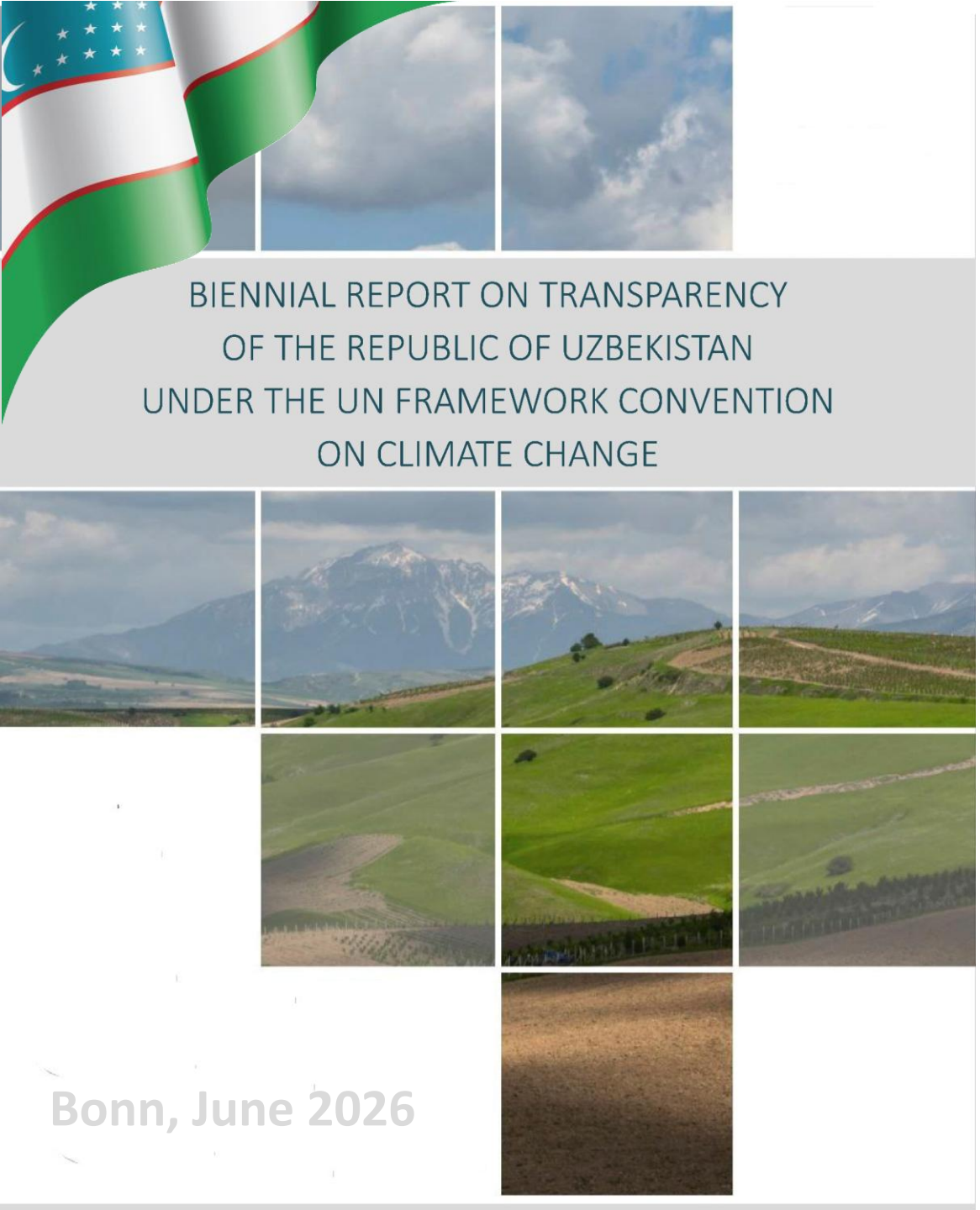


FMCP 3

FACILITATIVE MULTILATERAL CONSIDERATION OF PROGRESS

REPUBLIC OF UZBEKISTAN

UNFCCC SBI 64

NATIONAL CONTEXT

Total area **448.9** thous. km^2

Population: **38.237** mln

Annual population growth: **+2.0%**

$\Delta_{(2010\text{-}2025)}$ growth **+37.1%**

Climate

Dry, sharply continental, with large seasonal and daily air temperature ranges, with hot and long summers, relatively humid springs and unstable winters.

Climate change

Uzbekistan is one of the most vulnerable countries to CC.

The rate of **air T°C** increase is **twice** the global average.

Relative to the 1930s, the mean **air T°C** has risen

by **2.4°C** in lowland areas

by **1.8°C** in mountainous regions.

Uzbekistan is the developing country with rapidly growing economy

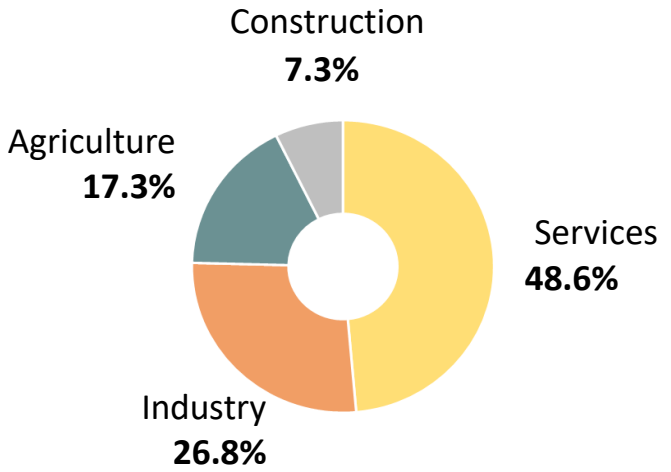
Average annual growth

GDP $_{(2010\text{-}2025)}$ **5.5-6.0%**

GDP $_{(2022)}$ **5.7%**

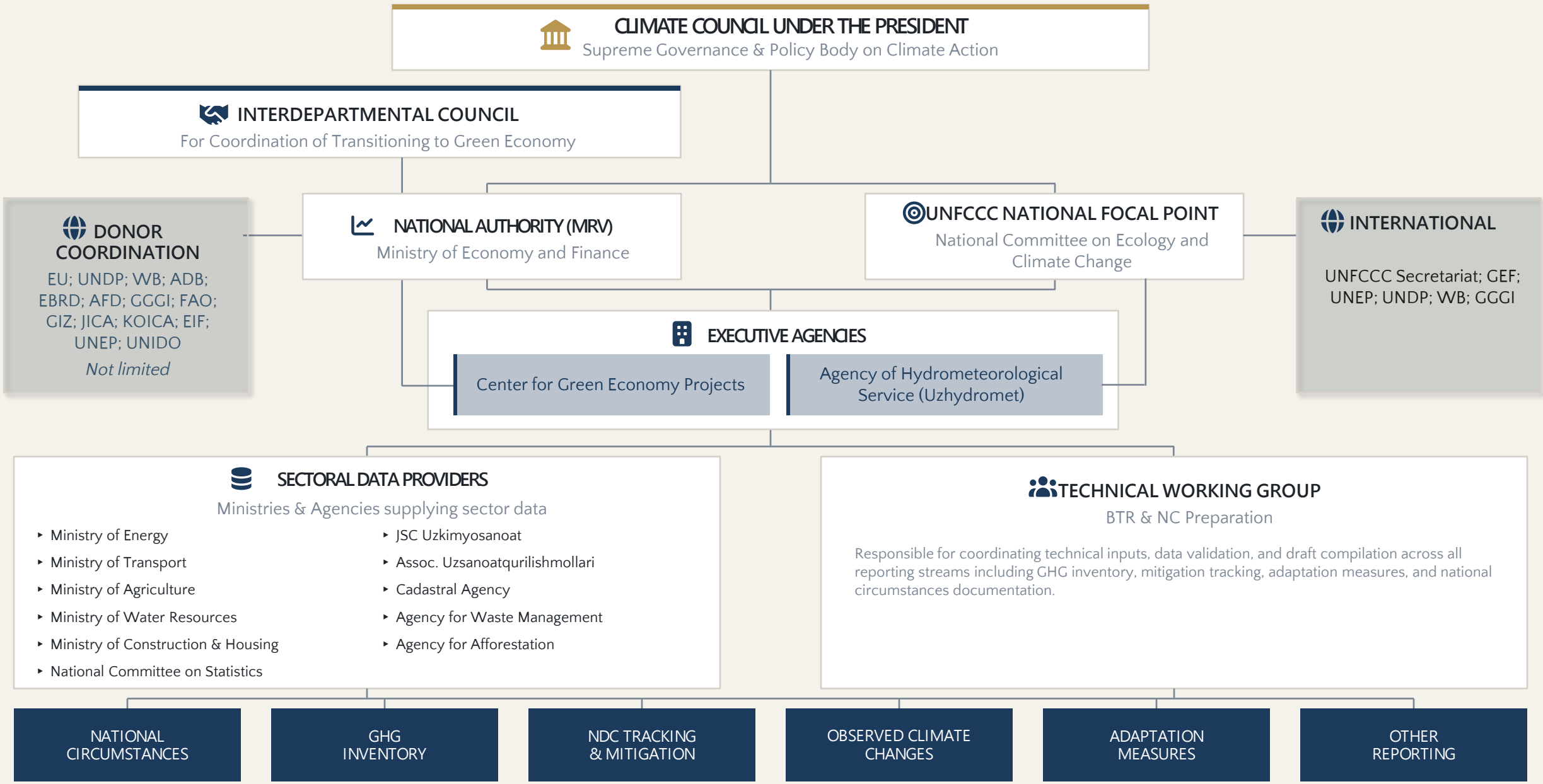
GDP $_{(2025)}$ **7.7%**

GDP structure (2025)



Industry $\Delta_{(2015\text{-}2025)}$ growth +8%

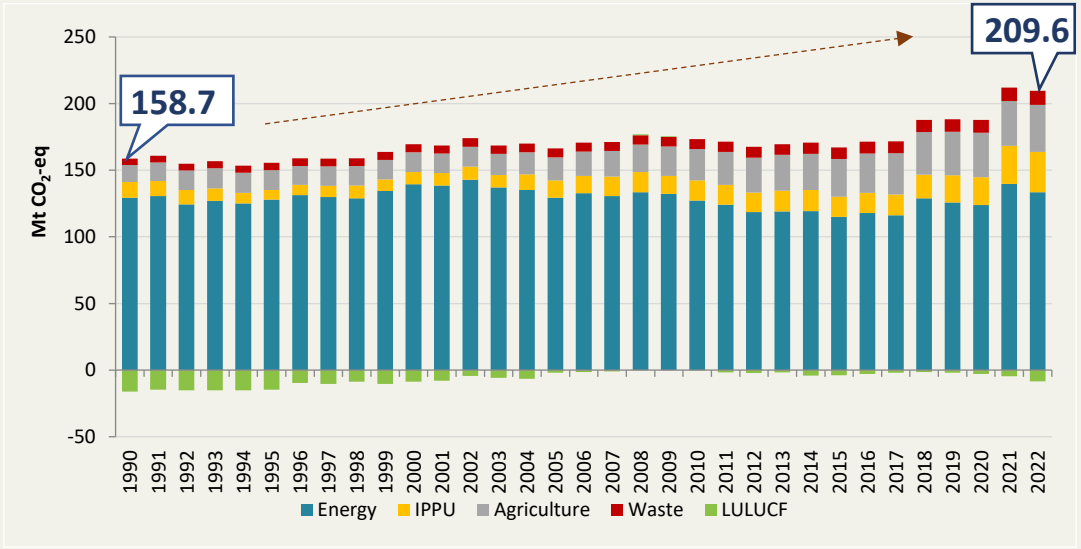
INSTITUTIONAL FRAMEWORK FOR UNFCCC NATIONAL REPORTING & TRANSPARENCY



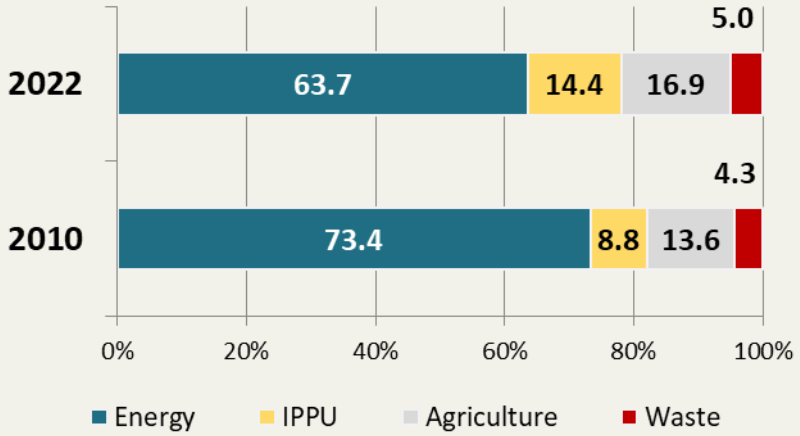
GHG INVENTORY 1990-2022 : KEY OUTCOMES

1990-2022

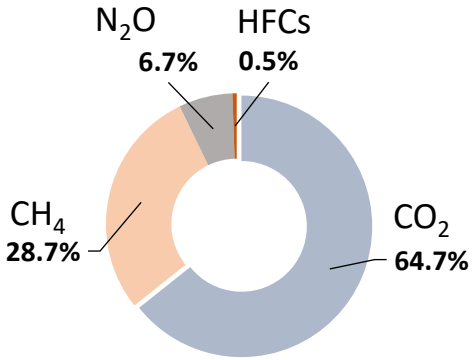
GHG Emissions Growth: + 32.1%



Changing Structure of GHG Emissions (%)



Distribution by Gases, 2022



GHG Emissions per Capita

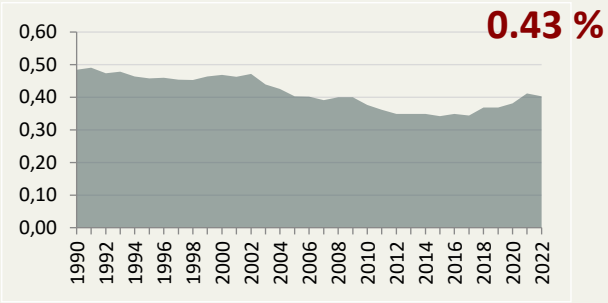
1990	2022
7.7	5.9

t CO_{2-eq} / person

Uzbekistan's Contribution to the Global CO_2 Emissions from Fuel Combustion

1990
0.52%

2022
0.43 %



2022

Global IEA ranking by CO_2 emissions — **38th** position

Among Central Asian countries — **2nd** position

CLIMATE POLICY: NATIONAL LEVEL (1)

2019

STRATEGY OF TRANSITION OF THE REPUBLIC OF UZBEKISTAN TO A GREEN ECONOMY FOR THE PERIOD 2019 – 2030 (№PP-4477 dated 04.10.2019)

2022

NEW UZBEKISTAN DEVELOPMENT STRATEGY FOR THE PERIOD 2022-2026 (№UP-60 dated 28.01.2022)

Main directions:

- 24 «Uninterrupted supply of electricity to the economy, active introduction of "green economy" technologies in all spheres, increase in energy efficiency of the economy by 20%»
- 80 «Protection of ecology and environment, improvement of ecological condition of cities and districts, implementation of the nationwide project "Yashil Makon"»
- 81 «Expansion of forest areas»

MEASURES TO IMPROVE THE EFFECTIVENESS OF REFORMS AIMED AT TRANSITION TO A GREEN ECONOMY AND ENSURING GREEN GROWTH IN THE REPUBLIC OF UZBEKISTAN UNTIL 2030 (No. PP-436 dated 02.12.2022)

- Program, Concept and Action plan for transition to green economy and green growth in Uzbekistan until 2030
- Target parameters of fuel and energy resources saving for the period of 2022-2026
- Reduction of the energy intensity of products manufactured by 25 leading enterprises by 20% in 2026 relative to 2022

2023

STRATEGY "UZBEKISTAN - 2030“ (№UP-158 dated 11.09.2023)

Main directions:

- 51 Transition to a green economy, based on a radical increase in the use of renewable energies
- 52 Uninterrupted supply of necessary energy resources to economic sectors and population
- 53 Deepening the integration of the Republic of Uzbekistan into global transport and logistics networks and increasing the potential of the national transport system

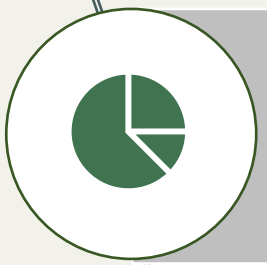
STRATEGIC GOALS UNTIL 2030

- Increasing the share of RES up to **54%**
- Increase in the energy efficiency in all the sectors of economy **2** times
- Raise to **95%** the coverage of MSW collection and disposal services, as well as **35%** usage for energy purposes
- Forest areas growth to **6.1** mln ha, including in the Aral Sea region **2.3** mln ha

CLIMATE POLICY: NATIONAL LEVEL (2)

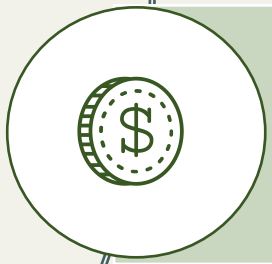
LEGISLATIVE AND REGULATORY FRAMEWORK FOR ADDRESSING GREENHOUSE GAS (GHG) EMISSIONS

- A Law "On Limitation Greenhouse Gas Emissions" has been developed and adopted.
- Regulatory acts governing and promoting the development and deployment of renewable energy sources (RES), "green" transport, etc.



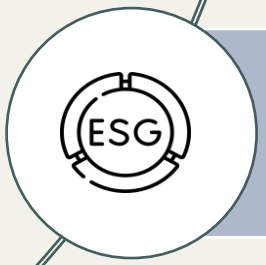
DATA COLLECTION AND MANAGEMENT OF GHG EMISSION REDUCTIONS

- Procedures for a modern MRV system are being developed.
- A national transparency system is being implemented to enhance reporting on the fulfillment of obligations under Article 13 of the Paris Agreement.



DEVELOPMENT OF "GREEN FINANCE" INSTRUMENTS

- A system of "green" energy certificates has been introduced.
- A National Taxonomy of the "green" economy has been approved.
- "Green" bonds have been issued and put into circulation.
- A "green" lending framework has been launched.



INTEGRATION OF ESG PRINCIPLES INTO CORPORATE STRATEGIC PLANNING AND REPORTING

- Large companies are advancing carbon reporting mechanisms.
- Developing measures and setting targets for reducing greenhouse gas emissions.

NDC 2 : UZBEKISTAN

UZBEKISTAN'S OBLIGATIONS UNDER THE PARIS AGREEMENT:

REDUCE GHG EMISSIONS PER UNIT OF GDP COMPARED TO THE LEVEL OF 2010

2017	PARIS AGREEMENT SIGNED	NDC 1	by **10%** by year **2030**
2021	UPDATED NDC 1	NDC 2	by **35%** by year **2030**
2025	UPDATED NDC 2	NDC 3	by **50%** by year **2035**

Description of NDC 2 according to Article 4 of Paris Agreement

- Goal: Reduce the carbon intensity of GDP by 35% by 2030 compared to the 2010 level
- Implementation period: January 1, 2020, to December 31, 2030
- Base year: 2010
- Gases covered: CO_2, CH_4, N_2O, HFCs
- Sectors covered: Energy, IPPU, Agriculture, LULUCF, Waste
- A single annual target has been established until 2030.

The Main Indicator to Track Progress of the NDC

$$\text{Carbon Intensity of GDP} = \frac{\text{total GHG emissions}}{\text{value GDP}_{2015}}, \quad kg\ CO_2\text{-}eq/USD_{2015}$$

Carbon Intensity reduction (ΔC, %)

$$\Delta C = \frac{C_i - C_{2010}}{C_{2010}} 100\%$$

Additional indicators by year 2030

1. To increase the share of RES to **25%** of the total electricity generation volume.

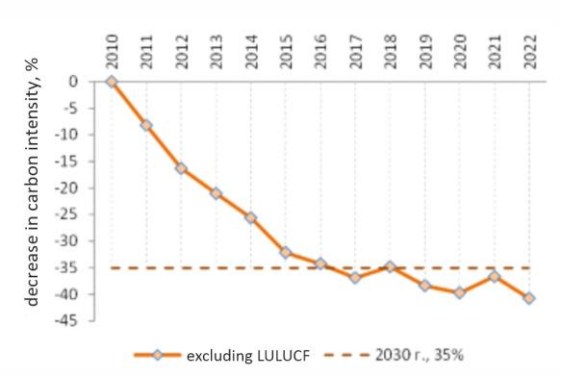
   SDG indicator (7.2.1.)

2. **Double** the energy efficiency indicator relative to the 2018 level, halve the energy intensity of GDP by 2030

   SDG indicator (7.3.1.)

ACHIEVEMENT OF NDC TARGETS: INDICATORS

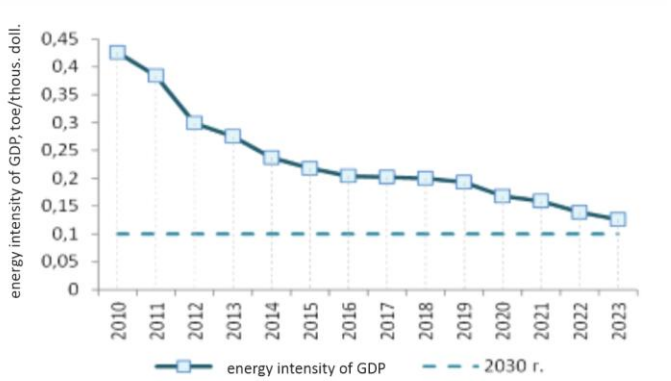
Decrease in carbon intensity of GDP from the 2010 level



Share of electricity produced from RES in the total electricity generation volume

	2019	2020	2021	2022	2023
Share of RES (%)	10.2	7.5	7.0	9.3	9.7

Dynamics of GDP energy intensity indicator



Assessment of the level of achievement of NDC targets by indicators

Indicators	2023	2030	Level of achievement $\Delta_{2024\text{-}2030}$ (%)
Main indicator *carbon intensity of GDP, (kg CO_2-eq/dollar$_{2015}$)*	decrease by 40.6% relative to the level of 2010	decrease by 35% compared to the 2010 level	116%
Additional indicator 1 *share of RES in the total volume of electricity generation (%)*	9,7%	25%	39%
Additional indicator 2 *GDP energy intensity (tons of oil equivalent/thousand USD)*	decrease by 1.6 times against the 2018 level	a 2-fold decrease compared to the 2018 level	74%

KEY CLIMATE CHANGE MITIGATION ACTIONS

ENERGY GENERATION

- modernization and upgrading of generating capacity
- reduction of losses in electrical grids
- RES construction and infrastructure development
- decentralized energy development

BUILDINGS

- improving the efficiency of heat supply systems
- improving the energy efficiency of buildings

IPPU

- reducing direct N2O emissions
- implementing green technologies in mineral fertilizer production
- increasing the energy efficiency of the technologies used

TRANSPORT

- reducing energy consumption
- promoting alternative fuels, improving motor fuels
- fleet renewal
- gradual transition to electric transport
- improving the public transport system
- electrification of railways, renewal and modernization of rolling stock

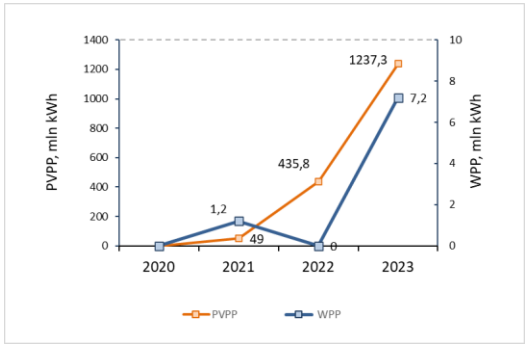
WASTE

- improving the solid waste management system
- increasing the share of recycling and reuse
- introducing separate collection and sorting, as well as recycling technologies
- land reclamation

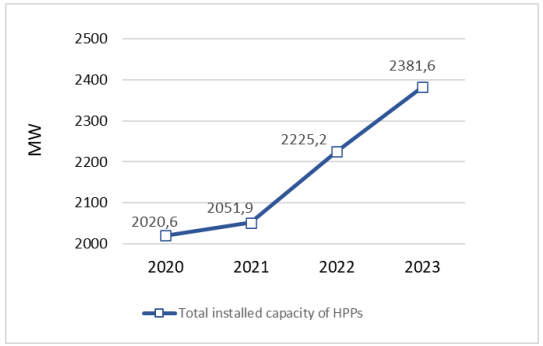
AFOLU

- afforestation and reforestation
- improving soil fertility;
- restoring degraded pastures;
- ensuring forest growth
- creating shelterbelts and park zones;
- introducing greening regulations in cities.

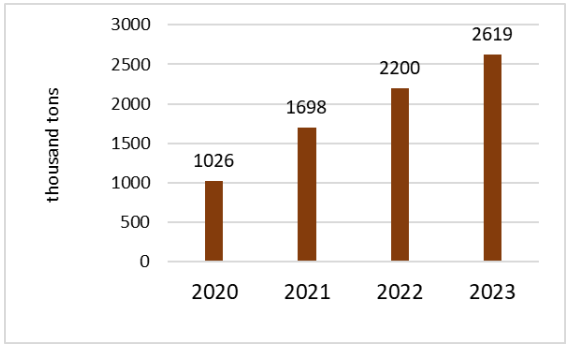
Electricity Generated by PVPP and WPP



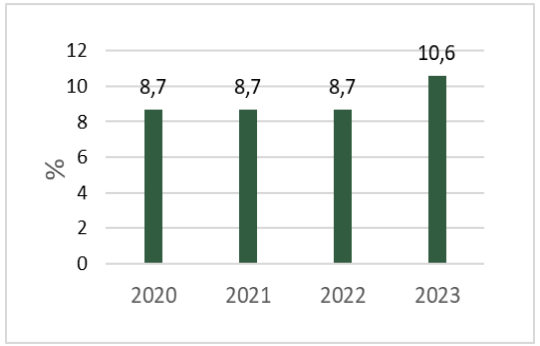
Total installed HPPs capacity



National level of waste recycling

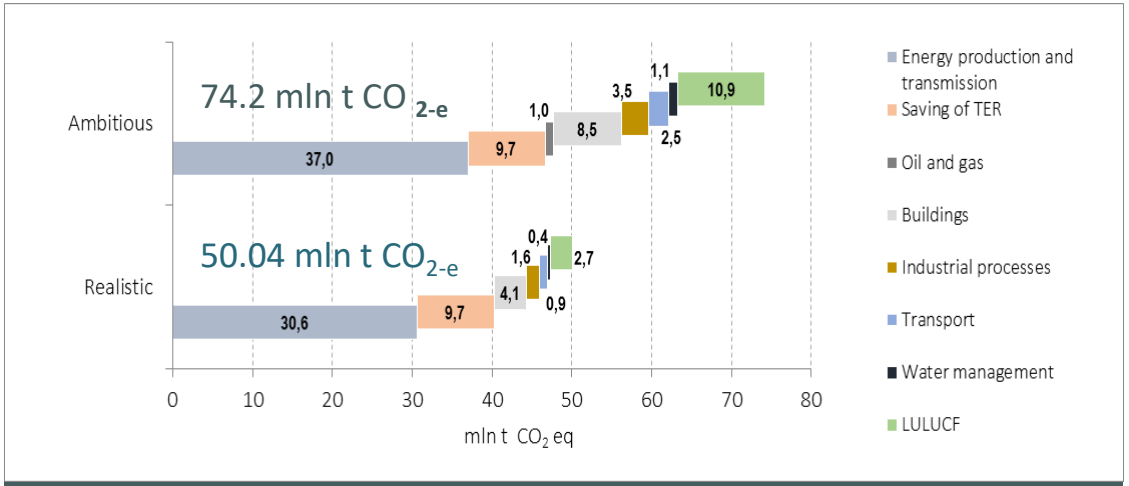


Forest area relative to total land area (%)

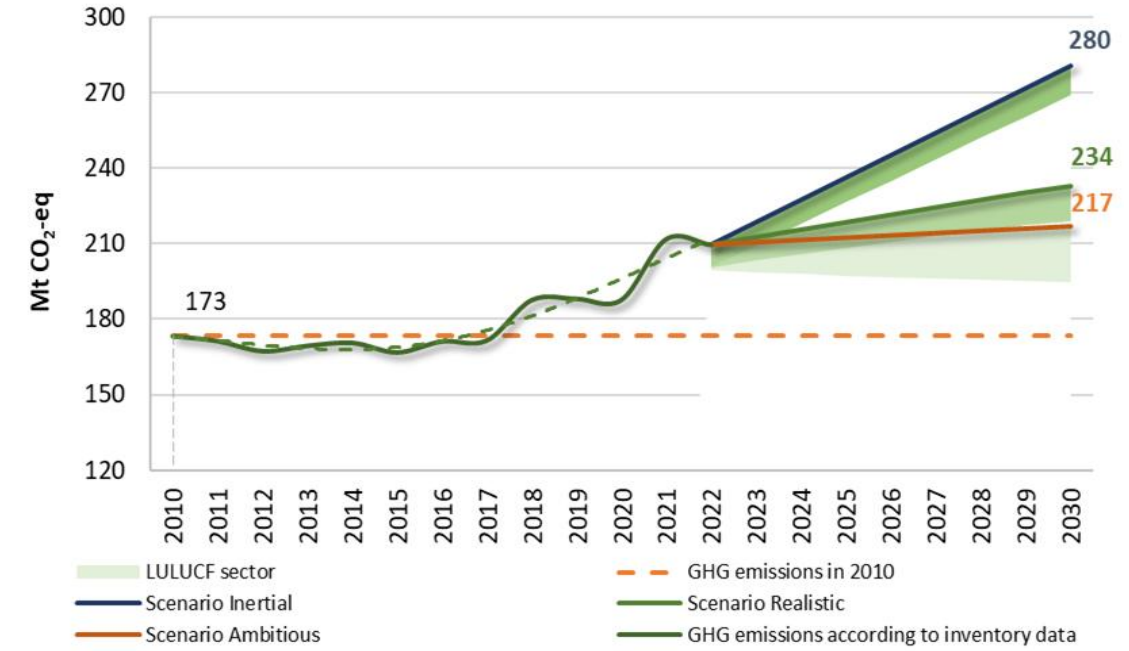


ESTIMATION OF GHG EMISSIONS REDUCTION POTENTIAL AND GHG PROJECTIONS UNTIL 2030

Emission reduction potential in key sectors of the economy



GHG projections until 2030



Inertial

- GHG emissions growth rate remains at the current level;
- energy consumption in the sectors of the economy grows in proportion to the growth of GDP and population

without additional measures

Realistic

GHG emissions reductions as a result of implementation ***measures with guaranteed funding*** which are

- ongoing;
- of high priority;
- planned for near future

50.0
Mt CO_2-eq

Ambitious

GHG emissions reductions due to implementation of Activities related to

- transition to "green economy";
- improving energy efficiency;
- realizing the maximum potential to reduce greenhouse gas emissions

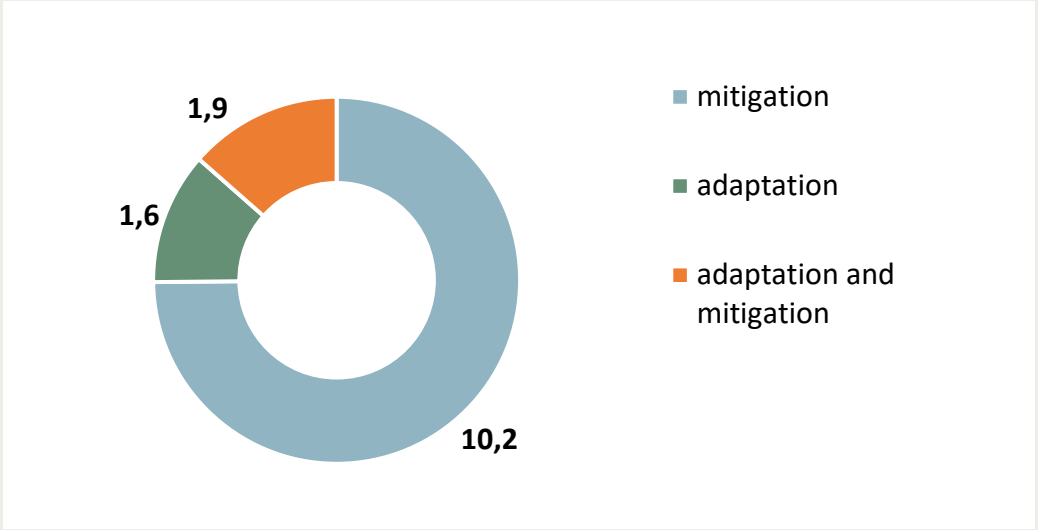
74.2
Mt CO_2-eq

Scenario	GHG emissions, Mt CO_2-eq.			Change in GHG emissions, % by 2022	
	2022	2025	2030	2025	2030
Inertial	209.6	236.2	280.4	13%	34%
Realistic		218.6	233.6	4%	11%
Ambitious		212.4	217.1	1%	4%

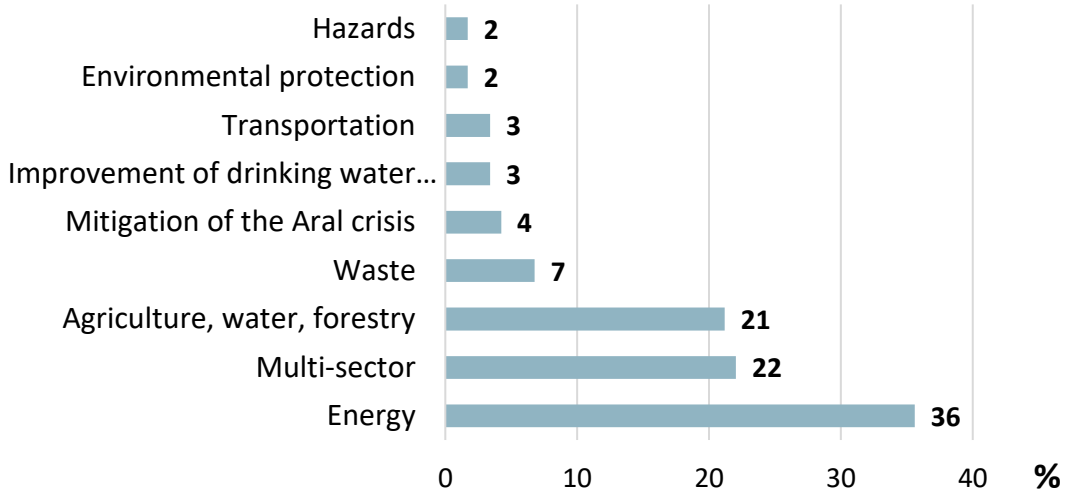
GHG projections have been developed using the model by UNEP CCC Greenhouse Gas Abatement Cost Model (GACMO)

FINANCIAL SUPPORT RECEIVED

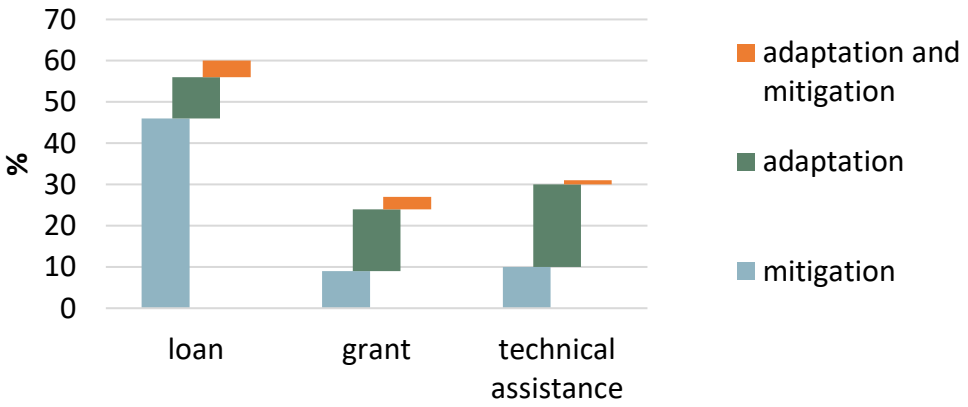
Distribution of project financing by mitigation, adaptation, and cross-cutting categories, 2021–2023 (USD billions)



Distribution of International Financial Support by Sector



Distribution of projects by category and financing types (%)



The majority of climate finance provided to Uzbekistan in 2021–2023 was channeled through the following organizations:

- Asian Development Bank (USD 653.0 million)
- World Bank (USD 277.7 million)
- Agence Française de Développement (USD 248.4 million)
- Islamic Development Bank (USD 54.7 million)
- GEF Secretariat (USD 16.7 million)
- Others

FINANCIAL SUPPORT NEEDS

Investment needed to mitigate climate change :
2030 → USD 33.7 B
2035 → USD 69.9 B

Energy	Transport	Water and sanitation	AFOLU	Industry	Waste
• Large-scale RES • Power grid modernization • Small-scale RES • Energy efficiency in residential sector • Redusing leaks in oil & gas sector • Energy sources diversification	• Electric vehicles • Public transport • Railways electrification • Logistic improvement	• Modernization of irrigation system • Improving energy efficiency of pumping stations • Improving water use efficiency in the residential sector • Digitalization of natural water systems and irrigation	• Organic agriculture • Smart agriculture • Livestock breed improvement • Afforestation • Reforestation • Agroforestry – tree belts • Ecosystems conservation, protection and restoration • Restoration and maintenance of the Aral Sea region ecosystem	• Energy efficiency improvement of enterprises • Introduction of "green" technologies and principles of circular economy • Waste heat utilization	• Reduction of number of SWDS • Construction of waste incineration plants • Waste recycling


Thank you for your attention!