Environmental protection and environmental assessment activities

Ministry of Ecology, environmental protection and climate change of the Republic of Uzbekistan

REPUBLIC OF UZBEKISTAN

Area: **447,4** square kilometers
Population: more than **36 million** of people
State language: Uzbek
Capital: Tashkent

Uzbekistan, landlocked country in Central Asia. It lies mainly between two major rivers, the Syr Darya to the northeast and the Amu Darya to the southwest, though they only partly form its boundaries. Uzbekistan is bordered by **Kazakhstan** to the northwest and north, **Kyrgyzstan** and **Tajikistan** to the east and southeast, **Afghanistan** to the south, and **Turkmenistan** to the southwest.

Most of the territory of Uzbekistan **(78.7%)** is occupied by plains, and the rest **(21.3%)** consists of mountains and mountain ranges.

The climate is dry and continental.

The summer in Uzbekistan is very hot and long.

The largest rivers of Central Asia, the Amu Darya and Syr Darya, flow from the territory of Uzbekistan.

There are about **250 lakes** on the territory of Uzbekistan.

There are small healing lakes such as **Tuzkan, Akhsikent, Dengizkul, Kurbankul, Balikkul**.

Uzbekistan has been the **UN, OSCE** member **since 1992.** It is the member of **CIS since 1991.**

Uzbekistan has large reserves of gold, tungsten, copper, lead, zinc, and natural gas reserves.

ACTIVITIES OF THE MINISTRY

Law of the Republic of Uzbekistan:

”On Nature Protection“

"On atmospheric air protection“

”On waste“

”On Environmental expertise“

”Protected natural areas“

”Land Code on Water and Water Use“

”Code of Administrative Responsibility"

Decrees and resolutions of the President of the Republic of Uzbekistan

1. Decree No. **5863** dated October 30, 2019 «On approval of the Concept of Environmental protection of the Republic of Uzbekistan for the period up to 2030»
2. Resolution No. **171** of May 31, 2023 «On measures for the effective organization of the activities of the Ministry of Ecology, Environmental Protection and Climate Change»
3. Decree No. **81** of May 31, 2023 «On measures to transform the sphere of ecology and environmental protection and the organization of the activities of the authorized State organization»

Resolutions of the Cabinet of Ministers of the Republic of Uzbekistan

Resolution No. **14** of January 21, 2014 “On approval of the Regulations on the Procedure for the Development and Approval of draft environmental Standards”.

Resolution No. **541** of September 7, 2020 “On further improvement of the environmental impact assessment mechanism”

ATMOSPHERIC AIR PROTECTION

According to Decree No. 5863 dated October 30, 2019 «On approval of the Concept of Environmental protection of the Republic of Uzbekistan for the period up to 2030»

- Ensuring the use of dust and gas capture devices with an efficiency of at least **99.5%** in stationary sources of atmospheric air pollution of newly commissioned production facilities;
- In stationary sources of atmospheric air pollution of existing production facilities, work is underway to ensure the use of dust and gas capture devices with an efficiency of at least **95** percent.

According to the strategy "Uzbekistan-2030"

- It is planned to gradually reduce emissions of pollutants by **10.5%** by 2030.
- In order to reduce emissions from public transport in Tashkent, **324** electric buses have been put on the line.
- **By 2030**, it is planned to supply **1,200** electric buses and switch regular buses to **natural gas**.

WORK ON THE PROTECTION OF ATMOSPHERIC AIR

- **From January 1, 2022,** the import of vehicles equipped with gasoline and diesel engines that do not meet the environmental requirements **of Euro-4 is prohibited.**
- Over the past two years, **3,150 km** of railway sections have been electrified in railway transport, and the use of electric locomotives has been introduced instead of diesel locomotives.
- During the events of **the Clean air month,** which will be held in two stages, **319 thousand** vehicles were checked in 2023 and **8,600** vehicles that **did not comply with the standards** were **temporarily banned from use.**
- Currently, the level of atmospheric air pollution is monitored at **67 stationary observation** points **(professional posts)** located in **26** cities and towns, as well as at **8 automatic stations.**
- Monitoring covers **5 pollutants**: dust, sulfur dioxide, carbon monoxide, nitrogen dioxide and nitrous oxide.

WORK ON THE PROTECTION OF ATMOSPHERIC AIR

- Over **the past period of 2023**, **716** dust and gas capture plants at **147** industrial enterprises **were modernized**, which prevented the release of more than **10 thousand tons** of pollutants into the atmosphere

- Together with the **Zamin International Public Foundation, 2 Japanese automatic Horiba stations** have been installed in Tashkent, measuring fine dispersed particles in the atmospheric air

ATMOSPHERIC AIR AND MAIN FACTORS AFFECTING IT

Natural factors are dry climate, soil erosion, water scarcity, extreme hot days

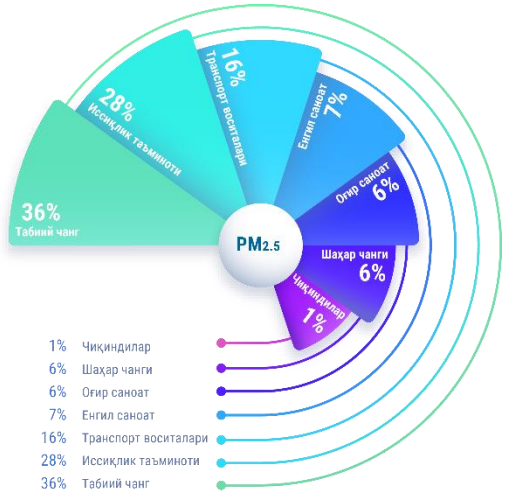
49 thousand illegally cut trees,
damage of **45 billion soums** was caused

Rapid implementation of construction works without approval of urban development **master plans**

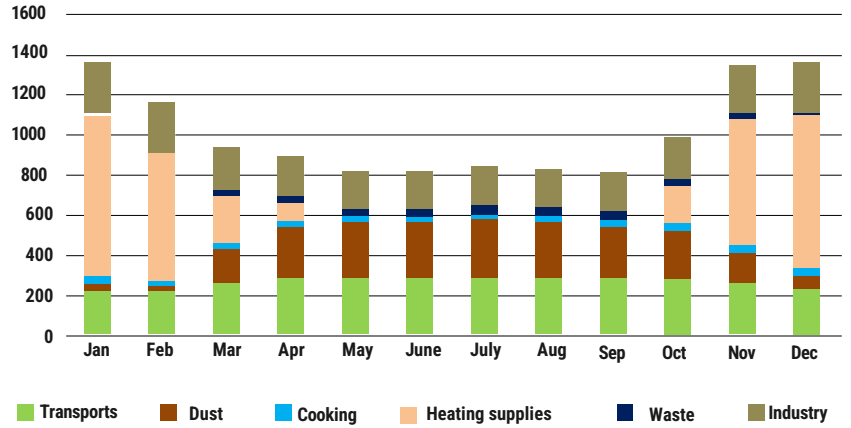
*Over the past **5** years, **5,400** objects (residential buildings, commercial, household and social objects) have been built in the capital. Growth 33%*

AIR QUALITY INDICATORS OF TASHKENT

SOURCES OF DISPERSED PARTICLES PM2.5



MONTHLY INDICATORS OF THE QUANTITY OF PM2.5 PARTICLES IN TASHKENT CITY



** Source: World Bank data*

As a result of the increase in demand for energy resources by economic sectors and the population, there is a tendency to increase the use of hydrocarbons, including coal and fuel oil.

Increase in coal consumption

6,8 million tons in 2018

11 million tons in 2023

As a result of burning 10 tons of coal fuel:

220 kg body

360 kg of sulfur oxide

80 kg of carbon and nitrogen oxides are formed

A sharp increase in the number of vehicles is observed in the republic

In 2021 **3,14 million** units of vehicles were registered, in 2023 their number increased by **32%** and amounted to **4,6 million**

The use of fuel oil in thermal power stations has increased almost 5 times

*If in 2018, **118,900 tons** of fuel oil were consumed at the Tashkent TPP, in 2023, this indicator will exceed **270,000 tons** (2,3 times increase). Over the past five years, the use of fuel oil at the Angren thermal power plant has almost doubled.*

The use of **low-quality** motor fuel **AI-80**

In cities, the number of traffic and pedestrian intersections is not reduced, **traffic is not properly organized**

ORGANIZING A MODERN SYSTEM OF ATMOSPHERIC AIR MONITORING

Installation of 150 devices connected to the international **“Air Visual”** monitoring system to inform the public about **air quality**

Installation of 347 automated small stations for background monitoring of atmospheric air pollution

Installation of automatic air quality control stations in sanitary protection zones of **class I industrial enterprises**

Purchase of additional **25 automated background monitoring stations** of the **“Horiba”** company for the city of Tashkent

Installation of billboards and monitors on the streets of the capital that will constantly announce air quality indicators.

Installation of dust-gas cleaning equipment in class I industrial enterprises

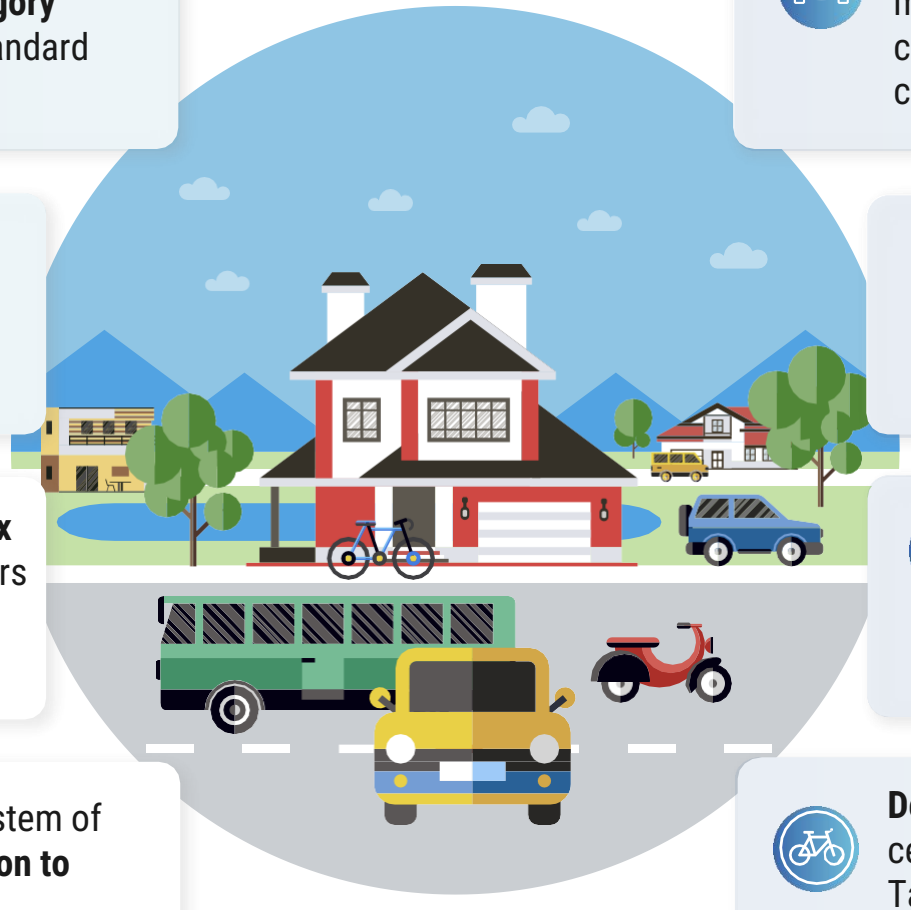
REDUCING THE NEGATIVE IMPACT OF MOTOR TRANSPORT VEHICLES ON ATMOSPHERIC AIR

Prohibition on the use of motor fuel of **an ecological category lower** than the "Euro-4" standard (**AI-80** gasoline)

Establishment of vehicle-free zones in prominent central streets of the city

Introduction of a special type of tax to increase the obligations of owners of vehicles manufactured **before 2010**

Implementation of the system of **encouraging the population to switch to electric cars**



Gradual restriction of the movement of heavy trucks and cars **older than 10 years** in the capital

Taking necessary measures to **reduce traffic congestion** in Tashkent city

Ensuring the priority of public transport in the city of Tashkent through the development of road transport infrastructure

Development of bicycle infrastructure in central streets leading from the center of Tashkent city to crowded places and residential areas

CREATING FAVORABLE CONDITIONS FOR IMPROVING ATMOSPHERIC AIR QUALITY

Ban on the use of coal fuel for industrial purposes in the districts adjacent to the city of Tashkent, Tashkent region

Construction of artificial water bodies in order to ensure the moderation of the microclimate, to have a positive effect on the quality of atmospheric air

Announcing a moratorium on the construction of all types of construction objects (except for objects of social and state importance)

A strict ban on the use of fuel oil as a backup fuel in heating centers operating in Tashkent

Approval of the master plan of the city of Tashkent for the period **up to 2045**

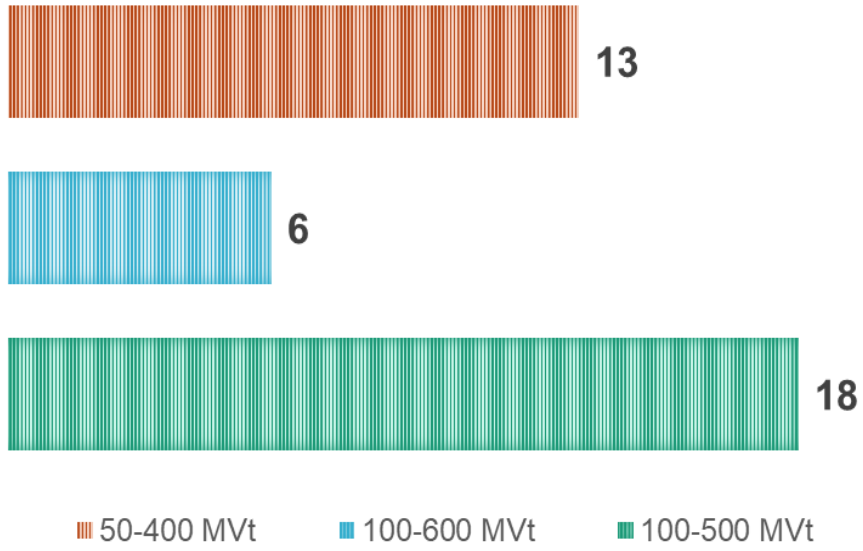
Creation of **3 thousand hectares of "green belt"** and **200 hectares of "green parks"**

Installation of certified dust-gas cleaning equipment with an efficiency of at least **99,5 %** in coal-fired greenhouses

Ongoing work on the support and implementation of “green energy” in the conclusions of the state environmental assessment

37 photovoltaic plants with a capacity from **50** to **600 MW**, built in 2021-2023, have passed the state environmental assessment

- In Andijan, Namangan, Surkhandarya, Syrdarya and Tashkent regions
- In the Republic of Karakalpakstan, Bukhara and Navoi regions
- In Bukhara, Jizzakh, Kashkadarya, Navoi, Namangan, Samarkand, Surkhandarya, Khorezm and Tashkent regions of our republic

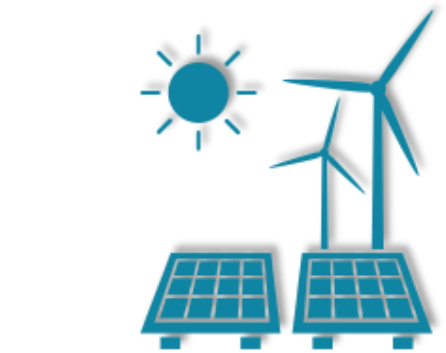


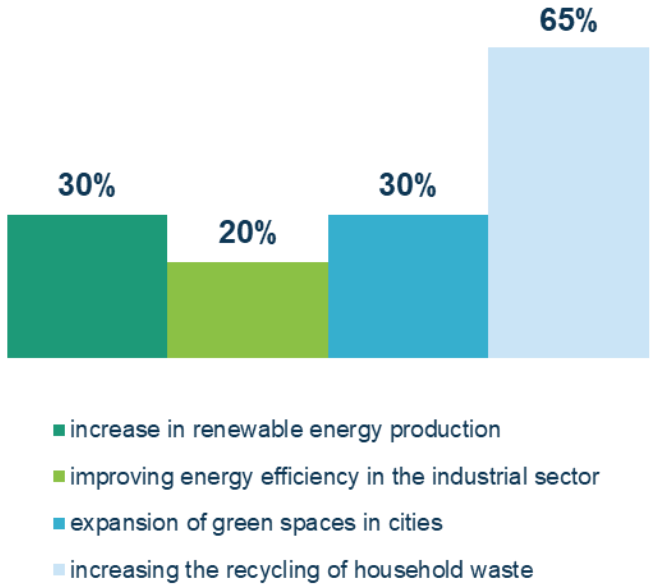
Resolution of the President of the Republic of Uzbekistan dated December 2, 2022 No. 436 "On measures to improve the effectiveness of reforms aimed at the transition of the Republic of Uzbekistan to a "green" economy by 2030"

A program has been approved for the transition to a **"green"** economy and ensuring "green" growth in the Republic of Uzbekistan until 2030, aimed at achieving strategic goals.

According to the program:

- reduction of specific greenhouse gas emissions per unit of GDP by **35 percent** compared to the 2010 level;
- reduction of energy consumption by **30 %** due to increased use of renewable energy sources;
- improving the efficiency of water use, the introduction of water-saving irrigation technologies on an area of up to **1 million** hectares;
- bringing the indicator of the reserves of the forest fund of the republic to more than **90 million** cubic meters





The resolution tasked the Council of Ministers of the Republic of Karakalpakstan, the regions and the municipalities of the city of Tashkent with improving the protection and sustainable management of forests and expanding the "green" areas:

In this:

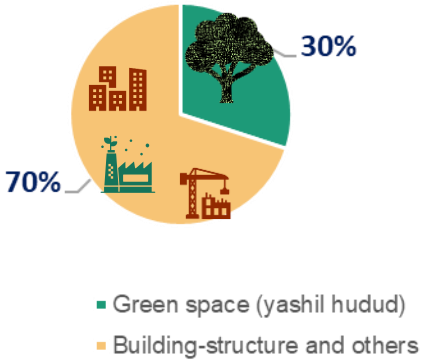
- identification of tree varieties with low water consumption and resistance to climate change, depending on the climatic conditions of each area;
- the conservation and sustainable management of forests, as well as the planting of climate-resilient trees, as the main natural solution to enhance the sustainability of ecosystems and infrastructure;
- cultivation of climate-resistant trees, windproof **"green"** barriers for agroforestry, as well as **"green"** protective barriers of cities.

WITHIN THE FRAMEWORK OF THE NATIONAL "GREEN SPACE" PROJECT

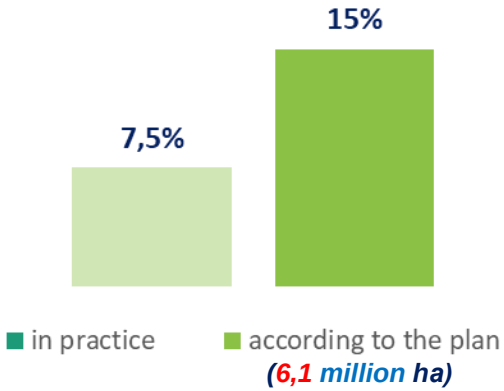
- Every year, within the framework of the Green Space project, implemented on the initiative of the president, **200 million** seedlings are planted, new green belts and public parks are being gradually created, which in a few years will show a positive result.

Increase the volume of green spaces

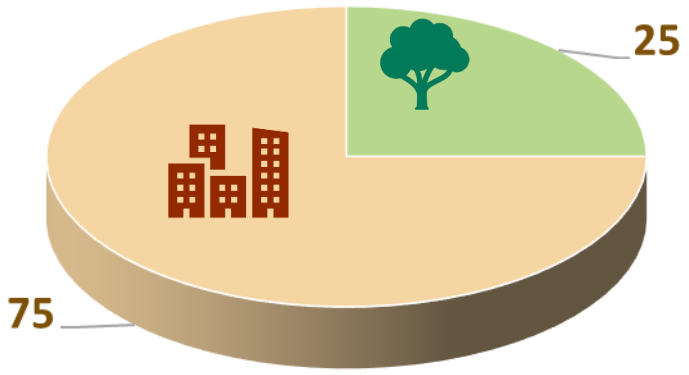
200 **Million** Planting tree seedlings



To bring the level of forested areas



When accepting urban planning design documentation, it is noted that at least **25 %** of the planned area will be allocated for landscaping



- **The conclusions of the environmental assessment** issued according to the design documentation of enterprises of the **I and II** categories of environmental impact introduce requirements for the creation of **"green belts"** at the enterprise and adjacent territories

416 million trees and shrubs have been planted

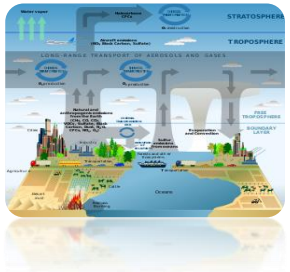
588 hectares "**green gardens**", **662 hectares** "**green public parks**", a "**green belt**" with a total length of **40 km** around the cities of Bukhara, Nukus, Khiva and Urgench have also been laid.

Around **189 industrial enterprises**, **2.3 million tree seedlings** were planted and **"green belts"** were established

STATE ENVIRONMENTAL EXPERTISE

Main function

When conducting a state environmental assessment of environmental impact assessment materials and compliance of activities with environmental requirements, the project documentation is either approved, sent for processing, or rejected.



Objects of state environmental expertise

state programs and concept projects (socio-economic projects)

materials for the selection and separation of land plots (construction projects, public objection)

all types of urban planning documents (urban master plans)

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Law of the Republic of Uzbekistan "On environmental expertise"

Resolution of the Cabinet of Ministers dated September 7, 2020 **"On further improvement of the Environmental Impact Assessment Mechanism"** No. **541**

Resolution of the Cabinet of Ministers No. **14** dated January 21, 2014 **"On Approval of the Regulations on the Procedure for the Development and Approval of draft Environmental Standards"**

The procedure for the implementation of state environmental expertise

Before choosing and allocating land (draft environmental impact statement)

Acceptance and operation of the object for use (Statement of environmental consequences, normatives)

State environmental expertise

State environmental control (by inspection)

It is possible or impossible to carry out activities

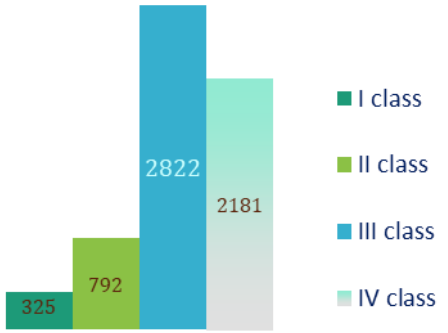
Compliance or inconsistency with environmental requirements

Fulfillment of the requirements specified in the conclusion of the state environmental examination

BY ACTIVITY

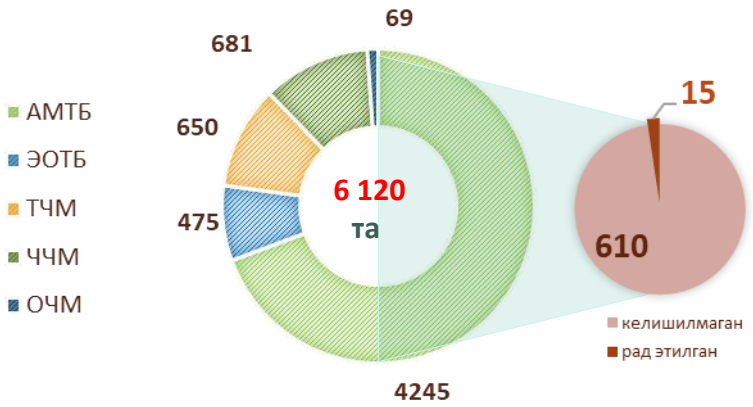
Facilities that have passed the state environmental expertise in 2023

By Category



*As a result of the cancellation of the mechanism for approving design estimates from the point of view of environmental assessment by Resolution of the Cabinet of Ministers No. **200** of April 20, 2022, the coverage of facilities in 2022 turned out to be lower than in 2021*

Лойиҳалар бўйича



The regulatory framework has been improved.

The current law has been revised due to the fact that it currently does not meet national and international requirements.

The draft law on environmental expertise in a new version of direct action.

Strengthening measures to prevent negative impacts on shrubs and trees as a result of construction.

Draft Resolution of the Cabinet of Ministers On Amendments and Additions to Resolution No. **200** dated April 20, 2022

Improving the document exchange system

www.eco-service.uz

www. ecofund.uz

Work on the integration of electronic programs

Methodological manuals and standards for adaptation to international requirements.

O‘z DSt ISO 14015:2023 "Environmental management. Handbook on integrated environmental assessment" State standard.

The methodological guide "Environmental impact assessment"

Instructions for the development and registration of standards for permissible boundary discharges of pollutants into a surface water body and terrain.

A methodological guide for calculating greenhouse gas emissions into the atmosphere by enterprises and organizations of the Republic of Uzbekistan.

Ts 13.030.01-01:2022 "Performance of works related to production and consumption waste. Methodological guidelines for determining the limit of waste disposal"

Ts 13.030.01-02:2022 "Waste of production and consumption. Methodological recommendations for determining waste generation standards"

New version of the Law of the Republic of Uzbekistan" On State Environmental Expertise and Environmental Impact Assessment"

In cooperation with experts from **the World Bank, the United Nations Economic Commission for Europe**, and **the European Organization for Security and Cooperation**, the law of the Republic of Uzbekistan "On Environmental Expertise" was revised."

A draft law of the Republic of Uzbekistan has been developed" On State Environmental Expertise and Environmental Impact Assessment " (new edition).

When drafting the bill, the experience of Asian, European, and American countries was studied. In particular, the Japanese experiment studied environmental impact assessment categories **I, II** and **III** and the time frame for reviewing project documentation was **60-90 days.** Also, when developing the draft law, based on the requirements of the Espo Convention and the Protocol of Strategic Environmental Assessment, the Aarhus Conventions, the Paris Protocol, the following requirements were introduced:

Government programs, concepts, general plans, master plans, road maps and all urban planning documents were included in the environmental strategic assessment procedure.

A system is being introduced to inform, discuss and coordinate the design documentation of facilities with the population living in the planned territory before their construction.

Enterprises are tasked with developing measures to prevent climate change in production processes, keeping accurate records of greenhouse gases generated, and organizing work to reduce emissions.

WORLD BANK GROUP

UNECE

OSCE
Organization for Security and Co-operation in Europe

ESPOO

INFORMATION PARTICIPATION JUSTICE
AARHUS CONVENTION
for our environment

АТРОФ-МУҲИТГА ТАЪСИРНИ БАҲОЛАШ БЎЙИЧА ХАЛҚАРО ТАЖРИБА

Countries	 United States of America	 Turkey	 Russia	 Georgia	 Republic of Belarus	 Japan	 Uzbekistan
Authorized organization	Environmental Protection Agency	Environmental Impact Assessment Agency	Federal service for the use, control of nature	Ministry of Environmental Protection	State organization for environmental expertise and professional development	Environmental Impact Assessment Unit	State Ecological Expertise Center
Impact categories	I, II, III and IV	I, II and III	I, II and III	I, II and III	I, II, III and IV	I, II and III	I, II, III and IV
processing time	45-120 days	120-360 days	60-120 days	55 days	30 days	60-90 days	15-20 calendar days
Expertise fee	In the amount of 0.1-0.3% of the cost of the project	In the amount of 0.5-1.0% of the cost of the project	50 000 - 130 000 Russian rubles'	500 Georgian Lari	3658 – 4251 Belarus rubles'	In the amount of 0.5-1.0% of the cost of the project	from 0.5 to 25 times the amount of the basic calculation
			810 - 2100 USD	175-200 USD	175 – 1660 USD		13,6 – 680 USD

* The deadline for reviewing environmental impact assessment materials in foreign countries is indicated in the "working day" column.

* 1 Russian rubles'– 181,74 UZ SUM, * 1 Georgian Lari – 3781 UZ SUM, * 1 Belarus rubles'– 4349,52 UZ SUM.

ONGOING INTERNATIONAL PROJECTS

1. Strategic environmental assessment of ecological tourism in the Charvak Free Tourism Zone based on “Programs for the development of the tourism sector of the Bostanlyk district of the Tashkent region” in cooperation with the **French Development Agency (AFD) ;**

2. In cooperation with **the German Society for International Cooperation (GIZ)** in the Republic of Karakalpakstan and the Khorezm region, on the basis of the “forest industry improvement program”, standard projects of strategic environmental assessment of forests of the Aral Sea region are being carried out.

Proposals for the implementation of urgent measures

- **The first** is a ban on the use of motor fuel of a low environmental category of the Euro-4 standard (**Ai-80** gasoline) ;

- **The second** is to restrict the movement of vehicles weighing more than **3.5** and **12 tons** intended for the transportation of goods at busy times of the day (**from 07:00** to **10:00** and from **17:00** to **20:00**) on the territory of Tashkent city in order to reduce traffic congestion and ensure traffic safety;

- **The third** is the introduction, as an experiment, of the rules for driving cars on “odd and even” days in order to optimize the movement of cars;

- **The fourth** is the creation of vehicle-free zones on notable central streets of the city.;

- **The fifth** is the transfer of public transport to fully electric and gas fuels, as well as the organization of road infrastructure;

- **The sixth** is the declaration of a moratorium on the construction of all types of construction facilities (except for objects of social and state significance) ;

Plan for the implementation of urgent measures

- **7th,** a ban on the use of industrial coal in the districts of the Tashkent region adjacent to the city of Tashkent;

- **8th,** the creation of **artificial reservoirs** in order to ensure a moderate microclimate, a positive effect on the quality of atmospheric air;

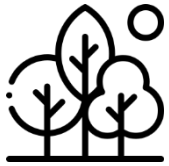
- **The 9th, drastic ban** on the use of **fuel oil as a backup fuel at heating plants** operating in Tashkent;

- **10th** Creation of a **“green belt”** around the city of Tashkent, aimed at reducing wind speed, preventing migration of soil particles based on scientific and carefully considered conclusions.;

- **The problems of climate change:** sectors of our economy, food security, and reducing the negative impact on people's lifestyles require further clarification of factors and the adoption of preventive measures**.**

- **Conducting public and parliamentary control over the implementation of the tasks** set for nature protection shows a positive result.

CURRENT PROBLEMS AND CHALLENGES IN THE INDUSTRY



On January **29** of this year, at a video conference on priority tasks to be implemented in the spheres in **2024,** under the chairmanship of the President of our country, appropriate instructions were given to mitigate the difficult environmental situation in the regions, including in the city of Tashkent.

- Development of a **“master plan”** for each district and city to improve the environmental situation on the ground;
- Publication of the **environmental rating** and **environmental passport** of territories and industries at the end of the year;
- Installation of automatic air monitoring stations in the cities of **Tashkent** and **Nukus**, regional centers and **20** industrialized areas;
- By the end of the year, modern dust and gas cleaning equipment will be **installed** at **112 large industrial enterprises and all cement producers**, and old filters will be **replaced** and **modernized at enterprises** with a high degree of dust emission into the air;
- The creation of a **“green belt”** of **5 hectares** by large enterprises of building materials, energy, metallurgy and the organization of planting **10 million** bushes of trees;
- Organization of **"green belts"** in Tashkent by construction companies;
- implementation of the system **”planting 100 seedlings instead of each illegally felled tree"**

Questions about Japan's experience in environmental protection

- What alternative fuel source is used instead of coal to prevent air pollution in the development of thermal energy in Japan?
- In particular, at industrial facilities using coal, technologies of dust and gas purification plants that capture emissions into the atmosphere are used, as well as technologies that increase the combustion coefficient of coal due to its concentration?
- What new technologies are used in the construction of local wastewater treatment plants and the reconstruction of existing ones for wastewater treatment at industrial enterprises?
- Knowledge of the Japanese experience in the construction of local wastewater treatment plants, as well as the technologies used in them, manuals, laboratories.
- Familiarization with the activities of the organization carrying out environmental expertise in Japan, on current legislation, by-laws, standards, regulations in the field of environmental expertise, as well as on ongoing work to improve the skills of personnel.