Transparency System in the Transition to a 'Green' Economy in the Republic of Uzbekistan"²², which came into effect in 2024, serves as an addition to the Resolution of the President of the Republic of Uzbekistan "On Measures to Implement a National Transparency System in the Transition to a 'Green' Economy in the Republic of Uzbekistan". It outlines the main provisions of the Concept for Implementing the National Transparency System in the Transition to a "Green" Economy, defines the terminology, and establishes the goals and principles of the national transparency system.

The Decree of the President of the Republic of Uzbekistan "On Measures to Participate in the International Carbon Market"²³, which came into effect in 2025, and aims to implement tasks outlined in the "Uzbekistan-2030" Strategy²⁴. Its objectives include further expanding the country's contribution in reducing greenhouse gas emissions on a global scale, attracting investments through access to the international carbon market, as well as supporting low-carbon

¹⁸ <https://lex.uz/ru/docs/6600404>

¹⁹ <https://lex.uz/docs/7052217>

²⁰ <https://lex.uz/docs/6956104>

²¹ <https://www.lex.uz/uz/docs/7044892>

²² <https://lex.uz/ru/docs/7248680>

²³ <https://lex.uz/ru/docs/7616216>

²⁴ <https://lex.uz/ru/docs/6600404>

development projects, and reducing the "carbon footprint" through the use of innovative and energy-efficient technologies in economic and social spheres.

The Decree of the President of the Republic of Uzbekistan "On the State Program for the Implementation of the 'Uzbekistan-2030' Strategy in the 'Year of Environmental Protection and Green Economy" adopted in 2025²⁵ and aimed at implementing a comprehensive "green transformation" of industries and sectors while fulfilling the country's commitments to the global community within the framework of the Kyoto Protocol to the UN Framework Convention on Climate Change and the Paris Agreement. The decree focuses on ensuring competitiveness and resource-saving, and climate change mitigation and adaption, and improving the quality of life of the population, and transitioning economic growth to a new "green" development model.

The Law of the Republic of Uzbekistan "On Limiting Greenhouse Gas Emissions"²⁶ adopted in 2025, is aimed at systematically regulating and reducing greenhouse gas emissions, as well as supporting "green" initiatives. The law provides for:

- Maintaining state records on emissions, setting target indicators, and supporting projects aimed at reducing emissions and increasing carbon removals.
- Developing a government resolution that establishes the procedure for participation of legal entities, individual entrepreneurs, and individuals in the international carbon market and trading of carbon units obtained domestically.
- Development and maintenance of the state register of reduced greenhouse gas emissions.
- Development of a government resolution establishing the procedure for maintaining the greenhouse gas emissions inventory.
- Development of a government resolution establishing the procedure for submitting reports on GHG emissions at the enterprise/organization level and their verification.
- Development of a government resolution establishing the procedure for approving target indicators for reducing GHG emissions for sectors of the national economy.
- Alignment of the existing legal and regulatory framework with the adopted law.

5.3. Mitigation of Climate Change Impacts

5.3.1. Greenhouse Gas Emissions Inventory for the period up to 2022

Based on previous updates to the NDCs and the results of the First Biennial Transparency Report (BTR1) published in 2024, the new NDC 3.0 target for 2035 continues to use the same target-setting methodology as the previous NDC 2.0.

The results of the greenhouse gas emissions inventory serve as the foundation for assessing progress in implementing the NDCs, as well as for updating the country's commitments under the Paris Agreement.

The current inventory covers the period from 1990 to 2022.²⁷ The main distinction of this inventory from previous ones is that it was conducted in accordance with the transparency requirements of the Paris Agreement (ETF). The greenhouse gas inventory encompasses five sectors: "Energy", "Industrial Processes and Product Use" (IPPU), "Agriculture", "Land Use, Land-Use Change and Forestry" (LULUCF), and "Waste". The methodological foundation for conducting the inventory is the "Guidelines for National Greenhouse Gas Inventories, IPCC, 2006". The updated inventory was prepared using the IPCC Inventory Software v2.93, which ensures a more

²⁵ <https://lex.uz/ru/docs/7369745>

²⁶ <https://lex.uz/ru/docs/7618153>

²⁷ https://unfccc.int/sites/default/files/resource/NIR_BTR_kadastrGHG_Uzbekistan_0.pdf

accurate and precise representation of GHG emissions, including in the Common Reporting Tables (CRT).

The inventory includes carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. In the future, it is planned to expand the coverage of greenhouse gases and include other F-gases specified by the IPCC in the inventory as well. For this purpose, research will be conducted to identify emission sources and collect data on relevant activities. Due to the current lack of required information on the sources of emissions for perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride, these gases are not included in the NDC 3.0.

Greenhouse gas emission trends. In 2022, the total volume of greenhouse gas emissions in Uzbekistan amounted to 209.6 million tons of CO₂-eq. Considering absorptions in the "Land Use, Land Use Change and Forestry" (LULUCF) sector, it totaled 201.15 million tons of CO₂-eq. Compared to 1990 levels, net greenhouse gas emissions increased by 41 percent by 2022, which amounts to 58.6 million tons of CO₂-eq.

During the period 2010-2022, which encompasses the implementation phase of commitments under the Paris Agreement, net greenhouse gas emissions in Uzbekistan increased **by 16.7 percent (28.8 million tons of CO₂-eq.)**. This indicates an intensification of their growth, especially over the past five years. The increase in the annual growth rate of greenhouse gas emissions is linked to the acceleration of economic growth in the country.

The total greenhouse gas emissions per capita amount to 5.94 tons of CO₂-eq. per person. The contribution of the Republic of Uzbekistan to global greenhouse gas emissions is approximately 0.4 percent.

5.3.2. Progress in the Implementation of Uzbekistan's NDC 2.0

As a developing country, Uzbekistan has chosen *specific greenhouse gas emissions per unit of GDP known as the carbon intensity of GDP* as its main quantitative indicator.

The progress in fulfilling the NDC 2.0 commitments to date is presented in the *First Biennial Transparency Report (BTR1)*. According to the report, as of 2022, the reduction in GDP carbon intensity was approximately 35-40 percent compared to the 2010 level. However, this does not mean that the NDC 2.0 target has been achieved ahead of schedule, as the target year is 2030, and the achieved level of reduction must be maintained until the specified date.

Nevertheless, current trends demonstrate that Uzbekistan possesses significant potential to maintain its present rate of carbon intensity reduction and to further advance along the path of sustainable development. These trends also confirm the effectiveness of measures being taken to achieve the key mitigation target of the Nationally Determined Contribution (NDC). However, the carbon intensity of Uzbekistan's economy still remains one of the highest in the Central Asian region.

Uzbekistan's fulfillment of quantitative commitments taken under the Paris Agreement for 2022 is primarily driven by the accelerated GDP growth rate compared to the overall GHG emissions increase. This confirms the effectiveness of the measures being taken to achieve the key mitigation target of NDC.

5.3.3. Projections of greenhouse gas emissions for the period up to 2035

The GACMO (Greenhouse Gas Abatement Cost Model²⁸) model was used to calculate the possible **updated numerical value** of NDC for the period up to 2035. GHG emission forecast was compiled based on inventory data for 2022.

The calculations are founded on projected population and GDP data, as well as an assessment of the potential reduction in greenhouse gas emissions as a result of implementing development strategies, sectoral programs, and projects in key sectors of the economy. The forecasting was conducted using three scenarios reflecting different levels of ambition for reducing greenhouse gas emissions.

The Inertial scenario - business-as-usual (BAU) scenario was calculated based on existing economic development trends, without considering additional measures to mitigate the impacts of climate change.

The realistic scenario considered the potential for stabilizing/reducing greenhouse gas emissions in economic sectors and subsectors (energy, oil and gas industry, forestry, etc.) resulting from the implementation of energy saving and energy efficiency measures outlined in adopted national and sectoral programs, and investment projects with secured funding. The estimated emissions reduction potential amounts to **approximately 62-65 million tons of CO₂-eq.**

The ambitious scenario considered the most intensive development of sectors (industry, transport, energy), the advancement of a "green" economy, and the implementation of maximum potential for reducing greenhouse gas emissions. The calculated reduction rate is approximately **85-95 million tons of CO₂-eq.**

Under the first two scenarios, the total volume of greenhouse gas emissions is projected to increase compared to 2022 levels (209.6 million tons of CO₂-eq.):

The Inertial scenario (BAU) - by 34 percent by 2030 and by 55 percent by 2035

The Realistic scenario - by 4 percent by 2030 and by 6.5 percent by 2035.

The Ambitious scenario forecasts a reduction in total emissions by 6-11 percent.

The projected positive trends in greenhouse gas emissions are attributed to the country's population growth and increasing living standards; development of energy-intensive economic sectors (industry, construction, transport); increased extraction and processing of fossil fuels; and growth in agricultural production due to strengthened export potential and efforts to ensure food security.

5.4. Measures and actions for reducing greenhouse gas emissions in Uzbekistan

Uzbekistan, as a country with a continental climate, extreme temperatures, and high energy demand, faces numerous challenges due to the adverse impacts of climate change on various sectors of the economy and the social sphere. While greenhouse gas emissions continue to rise, the carbon intensity of the GDP is noticeably decreasing.

Climate change issues have been integrated into almost all sectoral and national strategies, and the country's development plans. Uzbekistan is actively taking measures to strengthen its legal framework, enhance institutional coordination, and expand international cooperation.

As part of ensuring the fulfillment of the commitments made under the Paris Agreement, the priorities for transitioning the economy to the "green" development path were defined in 2019,

²⁸ <https://unepcc.org/gacmo-tool/>

and the Strategy for the Transition of the Republic of Uzbekistan to a "Green" Economy for the period 2019-2030²⁹ and its updated version adopted in 2022.³⁰

In recent years, the government of Uzbekistan has significantly intensified its efforts to promote the "green" agenda, including through cooperation with international development partners such as UNDP, World Bank, FAO, ADB, AFD, GIZ, and others³¹.

The transition to a "green" economy in the context of global climate change is becoming an integral part of the national development strategy for the Republic of Uzbekistan. This transformation is not merely a technological or sectoral task, but primarily a large-scale social project. In accordance with NDC 3.0, Uzbekistan aims not only to reduce greenhouse gas emissions and improve resource efficiency but also to ensure that climate and environmental measures contribute to poverty reduction, expanded opportunities for youth and women, and social protection for the most vulnerable segments of the population.

Uzbekistan also continues to enhance its adaptive capacity to reduce the risk of adverse climate change impact on various sectors of the economy and the social sphere.

The comprehensive sectoral targets in the "Uzbekistan-2030" Strategy lay a solid foundation for enhancing the ambition of NDC 3.0. The Strategy encompasses five priority areas, within which 99 specific goals have been developed with established indicators to be achieved by 2030. The successful reduction of specific greenhouse gas emissions per unit of GDP, combined with clear sectoral roadmaps and implementation mechanisms ensures significant potential for adopting more ambitious commitments within the framework of NDC 3.0.

Based on the formulated strategic outlines presented above, the following presents an overview of practical measures aimed at reducing greenhouse gas emissions in key sectors of Uzbekistan's economy.

5.4.1. Energy Sector

The energy sector holds a special place in Uzbekistan's economy. It is the largest consumer of fuel, and it is both a producer and consumer of energy, and consequently, the primary source of greenhouse gas emissions. In 2022, the sector's contribution to GHG emissions in Uzbekistan accounted for 64 percent of total emissions. This is attributed to the predominant use of fossil fuels for electricity and heat generation in the country's energy mix, along with high levels of energy consumption in industry, transportation, and buildings. Additionally, fugitive emissions from the oil and gas sector, primarily from natural gas transportation and distribution systems, make a significant contribution to this sector's emissions (approximately 19 percent). At the same time, this sector is also a key tool for achieving national climate targets, and for ensuring energy security.

Consistent with existing trends, the energy sector will also remain the dominant sector in terms of GHG emissions in the future. at the same time, there will be a trend towards an increase in the share of GHG emissions from non-energy sectors (in particular, in 2022 it was 36.3 percent, while in 2010 it was about 26.3 percent). Due to the measures being implemented to reduce GHG emissions, their growth in the "Energy" sector is the lowest among all sectors, showing an increase of only 4.9 percent compared to 2010 levels.

²⁹ <https://lex.uz/docs/4539506>

³⁰ <https://lex.uz/ru/docs/6303233>

³¹ Resolution of the President of the Republic of Uzbekistan "On measures to improve the effectiveness of reforms aimed at transitioning the Republic of Uzbekistan to a "green" economy until 2030, No.RP-436 of 02.12.2022, <https://lex.uz/ru/docs/6303233>

If greenhouse gas emission trends persist in the "Energy" sector, it could decrease to 19-20 million tons of CO₂-eq by 2035-2040 due to the diversification of electricity generation sources and a reduction in fugitive emissions of greenhouse gases (methane) from the use of natural gas as fuel for gas systems.

The leading Uzbek oil and gas company, Sanoat Energetika Guruhi LLC (Saneg), which accounts for 80 percent of the country's oil production and 5 percent of gas production, has become the first company in Central Asia to implement a project for reducing methane emissions at its production facilities and has registered it with the German Emissions Trading Authority (DEHSt).

"Saneg" Company has completed the first stage of a large-scale program for the technical modernization of its infrastructure facilities, which led to a significant irreversible reduction in methane emissions by more than 83 thousand tons of CO₂-eq per year.³² "Saneg" has also completed the implementation of a modern respiratory gas utilization system at the oil storage territorial production enterprises "Qarshi" and "Mubarek". As a result, the company has managed to substantially reduce emissions of volatile organic compounds, minimize oil product losses, enhance industrial safety at storage facilities, and decrease greenhouse gas emissions by more than 160 thousand tons of CO₂-eq per year.

Several reforms are being implemented in the country's energy sector aimed at modernizing and increasing the efficiency of this sector,^{33,34} with key aspects including:

Improving legislation: Development and adoption of new laws and regulations governing the energy sector to create a more predictable and stable regulatory environment for investors. The following laws have been adopted: "On ratification of the Statute of the International Renewable Energy Agency (Bonn, January 26, 2009)"³⁵; "On the Use of Renewable Energy Sources"³⁶; "On Public-Private Partnership"³⁷; "On Amendments and Additions to the Law of the Republic of Uzbekistan 'On the Rational Use of Energy'"³⁸; "About Saving Energy, its Rational Use and Improving Energy Efficiency"³⁹; and "On Electric Energy"⁴⁰.

Diversification of energy sources: According to the updated target indicators for the development of the electric power industry, presented by the Ministry of Energy of the Republic of Uzbekistan for projected implementation, electricity production is expected to increase to 87.2 billion kWh by 2025, and to 164.4 billion kWh by 2030, which is 36 percent higher than the previous estimates of the Ministry of Energy. At the same time, the total share of "clean" generating capacities (renewable energy sources based) will exceed 50 percent by 2030. As a result, the expected reduction in natural gas consumption could reach 30,259.5 million cubic meters in 2030.

Uzbekistan aims to reduce its dependence on fossil fuels for energy generation. The country possesses significant potential in the field of renewable energy sources - primarily in solar and wind energy - and is well-equipped to meet the growing demands during the transition to environmentally friendly energy. Projects on the use of solar and wind energy are being actively implemented, which contributes to the diversification of the country's energy system. In recent years, the government has been paying great attention to developing this sector and establishing an appropriate legal framework. An enabling environment for investors has been established.

³² <https://www.saneg.com/en/publications/308-saneg-neftni-saqdash-obyektlarida-nafas-olish-gazlarini-utilizatsiya-qilish-tizimini-joriy-etdi>

³³ <https://unfccc.int/sites/default/files/resource/FBURUzru.pdf>

³⁴ https://unfccc.int/sites/default/files/resource/4NC_Uzbekistan_RU.pdf

³⁵ <https://lex.uz/ru/docs/6821948>

³⁶ <https://lex.uz/docs/4346835>

³⁷ <https://lex.uz/docs/4329272>

³⁸ <https://lex.uz/docs/4895655>

³⁹ <https://lex.uz/docs/7064069>

⁴⁰ <https://lex.uz/ru/docs/7060174>

Large-scale programs for the construction of "green" energy production facilities have been initiated.

Attracting investments: Uzbekistan is opening the market for private investors and foreign companies to implement new energy projects using the public-private partnership (PPP) mechanism, which contributes to increased efficiency and the introduction of modern technologies. In 2023, the Concept for a phased transition to wholesale and retail electricity market mechanisms by 2030 was developed and adopted.⁴¹

Infrastructure improvement: Modernization of existing energy facilities, upgrading of thermal power plants, and enhancement of the power grid infrastructure. Based on the Concept for Ensuring Electricity Supply in the Republic of Uzbekistan for 2020-2030, adopted in 2020,⁴² the Ministry of Energy and relevant agencies continue to implement planned projects: modernization and reconstruction of existing power plants, construction of new generating capacities utilizing highly efficient energy production technologies, improvement of the electricity metering system, and diversification of fuel and energy resources with the development of renewable energy sources. The implementation of these plans will ensure the country's energy security, considering that, according to forecasts, energy consumption in Uzbekistan will nearly double within 10 years. The country is paying attention to the pace of development and modernization of the electricity distribution system, as the increase in generating capacities using renewable energy sources, the growth of industrial production, and population growth require improved efficiency in transmission and distribution networks.

Energy Efficiency: In line with the Sustainable Development Goals (Goal 7.3)⁴³ and decisions made following the Global Stocktake (GST1), Uzbekistan plans to double its energy efficiency improvement rate by 2030. State regulation in energy conservation and energy efficiency enhancement is ensured by the Cabinet of Ministers of the Republic of Uzbekistan as a specially authorized state body, as well as by local authorities. In 2025, a regulatory and legislative framework has been established to implement a unified national policy in the energy efficiency improvement, creating a market-based, integrated, and coordinated ecosystem. This includes developing auditing, consulting, and management in energy consumption and the market for energy service companies that generate income from energy savings, as well as expanding the use of "green" financial instruments.⁴⁴ A National Agency for Energy Efficiency⁴⁵ has also been established, which will implement programs and projects to improve energy efficiency aimed at reducing energy losses and enhancing energy consumption management.

Currently, improving energy efficiency is considered the primary energy resource. During a meeting on energy saving held by the President of the Republic of Uzbekistan⁴⁶, it was mentioned that in 2024, savings of 50 billion cubic meters of natural gas were achieved and 82.7 billion kWh of electricity was generated.⁴⁷

In 2025, the necessary measures aimed at accelerating the implementation of energy efficiency projects in various sectors of the economy and social sphere were defined in a government

41 Decree of the President of the Republic of Uzbekistan "On measures to carry out the next stage of reform in the energy sector", No DP.-166 of 28.09.2023, <https://lex.uz/uz/docs/6991184>; (Appendix 1), <https://lex.uz/uz/docs/6624455?otherlang=1>

42 <https://gov.uz/ru/minenergy/pages/about>

43 National Goals for Sustainable Development - Sustainable and Reliable Energy, <https://nsdg.stat.uz/goal/10>

44 Decree of the President of the Republic of Uzbekistan "On Measures to Improve Public Administration in the Field of Energy Efficiency Enhancement and the Development of the Energy Service Company Market", No DP-63 of March 27, 2025, <https://lex.uz/docs/7464127>

45 Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On Measures to Organize the Activities of the National Agency for Energy Efficiency under the Cabinet of Ministers of the Republic of Uzbekistan," No RP-. 292 of 02.05.2025. <https://www.lex.uz/ru/docs/7511815?otherlang=1>

46 President of the Republic of Uzbekistan: "Energy-saving proposals have been reviewed" <https://president.uz/ru/lists/view/7894>

47 National Statistics Committee of the Republic of Uzbekistan

decision.⁴⁸ This decision approved targeted programs and specific parameters for implementing energy-efficient technologies in 2025-2026, including the modernization of heating systems, installation of solar collectors, and conducting energy audits in public administrative buildings.

Reducing energy intensity: According to the preliminary report on the development of Uzbekistan's Long-term Low-Carbon Development Strategy, the energy sector is carbon-intensive for several reasons, including: the predominance of fossil fuels in the energy mix, the presence of energy- and resource-intensive heavy industries, outdated energy infrastructure, and low efficiency of thermal power plants.

Uzbekistan's energy intensity of GDP has decreased by 37 percent between 2018 and 2023. Nevertheless, Uzbekistan remains among the countries with high energy intensity, and the government is implementing measures to stimulate energy saving and reduce energy production costs. The indicators of energy intensity reduction have improved due to the gradual decommissioning of outdated energy generating facilities and the introduction of new energy generation technologies.

5.4.2. Industrial Processes and Product Use

The Industrial Processes and Product Use (IPPU) sector in Uzbekistan is the third largest source of greenhouse gas emissions after energy sector (including natural gas leaks - methane) and agriculture. The contribution of the "Industrial Processes and Product Use" sector to total emissions in 2022 was 14 percent, while greenhouse gas emissions during the 2010-2022 period increased 1.5 times due to production growth. The main contributors to greenhouse gas emissions in the sector are the production of construction materials (cement, glass, ceramic products), and the well-developed chemical industry, including the production of mineral fertilizers.

Measures aimed at reducing greenhouse gas emissions include improving energy efficiency, implementing modern technologies, and modernizing production lines. These measures in the industrial sector are being implemented in accordance with the "Uzbekistan-2030" Strategy,⁴⁹ sectoral and corporate strategies, as well as development programs.

The industrial sector, particularly processing industries, is viewed by the Uzbekistan government as one of key engines of economic development that is facilitating the country's transition to high-value-added production while simultaneously stimulating the growth of other sectors (for instance, the chemical industry for agriculture, and cement and metallurgical industries for construction sector) and transforming the labor market.

From the perspective of reducing greenhouse gas emissions, the most significant sectors are the production of construction materials, chemical industry, and metallurgy. According to a decree by the President of the Republic of Uzbekistan,⁵⁰ all new cement production projects must implement energy-saving technologies based on transition to the "dry" method. This measure will enable relative gas savings of 35-40 percent per ton of cement produced.

In the metallurgical industry, the Almalyk Mining and Metallurgical Plant, JSC has set targets to reduce greenhouse gas emissions by 15 percent (770 thousand tons of CO₂ eq) by 2030⁵¹ as part of its transition towards carbon neutrality.

⁴⁸ Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On measures to accelerate projects aimed at improving energy efficiency", No. 300 of 07.05.2025, <https://www.lex.uz/uz/docs/7525707>

⁴⁹ <https://lex.uz/docs/6991208>

⁵⁰ Resolution of the President of the Republic of Uzbekistan "On additional measures for the accelerated development of the construction materials industry" No RP.-4335 of 23.05.2019, <https://www.lex.uz/uz/docs/7571918>

⁵¹ Almalyk Mining and Metallurgical Plant: "Environmental Accountability", <https://agmk.uz/en/menu/ekologicheskaja-otvetstvennost>

According to the preliminary report on the development of Uzbekistan's Long-term Low-Carbon Development Strategy, the industrial sector is viewed as a driving force for sustainable socio-economic development. The promotion of circular economy principles and the transition to low-carbon development are cross-cutting directions in all strategic documents.

The "Uzbekistan-2030" Strategy emphasizes increasing the share of industrial technological products from 25 percent to 32 percent; doubling the production volume of construction materials and expanding the production of new types of energy-saving materials; creating large chemical-polymer clusters in the Republic of Karakalpakstan, Bukhara, Navoi, Tashkent, and Fergana regions; and engaging enterprises in the production of finished goods with high added value.

Specifically, in the chemical industry, measures include, among other initiatives, the modernization and construction of new energy-efficient plants for the production of ammonia, nitric acid, and mineral fertilizers, as well as the use of heat recovery technologies in energy-intensive chemical processes to generate electricity.

In 2021, Uzbekistan joined the global initiative The Nitric Acid Climate Action Group (NACAG) and committed to transforming nitric acid production by acquiring technologies to reduce nitrogen dioxide emissions. The potential of this sector to reduce greenhouse gas emissions in Uzbekistan is estimated at approximately 2 million tons of CO₂-eq per year. Currently, in cooperation with NACAG and the German Agency for International Cooperation (GIZ), three projects are being implemented to reduce nitrous oxide (N₂O) emissions. As a result of these projects, N₂O emissions into the atmosphere are expected to decrease by 1,613,300 tons of CO₂-eq.

Measures to reduce greenhouse gas emissions in the construction materials industry are aimed at increasing the use of the secondary and recycled resources and introducing innovative energy-efficient technologies. Especially in the production of cement, the use of technologies for utilizing the heat of exhaust gases and the widespread introduction of the "dry" method of production are being promoted.

Uzbekistan aims to reduce methane emissions by 30 percent⁵² and reduce the level of pollutants in the atmosphere by 10.5 percent by 2030⁵³ to address the problem of unorganized emissions. The target indicators also include the complete modernization of polluting technologies at specific economic entities, as well as the construction and reconstruction of local drainage and treatment facilities at 249 industrial enterprises.

5.4.3. Solid household waste management

In 2022, the emissions of greenhouse gases in the "Waste"⁵⁴ sector amounted to 10.5 million tons of CO₂-eq, which is 5 percent of the country's total greenhouse gas emissions. The volume of emissions in this sector increased 1.4-fold compared to 2010.

A national law "On Waste"⁵⁵ is in effect in Uzbekistan, aimed at preventing the harmful impact of waste on the life and health of citizens, the environment, reducing waste generation, and ensuring its rational use in economic activities.

⁵² https://www.uzdaily.uz/ru/uzbekistan-prisoedinilsia-k-globalnomu-obiazatelstvu-po-sokrashcheniiu-vybrosov-metana/12/analiticheskaya_zapiska_o_vozmozhnostyakh_povysheniya_ambicioznosti_i_kachestva_suschestvuyuschiikh_ndc_v_uzbekistane.pdf

⁵³ "Uzbekistan - 2030" Strategy, <https://lex.uz/ru/docs/6600404>

⁵⁴ Biennial Report on Transparency of the Republic of Uzbekistan - https://unfccc.int/sites/default/files/resource/BTR1_Uzbekistan_eng.pdf

⁵⁵ Law of the Republic of Uzbekistan "On Waste," of 05.04.2002. № 362-II, <https://lex.uz/docs/6817352>

The Strategy for Solid Household Waste (SHW) Management in Uzbekistan for 2019-2028⁵⁶ identifies key challenges in SHW management and sets several target indicators, including achieving 100 percent coverage of the population with waste collection and removal services by 2028 and achieving a solid household waste recycling level of 60-65 percent. Within the framework of the "Uzbekistan-2030" Strategy, more ambitious indicators were defined and comprehensive goals were set, including generating up to 35 percent of alternative energy from waste incineration, while reducing the area of household waste landfills by 50 percent.

Implemented measures. In recent years, Uzbekistan has carried out significant work to improve the infrastructure of the solid waste management system. This includes the establishment of 13 state unitary enterprises for sanitary cleaning with 172 branches in districts and cities, as well as 9 clusters for integrated solid waste management.

According to the preliminary report on the development of Uzbekistan's Long-term Low-Carbon Development Strategy, the waste management sector is one of the main potential areas where projects to reduce greenhouse gas emissions need to be implemented.

In recent years, Uzbekistan has significantly strengthened its waste management system, including through the implementation of the Waste Management Strategy for 2019-2028. Clusters capable of processing up to 1 million tons of waste per year have been established in 9 cities. A methane capture system has been implemented at a landfill in the Tashkent region, contributing to a reduction in greenhouse gas emissions.

Moreover, the implementation of **a number of large investment projects** aimed at developing the infrastructure for the collection, transportation, processing, and disposal of solid household waste has begun, including:

- The "Sustainable Solid Household Waste Management" project will be implemented using a loan of USD 60.0 million with the participation of the ADB.⁵⁷
- The "Production of Alternative Thermal Energy from Medical Waste" project, implemented by Sayar LLC (USA). In the first stage during 2024-2025, it is scheduled to attract USD 7 million in direct investments and commissioning of equipment with a production capacity of 20 GW of power per year for thermal processing of 6 thousand tons of medical waste.⁵⁸
- "Production of electricity by burning solid household waste in the city of Tashkent, Tashkent and Andijan regions" project with the participation of the company "China CAMC Engineering" (People's Republic of China). The project implementation is scheduled for 2025-2027.⁵⁹
- "Electricity generation by burning solid household waste in Namangan and Fergana regions" project with the participation of "China Everbright International Limited" (People's Republic of China). The project implementation is scheduled for 2025-2027.⁶⁰

⁵⁶ Resolution of the President of the Republic of Uzbekistan "On the approval of the Strategy for Municipal Solid Waste Management in the Republic of Uzbekistan for 2019 — 2028", No RP. -4291 of April 17, 2019, <https://lex.uz/docs/7570199>

⁵⁷ Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On measures to implement the project "Sustainable management of solid household waste" with the participation of the Asian Development Bank", No. 748 of November 25, 2020, <https://www.lex.uz/ru/docs/5131536?otherlang=3>

⁵⁸ Resolution of the President of the Republic of Uzbekistan "On measures to implement the investment project "Production of alternative thermal energy from medical waste"", No RP-263 of July 17, 2024, <https://lex.uz/docs/7027632>

⁵⁹ Resolution of the President of the Republic of Uzbekistan "On measures for the implementation of the investment project «Electricity generation through incineration of solid household waste in the city of Tashkent, Tashkent Region, and Andijan Region», No RP-116 of 24.03.2025, <https://lex.uz/ru/docs/7445569>

⁶⁰ Resolution of the President of the Republic of Uzbekistan No. RP -117 of March 24, 2025, "On Measures to Implement the Investment Project "Production of Electrical Energy by Burning Solid Waste in Namangan and Fergana Regions", <https://lex.uz/ru/docs/7444609>

- "Production of electricity by burning solid household waste in Kashkadarya and Samarkand regions" project with the participation of the company "Shanghai SUS Environment" (People's Republic of China). The project implementation is scheduled for 2025-2027.⁶¹

5.4.4. Transport Sector

The transport sector is one of the key sources of greenhouse gas emissions in Uzbekistan.

The transport sector accounts for 15 percent of greenhouse gas emissions from fuel combustion. The main source of emissions from transport is road transport, which accounts for 92.2 percent, while aviation accounts for 0.3 percent, and railway transport for 1.8 percent. From 2010 to 2022, emissions from transport increased by 36.1 percent overall, including a 2.3-fold increase in emissions from road transport specifically.⁶²

The growth of greenhouse gas emissions in the transport sector is a significant problem for Uzbekistan. However, the implementation of planned measures for railway electrification, public transport development, and the transition to environmentally friendly vehicles will slow the growth rate of greenhouse gas emissions and reduce them by 2.5 million tons of CO₂-eq per year.

This sector is linked to several Sustainable Development Goals, including: SDG 7 - Affordable and Clean Energy, SDG 9 - Industry, Innovation and Infrastructure, SDG 11 - Sustainable Cities and Communities, SDG 13 - Climate Action.

To decarbonize its sectors of national economy, Uzbekistan is focusing on the electrification of transport. The country possesses certain production capacities in the field of mechanical engineering; however, it remains dependent on imports of key components, primarily battery cells. Successful electrification requires not only the development of production but also the creation of modern infrastructure - including the expansion of electrical grids, the construction of charging stations, and integration with "green" power generation.

The Uzbekistan 2030 Strategy envisages the implementation of a number of measures to reduce the environmental impact of the transport sector by 2030, including the electrification of rail transport and the conversion of the public transport fleet to environmentally friendly fuels. This course aligns with the country's international commitments under the Paris Agreement and the UN Sustainable Development Goals. Implementation of climate policy in the transport sector should be carried out in parallel with the transition to clean energy in the electric power industry. This approach ensures that electrification genuinely contributes to reducing greenhouse gas emissions, rather than merely shifting them to other sectors of the economy.

One of the main barriers to the transition to electric transport remains the high capital costs associated with purchasing electric vehicles. This necessitates the implementation of appropriate financial instruments, including government subsidies, preferential lending mechanisms, and public-private partnerships. Such measures are especially crucial in the early stages when the operational advantages of electric vehicles are not yet able to offset their high price.

5.4.5. Agriculture, land use, land-use change and forestry

The "Agriculture" and "Land Use, Land-Use Change and Forestry (LULUCF)" sectors are given special attention in the "Uzbekistan-2030" Strategy. Since 2021, a nationwide project called "Yashil

⁶¹ Resolution of the President of the Republic of Uzbekistan "On measures for the implementation of the investment project "Electricity generation through incineration of solid household waste in Kashkadarya and Samarkand Regions", No RP.-118 of 24.03.2025, <https://lex.uz/ru/docs/7448571>

⁶² https://unfccc.int/sites/default/files/resource/BTR1_Uzbekistan_eng.pdf

makon" (Green Space)⁶³ is being implemented, which envisages planting 1 billion tree and shrub seedlings across the country within the next five years, as well as increasing the area of green areas and parks from 8 percent to 30 percent by 2026.

Special attention in the country is focused on creating protective forests ("Yashil Qoplamlar") on the dried-up bed of the Aral Sea. Between the autumn of 2018 and 2023, work has been carried out to create forests on an area of more than 1.7 thousand hectares on the dried bottom of the Aral Sea and in the Aral Sea region.

By 2023, as part of a nationwide project, 588 hectares of "green parks", 622 hectares of "green public parks", as well as "green belts" around the cities of Bukhara, Nukus, Khiva, and Urgench with a total length of 40 km were created. In the same year, the government adopted a decision⁶⁴ on measures to ensure environmental sustainability by further increasing the level of greenery in Uzbekistan and consistently implementing the nationwide "Yashil Makon" project.

The implementation of a program to increase green spaces in the Aral Sea region and on a dried bed of Aral Sea will allow for a reduction in greenhouse gas emissions through the carbon removals by desert vegetation, as well as adaptation to climate aridization through the creation of a microclimate and the reduction of desertification, considering the rational use of water resources.⁶⁵

In 2025, Uzbekistan launched a new phase of the nationwide "Yashil Makon" (Green Space) project, aimed at greening the country and combating desertification. In accordance with the Presidential Decree⁶⁶ issued in May 2025, an Agency for Afforestation and Expansion of Green Zones and Combating Desertification was established to provide systematic and effective coordination of this initiative.

Uzbekistan's Greening Plan for 2030 envisions the cultivation of 919 million trees, selected based on climatic conditions. Seedling production will be established in 79 forestry enterprises, expanding the area of nurseries from 1,300 to 1,500 hectares. The aim is to increase the country's forest coverage from 8 percent to 15 percent and raise the proportion of green spaces to 30 percent.⁶⁷

Agriculture is the second-largest sector in terms of greenhouse gas (GHG) emissions, accounting for 17 percent of total GHG emissions. From 2010 to 2022, GHG emissions in this sector increased 1.5-fold. The main sources of emissions in the sector are livestock and agricultural soils. The growth in emissions is linked to the intensive development of agriculture in the country, its increasing export orientation, and the need to ensure food security. The primary measures to reduce GHG emissions in the sector include improving the breeding of cattle and their diet, as well as increasing soil fertility by enhancing the efficiency of mineral fertilizer application. These measures are being implemented within the framework of the "Uzbekistan-2030" Strategy and the Agricultural Development Strategy until 2030⁶⁸.

63 Decree of the President of the Republic of Uzbekistan "On measures to accelerate landscaping and further effective organization of tree protection in the Republic," No. DP -46 of December 30, 2021, <https://lex.uz/docs/6967991>

64 Decree of the President of the Republic of Uzbekistan "On Measures to Ensure Environmental Sustainability through Further Increasing the Level of Greening in the Republic and Consistent Implementation of the Nationwide 'Yashil Makon' Project," No. DP-199 of November 23, 2023., <https://lex.uz/docs/6673810>

65 https://api.mf.uz/media/document_files/Budjet_P_24_ru.pdf

66 Decree of the President of the Republic of Uzbekistan "On Measures for the Consistent Continuation of Reforms in the National Project 'Yashil Makon' and in the Forest Management System, as well as the Expansion of Green Zones," No. DP -90 of 30.05.2025, <https://lex.uz/ru/pdfs/7552006>

67 <https://gov.uz/ru/eco/news/view/67110>

68 <https://lex.uz/ru/docs/6971398>

In the agricultural sector, Uzbekistan has advanced experience in implementing circular economy mechanisms. Action plans for the implementation of Circular Economy principles will help improve this industry's performance indicators in terms of resource utilization efficiency. Circular Economy principles propose 17 measures in areas such as water circulation, bioresource utilization, precision farming, energy efficiency, and environmentally sustainable packaging. Implementation of the Circular Economy principles will significantly increase the resilience of Uzbekistan's agricultural sector to climate vulnerability factors and climate shocks, as well as reduce greenhouse gas emissions in the sector by 34 percent.⁶⁹

In the "LULUCF" sector, both carbon dioxide absorption and emissions are being observed. The inventory in this sector covers three categories: "Forest lands", "Croplands", and "Grasslands". The source of CO₂ emissions in the sector is grasslands, while forest lands and croplands act as CO₂ removals. Between 2010 and 2022, there was a significant increase in net absorption (by 50.6 times) in the sector, due to a decrease in emissions from the "Grasslands" category and an increase in absorption in the "Forest lands" and "Croplands" categories. Carbon sequestration in the sector is associated with the gradual increase in forest land areas, primarily as a result of targeted state policy on afforestation.

Between 2022 and 2024, the Government adopted a series of legislative acts, the implementation of which will help mitigate the effects of climate change in the field of land use.

The Law "On Organic Products" (2021)⁷⁰ aims to develop organic agriculture in Uzbekistan, improve product quality, and protect consumer interests. It establishes clear criteria and standards for defining organic products, which include soil fertility conservation, restoration, and improvement.

The Resolution of the President of the Republic of Uzbekistan⁷¹ "On the creation of an effective system for combating land degradation", adopted in 2022 to combat land degradation, prevent desertification, and increase soil fertility, raises these issues to the level of state policy. To protect pastures and ensure their rational use, a Program on Measures for Pasture Protection, approved by a Decree of the President of the Republic of Uzbekistan⁷², is being implemented.

Rehabilitation of pastures degraded due to water scarcity using pumps powered by solar photovoltaic installations, and the use of livestock manure for biogas production, for the production of thermal and electrical energy, with the application of associated product - biofertilizers - to the soil to increase the yield of fodder crops and reduce the use of mineral fertilizers are good examples of mixed impact measures. The restoration of landscape vegetation contributes to the mitigation of climate aridity and, consequently, to adaptation to climate change.⁷³

The Law "On protecting soil and increasing its fertility" (2024)⁷⁴ establishes the fundamental principles and measures for soil protection and conservation of the fertile soil layer, requirements for the protection and rational use of soils.

69 World Bank. 2024. Circular Economy: An Opportunity for Central Asia, <https://www.worldbank.org/en/region/eca/publication/circular-economy-as-an-opportunity-for-central-asia>

70 <https://lex.uz/en/docs/6906752>

71 Resolution of the President of the Republic of Uzbekistan "On measures for the creation of an effective system for combating land degradation", No. RP- 277 of 10.06.2022., <https://lex.uz/uz/docs/7571574>

72 Decree of the President of the Republic of Uzbekistan "On Additional Measures for the Protection and Rational Use of Pastures", No. DP -24, dated February 16, 2023, <https://lex.uz/ru/docs/6999790>

73 https://api.mf.uz/media/document_files/Budjet_P_24_ru.pdf

74 <https://www.lex.uz/ru/docs/7109541>

A Presidential Decree⁷⁵ aimed at implementing additional measures to introduce a modern organizational system and financially support the activities of household plot owners and dehqan farms, including the construction of energy-saving greenhouses using "green" approaches on household plots, the construction of micro-intensive orchards, and the expansion of the use of innovative irrigation technologies, was adopted in 2025 to effectively use household plots and dehqan farm land, introduce a modern management system in the sector, and provide financial support for the cultivation of high-income and export-oriented products based on the specialization of mahallas.

5.4.6. Conservation, Protection, and Restoration of Ecosystems

NDC 3.0 acknowledges the importance of "preserving, protecting, and restoring nature and ecosystems" for achieving the goals of the Paris Agreement.

The government of Uzbekistan supports a synergistic approach to combating climate change and biodiversity loss, acknowledging their interconnectedness. Nature-based climate solutions will help achieve climate goals and preserve biodiversity. For example, the initiative of the President of the Republic of Uzbekistan - the "Yashil Makon" (Green Space) program - enables the planting of 200 million trees annually. Over the past three years, 698 gardens and 316 public parks have been created. Green areas covering approximately 2 million hectares have been established on the dried Aral Seabed.

Uzbekistan is also implementing a number of "nature-based solution" projects that provide dual benefits for climate change mitigation and adaptation, as well as associated benefits for ecosystem conservation and restoration, and combating droughts and dust storms.

Specifically, these projects aim to afforestation and reforestation at the degraded forest areas, increase the fertility of agricultural soils, and restore degraded pastures. Projects are also being implemented in agriculture and livestock farming aimed at promoting environmentally responsible methods of farming, sustainable land and water management.

In Uzbekistan, the area of specially protected areas (PAs) is rapidly expanding. The country aims to increase forested areas to 4.1 million hectares and extend protected natural territories to 14.5 percent of the country's area by 2025.⁷⁶ By 2030, the plan is to achieve 17 percent coverage of the country's territory with PAs, which will bring Uzbekistan closer to the global "30 by 30" goal.

The Strategy for the Conservation of Biological Diversity in the Republic of Uzbekistan and the National Action Plan (NBSAP) for the period 2019-2028 have been adopted and are being implemented.⁷⁷ In April 2023, Uzbekistan joined the Global Environment Facility (GEF) Program to Support Early Action for the Global Biodiversity Framework (GBF).⁷⁸

Under this initiative, within the framework of the "Comprehensive Program to Support the Update of the NBSAP and the 7th National Report on Biodiversity Conservation" project, Uzbekistan is reviewing its NBSAP and relevant policies/strategies. The project is being implemented by the Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan, the United Nations Development Programme (UNDP) in Uzbekistan, and the International Union for Conservation of Nature (IUCN), with financial support from the GEF.

⁷⁵ Decree of the President of the Republic of Uzbekistan "On additional measures for the implementation of a modern organizational system and the financial support of the activities of owners of household plots and peasant farms", No. DP-22 of 14.02.2025, <https://lex.uz/docs/7394083>

⁷⁶ Decree of the President of the Republic of Uzbekistan "On the state program for the implementation of the strategy "Uzbekistan — 2030" in the "year of environmental protection and green economy", No. DP-16 of January 30, 2025, <https://lex.uz/docs/7375421>

⁷⁷ Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On Approval of the Strategy for the Conservation of Biological Diversity in the Republic of Uzbekistan for the Period 2019-2028," No. 484, of 11.06.2019, <https://lex.uz/docs/4372841>

⁷⁸ <https://www.fao.org/biodiversity/kunming-montreal-global-biodiversity-framework/ru>

The main goal is to develop a long-term state policy for biodiversity conservation, develop a strategy and action plans, including the establishment of new national targets, in accordance with the Global Biodiversity Framework. This provides opportunities for **integrating climate change mitigation objectives into the updated biodiversity conservation program** (see Section 6 "Adaptation").

6. Adaptation: National Goals, Measures, and Actions by Sectors

Uzbekistan's updated Nationally Determined Contribution (NDC 3.0) provides for increased focus on climate adaptation alongside climate change mitigation measures (reducing greenhouse gas emissions). The climate change adaptation section of the NDC covers key sectors - agriculture, water resources, ecosystems and forestry, disaster risk reduction, healthcare and social sphere, as well as strategic infrastructure - and details specific measures to address adaptation challenges and objectives in the Aral Sea region. **The goals, measures, and actions for adapting to the consequences of climate change will be presented in a supplementary document.**

Uzbekistan's climate adaptation measures are based on existing national framework documents, such as the Strategy for Transition to a "Green" Economy (2019-2030), the State Program for the Development of the Aral Sea Region (2017-2021), the National Sustainable Development Goals and Objectives until 2030 (SDGs)^{79,80}, the Decree of the President of the Republic of Uzbekistan "On the 'Uzbekistan 2030' Strategy"⁸¹, the Concept for Water Sector Development in the Republic of Uzbekistan for 2020-2030⁸², the Agricultural Development Strategy (2020-2030)⁸³, the Concept for Healthcare System Development in the Republic of Uzbekistan for 2019-2025⁸⁴, and the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On Developing and Organizing the Effective Implementation of the National Action Plan on Climate Change and Disaster Risks"⁸⁵. These documents together create a basis for protecting ecosystems, preserving water and land resources, and ensuring food security.

They are complemented by the Regional Concept of "Green" Development, presented at the Samarkand Climate Forum of 2025. The main priority of the Concept is to deepen coordinated cooperation in the region through the harmonization of legal frameworks, standards, and joint programs across all Central Asian countries to address transboundary climate and environmental challenges. These strategies integrate measures for "green" growth and increased resilience into sectoral planning and create a unified space for aligning climate adaptation with long-term development goals, while enhancing institutional capacity, raising public awareness, and harmonizing national policies.

The priorities of the adaptation component are defined within the framework of the national climate change adaptation planning process and are based on the provisions of sectoral and regional strategies, ensuring their consistency with the national development program and international frameworks, such as the Sustainable Development Goals and the Paris Agreement.

Key Climate Adaptation Targets and Priority Sectors within the "Uzbekistan-2030" Strategy and the Importance of them for the NDC 3.0.

⁷⁹ <https://lex.uz/docs/4013358>

⁸⁰ <https://lex.uz/docs/5873508>

⁸¹ <https://lex.uz/ru/docs/6600404>

⁸² <https://lex.uz/ru/docs/4892946>

⁸³ <https://lex.uz/ru/docs/4567337>

⁸⁴ Concept for the Development of the Healthcare System of the Republic of Uzbekistan for 2019-2025, Appendix No. 1 to the Decree of the President of the Republic of Uzbekistan of 07.12.2018, No. 5590), https://nrm.uz/contentf?doc=570744_&products=1_vse_zakonodatelstvo_uzbekistana

⁸⁵ <https://lex.uz/docs/7371115>

Uzbekistan's NDC 3.0 acknowledged the critical importance of climate change adaptation measures in addressing climate vulnerability issues in key sectors. The country's geographical location and climatic conditions make it particularly susceptible to the impacts of climate change, especially concerning water resources and agricultural productivity. NDC 2.0 established a foundation for enhancing resilience through sectoral adaptation measures, with progress in their implementation varying across different climate-vulnerable sectors.

In recent years, efforts for climate adaptation in the country have been significantly intensified, particularly through the developing and implementation of adaptation plans at sectoral and regional levels, and subsequently at the national scale. This includes establishing an appropriate institutional structure, creating a mechanism for coordinating the development and implementation of adaptation plans, developing mechanisms for their budgetary and private financing, as well as attracting climate financing and donor support.

In support of strengthening the MRV system in accordance with the requirements of the Enhanced Transparency Framework (ETF), work is underway within the CITEPA program to implement the "Adaptation" module of the RISQ online platform.

Specifically, to fully utilize the platform's capabilities, a series of activities are planned to strengthen the institutional system for adaptation planning and capacity building at the national and regional levels and align it with the priorities set in the country's strategic documents (NDC, NAP, etc.). As a result, the "Adaptation" module will be fully operational and provide effective capabilities for monitoring adaptation measures at the national and regional levels.

Five sectoral adaptation plans (for water resources, agriculture, healthcare, emergency situations, and the housing sector) for the period up to 2030 are in the final stage of approval. These documents define strategic priorities and comprehensive goals for five priority sectors and three regions that are most vulnerable to the impacts and consequences of climate change. These adaptation plans establish sectoral and regional targets and operational frameworks necessary for effective climate change adaptation, as well as the roles and responsibilities of various government bodies, ensuring coordinated and cohesive implementation of adaptation measures and actions.

In the agricultural sector, which remains particularly vulnerable to climate impacts, the "Uzbekistan-2030" Strategy outlines the need to reform agricultural insurance systems and establish a special insurance fund with an allocation of USD 100 million. The Strategy also prioritizes the development of 300,000 hectares of agricultural land using modern water-saving technologies and aims to increase agricultural yields by 30-35 percent through the introduction of drought-resistant crop varieties. These measures are designed to enhance the sector's resilience while maintaining productivity in the face of changing climate conditions.

Water resource management represents another critically important priority for climate adaptation, given the water scarcity challenges in the Central Asian region. The "Uzbekistan-2030" Strategy sets ambitious goals to increase water use efficiency by 25 percent through the modernization of irrigation systems. This includes a large-scale expansion in the use of water-saving technologies from 600 thousand hectares to 2 million hectares specifically allocated for drip irrigation. Furthermore, the Strategy identifies the need to concrete-line 46 percent of irrigation canals (approximately 13,100 kilometers) to reduce water losses and improve water distribution efficiency.

Adaptation measures in the healthcare sector focus on strengthening the medical service system to address climate-related risks to human health, particularly risks associated with heat waves and waterborne diseases. The strategy outlines plans to double healthcare funding, reduce premature mortality from climate-related diseases by 2.5 times, and achieve 100 percent digitalization of

medical institution documentation. These measures are aimed at enhancing the sector's capacity to respond to and prevent climate-related health issues, especially for people living in rural regions where the consequences of climate change are felt most acutely.

In the **housing construction** and housing sector, key objectives include building 1 million climate-resilient housing units by 2030 and ensuring that 30 percent of urban areas are covered by green zones. This will address the growing problems of urban heat islands and climate-related stress on urban infrastructure, while simultaneously enhancing the overall climate resilience of urban communities.

Emergency management sector represents the fifth priority sector for adaptation, focusing on strengthening early warning systems for risks associated with natural disasters and extreme weather events linked to climate change impacts. It also aims to improve preparedness for rapid and effective disaster response. The Strategy outlines the necessity of achieving 100 percent coverage for early warning and notification of the population about dangerous meteorological phenomena, as well as increasing the accuracy of river flow forecasts to 98 percent. These measures are critically important for reducing vulnerability to extreme weather events and enhancing the climate resilience of urban and rural communities through improved disaster risk management and increased preparedness to respond to their consequences.

Given the comprehensive nature of climate adaptation goals outlined in the "Uzbekistan-2030" Strategy, with an emphasis on measurable targets and sector-specific measures and actions, the climate change adaptation component in NDC 3.0 has acquired a solid foundation for strengthening the country's adaptation efforts.

Moreover, the Strategy's focus on transformative actions for climate adaptation, particularly in agriculture and water management, aligns with international best practices and provides a foundation for further development and strengthening of the adaptation component in NDC 3.0.

Adaptation plans for three regions of Uzbekistan: the Aral Sea area - the Republic of Karakalpakstan, Bukhara and Khorezm regions

Specific climatic changes associated with the drying up of the Aral Sea are observed in the Aral Sea region and adjacent territories (Republic of Karakalpakstan, Bukhara and Khorezm regions). In particular, in Uzbekistan over the past 5 years, the maximum number of days with air temperatures above 40 °C has exceeded the average by 5-7 days, and in the Aral Sea region and lower reaches of the Amudarya River - by 12-17 days.⁸⁶ The Aral Sea region is the most vulnerable to the consequences of climate change and is a priority area for implementing climate adaptation measures and actions.

Based on the adopted "New Uzbekistan" Development Strategy for 2022-2026⁸⁷, a comprehensive program for the socio-economic development of industry, agriculture, and the service sector was developed for each region of Uzbekistan, including the Republic of Karakalpakstan, Bukhara, and Khorezm regions. This program is based on the relevant resolutions of the Cabinet of Ministers of the Republic of Uzbekistan: "On Additional Measures for the Comprehensive Socio-Economic Development of Territories and Further Improvement of the Living Standards of the Population in the Republic of Karakalpakstan in 2022-2026"⁸⁸, "On Additional Measures for the Comprehensive Socio-Economic Development of Territories and Further Improvement of the Living Standards of the Population in the Bukhara Region in 2022-2026"⁸⁹, "On Additional Measures for the

⁸⁶ National Environment Report: Uzbekistan, <https://www.iisd.org/system/files/2024-02/uzbekistan-state-of-the-environment-ru.pdf>

⁸⁷ <https://lex.uz/ru/docs/5841077>

⁸⁸ <https://lex.uz/ru/docs/5939945>

⁸⁹ <https://lex.uz/ru/docs/5988277>

Comprehensive Socio-Economic Development of Territories and Further Improvement of the Living Standards of the Population in the Khorezm Region in 2022-2026"⁹⁰. The corresponding three regional adaptation plans are currently being finalized, taking into account new government resolutions: " On additional measures for the comprehensive socio-economic development and employment promotion in the Republic of Karakalpakstan " (2024),⁹¹ and "On the Implementation of Practical Measures in Districts (Cities) Selected for Accelerated Comprehensive Development of the Regions of the Republic" (2025).⁹²

Three regional adaptation plans are closely interconnected with five sectoral adaptation plans. They aim to identify and assess the current and expected impacts of climate change on target sectors, taking into account the regional context and peculiarities of their socio-economic development. These plans analyze climate vulnerability, existing needs and opportunities, and propose specific adaptation measures to reduce climate change risks by strengthening adaptive capacity. They consider gender aspects and capacity-building needs, as well as ensure efficient and effective use of natural and human resources. This aligns with the objectives of creating conditions for agricultural development; infrastructure development, implementation of "green" principles and approaches, digitalization, and creating favorable conditions in district (city) centers for residents' living and entrepreneurial activities.⁹³ The list of districts (cities) for which accelerated comprehensive development program projects are being developed includes the Kungrad and Chimbay districts in the Republic of Karakalpakstan, the Gijduvan district in the Bukhara region, and the Khazarasp and Shavat districts in the Khorezm region.

Investment needs to achieve 2030 and 2035 adaptation targets

Achieving Uzbekistan's climate adaptation goals requires significant investment in key sectors and regions most vulnerable to climate change. The total investment needs are estimated at USD 15.7 billion by 2030, with a projected increase to USD 30.1 billion by 2035 (Table 1). This investment trajectory reflects the growing urgency of implementing climate change adaptation measures, as well as the increasing scale of necessary adaptation initiatives across various sectors of the national economy and social welfare spheres.

Table 1. Sectoral investment needs for climate adaptation measures for the period 2025-2035 (million US dollars)⁹⁴

Sectors	Investment needs, million USD	
	2025-2030	2025-2035
Water resources	4,150	7,954
Agriculture	10,405	19,943
Healthcare	197	378
Residential sector	924	1,771

⁹⁰ <https://lex.uz/ru/docs/5942066>

⁹¹ <https://lex.uz/ru/docs/7565400>

⁹² Resolution of the President of the Republic of Uzbekistan No. RP-132 dated April 1, 2025 "On the implementation of practical measures in districts (cities) selected for accelerated comprehensive development of the Republic's regions", <https://lex.uz/ru/docs/7463009>

⁹³ Resolution of the President of the Republic of Uzbekistan "On the Implementation of Practical Measures in Districts (Cities) Selected for Accelerated Comprehensive Development of the Republic's Regions", No. RP-132 dated April 1, 2025, <https://lex.uz/ru/docs/7465123>

⁹⁴ Based on assessments of the UNDP/GCF project "National Adaptation Plan (NAP) by Sectors to Promote Medium- and Long-Term Adaptation Planning in Uzbekistan," 2021-2023

Emergency situations	21	40
Total	15,697	30,086

7. Information to promote clarity, transparency and understanding of the nationally determined contributions referred to in decision 1/CP.21, paragraph 28 (ICTU)

1. QUANTIFIABLE INFORMATION ON THE REFERENCE POINT (INCLUDING, IF REQUIRED, THE BASE YEAR):	
1(a) Reference year(s), base year(s), base period(s), or other starting point(s)	Within the framework of fulfilling its commitments under the Paris Agreement, Uzbekistan has designated 2010 as the base year under its NDC 3.0 for greenhouse gas emissions reduction. Thus, the intensity of net GHG emissions per unit of GDP in 2010 has become a reference point for assessing progress within the framework of the Paris Agreement. The target is to reduce the intensity of GHG emissions rather than absolute emissions that allows consideration of economic growth, which is especially relevant for developing countries, including Uzbekistan. Uzbekistan's choice of 2010 as the base year is considered balanced, as it reflects the period before the start of large-scale economic reforms and a sharp increase in energy consumption, which makes the calculations more objective.
1(b) Quantifiable information on the reference indicators, their values in the reference year(s) , base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year	According to the First Biennial Transparency Report (BTR1)⁹⁵ of the Republic of Uzbekistan, prepared by Uzbekistan in 2024 and submitted to the UNFCCC Secretariat on December 28, 2024, the key data for the base year 2010 are as follows: - The value of the base year's GDP, which amounted to 60.08 billion dollars at constant 2015 prices. - Total net greenhouse gas emissions, which amounted to 172.32 million tons of CO₂-eq. (including LULUCF). The update of the base year indicator value compared to the previous inventory (Fourth National Communication, 2024)⁹⁶ is related to recalculations resulting from the use of Global Warming Potential (GWP) values according to the IPCC Fifth Assessment Report, refinement of activity data, and the application of higher-tier methodological approaches. According to the First Biennial Transparency Report of the Republic of Uzbekistan (BTR1, 2024), Uzbekistan's GDP carbon intensity was estimated at 2.85 kg CO₂-eq./USD₂₀₁₅ in 2010 and reached 1.62 kg CO₂-eq./USD₂₀₁₅ in 2022. Furthermore, based on the NDC 2.0 adopted in 2021, the republic has committed to reducing the carbon intensity of its economy to 1.85 kg CO₂-eq./USD₂₀₁₅ by 2030.

⁹⁵ <https://unfccc.int/first-biennial-transparency-reports>

⁹⁶ The Fourth National Communication on Climate Change of the Republic of Uzbekistan, 2024, <https://unfccc.int/documents/641400>

	Greenhouse gas emissions and their projections by sector, million tons of CO₂-eq.				
	Sector	2010*	2022	2030 Forecasts	2035 Forecasts
	Realistic scenario				
	Energy sector	127,2	134	115	119
	Industrial Processes and Product Use (IPPU)	14,2	30	51	53
	Agriculture	23,5	35	39	40
	Land use, land-use change and forestry (LULUCF)	-0,16	-8	-14	-14
	Waste	7,5	10	12	12
	Amount including LULUCF	172,3	201	204	210
1(c) For strategies, plans and actions referred to in paragraph 6 of Article 4. The Paris Agreement or policies and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, Parties shall provide other relevant information.	Not applicable				
1(d) Target relative to the reference indicator, expressed numerically, for example, in percentage or amount of reduction	As part of the updated Nationally Determined Contribution (NDC) 3.0, the Republic of Uzbekistan, considering national circumstances and respective capabilities, has committed to achieving a reduction in specific greenhouse gas emissions (emission intensity) per unit of gross domestic product by 50 percent by 2035 compared to 2010 levels. This goal is established to keep global warming at 1.5 °C and reflects the Republic of Uzbekistan's commitment to demonstrating maximum effort by making significant contributions to global climate change mitigation measures. This will be achieved by reaching peak greenhouse gas emissions in the shortest possible timeframe and subsequently reducing them. The target indicator adopted as Uzbekistan's NDC, which is linked to a unit of GDP (<i>GDP carbon intensity</i>), is the most acceptable approach for the countries with high GDP growth rates. The NDC concept reflects the conditions for dynamic growth of the Uzbek economy, considering the implementation of measures stipulated by relevant government decisions (No. RP-436 of				

	02.12.2022⁹⁷ and other documents). Favorable conditions for fulfilling quantitative obligations in the republic include the high GDP growth rate (about 6.0 percent per year) and low growth rates of greenhouse gas emissions (about 1.0 percent per year). Since GDP grew by 6.5 percent in 2024, with further accelerated economic growth, the government of the Republic of Uzbekistan intends to achieve a GDP of USD200 billion by 2030 and USD237 billion by 2035⁹⁸. According to the Institute of Macroeconomic and Regional Studies under the Cabinet of Ministers of the Republic of Uzbekistan, the projected population in 2035 will be 45.6 million people.⁹⁹ NDC 3.0 was developed in full compliance with the nationally adopted SDGs and the goals of the "Uzbekistan-2030" Strategy¹⁰⁰, which establishes comprehensive climate targets for key economic sectors and identifies the need for accelerated action to combat climate change for the period up to 2030. The strategy sets ambitious objectives, including increasing renewable energy capacity to 25,000 MW to ensure that 40 percent of the total electricity generation comes from renewable energy sources, doubling energy efficiency across all sectors of the economy, achieving 95 percent waste collection coverage with 35 percent of energy generated from waste utilization, and expanding forest cover to 6.1 million hectares, including 2.3 million hectares as a result of afforestation activities in the Aral Sea region. The "Uzbekistan-2030" Strategy also provides an opportunity for the prompt adoption and implementation of the Long-term Strategy for the Low-Carbon Development of Uzbekistan until 2055, the project of which is being discussed in the country. Thus, in accordance with Article 4.3 of the Paris Agreement, the NDC 3.0 of the Republic of Uzbekistan reflects its highest possible ambitions and represents progress that goes beyond the commitments undertaken in NDC 2.0.
1(e) Sources of data used in quantifying the reference point(s)	The main source of information is the First Biennial Transparency Report of the Republic of Uzbekistan (BTR1, 2024)¹⁰¹ and additional research¹⁰² conducted within the framework of preparing the NDC 3.0 document, the draft of the country's Long-term Low-Carbon Development Strategy, and the experience of other countries. The calculation of the updated NDC 3.0 target indicator is based on: – greenhouse gas inventory data for 1990-2022; – forecasts of greenhouse gas emissions for the period up to 2035 (according to the realistic scenario, greenhouse gas emissions in 2035 may amount to 210 million tons of CO₂-eq);

⁹⁷ <https://lex.uz/ru/docs/6303233> Presidential Resolution No. RP-436 "On Measures to Increase the Effectiveness of Reforms Aimed at Transitioning the Republic of Uzbekistan to a "Green" Economy until 2030":

⁹⁸ President of the Republic of Uzbekistan: "It's time for new approaches in the work of parliament and government based on devoted service to the people" <https://president.uz/ru/lists/view/7716>

⁹⁹ <https://www.uzdaily.uz/ru/ipmi-ozhidaemaia-chislennost-naseleniia-uzbekistana-k-2035-godu-sostavit-bolee-456-mln-chelovek/>

¹⁰⁰ <https://lex.uz/ru/docs/6600404>

¹⁰¹ <https://unfccc.int/first-biennial-transparency-reports>

¹⁰² <https://www.undp.org/uzbekistan/publications/ndc2-revision-roadmap-ndc30>

	– assessment of the progress in implementing NDC 2.0 (see BTR1 and NDC 3.0 section 1 (b)); – assessment of the potential for reducing emissions as a result of implementing development strategies and sectoral programs and projects that provide for the active introduction of renewable energy sources and other measures. The estimated climate change mitigation potential resulting from the completion of projects with guaranteed financing and ongoing projects amounted to 62-65 million tons of CO₂-eq. (see BTR1); – GDP forecasts prepared by the Ministry of Economy and Finance up to 2035; – the main provisions of the Strategy for the transition of the Republic of Uzbekistan to a "green" economy¹⁰³ and sectoral development programs. The following strategic documents, approved by the Government of Uzbekistan to implement tasks set within the framework of commitments made under the Paris Agreement, were reviewed to assess the climate change mitigation potential: – Concept for Environmental Protection of the Republic of Uzbekistan until 2030 (No. DP-5863 of 30.10.2019); – Strategy for Solid Waste Management in the Republic of Uzbekistan for the period 2019-2028; – Strategy for the Conservation of Biological Diversity in the Republic of Uzbekistan for the period 2019-2028; – Strategy for the Development of Agriculture of the Republic of Uzbekistan for 2020-2030; – Concept for Ensuring Uzbekistan's Electricity Supply for 2020-2030; – Concept for the Development of Water Management for 2020-2030; – Corporate climate goals; – Uzbekistan's accession to the NACAG Initiative; – Measures in the "Buildings" sector; – Strategy "Uzbekistan - 2030" (Goals 68, 69); – Joining the Global Methane Emissions Reduction Initiative. An assessment has been conducted of sectoral programs and projects, especially those aimed at: – construction of energy-efficient combined cycle power plants and gas turbine units; – conservation and decommissioning of outdated and low energy-efficient units at thermal power plants;¹⁰⁴ – development and modernization of main power transmission networks; – expanded use of renewable energy sources and construction of new solar power plants, wind farms, and
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¹⁰³ Resolution of the President of the Republic of Uzbekistan "On Approving the Strategy for the Transition of the Republic of Uzbekistan to a "Green" Economy for the Period 2019-2030," No RP-4477 of 04.10.2019,., <https://lex.uz/docs/4539506>

¹⁰⁴ <https://www.uzdaily.uz/ru/v-uzbekistane-nachnetsia-poetapnoe-vyvedenie-iz-ekspluatatsii-ustarevshikh-energoustanovok/>

	hydroelectric power stations, as well as modernization and rehabilitation of existing hydroelectric power stations; – conservation of fuel and energy resources in economic sectors; – improving the energy efficiency of the heat supply system; – modernization and improvement of the technical condition of pumping stations in the water management sector; – implementation of NACAG projects (GIZ); – transport sector; – sustainable management of forests and pastures.
1(f) The circumstances under which the Party may update the values of reference indicators	Circumstances for updating the base year indicator value may be associated with recalculations due to the planned improvement of the national greenhouse gas inventory quality. These include refining activity data, applying higher-level methodological approaches, developing and updating national GHG emission coefficients, expanding the coverage of sources of emissions/removals, controlled greenhouse gases; and changes in the GDP indicator relative to the US dollar exchange rate, according to the World Bank.¹⁰⁵.
2. TIMEFRAMES AND/OR PERIODS OF IMPLEMENTATION	
2(a) Timeframe/period of implementation, including start and end date, in accordance with any other relevant decision taken by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA)	The term of the obligation is from January 1, 2020, to December 31, 2035.
2(b) Whether it is a single-year or multi-year target, as applicable	A unified annual target has been set for the year 2035.
3. SCOPE AND COVERAGE	
3(a) General description of the target	The goal corresponds to a relative reduction in specific net greenhouse gas emissions per unit of GDP across the entire economy compared to the base year emissions. The target indicator - GDP carbon intensity - is expressed through the following formula: $\text{Carbon intensity of GDP} \left(\frac{\text{kg CO}_2 - \text{eq}}{\text{USD 2011}} \right) = \frac{\text{net GHG emissions}}{\text{GDP 2011 value}}$ where: the numerator represents annual net greenhouse gas emissions in year ii, million tons of CO₂-eq. the denominator represents the GDP value in year ii, expressed in international dollars at constant prices, billion USD, according to World Bank data.
3(b) Sectors covered, categories and pools covered by the Nationally Determined	Gases covered: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs).

¹⁰⁵ <https://www.worldbank.org/en/country/uzbekistan>

Contribution, including, where applicable, IPCC recommendations	In the 1990-2022 GHG inventory¹⁰⁶, Uzbekistan applied flexibility provisions regarding sulfur hexafluoride, perfluorocarbons, and NF₃; these gases are not included in the NDC 3.0. The country plans to enhance transparency and consistency in future reporting by including emissions of sulfur hexafluoride, perfluorocarbons, and NF₃ when relevant activity data becomes available. Sectors covered: Energy; Industrial Processes and Product Use (IPPU); Agriculture; Land Use, Land-Use Change and Forestry (LULUCF) and Waste. In the future, Uzbekistan plans to improve the completeness of GHG inventory categories in the LULUCF sector and conduct additional research for this purpose.
3(c) How has the Party considered paragraph 31(c) and (d) of Decision 1/CP.21	The National Greenhouse Gas Inventory covers the entire territory of Uzbekistan, encompassing the main sources of carbon emissions and absorption in the country (about 95 percent of sources according to expert estimates). Greenhouse gases and categories not covered are explained in section 3 (b). Emissions from aviation bunker fuel do not fall within the scope of NDC 3.0.
3(d) Mitigation co-benefits resulting from adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of adaptation actions and/or economic diversification plans	Not applicable
4. PLANNING PROCESSES	
4(a) Planning processes and implementation. Information on the planning processes the Party has undertaken to prepare its nationally determined contribution and, if available, on the Party's plans for implementing it, including, where appropriate:	
4a (i) Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner	Uzbekistan's updated Nationally Determined Contribution (NDC 3.0) has been prepared in accordance with the decisions of the Conference of the Parties to the UN Framework Convention on Climate Change and the Paris Agreement. NDC 3.0 for Uzbekistan was developed by an Interdepartmental Working Group consisting of representatives of key ministries and agencies, civil society scientific circles under the general coordination of the Ministry of Ecology, Environmental Protection and Climate Change. The development of the new NDC 3.0 was supported by the United Nations Development Programme in Uzbekistan within the framework of the "Climate Promise - Phase 2" project. Uzbekistan acknowledges that effective action in combating climate change requires cooperation between the private sector and civil

¹⁰⁶ https://unfccc.int/sites/default/files/resource/NIR_BTR_kadastrGHG_Uzbekistan_0.pdf

	society. Accordingly, the government actively involves key private sector entities and local NGOs in the process of developing its Nationally Determined Contribution (NDC). The National Dialogue on Climate Ambitions (NDC) was initiated by UNDP as a platform to facilitate climate cooperation, engaging experts and representatives from all stakeholders, international organizations, youth, and women. This inclusive approach ensures that NDC 3.0 is considered from various perspectives. Uzbekistan's 2035 key mitigation target (NDC 3.0) has been developed in accordance with existing national legislation (see the National Circumstances section), as well as taking into account the Long-term Low-Carbon Development Strategy until 2055, which is being developed jointly with the World Bank. The long-term strategy is being developed in accordance with the Decree of the President of the Republic of Uzbekistan "On the State Program for the Implementation of the Strategy 'Uzbekistan-2030' in the 'Year of Environmental Protection and Green Economy.'" ¹⁰⁷ Additionally, in developing NDC 3.0, the initiatives of the Government of Uzbekistan for further expansion of renewable energy sources usage were considered. According to calculations, electricity consumption in Uzbekistan is projected to reach 121 billion kWh by 2035. Considering this, measures are already being implemented to develop all sectors of the energy industry. Institutional Interaction Uzbekistan acknowledges the importance and necessity of coordinating climate change measures and involving the public in the preparation and implementation of the NDC 3.0. Since 2019, an Interdepartmental Council for the Promotion and Implementation of a "Green" Economy has been operating in the Republic of Uzbekistan. This council ensures effective organization of work by ministries and agencies to implement the Strategy for the Transition of the Republic of Uzbekistan to a "Green" Economy for 2019-2030. ¹⁰⁸ This strategy was one of the first to be approved with the aim of fulfilling obligations under the Paris Agreement. In 2022, the Action Plan for the transition to a "green" economy and ensuring "green" growth in the Republic of Uzbekistan until 2030¹⁰⁹ envisions the establishment and development of a national-scale MRV system for greenhouse gas emissions. In 2023, the Ministry of Ecology, Environmental Protection and Climate Change was established in Uzbekistan, responsible for the country's climate and environmental policy. In 2024, the National Center for Climate Change was created under this ministry. The Center serves as the working body of the Climate Council under the President of the Republic of Uzbekistan and is the authorized body for coordinating and preparing Uzbekistan's participation in
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¹⁰⁷ Decree of the President of the Republic of Uzbekistan "On the State Program for the Implementation of the 'Uzbekistan-2030' Strategy in the 'Year of Environmental Protection and Green Economy,'" of January 30, 2025, No. DP-16, <https://lex.uz/uz/docs/7369745>

¹⁰⁸ <https://lex.uz/ru/docs/4539506>

¹⁰⁹ <https://lex.uz/ru/docs/6303233> Presidential Resolution No. PP-436 "On Measures to Increase the Effectiveness of Reforms Aimed at Transitioning the Republic of Uzbekistan to a "Green" Economy until 2030"

	significant international and regional official events on climate change issues. It is also the authorized body for coordinating the activities of the Loss and Damage Fund (LDF) and the "Green Cities" initiative (which involves implementing ecological master plans for cities and regions, monitoring their execution, and compiling an ecological rating of cities)¹¹⁰. Additionally, the Ministry has established the Waste Management and Circular Economy Development Agency¹¹¹, a state body responsible for coordinating waste management activities. This agency also develops and organizes the implementation of measures to promote a circular economy by establishing the production of energy resources, raw materials, and materials from waste sorting and processing. In 2024, with the aim of effectively addressing climate change issues, improving internal institutional mechanisms for shaping and implementing a unified state policy on climate change mitigation and adaptation, as well as ensuring the Republic of Uzbekistan's effective fulfillment of its obligations under the Paris Agreement, the Climate Council under the President of the Republic of Uzbekistan was established. The Climate Council is the supreme advisory body to the President of the Republic of Uzbekistan on climate change mitigation and adaptation, with the following main responsibilities: (i) developing the National Strategy for Climate Change Mitigation and Adaptation, as well as a unified state policy in this area; (ii) coordinating the efforts of ministries and agencies to effectively implement the unified state policy on climate change mitigation and adaptation; (iii) monitoring the fulfillment of the Republic of Uzbekistan's commitments under the UN Framework Convention on Climate Change and the Paris Agreement; (iv) identifying annual priority directions for foreign policy implementation regarding climate change mitigation and adaptation; (v) improving the regulatory and legal framework for climate change mitigation and adaptation; (vi) facilitating resource allocation and financing, including attracting investments to support climate change mitigation and adaptation projects that incorporate "green" technologies, scientific research, and innovation. Inclusiveness and empowerment are key elements of Uzbekistan's climate agenda. The NDC emphasizes the protection and support of the most vulnerable groups in society, such as women, youth, and children. These groups were involved in the process of preparing the NDC, reflecting the country's commitment to integrating diverse perspectives on climate change impacts and addressing them. Various segments of the population, including women and youth, were actively engaged in shaping the country's climate policy, thereby ensuring that their climate change mitigation efforts contribute to social equality and enhance the population's resilience to the consequences of climate change. (for more details, see the National Circumstances section).
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¹¹⁰ Decree of the President of the Republic of Uzbekistan "On the Establishment of the Climate Council under the President of the Republic of Uzbekistan," No. DP-106 of 23.07.2024., <https://lex.uz/uz/docs/7044892>

¹¹¹ Decree of the President of the Republic of Uzbekistan "On Measures to Ensure Transparency and Further Improve the Management System in the Fields of Ecology and Environmental Protection," No. DP-149 of September 26, 2024, <https://lex.uz/ru/docs/7128168>

	Gender equality In recent years, Uzbekistan has actively initiated several reforms aimed at creating favorable conditions for achieving social justice. Issues of gender equality play a significant role in this process. The country has initiated several important measures to protect women's rights and eliminate inequalities in the labor market through the adoption of relevant national strategies and legislation. Uzbekistan has joined key international documents protecting women from all forms of discrimination and has also adopted several laws guaranteeing equal rights and opportunities for women and men (Law of the Republic of Uzbekistan No. 562 of 02.09.2019¹¹²) and protecting women from harassment and violence (Law of the Republic of Uzbekistan No. 561 of 02.09.2019¹¹³). In recent years, over 30 presidential decrees and government resolutions have been adopted concerning women's support. Under the initiative of the Government, the 14th Summit of Women Leaders of the Parliamentary Union Member States was held in 2022 on the topic "Parliamentary Leadership: Risk Forecasting for More Effectively Ensuring Sustainability and Prosperity". Over 120 women parliamentarians from 17 countries worldwide participated in its proceedings, along with representatives from the Inter-Parliamentary Union, the UN, the OSCE Parliamentary Assembly, and the CIS Inter-Parliamentary Assembly. Following the Summit, the Tashkent Declaration was adopted, which defines priorities related to the formation of a gender-responsive parliament, ensuring sustainable development of society, peace, and the well-being of the population. The role of parliament is increasing in ensuring that post-crisis socio-economic recovery remains sensitive to climate change and is based on strengthening environmental protection. Women are the most vulnerable to the consequences of climate change. About 50 percent of the country's population lives in rural areas, where women predominantly engage in agriculture, household management, and childcare. Rural women suffer to a greater extent, given their limited access to practices and technologies that facilitate successful adaptation to climate change. As a result, they are forced to spend considerable time on providing their families with fresh safe water. Role of private sector Uzbekistan acknowledges the important role of the private sector in achieving sustainable economic growth and climate goals. By involving private enterprises in planning actions aimed at combating climate change and maintaining ongoing consultations with various stakeholders, the country demonstrates awareness and utilization of private sector opportunities, considering market approaches.
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¹¹² Law of the Republic of Uzbekistan "On Guarantees of Equal Rights and Opportunities for Women and Men," No. LRU-562 dated September 2, 2019, <https://lex.uz/docs/4494873>

¹¹³ ¹¹³ Law of the Republic of Uzbekistan "On Protection of Women from Harassment and Violence," No. LRU-561 dated September 2, 2019

	This inclusive approach promotes collaboration with the private sector in implementing climate agenda measures and actions, utilizing business innovations, private investments, and market-based carbon mechanisms to advance the country's transition to a low-carbon economy while safeguarding Uzbekistan's economic stability and development. The Law on Public-Private Partnership adopted in Uzbekistan¹¹⁴ has significantly accelerated the development of renewable energy source utilization and the implementation of renewable energy technologies and equipment.
4a (ii) Contextual matters, including, inter alia, as appropriate:	
a. National circumstances, such as geography, climate, economy, sustainable development, and poverty eradication	National circumstances <i>Geographical location.</i> The Republic of Uzbekistan is a double-landlocked country with a total area of 448,920 square kilometers, situated in Central Asia. It shares borders with Kazakhstan, Turkmenistan, Afghanistan, Tajikistan, and Kyrgyzstan. Uzbekistan is characterized by a complex and diverse terrain. Plains make up 78.7 percent of the country's area. Over 85 percent of the territory is covered by deserts and semi-deserts. Among these, the Kyzylkum is one of the largest deserts in Central Asia. In total, mountains account for 21.3 percent of the country's territory. <i>Uzbekistan's climate</i> is arid and sharply continental, characterized by high inflow of solar radiation, significant seasonal and daily fluctuations in air temperature, and long dry and hot summers. Maximum air temperatures in desert regions can reach 45-49 °C. Minimum temperatures can drop to as low as -25 °C even in the southern parts of the country. Annual precipitation on the plains ranges from 80 to 200 mm, while in mountainous areas it can reach 600-800 mm. <i>Climate risks.</i> In Uzbekistan, the most vulnerable sectors are agriculture, water resources, public health, aquatic ecosystems and fisheries, forests and forestry, utilities, and specific industrial sectors (oil and gas, transportation, construction, design, and energy). The vulnerability of these sectors is determined by current and projected changes according to climate scenarios: an increase in the duration of the dry, hot period of the year, reduction of water resources and deterioration of water quality, increased water consumption across all sectors and growing water scarcity, decreased yields of modern crop varieties, reduced productivity of pastures and livestock, and heightened risks to food security and public health. <i>Water resources.</i> Uzbekistan's water resources belong to the Aral Sea basin. The surface runoff of the region's main rivers, Amudarya and Sirdarya, is mainly formed outside Uzbekistan - in the mountainous regions of Tajikistan and Kyrgyzstan, which necessitates the country's dependence on transboundary water sources. Only about 11 percent of the total flow of these two major

¹¹⁴ Law of the Republic of Uzbekistan "On Public-Private Partnership," No. LRU-537 of May 10, 2019., <https://lex.uz/docs/4329272>

	rivers is formed within Uzbekistan's territory, which accounts for approximately 20 percent of the country's total annual water consumption. The remaining 80 percent is supplied by the resources of the transboundary Amudarya and Syrdarya rivers. The total long-term average annual flow of all rivers is about 116.2 km³/year. <i>Biological resources and ecosystems.</i> The territory of Uzbekistan is characterized by a great diversity of natural ecosystems. Desert ecosystems are widespread in the lowland regions. Desert-type steppes cover almost 80 percent of the country's territory. There are more than 500 lakes in Uzbekistan, mostly small water bodies with an area of less than 1 km². <i>Mineral resources.</i> Uzbekistan possesses significant industrial and mineral resource potential, unique agricultural raw materials, abundant natural resources, and a well-developed infrastructure. The current level of mineral exploration is linked to the development of deposits of precious, non-ferrous, and rare metals, as well as all types of organic fuels - oil, natural gas and gas condensate, lignite and hard coal, oil shale, uranium, and numerous types of raw materials for construction materials. <i>State governance structure:</i> Uzbekistan is a sovereign democratic republic led by the President and a full-fledged subject of international law. <i>Demographics:</i> The country is the most populous in Central Asia, with a population of 37.543 million as of January 1, 2025. Between 2021 and 2024, the poverty rate declined from 17 percent to 8.9 percent. In Uzbekistan, 32.1 percent of the total permanent population consists of individuals below working age, 56 percent are of working age, and 11.9 percent are above working age. According to forecasts, the country's population will reach 40 million by 2028 and is expected to exceed 50 million by 2050. By 2030, at least 8 million people will be living in high climate risk zones, and the level of urbanization will reach 60 percent. <i>Economic development and economics' structure.</i> Uzbekistan is among the developing countries with a rapidly growing economy, where GDP increased by 6.5 percent in 2024, reaching USD115 billion. In 2023, Uzbekistan's economy reached a historic milestone, achieving a GDP of USD100 billion for the first time.¹¹⁵ With further acceleration of economic growth, Uzbekistan aims to reach a GDP of USD200 billion by 2030. With further acceleration of economic growth, Uzbekistan intends to achieve a GDP of USD200 billion.¹¹⁶ The country's economy is currently undergoing a period of reform. Among the most important tasks are increasing the share of industry, the service sector, small businesses, and private entrepreneurship in the national economy, as well as the
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¹¹⁵ According to the National Statistics Committee of the Republic of Uzbekistan, the GDP for 2023 amounted to USD 102.6 billion.

¹¹⁶ President of the Republic of Uzbekistan: "It's time for new approaches in the work of parliament and government based on dedicated service to the people" <https://president.uz/ru/lists/view/7716>

	accelerated development of high-tech production of finished goods with high added value. In the sectoral structure of GDP, the "Services" and "Industry" sectors predominate. Growth in the industrial sector is primarily driven by increasing added value in the manufacturing and mining industries. <i>The fuel and energy sector</i> is a crucial component of Uzbekistan's economy and encompasses electric power, thermal power, hydropower, and the oil and gas industry. Uzbekistan's economy is characterized by high energy intensity; therefore, the modernization and diversification of the fuel and energy sector are among the main priorities for the country's development. The energy sector occupies a special place in Uzbekistan's economy. It is the largest consumer of fuel and energy and, consequently, the main source of greenhouse gas emissions. Greenhouse gas emissions from the "Energy" sector in 2010 amounted to 127.2 million tons of CO₂-eq or 63.7 percent of the total greenhouse gas emissions (excluding carbon sink). At the same time, according to the First Biennial Transparency Report (BTR1, 2024), the share of this sector in 2022 in the total GHG emissions (excluding absorption) amounted to 133.5 million tons of CO₂-eq or 63.6 percent. At the beginning of 2025, during a meeting conducted by the President of the Republic of Uzbekistan¹¹⁷, it was announced that over the next five years, there are plans to create additional power-generating capacities using renewable energy sources, totaling 25 GW. This will enable Uzbekistan to increase its "green" energy production to 64 billion kWh by 2030, with the share of renewable energy sources in electricity production reaching 54 percent.¹¹⁸
b. Best practices and experience related to the preparation of the nationally determined contribution	The positive experience gained during the preparation of previous NDC documents of the Republic of Uzbekistan was taken into account, the guiding documents of the UNFCCC and the Paris Agreement (Decision 4/CMA.1) were considered, NDC 3.0 documents of other countries were examined, and materials from trainings involving international consultants were also used, including in the implementation of the UNDP project "Climate Promise - Phase 2" on assessing progress in implementing NDC 2.0 and the corresponding Roadmap to enhance the contribution to climate change mitigation in NDC 3.0.¹¹⁹ All calculations for determining the quantitative value of the NDC 3.0 target indicator were carried out based on the inventory results for the period 1990-2022, the results of monitoring the implementation (stocktake in 2024) of NDC 2.0, assessment of trends and tendencies, and the experience gained in preparing BTR1 (2024).

¹¹⁷ President of the Republic of Uzbekistan: "Information on work in the field of nuclear energy was presented" <https://president.uz/ru/lists/view/7867>

¹¹⁸ President of the Republic of Uzbekistan: "18 new energy facilities have been put into operation, and the construction of 6 additional power capacities has begun" <https://president.uz/ru/lists/view/7764>

¹¹⁹ <https://www.undp.org/uzbekistan/publications/ndc2-revision-roadmap-ndc30>

	The NDC planning process is closely linked to the Long-term Low-carbon Development Strategy being developed and the "Uzbekistan - 2030" Strategy, ensuring coherence of measures and actions to combat climate change. Recognizing the need for cooperation between public and private sectors to combat climate change, key private entrepreneurs were involved in the process of developing the NDC.
c. Other contextual aspirations and priorities acknowledged when joining the Paris Agreement.	Uzbekistan reaffirmed its commitment to several key aspirations and priorities, acknowledging its significant role in addressing climate change and ensuring sustainable development (voluntary commitments). Uzbekistan places special emphasis on international cooperation in the field of climate change. The country has joined the "Global Methane Pledge", thereby reaffirming its commitment to reducing methane emissions and supporting international efforts to combat climate change. The Decree of the President of the Republic of Uzbekistan¹²⁰ (No. DP-16 dated January 30, 2025) sets the task of determining the baseline state of methane emissions in sectors such as natural gas, waste management, and animal husbandry as part of the country's methane emission reduction commitment. JSC "Uzbekneftegaz", in collaboration with the Swiss company "Vema S.A.", is implementing the "Methane Emissions Reduction" project. As a result of this project's implementation, methane emissions at the company's production facilities have decreased by 16 million cubic meters.¹²¹ In his speeches, President of Uzbekistan, Shavkat Mirziyoyev, proposed a series of climate initiatives¹²²: – Establishment of the International Center for Assessing Climate Losses and Damage; – Declaration on Obligations to Ensure the Health and Environmental Safety of River Ecosystems under the umbrella of the United Nations; – Launch of the Regional Bank of Genetic Resources to increase the resistance of plants to climate change, as well as the establishment in Uzbekistan of the UN Innovation Agro-Industrial Hub for landlocked countries; – Establishment of the Alliance of Climate Capitals of the World for the Transfer of Advanced Knowledge and Practices in the Field of Sustainable Development of Megapolises and Cities Affected by Climate Change, and conducting its first forum in Tashkent, Uzbekistan. (For more details, see Section 4a (ii) National Circumstances)
4(b) Specific information applicable to Parties, including regional economic integration	Not applicable

¹²⁰ <https://www.lex.uz/uz/docs/7375421>

¹²¹ https://uza.uz/en/posts/methane-emissions-reduced_677982

¹²² <https://www.uzdaily.uz/en/president-of-uzbekistan-puts-forward-a-number-of-important-initiatives-as-part-of-the-global-climate-agenda/>

organizations and their member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the term, of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement	
4(c) How the Party's preparation of its nationally determined contribution has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement	Considering the results of the First Global Stocktake (GST, 2023) and sharing the global community's concern about insufficient efforts in combating climate change, Uzbekistan is increasing the ambition of its commitments under the Paris Agreement within the framework of NDC 3.0, raising the NDC target from 35 percent in 2030 to 50 percent by 2035. Uzbekistan's goal for 2035 is the next crucial milestone on the path to achieving net-zero emissions by 2055, as required by IPCC scenarios to limit warming to 1.5 °C with minimal or zero overshoot. This commitment is enshrined in national legislation and is accompanied by transparency and reporting mechanisms that ensure government accountability. In response to the GST results, Uzbekistan has developed its third NDC 3.0 to further enhance its ambitions for the period up to 2035. Uzbekistan has adopted an economy-wide approach, engaging stakeholders in the energy, industry, transport, waste, agriculture, construction, ecosystem, and social sectors, with the aim of further identifying climate change mitigation potential within the context of national circumstances.
4(d) Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on:	
4d (i) How the economic and social consequences of response measures have been considered in developing the Nationally Determined Contribution	In 2024, the real GDP of the Republic of Uzbekistan increased by 6.5 percent compared to 2023. Real GDP increased by 2.4 times compared to 2010, which is equivalent to a 141.5 percent increase. Achieving the adopted target indicator ensures the containment of greenhouse gas emissions growth as the economy develops. The country's intention to increase its ambitions to limit the growth rate of greenhouse gas emissions by reducing specific GHG emissions per unit of GDP by 50 percent (NDC 3.0) by 2035 from the 2010 level will not create obstacles to the country's socio-economic development and is consistent with the overall policy goals of increasing energy efficiency, reducing resource consumption by the economy, and increasing the share of renewable energy sources in

	the country's energy mix and as the Sustainable Development Goals (SDGs). In the future, this will allow the Republic of Uzbekistan, jointly with other Parties to the UNFCCC, to achieve the long-term global goal of preventing an increase in the average global air temperature by more than 2 °C. Considering both economic and social aspects and promoting active engagement with the private sector, the NDC adheres to a balanced approach to climate action. This approach acknowledges that decarbonization can stimulate economic growth, foster innovation, create new employment opportunities, and ensure stakeholder support while simultaneously safeguarding social welfare. Furthermore, the environmental impact of each decarbonization measure has been evaluated to ensure that sectoral targets and pathways align with broader sustainability goals, as outlined in the National Circumstances section. The circular economy in Uzbekistan represents a promising direction for sustainable development, capable of significantly reducing the burden on natural resources, minimizing waste, and creating new economic opportunities. In the face of growing environmental challenges and the global transition to a "green" growth model, Uzbekistan is taking steps to implement circular approaches in key sectors of the economy - energy, industry, agriculture, construction, and housing and utilities. Pilot projects are already being implemented for the recycling of raw materials, introduction of energy-efficient and resource-saving technologies, development of green infrastructure, and modernization of production processes. Government programs, support from international partners, as well as the introduction of new regulatory acts demonstrate the growing attention to issues of sustainable and circular production cycles. The development of a circular economy in Uzbekistan can become a key factor in ensuring sustainable economic growth, environmental safety, and improving the quality of life for the population in the long term.
(ii) Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which	Adaptation to climate change Uzbekistan's NDC 3.0 acknowledged the critical importance of adaptation measures in addressing climate vulnerability issues in key sectors. The country's geographical location and climatic conditions make it particularly susceptible to climate change impacts, especially in terms of water resources and agricultural productivity. NDC 2.0 laid the foundation for enhancing resilience through sectoral adaptation measures, with progress in implementation varying across different areas. Uzbekistan's updated Nationally Determined Contribution (NDC 3.0) envisages increased attention to adaptation along with climate change mitigation measures. The Climate Change Adaptation section in NDC 3.0 covers key sectors - agriculture, water resources, ecosystems and forestry, disaster risk reduction, healthcare and social sphere, as well as strategic infrastructure - and details specific

may cover, but are not limited to, sectors such as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries	measures to address the problems and challenges of the Aral Sea region. The Adaptation section - targets, measures, and actions for climate adaptation will be submitted to the UNFCCC Secretariat as a supplementary document. The priorities of the adaptation component are formulated within the framework of the national adaptation planning process and are based on the provisions of sectoral and regional strategies, ensuring their alignment with the national development program and international framework documents, such as the Sustainable Development Goals and the Paris Agreement.
5. ASSUMPTIONS AND METHODOLOGICAL APPROACHES, INCLUDING THOSE FOR ESTIMATING AND ACCOUNTING FOR ANTHROPOGENIC GREENHOUSE GAS EMISSIONS AND, AS APPROPRIATE, REMOVALS:	
5(a) Assumptions and methodological approaches used for accounting of GHG emissions and removals for the implementation of policies and measures, or strategies in the NDC in accordance with decision 1/CP.21, paragraph 31, and guidelines adopted by the CMA	In the Republic of Uzbekistan, the assessment of greenhouse gas emissions/removals in the GHG emission inventory for the period 1990-2022¹²³ was carried out according to the methodologies of the "Guidelines for National Greenhouse Gas Inventories of the IPCC, 2006"¹²⁴. In accordance with Decision 5/CMA.3, paragraph 25, Uzbekistan applied the Global Warming Potentials (GWPs) of greenhouse gases with a 100-year time horizon, as presented in the IPCC Fifth Assessment Report¹²⁵, for all included categories. During the preparation of the inventory, consistency was maintained in terms of scope, definitions, data sources, indicators, assumptions, and methodological approaches. Greenhouse gas emission assessments based on NDC 2.0 (inventory for 1990-2017, BUR1, 2021)¹²⁶ were recalculated in the 1990-2022 inventory (BTR1, 2024)¹²⁷. Uzbekistan includes all sectors and categories assessed in the 1990-2022 inventory in its updated NDC 3.0. Uzbekistan does not include the following greenhouse gases in its NDC 3.0: PFCs, SF₆, NF₃, using the Paris Agreement's flexibility provision (paragraph 48 of the MPG)¹²⁸. These gases were not included in the 1990-2022 inventory due to the lack of statistical activity data. To include them in the inventory, it is necessary to conduct research and study the experience of other countries in data collection and the use of methodological assumptions, as well as to build expert capacity. Uzbekistan intends to submit its Biennial Transparency Report every two years in accordance with the modalities, procedures, and guidelines set forth in Decisions 4/CMA.1 (Annex II) and 18/CMA.1 (Annex) of the Paris Agreement, and to reflect progress in achieving its NDC 3.0. Information on GHG emissions in 2035 and achievement of the NDC 3.0 target will be based on data from the latest available GHG inventory, which will comply with the methodologies of the current

¹²³ https://unfccc.int/sites/default/files/resource/NIR_BTR_kadastrGHG_Uzbekistan_0.pdf

¹²⁴ <https://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html>

¹²⁵ IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri, and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp, <https://www.ipcc.ch/report/ar5/syr/>

¹²⁶ <https://unfccc.int/sites/default/files/resource/FBURUZeng.pdf>

¹²⁷ <https://unfccc.int/first-biennial-transparency-reports>

¹²⁸ UNFCCC, Decision 18/CMA.1, Annex to decision 18/CMA.1, December 15, 2018.

	editions of the IPCC Guidelines (2006) and Global Warming Potential values for greenhouse gases in accordance with the relevant UNFCCC recommendations.
5(b) Assumptions and methodological approaches used for accounting for the implementation of policies and measures, or strategies in the NDC	Uzbekistan will assess the impact of its policies and measures on climate change through a GHG inventory. If necessary, the effects of specific policies and measures will be incorporated, defining relevant methodologies and assumptions, which should be noted in the corresponding Biennial Transparency Report (BTR). The assessment of current climate change mitigation policies and measures that are in effect or have been approved in the last two years was conducted in accordance with the "Technical Guidance for Developing Country Parties on Preparing for the Implementation of the Enhanced Transparency Framework under the Paris Agreement" (2023)¹²⁹ and is carried out based on: – analysis of existing and/or new relevant policies and strategies (in all mitigation-related sectors), to what extent they contribute to climate change mitigation and how they align with policy objectives in the NDC country; – analysis of the national institutional framework and coordination mechanisms; – analysis of development plans and sectoral plans, and assessment of the integration of targets related to climate change mitigation; – review of analytical reports and analysis of expert assessments in various areas related to climate change, used to evaluate the effectiveness of mitigation measures; – case studies - examination and analysis of documents on specific projects that implement climate change mitigation measures and have performance indicators; – analysis of time series of key indicators (for example, greenhouse gas emissions, SDG indicators, data from the National Statistics Committee); – modeling methods for projecting future greenhouse gas emissions, taking into account implemented and planned climate change mitigation measures.
5(c) if applicable, information on how a Party will take into account existing methods and guidelines under the Convention for accounting anthropogenic emissions and removals in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate;	In 2024, the ten comprehensive strategies and programs aimed at reducing greenhouse gas emissions and increasing climate resilience were implemented in the country: – New Uzbekistan Development Strategy, Section III (Presidential Decree No. 60, 2022) – "Uzbekistan-2030" Strategy (Presidential Decree No. 37, 2024) – Environmental Protection Concept until 2030 (Presidential Decree No. 5863, 2019) – Strategy for the Transition of the Republic of Uzbekistan to a "Green" Economy by 2030 (Presidential Resolution No. 4477, 2019)

¹²⁹ <https://unfccc.int>

	– Solid Waste Management Strategy (Presidential Resolution No. 4291, 2019) – Concept for the Efficient Use of Land and Water Resources (Presidential Decree No. 5742, 2019) – Agricultural Development Strategy until 2030 (Presidential Decree No. 5853, 2019) – Forestry Development Concept until 2030 (Presidential Resolution No. 4850, 2020) – Plan for Transitioning to Carbon-Neutral Electricity Generation by 2050 (Ministry of Energy, Ministry of Investments, Industry and Trade of the Republic of Uzbekistan (MIIT), EBRD) posted on the Ministry of Energy website – Program for the Transition to a "Green" Economy and Ensuring "Green" Growth in the Republic of Uzbekistan until 2030 (Presidential Resolution No. 436, 2022), (Sheet 6 of the indicators table)
5 (d) Methodologies and indicators of the Intergovernmental Panel on Climate Change (IPCC) used to assess anthropogenic emissions and absorption of greenhouse gases;	The target indicator for GDP carbon intensity, which forms the basis for the development of NDC 3.0, was calculated using greenhouse gas inventory data for 1990-2022 (BTR1, 2024) ¹³⁰ . In preparing the greenhouse gas inventory for emission/removals assessment, Uzbekistan used the IPCC 2006 "Guidelines for National Greenhouse Gas Inventories" and Global Warming Potentials (GWPs) from the IPCC Fifth Assessment Report, in accordance with the transparency requirements of the Paris Agreement. ¹³¹
5 (e) Assumptions, methodologies, and approaches specific to the sector, category, or type of activity, consistent with the IPCC guidelines, as appropriate, including, where applicable:	In all sectors of the GHG inventory, which served as the basis for the development of NDC 3.0, the methodologies and approaches recommended by the "Guidelines for National Greenhouse Gas Inventories, IPCC, 2006" were used. In the absence or insufficiency of activity data in certain inventory categories, assumptions were made, the application of which is described in detail in the National Inventory Report for 1990-2022. ¹³²
(i) The approach used to address emissions and subsequent removals from natural disturbances on managed lands;	Any approach used to assess emissions and removals resulting from natural disturbances will conform to the guidelines included in the "Guidelines for National Greenhouse Gas Inventories, IPCC, 2006" and any subsequent versions or refinements, as applicable, and will be based on best practices developed by the Parties to the UNFCCC.
(ii) The approach used to account for the emissions and removals from harvested wood products;	Not estimated
(iii) The approach used to address the effects of age-class structure in forests;	An approach based on forest areas was applied using national coefficients for the growth of tree biomass and the density of individual tree species.
5(f) Other assumptions and methodological approaches used to understand the nationally determined contribution and, if applicable, to estimate relevant	

¹³⁰ <https://unfccc.int/first-biennial-transparency-reports>

¹³¹ Resolution of the President of the Republic of Uzbekistan "On measures for the introduction of a national transparency system during the transition to a green economy in the Republic of Uzbekistan", № RP-213 of 05.06.2024, <https://lex.uz/docs/7572123>

¹³² <https://unfccc.int/documents/640099>

emissions and removals, including:	
(i) How reference indicators, baseline data, and/or reference levels are constructed, including, where applicable, reference levels specific to sectors, categories, or types of activities, encompassing, for example, key parameters, assumptions, definitions, methodologies, data sources, and models used;	NDC 3.0 was prepared based on inventory data from 1990-2022, as well as greenhouse gas emission projections obtained within the framework of the First Biennial Transparency Report (BTR1) in 2024. Uzbekistan intends to update the base year indicator value based on recalculations performed in the cadaster preceding the preparation of the next NDC. This is part of the ongoing process to improve inventory quality, increase the accuracy of greenhouse gas emission estimates, and enhance the completeness of coverage for emission and removals sources.
ii) For Parties with nationally determined contributions containing non-greenhouse gas components, information on assumptions and methodological approaches used in relation to these components, depending on what is applicable;	NDC 3.0 does not include additional targets not related to greenhouse gases.
(iii) information on how climate-affecting factors are assessed for climate-affecting factors included in nationally determined contributions not covered by the IPCC Guidelines;	NDC 3.0 does not include additional factors affecting climate
(iv) Additional technical information as needed;	Not applicable
5(g) The intention to use voluntary cooperation in accordance with Article 6 of the Paris Agreement, if applicable.	Uzbekistan plans to reduce the intensity of greenhouse gas emissions (carbon intensity of GDP) at the national level, while maintaining the possibility to participate in the mechanisms of Article 6 of the Paris Agreement through various international mechanisms (more details in the National Circumstances section). In this case, Uzbekistan intends to report on the use of Article 6 mechanisms of the Paris Agreement in its Biennial Transparency Reports in accordance with any guidance adopted under Article 6.
6. HOW THE PARTY CONSIDERS THAT ITS NATIONALLY DETERMINED CONTRIBUTION IS FAIR AND AMBITIOUS IN THE LIGHT OF ITS NATIONAL CIRCUMSTANCES:	
6(a) how the Party considers its nationally determined contribution to be fair and ambitious in light of its national circumstances;	The government of Uzbekistan is committed to combating global climate change, considering that the country's greenhouse gas emission levels have not yet reached their peak due to ongoing economic growth. Currently, Uzbekistan's share of global greenhouse gas emissions amounts to approximately 0.4 percent. Greenhouse gas emissions per capita amount to 5.9 tons of CO₂-eq per person (2022). Since 1990, they have decreased by 1.8 tons of CO₂-eq per person. High population growth rates, industrial development (including the construction industry, textile manufacturing, automotive sector, and

	agriculture) necessitate the expansion of the energy sector. Furthermore, ongoing climate aridization will require additional energy expenditure for cooling processes. Nevertheless, Uzbekistan is pursuing and developing long-term programs and strategies for low-carbon development. Uzbekistan's updated NDC 3.0 for the period up to 2035 does not envision an absolute reduction in greenhouse gas emissions but rather aims to limit their growth without jeopardizing the country's economic development. The implementation of this contribution is closely linked to achieving socio-economic goals and depends on the degree to which zero-carbon development principles are integrated into state strategies and programs. The favorable conditions for achieving the new target indicator are as follows: – Consistently high GDP growth rates (5-6 percent) over many years and its projected high growth for the foreseeable future. – Political will for the country's long-term transition to a "green" economy. – Development of low-carbon development strategies for the period up to 2055-2060. In fact, the implementation of the Nationally Determined Contribution (NDC 3.0) is directly linked to the country's sustainable development goals and depends on the extent to which ambitious targets for low-carbon development and transition to a "green" economy have been achieved and integrated into national strategies and programs. Thus, in accordance with Article 4.3 of the Paris Agreement, the NDC 3.0 of the Republic of Uzbekistan reflects its highest possible ambitions and represents progress that goes beyond the commitments made in NDC 2.0.
6(b) Considerations of fairness, including the reflection of equality;	Although Uzbekistan's share of global greenhouse gas emissions amounts to approximately 0.4 percent, ambitious targets have been set to reduce specific greenhouse gas emissions per unit of GDP by 50 percent by 2035 compared to the 2010 baseline. At the same time, Uzbekistan's economic growth is planned to be achieved through "green" and low-carbon development, which will contribute to attaining the global goal of the UNFCCC and the Paris Agreement in accordance with the country's capabilities and national circumstances. A just transition to green development in Uzbekistan's NDCs is viewed as a targeted process of decarbonization and climate adaptation of the economy based on the principles of fairness, social inclusivity, and the creation of decent jobs. In this process, workers, communities, and vulnerable groups benefit from the "green" economy and are protected from transition-related costs. With the establishment of the National Agency for Social Protection under the

	President of the Republic of Uzbekistan ¹³³ , reforms in the sphere of social policy have gained new momentum. One of the key areas of the Agency's activities is ensuring the well-being of vulnerable segments of the population, including those who may be affected by large-scale structural transformations, particularly in the energy sector.
6(c) How the Party has fulfilled paragraph 3 of Article 4 of the Paris Agreement;	Uzbekistan signed the Paris Agreement on April 19, 2017, ratified it on October 2, 2018¹³⁴, and submitted its first Nationally Determined Contribution (NDC1) to the UNFCCC Secretariat: to reduce specific greenhouse gas emissions per unit of GDP by 10 percent by 2030 from the 2010 level. In 2021, in fulfillment of the UNFCCC decisions and in accordance with national circumstances, Uzbekistan prepared and submitted an updated ambitious commitment (NDC 2.0), reaffirming its intention to continue efforts to reduce specific greenhouse gas emissions per unit of GDP by 35 percent by 2030 compared to the 2010 level, instead of the previously adopted 10 percent target. According to the requirements of Decision 4/CMA.1¹³⁵, NDC 3.0 should include more ambitious targets aligned with the global trajectories of not exceeding 1.5 °C proposed by the IPCC for 2035. The Government of Uzbekistan deemed it appropriate to select a more ambitious single target for the updated NDC 3.0 - to reduce the carbon intensity of GDP by 50 percent by 2035 relative to 2010. Given the uncertainty of forecasting, this value is considered quite achievable.
6(d) How the Party has fulfilled paragraph 4 of Article 4 of the Paris Agreement;	The Republic of Uzbekistan will continue to enhance its efforts to mitigate the consequences of climate change and, over time, will move towards targets for absolute reduction or limitation of emissions across the entire economy, considering national circumstances. To this end, the country is currently discussing the "Low-Carbon Development Strategy for the Period up to 2055".
6(e) How the Party has implemented paragraph 6 of Article 4 of the Paris Agreement.	Not applicable
7. HOW THE NDC CONTRIBUTES TOWARDS ACHIEVING THE OBJECTIVE OF THE CONVENTION AS SET OUT IN ITS ARTICLE 2	
7(a) how the contribution determined at the national level contributes to the achievement of the Convention's objective set forth in Article 2	Uzbekistan aims to undertake efforts to curb greenhouse gas emissions, setting goals for low-carbon development and achieving net-zero emissions by 2055-2060, through the broad and systematic implementation of "green" economy principles. This will contribute to stabilizing greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system, ensuring that food production in the country is not jeopardized, while also enabling the

¹³³ <https://ihma.uz/en>

¹³⁴ Law of the Republic of Uzbekistan "On the Ratification of the Paris Agreement (Paris, December 12, 2015)," No. LRU-491 , October 2, 2018, <https://lex.uz/ru/docs/3924451>

¹³⁵ UNFCCC, Decision 4/CMA.1, December 15, 2018.

	implementation of Article 2 of the UNFCCC and maintaining sustainable economic development.
7 (b) How the nationally determined contribution facilitates the implementation of Article 2, paragraph 1 (a) and Article 4, paragraph 1 of the Paris Agreement	To address pressing issues, a fundamental transformation of approaches to natural and energy resource utilization is necessary through the implementation of "green" economy principles. These principles focus on low-carbon development, resource conservation, environmentally friendly technologies, and sustainable agriculture. The long-term transition should be built on alignment with national sustainable development goals, rational consumption of natural resources, consideration of environmental and social factors in the economy, prioritization of "green" solutions in socio-economic policy, creation of "green" jobs, and attraction of investments for efficient resource use. This underscores the importance of implementing a long-term Low-Carbon Development Strategy as a key instrument for integrating climate challenges into the country's sustainable development. Demonstrating commitment to the Global Goal of the Paris Agreement, the following main objectives have been chosen as strategic directions for Uzbekistan's development: (i) increasing the energy efficiency of the economy and promoting rational consumption of natural resources through technological modernization and development of financial mechanisms; (ii) incorporating "green" criteria based on advanced international standards into priority areas of state investments and expenditures; (iii) facilitating the implementation of pilot projects in areas transitioning to a "green" economy through the development of state incentive mechanisms, public-private partnerships, and enhanced cooperation with international financial institutions; (iv) developing a system for training and retraining personnel for the labor market in a "green" economy by stimulating investment in education, strengthening cooperation with leading foreign educational institutions and research centers; (v) implementing measures to mitigate the negative impact of the environmental crisis in the Aral Sea region; (vi) strengthening international cooperation in the field of "green" economy, including through the conclusion of bilateral and multilateral agreements.

8. Implementation

8.1. Uzbekistan's initiatives to combat climate change within the framework of international and regional cooperation

The intensifying consequences of climate change are becoming a significant challenge for all countries, making it crucial to strengthen common approaches and positions among nations in addressing urgent issues.

In 2024, for the first time, the average global temperature rose by more than 1.5 °C. The past decade has been the hottest in the history of meteorological observations. All countries are experiencing the negative impacts of climate crises - the expanding scale of forest fires and desertification, the shrinking of glaciers, the growing shortage of water resources, and the deterioration of air quality.

In July 2024, at a meeting in the "SCO Plus" format (Astana, Kazakhstan) ¹³⁶, the President of Uzbekistan emphasized that global issues such as climate change and environmental disasters cannot remain outside the focus of the Shanghai Cooperation Organization. Member countries are increasingly facing consequences such as natural disasters, soil degradation, reduced agricultural yields, air pollution, and water scarcity. In this context, climate cooperation should become a crucial element of the new SCO agenda. Uzbekistan proposed developing a Climate Change Cooperation Agreement, which would include specific measures to achieve common goals and objectives in the field of "green" development, with particular emphasis on improving the quality of life of the population and enhancing social protection measures for the most vulnerable communities.

Climate change has emerged as the primary global challenge, exacerbating issues of poverty alleviation, food and energy security, and access to water and resources. In Central Asia, climate-related problems are becoming new obstacles to improving the population's quality of life and implementing national development strategies. In November 2024, at the United Nations Climate Change Conference (COP29), the President of Uzbekistan ¹³⁷ specifically emphasized that the countries of the Central Asian region have developed a Regional Strategy for Climate Change Adaptation. At COP29, the President of the Republic of Uzbekistan proposed the following initiatives:

- Expanding technical assistance from leading countries and multilateral institutions to identify climate challenges faced by developing countries.
- Defining unified approaches to prevent pollution of transboundary water resources and preserve sustainable biodiversity, as well as developing, under the umbrella of the UN, a Declaration on Commitments to Ensure the Integrity and Environmental Safety of River Ecosystems.
- Launching a Regional Bank of Genetic Resources to enhance plant resilience to climate change, as well as establishing a UN Innovative Agro-Industrial Hub in Uzbekistan for landlocked countries.
- Creating a World Climate Capitals Alliance for the transfer of advanced knowledge and practices in sustainable development of megacities and cities affected by climate change, and holding its first forum in Tashkent, Uzbekistan.

Uzbekistan intends to work closely with all regional partners on the practical implementation of common goals and targets, as the Uzbek government bears responsibility for preserving the country's environment, which is also one of the main directions of the nation's climate policy. To reduce the area of degraded lands and mitigate the consequences of climate change, Uzbekistan is carrying out large-scale greening efforts within the framework of the "Yashil Makon" (Green Space) project. As part of this initiative, drought-resistant plants have already been planted on more than two million hectares of desert territory in the Aral Sea region. The President of Uzbekistan has proposed an annual regional tree-planting campaign called the "Green Belt of Central Asia", to be held on the eve of the spring holiday of Navruz.

Uzbekistan is also successfully collaborating with the European Union on programs to mitigate the consequences of the Aral Sea's drying up, rational water use, and expand the share of "clean" energy sources. Climate change issues are inextricably linked to food and energy security. The President of Uzbekistan also proposed combining the scientific potential of countries to enhance the climate adaptation capacity of forestry and the agricultural sector and strengthen food

¹³⁶ <https://president.uz/ru/lists/view/7374>

¹³⁷ <https://president.uz/ru/lists/view/7690>

security within the framework of the "Horizon Europe" program. This partnership makes a significant contribution to the sustainable "green" development of Central Asia.¹³⁸

Uzbekistan has started a transition to a resource-saving and environmentally friendly model of economic development, one of the key areas of which is the development of "green" energy. A proposal was made to establish a Secretariat for the European Union's "Water - Energy - Climate Change" initiative in Tashkent to mobilize funding, technologies, and expertise. Additionally, as part of implementing common strategic objectives at the Samarkand Climate Forum, held on April 4-5, 2025, a Concept for "green" development of the Central Asian region was presented. The adoption and subsequent implementation of this concept will create a solid foundation for the environmentally oriented development of Central Asia.¹³⁹

In May 2025, at an informal summit of the Organization of Turkic States in Budapest, Hungary¹⁴⁰, Uzbekistan, represented by the President of Uzbekistan, proposed developing a joint "Roadmap" for preventing drought and environmental problems. This proposal was based on Uzbekistan's earlier suggestion to strengthen regional and global cooperation in "green" development at the International Climate Forum (May 2025, Samarkand, Uzbekistan), as well as Hungary's initiative to establish a Drought Prevention Institute. Uzbekistan also presented important proposals for enhancing regional and global cooperation in "green" development. The region comprising the member states of the Organization of Turkic States is one of those most affected by climate change. In this regard, Uzbekistan put forward an initiative to create a Turkic Environmental Council at the ministerial level to systematically address existing problems. It was proposed to locate the headquarters of this structure in Nukus, a major city in the Aral Sea region, which has suffered the most from the environmental disaster.

In light of the serious challenges posed by climate change to the sustainable development of all Central Asian countries and China, the President of Uzbekistan called for accelerating the adoption of the "Green" Development Program through 2030 during the second "Central Asia - China" summit (Astana, Kazakhstan, 2025)¹⁴¹. It was also proposed to establish an inter-country Environmental Alliance for dialogue and partnership in combating desertification, restoring degraded lands, and enhancing bio-ecological resilience in arid and desert zones.

8.2. Climate Finance

8.2.1. Opportunities and financing requirements for achieving the ambitious targets outlined in NDC 3.0 in alignment with the "Uzbekistan-2030" Strategy¹⁴²

Achieving Uzbekistan's climate targets requires substantial investments. According to estimates, climate change mitigation measures will require USD33.7 billion by 2030, increasing to USD69.9 billion by 2035. Adaptation measures will require an additional USD15.7 billion by 2030. These figures underscore the enormous scale of the financial challenge.

The energy sector represents the largest share of investment needs for climate change mitigation (USD57.0 billion by 2035), driven by goals in renewable energy and grid modernization. In the sphere of climate adaptation, agriculture and water resources dominate, requiring a total of USD14.6 billion by 2030 to implement measures and actions addressing the highest priority issues of climate vulnerability in economic sectors, regions, and the social sphere.

¹³⁸ <https://president.uz/en/lists/view/8025>

¹³⁹ <https://president.uz/ru/lists/view/8025>

¹⁴⁰ <https://president.uz/ru/lists/view/8141>

¹⁴¹ <https://president.uz/ru/lists/view/8232>

¹⁴² <https://lex.uz/ru/docs/6991208>

National government climate financing demonstrates positive trends - climate-positive expenditures reached USD3.46 billion (3.8 percent of GDP) in 2023.¹⁴³ Mechanisms such as green budget labeling, sectoral funds (with USD937 million allocated for 2024)¹⁴⁴, and the successful issuance of sovereign green bonds (USD660 million in 2023)¹⁴⁵ have been introduced. However, government resources are insufficient to cover investment needs, and climate adaptation measures currently receive the vast majority of tracked government climate expenditures.

International partners, especially multilateral development banks such as the World Bank, the Asian Development Bank, and the Asian Infrastructure Investment Bank, are significant contributors, providing hundreds of millions of dollars in climate finance annually. Specialized climate funds (Green Climate Fund, Global Environment Facility, and Adaptation Fund) offer targeted climate financing opportunities. The total flow of international climate finance is expected to reach USD5.2 billion annually by 2035, but a better sectoral balance is needed beyond the current concentration in the energy sector.

Private sector participation is growing, particularly through successful public-private partnership (PPP) projects in renewable energy (US\$26.5 billion mobilized) and initial issuances of corporate green bonds. However, significant untapped potential remains. Key barriers include the lack of comprehensive data, underdeveloped risk mitigation tools, limited use of complex financial mechanisms such as project bonds and securitization, and insufficient compliance of commercial bank lending with green taxonomy requirements.

Despite mobilized funding, significant investment gaps still remain. The lack of funding for climate change mitigation (reducing greenhouse gas emissions) is estimated at USD9.5 billion until 2030 (USD17.4 billion until 2035), while the climate adaptation funding deficit reaches USD7.2 billion until 2030. Agriculture faces the most critical funding deficit for climate adaptation activities.

There is also a corresponding gender gap - women face significant barriers in accessing climate finance, despite being disproportionately more vulnerable to the climate change impact. Although gender indicators have been developed, their systematic integration into financing mechanisms, consideration in data collection, and inclusion in project development are crucial for gender-sensitive, socially just, and effective climate measures and actions.

8.2.2. Strategic recommendations for mobilizing climate finance

To overcome funding gaps and effectively support the implementation of NDC 3.0, Uzbekistan plans to implement a number of strategic measures:

- Improving mechanisms to stimulate private sector investments in decarbonization of energy and industry (with a potential of attracting USD2-3 billion of private funds annually), introducing targeted regulatory incentives through the consistent application of the national green investment taxonomy.
- Expanding private sector participation through large-scale replication of the successful PPP model in renewable energy, as well as in other priority sectors such as waste management, water infrastructure, sustainable and environmentally friendly transport, and energy efficiency, while ensuring the integration of "green" and just criteria.
- Building national capacity through investment in targeted training for employees of government agencies, financial institutions, and the private sector on the use of climate

¹⁴³ https://api.mf.uz/media/document_files/Budjet_23_ru.pdf

¹⁴⁴ https://api.mf.uz/media/document_files/Budjet_P_24_ru.pdf

¹⁴⁵ https://api.mf.uz/media/document_files/Budjet_23_ru.pdf

finance instruments, project development in accordance with international standards, and monitoring, reporting, and verification (MRV) systems.

- Implementation of mandatory gender mainstreaming in climate finance through conducting gender analysis and developing gender action plans for all major climate finance projects, applying specific targets (for example, allocating at least 30 percent of funding to projects with significant gender benefits).
- Promotion of strong public-private partnerships and continued engagement with international development partners.

8.2.3. Emissions Trading/Carbon Markets - Climate Finance Mechanisms

In accordance with Article 6 of the Paris Agreement, a mechanism for trading carbon units is being established at both intergovernmental and corporate levels. At present, the specific operational mechanisms of this article have not yet been clearly defined. Countries are cooperating with each other on a voluntary basis, investing in developing countries as per the Paris Agreement's provisions on providing necessary support to developing nations.

In particular, Uzbekistan has signed framework agreements and relevant memoranda with the Republic of Korea and Japan. In 2022, a Memorandum¹⁴⁶ of cooperation on the Joint Credit Mechanism (JCM) co-financing mechanism was signed between the Government of the Republic of Uzbekistan and Japan. According to the text of the memorandum, the Ministry of Economic Development and Poverty Reduction (now the Ministry of Economy and Finance) serves as the national body responsible for implementing this mechanism.

This mechanism allows for attracting up to 50 percent of investments into the project, enabling Uzbek companies and organizations to secure additional funding. The purpose is to further implement the generated carbon units to fulfill the Nationally Determined Contributions (NDCs) for greenhouse gas emission reductions of both countries.

In 2023, the Government of the Republic of Uzbekistan and the Republic of Korea signed a Framework Agreement¹⁴⁷ on cooperation in climate change mitigation and greenhouse gas emissions reduction. The carbon units generated can be used to fulfill the NDC commitments made under the Paris Agreement.

Uzbekistan is actively leveraging the opportunities of Article 6 of the Paris Agreement, particularly its sections 6.2 and 6.4. At present, Uzbekistan is developing a series of projects aimed at reducing greenhouse gas emissions through achieving energy and resource efficiency, implementing waste utilization and recycling, and employing innovative technologies and biomaterials as energy resources.

Uzbekistan's cooperation is not limited exclusively to countries within the framework of Article 6, Section 6.2 of the Paris Agreement. While continuing to expand its list of partner countries, Uzbekistan is also developing projects for utilizing carbon units in voluntary markets. In this regard, the Cabinet of Ministers has approved a Temporary Regulation¹⁴⁸ on the Procedure for Implementing International Greenhouse Gas Emissions Trading Projects.

Uzbekistan became the first country in the world to receive a payment from the World Bank on June 21, 2024, for reducing carbon emissions under the policy-based lending program. This innovative project - the **Innovative Carbon Resources Application for Energy Transition (iCRAFT)** -

¹⁴⁶ https://www.uz.emb-japan.go.jp/itpr_ru/memorandumcreditsystem.html

¹⁴⁷ <https://www.gazeta.uz/ru/2023/10/23/climate/>

¹⁴⁸ <https://lex.uz/ru/docs/7408855>

was created to support Uzbekistan in implementing measures to improve energy efficiency, gradually phase out energy subsidies, and transition to clean energy sources. **The World Bank's Transformative Carbon Assets Facility (TCAF)** allocated a grant of USD7.5 million to Uzbekistan for successfully reducing carbon emissions by 500,000 tons within the framework of the iCRAFT project. These greenhouse gas emission reductions have undergone independent verification.¹⁴⁹

Uzbekistan has become a pioneer in the Central Asian region in issuing sovereign green bonds. In July 2021, the country issued its first sovereign Sustainable Development Goals (SDGs) bond, which was the first such issuance in the Central Asian region and the second in the world¹⁵⁰ valued at USD235 million. The funds from the bonds were directed towards projects related to seven key SDGs: education, water management, healthcare, green transport, pollution control, natural resource management, and green energy. Building on this success, Uzbekistan issued its first green sovereign Eurobonds in October 2023, totaling USD660 million¹⁵¹. Listed on the London Stock Exchange, these Eurobonds are aimed at projects specifically aligned with the country's national green taxonomy.

A significant milestone was achieved with the issuance of the country's first corporate green Eurobonds by Uzbekistan's Industrial and Construction Bank (SQB) in August 2023, totaling USD100 million.¹⁵² The transaction was arranged by Société Generale, with investors including IFC, the Austrian Development Bank, the Asian Infrastructure Investment Bank, and the German development finance institution DEG. In 2024, SQB issued internationally verified sustainable development bonds on the London Stock Exchange, valued at USD460 million and USD680 million.¹⁵³ The funds were allocated to financing green projects within the country, particularly initiatives in the renewable energy sector, such as the construction of solar power plants.

Following this, in September 2024, the Uzbek Mortgage Refinancing Company issued green bonds worth 50 billion Uzbek soums (approximately USD4 million) on the Tashkent Stock Exchange in accordance with the new corporate green bond¹⁵⁴ standard. These bonds will finance, and refinance green loans provided by commercial banks for energy efficient renovation in the construction sector.

Private sector participation in green financing shows promising signs, though with significant potential for further growth. Corporations, especially in sectors highly vulnerable to climate change and with considerable potential for climate action impact, are beginning to recognize the economic viability of sustainable development and invest in green technologies and practices. However, the lack of data on corporate investments in decarbonizing their operations limits the analysis of the current state and hinders the formation of a complete picture of this trend.

Uzbekistan has developed industry standards and regulations to create attractive investment opportunities in various sectors. In the energy sector, the introduction of adequate electricity supply tariffs and power purchase agreements has already demonstrated success: private investments in renewable energy projects have reached USD26.5 billion through public-private partnership mechanisms. The regulatory framework of the waste management sector, including

¹⁴⁹ <https://www.worldbank.org/en/news/press-release/2024/06/21/uzbekistan-receives-7-5-million-in-carbon-credits-for-enabling-half-a-million-tons-of-emissions-reduction>

¹⁵⁰ <https://www.undp.org/uzbekistan/press-releases/uzbekistan-releases-its-first-sdg-bond-allocation-and-impact-report>

¹⁵¹ <https://gov.uz/ru/news/view/3061>

¹⁵² <https://sqb.uz/press-center/news-ru/uzpromstroybank-razmestil-na-londonskoy-fondovoy-birzhe-ocherednye-mezhdunarodnye-obligatsii/?srsId=AfmBOoGIXBpoaHWWHOrvLUvcvhiO9BuBOLFPKCcpKZftwAz3bjHTYi>

¹⁵³ https://sqb.uz/press-center/news-ru/uzpromstroybank-razmestil-na-londonskoy-fondovoy-birzhe-ocherednye-mezhdunarodnye-obligatsii/?srsId=AfmBOOrTOsR9kWO-ZHKNFEj8m75bWdZ7wf-JAiI8HMZlftKxdXafG_gD

¹⁵⁴ <https://napp.uz/ru/news/yashil-korporativ-obligatsiyalar-birinchi-bor-chiqariluv-ro-yaxtdan-o-tkazildi>

disposal tariffs and mandatory recycling standards, has the potential to attract USD2-3 billion in private investment by 2030.

Uzbekistan plans to actively implement carbon pricing mechanisms to ensure the possibility of attracting private investment, especially in the industrial and energy sectors. Establishing a clear price signal for carbon emissions will stimulate private sector investment in clean technologies and improved energy efficiency. Forecasts indicate the potential mobilization of private investments amounting to USD8-10 billion in the industrial sector alone by 2030.

Table 2. Opportunities for attracting private sector climate investments

Sector	Investment opportunities	Incentives	Investment potential (2030), billion USD
Energy	– Green bonds – PPP projects – Commercial loans	– Electricity supply tariffs – Power purchase agreements – Grid access guarantees	15–20
Industry	– ESG investments – Green loans – Technology leasing	– Carbon pricing – Technology standards – Tax incentives	8–10
Agriculture	– Commercial bank loans – Agricultural insurance – Green credit lines	– Land tenure guarantees – Market access – Risk guarantees	5–7
Waste	– PPP projects – Municipal bonds – Commercial financing	– Waste disposal rates – Recycling requirements – Waste-to-energy tariffs	2–3
LULUCF	– Carbon offsets – Sustainable forestry – Conservation financing	– Carbon markets – Forest certification – Payments for ecosystem services	1–2

9. Just transition

A just transition in Uzbekistan's Nationally Determined Contributions (NDCs) is viewed as a targeted process of decarbonization and climate adaptation of the economy based on the principles of fairness, social inclusion, and the creation of decent jobs. In this process, workers, communities, and vulnerable groups benefit from the green economy and are protected from the costs associated with the transition. With the establishment of the National Agency for Social Protection under the President of the Republic of Uzbekistan¹⁵⁵, reforms in the field of social policy have gained new momentum. One of the key focus areas of the Agency's activities is ensuring the

¹⁵⁵ <https://ihma.uz/en>

well-being of vulnerable segments of the population, including those who may be affected by large-scale structural transformations, particularly in the energy sector.

Starting in 2024, Uzbekistan began to gradually move towards market pricing for electricity and natural gas, which were previously supplied to the population at subsidized tariffs. The liberalization of tariffs creates conditions for improving the efficiency of the energy system and the sustainability of the whole industry sector. However, rising utility costs may significantly affect living standards, especially for low-income families.

To mitigate the negative consequences of liberalization, the following targeted support measures have been introduced:

- Social tariffs for established consumption limits: 200 kWh of electricity per month, 100 cubic meters of natural gas during the non-heating period and 500 cubic meters during the heating period.
- Monetary compensation for low-income households included in the registry of the National Social Protection Agency.
- One-time payments to vulnerable families during the transition period.

These measures allow for a temporary reduction in the burden on family budgets. However, they are short-term in nature and are aimed at adapting to the transition period.

The Aral Sea region is traditionally considered one of the most vulnerable to climate change. In this regard, from 2017 to 2025, one-time financial assistance was provided to families in need in the Republic of Karakalpakstan and Khorezm region. This measure served as urgent support aimed at mitigating the consequences of climatic and socio-economic shocks.

Starting from 2025, the social protection policy in the Aral Sea region will shift to a more sustainable and systematic approach. New types of support aimed at increasing the population's adaptive capacity are being introduced. One of the first measures in this direction has been ensuring access to safe drinking water through the drilling of artesian wells in the most vulnerable and hard-to-reach remote settlements.

Currently, the National Agency for Social Protection under the President of the Republic of Uzbekistan is developing an Adaptive Social Protection Strategy aimed at safeguarding the population in the face of increasing climate shocks. The document will outline response and support mechanisms for periods of extreme weather events and natural disasters. The initial phase involves establishing social protection systems tailored to address risks such as floods, droughts, landslides, and heat waves.

According to the World Bank report (2023), the "green" transition will not lead to a significant reduction in the overall number of jobs but will transform the employment structure and demand for new competencies. Specifically, accelerated employment growth is forecast in the following sectors:

- Renewable energy, including the production and maintenance of solar, wind, and other renewable energy installations.
- Insurance and climate-resilient financial services.
- Information and communication technologies (ICT) support the digitalization of environmentally friendly solutions.
- Tourism and hospitality industry, particularly in the areas of sustainable and eco-friendly tourism.

An increase in the number of jobs is also expected in the processing industry due to the localization of equipment and component production for green technologies.

In the process of technological modernization and the introduction of energy-efficient solutions and "green" technologies, significant risks of job loss arise in industries with a high proportion of manual labor. On the one hand, automation, digitalization, and the transition to environmentally sustainable production practices create new jobs; on the other hand, they can lead to mass layoffs of workers in traditional, energy-intensive, and labor-intensive sectors.

To mitigate the socio-economic consequences of labor market transformation, Uzbekistan commits to providing workers with opportunities for retraining, skill enhancement, and subsequent employment in sectors with growing demand for highly qualified labor resources such as "green" energy, logistics, care services, digital technologies, and others.

10. Children and Youth

10.1. Children

According to the "Climate Landscape Analysis for Children" (CLAC ¹⁵⁶, all regions of Uzbekistan are classified as zones of "high" or "extremely high" exposure to climate and environmental threats. The study reveals that 91 percent of children (9.5 million) are already affected by climate-induced heat waves. It is projected that by 2030, Uzbekistan will be among the ten countries in the world most susceptible to heat stress.

In Uzbekistan, 30.3 percent of the population is under 16 years old. Considering the scale of challenges and the particular vulnerability of children and youth to the impacts of climate change, as well as their unique potential to implement comprehensive changes for the country's long-term development, the Government is taking systematic measures for their planned protection, while simultaneously expanding opportunities for their active participation in climate action.

On November 17, 2022, Uzbekistan became the first country in Central Asia to sign the Declaration on Children, Youth and Climate Action. ¹⁵⁷ As a follow-up step, Uzbekistan joined UNESCO's Global Education Partnership (GEP) ¹⁵⁸, which led to the launch of the Environmental Education Program. A National Working Group has been established, which includes the Ministry of Preschool and School Education, the Ministry of Ecology, the Ministry of Sports and Youth Policy, the Zamin Foundation, UNICEF, and youth representatives, to coordinate national initiatives on children, youth, and climate change issues.

In 2023, three ministries signed the National Strategy "On Promoting a Culture of Sustainable Development and Engaging Children and Youth in the Climate Agenda" ¹⁵⁹, which became the first national act to officially establish the status of children and youth as active participants in climate action.

The Network of Young Climate Champions was established in 2024 by the Ministry of Preschool and School Education, the Zamin Foundation, and UNICEF, with support from the Ministry of Ecology and the Youth Affairs Agency. The first generation of 50 selected teenagers from 20

¹⁵⁶ <https://www.unicef.org/uzbekistan/documents/%D0%B0%D0%BD%D0%B0%D0%BB%D0%B8%D0%B7-%D0%BA%D0%BB%D0%B8%D0%BC%D0%B0%D1%82%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%BE%D0%B3%D0%BE-%D0%BB%D0%B0%D0%BD%D0%B4%D1%88%D0%B0%D1%84%D1%82%D0%B0-%D0%B4%D0%BB%D1%8F-%D0%B4%D0%B5%D1%82%D0%B5%D0%B9-%D0%B2-%D1%83%D0%B7%D0%B1%D0%B5%D0%BA%D0%B8%D1%81%D1%82%D0%B0%D0%BD%D0%B5>

¹⁵⁷ <https://www.unicef.org/uzbekistan/media/5206/file/%D0%94%D0%B5%D0%BA%D0%BB%D0%B0%D1%80%D0%B0%D1%86%D0%B8%D1%8F%20%D0%BE%20%D0%B4%D0%B5%D1%82%D1%8F%D1%85,%20%D0%BC%D0%BE%D0%BB%D0%BE%D0%B4%D0%B5%D0%B6%D0%B8%20%D0%B8%20%D0%BA%D0%BB%D0%B8%D0%BC%D0%B0%D1%82%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B8%D1%85%20%D0%B4%D0%B5%D0%B9%D1%81%D1%82%D0%B2%D0%B8%D1%8F%D1%85.pdf>

¹⁵⁸ <https://www.unesco.org/en/sustainable-development/education/greening-future/members>

¹⁵⁹ https://youthcan.uz/storage/files/shares/rus_INTERNATIONAL_STRATEGY.pdf

regional schools across the country underwent training and, over a 12-month period, organized 260 events, reaching more than 17,000 young participants.

In 2025, the project "Expanding and Developing Youth Leadership through Climate Education" for 2025-2028 was launched. This project is being implemented by the Ministry of Preschool and School Education in partnership with the Zamin Foundation and UNDP. By 2028, the project aims to reach 1.3 million school students, train 50,000 teachers, and educate 4,000 rural adolescents in "green" skills. Special attention will be given to engaging girls in Science, Technology, Engineering, and Mathematics (STEM) fields and developing their leadership qualities in environmental protection.

10.2. Youth

Uzbekistan recognizes the importance of ensuring youth participation in both the development and implementation of climate-related policies, where appropriate, and acknowledges that young people are a crucial driving force in implementing the country's climate agenda. Uzbekistan also recognizes the importance of equipping children and young people with the knowledge, skills, and behaviors necessary to understand and develop the connection between climate change issues and natural ecosystems, access green professions, and providing them with opportunities to thrive in life and work.

The Presidential Decree of the Republic of Uzbekistan (No. DP-106 of July 23, 2024)¹⁶⁰ provides a roadmap for the development and implementation of Uzbekistan's NDC 3.0 commitments through the creation of a unified national climate strategy. In cooperation with the Youth Affairs Agency and the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, measures have been identified to build the capacity of young people, particularly mechanisms for supporting innovations and startups to diversify the economy and stimulate youth employment.¹⁶¹

A Strategy for Engaging Youth on the Climate Agenda has been developed in 2024. The Youth Strategy encompassed three priority areas: an institutional mechanism for engagement, scheduled eco-events, and the promotion of education in climate science and ecology. The institutional mechanism for involvement entails the establishment of a Youth Council. To implement the projects outlined in the Strategy for youth, a memorandum was signed between the Ministry of Ecology, Environmental Protection and Climate Change and the Volunteers Association of Uzbekistan. As part of the Youth Ambassadors Program on Ecology, active young leaders from all regions of Uzbekistan were selected through an "open call" process. These leaders will develop regional maps of environmental issues with the support of the Youth Council under the Ministry of Ecology, Environmental Protection and Climate Change.¹⁶²

In 2023, the first Central Asian Youth Eco-camp¹⁶³ was held in Samarkand, bringing together 60 youth leaders from five Central Asian countries. The camp participants prepared a Regional Youth Statement, which was presented at the 28th Conference of the Parties in Dubai, UAE. They also jointly developed a Regional Strategy for Engaging Youth in Climate Change Action, which was subsequently signed by all five governments of Central Asian countries.

¹⁶⁰ Decree of the President of the Republic of Uzbekistan "On the Establishment of the Climate Council under the President of the Republic of Uzbekistan," No. DP-106 of July 23, 2024, <https://lex.uz/uz/docs/7051114>

¹⁶¹ Resolution of the President of the Republic of Uzbekistan "On Measures for Fundamental Reforming and Raising the State Youth Policy of the Republic of Uzbekistan to a New Level" of June 30, 2020, No. RP-6017, <https://lex.uz/docs/6973335>

¹⁶² <https://yuz.uz/en/news/v-ministerstve-ekologii-prezentovali-strategiyu-po-vovlecheniyu-molodeji-v-klimaticheskuyu-povestku>

¹⁶³ <https://www.newscentralasia.net/2023/10/04/molodyye-eko-aktivisty-iz-tsentralnoy-azii-obyedinyayutsya-dlya-prodvizheniya-ustoychivogo-razvitiya/>

An international youth eco-camp¹⁶⁴ was held in 2024, bringing together young people from Central Asian countries, as well as Turkey, Hungary, and Azerbaijan. The outcome of its work was a Joint Statement of the Youth of Central Asia and Turkic-Speaking States, presented by the youth themselves at a high-level event during the 29th Conference of the Parties in Baku, Azerbaijan.

In 2025, as part of the Youth Climate Champions Network established in August 2024 by the Ministry of Preschool and School Education, the "Zamin" Foundation, and UNICEF, with support from the Ministry of Ecology and the Youth Affairs Agency, a second generation of 51 youth leaders from all regions was selected. Furthermore, the Network received YOUNGO accreditation to host Uzbekistan's first Local Conference of Youth (LCOY) in August 2025, involving over 150 of the country's most active young leaders. Their voices are will subsequently be reflected in the National and Global Youth Climate Statement for COY-20 (Children & Youth Climate Statement) and at the 30th Conference of the Parties in Belém, Brazil. In 2025, national surveys and online/offline consultations were conducted with young people across the country to identify their opinions, needs, and proposals regarding the climate change.

11. Monitoring

Based on the decision of the Government of Uzbekistan to establish a Climate Council under the President of the Republic of Uzbekistan in 2023¹⁶⁵, which was designated as responsible for monitoring the implementation of the Republic of Uzbekistan's obligations arising from the United Nations Framework Convention on Climate Change and the Paris Agreement, a system for monitoring, reporting, and verification (MRV) of greenhouse gas emissions in Uzbekistan was developed in accordance with Article 13 of the Paris Agreement. This system was officially approved by the Resolution of the President of the Republic of Uzbekistan "On Measures to Implement the National Transparency System in the Transition to a 'Green' Economy in the Republic of Uzbekistan"¹⁶⁶ in June 2024, and the Concept for Implementing the National Transparency System, approved by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan¹⁶⁷ in November 2024.

The progress of NDC 3.0 implementation and the evaluation of the effectiveness of implemented measures and strategies will be tracked within the relevant component of the MRV system and will be reflected in subsequent Biennial Transparency Reports of Uzbekistan.

¹⁶⁴ <https://www.newscentralasia.net/2024/06/25/v-uzbekistane-startoval-mezhdunarodnyy-molodezhnyy-ekologicheskiy-lager/>

¹⁶⁵ Decree of the President of the Republic of Uzbekistan "On the Establishment of the Climate Council under the President of the Republic of Uzbekistan," No. DP-106 of July 23, 2024., <https://lex.uz/uz/docs/7051114>

¹⁶⁶ Resolution of the President of the Republic of Uzbekistan "On Measures to Implement a National Transparency System for the Transition to a 'Green' Economy in the Republic of Uzbekistan," No. RP-213 of June 5, 2024, <https://lex.uz/ru/docs/7572123>

¹⁶⁷ Resolution of the President of the Republic of Uzbekistan "On Measures to Implement a National Transparency System in the Transition to a 'Green' Economy in the Republic of Uzbekistan," No. RP-213 of 05.06.2024, <https://lex.uz/ru/docs/7572123>