

Uzbekistan's policy on adaptation and mitigation of climate change



In recent years, the climate agenda has become one of the priority areas of Uzbekistan's domestic and foreign policy. This trend is explained by the fact that the country is increasingly feeling the effects of global climate change.

At the same time, the measures taken by the government to adapt and mitigate the effects of climate change are taken in accordance with Uzbekistan's commitments under the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and the Paris Agreement and other international documents to achieve the Sustainable Development Goals.

It is noteworthy that in our country, special attention is paid to the issues of adaptation and mitigation of climate change at the highest level. This is confirmed by the words of the Head of State, who has repeatedly emphasized and emphasizes at various venues the priority of the climate agenda for Uzbekistan.

Thus, addressing the Parliament and the people (December 2022), Shavkat Mirziyoyev noted that "at present, serious environmental problems are emerging in Uzbekistan, as well as throughout the world. In most regions, these include soil degradation, reduction of fertile land, desertification, water shortages, drought, increased frequency of emergencies, as well as issues of providing the population with clean drinking water. Therefore, caring for nature, preserving the purity of water, air and the environment should become a real concern for the residents of each mahalla."

At a joint session of the chambers of the Oliy Majlis (July 2023), the President once again emphasized that "solving the problems of ecology and environmental protection, water shortage will continue to be an urgent task for us. We are all, of course, in favor of ensuring ecological balance, clean air and water, a clean environment. This issue is extremely relevant and important for us. Large-scale programs aimed at

preserving and strengthening the invaluable ecosystem are being implemented in the country. We will continue this work at an accelerated pace.” Speaking at the 78th session of the UN General Assembly (September 2023), the Head of State also noted that “Uzbekistan, to the best of its ability, continues to direct efforts to eliminate the consequences of the Aral tragedy, which is a global problem. The support of the international community is very important to continue work in this direction,” the President said. In turn, at the 28th Conference of the Parties to the UN Framework Convention on Climate Change (COP-28, UAE 2023), the President of Uzbekistan Shavkat Mirziyoyev noted that “the transition to a green economy and achieving carbon neutrality are a priority strategic task of the New Uzbekistan.”

Understanding the importance and urgency of action in addressing climate change issues, such as the transition to environmentally friendly energy sources, meeting energy needs and ensuring sustainable development, Uzbekistan joined the UN Framework Convention on Climate Change (UNFCCC) in 1993, ratified the Kyoto Protocol (1999) and the Paris Agreement (2018). Also in 2021, at the 26th session of the United Nations Framework Convention on Climate Change (COP-26), Uzbekistan announced additional commitments to reduce greenhouse gas emissions per unit of GDP by 35% by 2030 compared to 2010 levels. In 2022, the country joined the global initiative Global Methan Pledge to achieve the collective goal of reducing methane emissions by at least 30% by 2030 compared to 2020.

In order to fulfill the undertaken obligations, the national legal framework has significantly expanded and strengthened in recent years. In particular, the key areas of Uzbekistan’s climate policy were recorded in such flagship documents as the Development Action Strategy for 2017-2020, the Uzbekistan-2030 Strategy, as well as such program documents as the Environmental Protection Concept until 2030, the Water Resources Development Concept for 2020-2030, the Agricultural Development Strategy for 2020-2030, the Strategy for the Transition to a Green Economy for 2019-2030, the Biodiversity Conservation Strategy for 2019-2028 and others. In addition, the Strategy for Decarbonization of the Economy of Uzbekistan until 2060 has been developed.

To ensure the practical implementation of these programs, as well as for the development of agriculture and water management, energy, environmental protection, etc., a number of laws, decrees and resolutions of the President and the Cabinet of Ministers of the Republic of Uzbekistan have been adopted. In addition, the Water, Ecological and Social Codes are being developed in the country.

These documents set out the main areas for achieving target indicators for the implementation of adaptation and mitigation measures, including:

- a) reducing specific greenhouse gas emissions per unit of GDP by 30-35% by 2030 compared to the baseline of 2010;
- b) introducing cleaner and safer industrial technologies and increasing the energy efficiency of economic sectors by 2 times, industrial infrastructure – by 20%;
- c) increasing the efficiency of water use in all sectors of the economy, introducing water-saving irrigation technologies up to 2 million hectares and increasing crop yields by 30-35%;
- d) increasing the production capacity of renewable energy sources (RES) to 15-25 GW and bringing their share in the total volume of electric energy production to more than 30-40%;
- e) expanding the area of protected natural areas to 12% of the country’s territory, as well as increasing forest plantations in the Aral Sea region to 2.3 million hectares;
- f) introducing international and national “green” criteria in the field of public investment and procurement, a system of certification of energy efficiency of buildings, etc.

By now, the country has already seen the practical implementation of measures to achieve these targets.

Thus, in order to improve energy efficiency, since 2020, it has become mandatory to determine the class

and technical indicators of energy efficiency of products (equipment, goods) and technologies during their certification in Uzbekistan.

Since August 1, 2024, the ISO 50001 energy management system has been gradually introduced at domestic enterprises and organizations, providing for transparency and objectivity in assessing energy efficiency, reducing energy intensity and reducing emissions into the atmosphere. The implementation of this standard will allow enterprises to obtain an international certificate to reach the international level.

Measures are being taken to stimulate energy efficiency in the household sector, including compensation for part of the expenses of individuals when installing solar photovoltaic stations in homes, interest expenses on loans from commercial banks to individuals and legal entities for the purchase of renewable energy installations, energy-efficient gas burners and boilers, as well as other energy-efficient equipment. From November 1, 2024, energy efficiency categories for buildings and structures with an area of over 200 square meters were introduced in Uzbekistan. The objects will be divided into categories from “A” – this is the highest energy efficiency to “G” – the lowest energy efficiency. By the end of 2024, a specialized electronic platform will be created for maintaining a register of energy passports and reports on the results of energy audits of buildings and structures. Mandatory energy audits will be carried out at least once every five years.

In addition, a course has been taken to increase the share of renewable energy sources (RES). According to the International Renewable Energy Agency (IRENA), in 2020-2023, the volume of solar energy in the country increased 63 times, from 4 MW to 253 MW, which experts associate with the commissioning of a solar power plant in the Karmana district of the Navoi region in 2021.

By the end of 2023, solar and photovoltaic power plants with a total capacity of more than 1.1 thousand MW and wind power plants with a capacity of 500 MW were put into operation. In general, it is planned to increase the capacity of “green” power plants to 27 GW by 2030. At the same time, the country is taking measures to save water and rationally use water resources. The country has adopted a sectoral adaptation plan for water management for 2024-2030.

One of the priority areas is the introduction of water-saving technologies for irrigation. According to the Ministry of Water Resources, in 2023-2024, the area covered by water-saving technologies increased from 1 to 1.6 million hectares (from 23% to 37% of the total area of irrigated land – 4.3 million hectares).

The introduction of water-saving technologies allows saving up to 30-40% of water, fertilizers and fuel – up to 25-30%. By 2030, it is planned to cover all irrigated lands with water-saving technologies.

These indicators put Uzbekistan in first place in the Central Asian region and 7th place in the world after Israel, the USA, the Russian Federation, Spain, Brazil and Italy in terms of areas with the introduction of water-saving technologies. In addition, in order to reduce water losses in irrigation networks, at the initiative of the President of Uzbekistan, 2024 was declared a “shock year for concreting canals” in the water sector. The task was set to concrete 1.5 thousand km in 2024, 4 times more canals than in 2023, and at least 2 thousand km of canals in 2025.

In total, by 2030, it is planned to increase the share of main and inter-farm canals with concrete coating from 10.1 thousand km (37%) to 20.5 thousand km (71%). In general, according to the data, the introduction of water-saving technologies and the adoption of comprehensive measures in the field of water management allows Uzbekistan to save about 7 billion m³ of water annually.

At the same time, automated control systems (SCADA) and online water metering and control “Smart Water” are being actively introduced in the water sector.

Thanks to the introduction of digital technologies at water management facilities that facilitate the operational management of water resources, water savings increased by 1.5 times in 2021-2023, from 350 million m³ to 530 million m³.

In order to prevent and combat land degradation, a set of measures was developed for 2022-2025, consisting of more than 10 points and providing for an increase in the humus content in soils from 1 to 1.5%, a reduction in saline lands by more than 1.5 times by 2025, from 2.5 to 1.5 million hectares, as well as counteracting secondary soil salinization.

To eliminate the consequences of desertification of the Aral Sea in 2018-2022. Large-scale work was carried out to create “green covers”: solo- and drought-resistant plants (saxaul, cherkes, kandym and others) were planted on 1.7 million hectares. In addition, in order to preserve the unique biodiversity and their habitat in the Republic of Karakalpakstan, 5 new protected natural areas with a total area of 3.6 million hectares were created.

At the same time, since 2021, the country has been implementing the nationwide program “Yashil Makon” (“Green Land”), which sets the goal of annually planting 200 million trees and shrubs in order to bring the level of greenery to 30% by 2030. At present, this figure is 12%. Within the framework of the project, about 10 thousand hectares of green areas were created, including public parks, “green belts” around the cities of Bukhara, Nukus, Khiva and Urgench with a total length of 40 km.

In general, according to various sources, over the past decades, more than 20 large-scale projects in water and agriculture, water supply and environmental protection have been implemented in Uzbekistan in cooperation with international partners, worth more than \$ 1.5 billion.

Thus, today we can already see some positive achievements of the policy implemented in Uzbekistan to adapt and mitigate the effects of climate change. At the same time, achieving all the targets within the framework of the undertaken commitments still requires time and further transformations.

In this regard, in order to effectively address the problems related to climate change, form a National Strategy and a unified state policy, coordinate the activities of ministries and departments in this area, as well as effectively fulfill Uzbekistan’s obligations under the Paris Agreement, the Climate Council under the President of the Republic of Uzbekistan was established in August 2024, which is the highest advisory body on climate change mitigation and adaptation. The Climate Council is designed to help attract resources, including financial ones, to support projects for the introduction of “green” technologies, scientific developments and innovations.

Along with domestic efforts on adaptation and mitigation, Uzbekistan has also significantly intensified climate diplomacy in recent years and has been able to achieve specific positive results.

In November 2018, the Multi-Partner Human Security Trust Fund for the Aral Sea Region in Uzbekistan was launched under the auspices of the UN. The Trust Fund provides a single platform for cooperation at the national and international levels to address environmental and socio-economic problems of the Aral Sea region and achieve the Sustainable Development Goals.

On October 24-25, 2019, the International High-Level Conference “Aral Sea Region – a Zone of Environmental Innovations and Technologies” was held in Nukus under the auspices of the UN. The final documents of this event formed the basis for the special Resolution of the UN General Assembly “On declaring the Aral Sea region a zone of environmental innovations and technologies” initiated by Uzbekistan and adopted in 2021.

In December 2023, the UN General Assembly approved the resolution “Central Asia Facing Environmental Challenges: Strengthening Regional Solidarity for Sustainable Development and Prosperity”, proposed by Uzbekistan in co-authorship with 60 countries. The document emphasizes the importance of strengthening regional cooperation to address environmental problems in Central Asia and promote socio-economic development. It notes the important role of new technologies and best practices in combating drought, desertification and sand and dust storms. In addition, the Resolution calls on countries to intensify efforts to protect mountain ecosystems and preserve glaciers.

In addition, Uzbekistan has initiated a number of regional initiatives that are gradually being implemented thanks to the joint efforts and coordinated coordination of all Central Asian states. Our neighbors supported and adopted the regional program “Green Agenda” for Central Asia proposed by Uzbekistan at the Fourth Consultative Meeting of the Heads of State in Cholpon-Ata (2022).

Also, the Central Asian states fully supported the initiative aimed at developing joint approaches to the rational and efficient use of resources, identifying priority areas of cooperation with the international community to mitigate the effects of climate change.

At the Fifth Consultative Meeting in Dushanbe (2023), the President of Uzbekistan Shavkat Mirziyoyev proposed to adopt a Regional Strategy for Adaptation to Climate Change. Thanks to the coordinated work of experts from all Central Asian countries with the support of international partners, the document was developed and jointly presented at the 28th Conference of the Parties on Climate Change (COP-28, 2023, Dubai, UAE).

The goal of the Regional Strategy until 2030 is to develop a mechanism for interaction between Central Asian countries to overcome the negative consequences of climate change and implement adaptation measures. To achieve this, four strategic objectives have been identified: 1) strengthening regional coordination on adaptation to climate change; 2) creating mechanisms for the development and implementation of adaptation projects/programs and attracting funding; 3) increasing adaptive capacity through accumulation, exchange of knowledge and scientific cooperation; 4) development of climate monitoring, information exchange and forecasting systems.

Uzbekistan pays special attention to the development of regional cooperation on joint equitable management of transboundary water resources based on a balance of interests of all Central Asian countries. In this context, the leading role is given to the International Fund for Saving the Aral Sea (IFAS), which represents a unique experience of multilateral cooperation of Central Asian countries in solving one of the most acute problems of a global scale. Moreover, as Shavkat Mirziyoyev emphasized, in the context of the emergence of new challenges and threats due to global climate change, the demand for such regional cooperation is growing even more.

Over the past years, IFAS has proven its effectiveness as an interstate body within which the parties openly discuss and develop mutually acceptable solutions for cooperation in the rational use and joint management of water resources of transboundary rivers. In this regard, Uzbekistan advocates for further improvement of the structure and legal framework of IFAS in order to update its role in modern realities.

Thus, Uzbekistan, which is increasingly experiencing the impact of climate change, is actively taking measures to fulfill its obligations under international climate agreements. At the same time, the country needs to continue efforts in domestic and foreign policy to adapt and mitigate the effects of climate change based on an integrated intersectoral approach.

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Source