



MINISTRY OF ECONOMY AND
FINANCE OF THE
REPUBLIC OF UZBEKISTAN



EUROPEAN UNION



UZBEKISTAN

OCTOBER 2023 GREEN BOND FIRST ALLOCATION AND IMPACT REPORT

The publication “Uzbekistan October 2023 Green Bond First Allocation and Impact Report” was developed within the framework of the joint initiative of the Ministry of Economy and Finance of the Republic of Uzbekistan and United Nations Development Programme (UNDP) financed by the European Union through the Agence Française de Développement (AFD).

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ABBREVIATIONS AND ACRONYMS

BTI	Bertelsmann Transformation Index
CIS	Commonwealth of Independent States
CA	Circa
CEEMEA	Central and Eastern Europe Middle East and Africa
DTC	Depository Trust Company
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GISDA	Global Investors for Sustainable Development Alliance
HA	Hectare
ICMA	International Capital Market Association
IFI	International Financial Institution
JSC	Joint Stock Company
KM	Kilometre
M.C / HA	Metric centner per hectare (1 metric centner = 100 kg)
MOF	Ministry of Finance
MUFG	Mitsubishi UFJ Financial Group
N/A	Not Available
NDC	Nationally Determined Contributions
NO	Number
P.A	Per annum
PDD	Public Debt Department
PM	Particulate Matter
PPP	Public-Private Partnerships
SCD	Systemic Country Diagnosis
SDG	Sustainable Development Goals
SME	Small and Medium-sized Enterprises
SPO	Second Party Opinion
UN	United Nations
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
US\$	United States Dollar
UZS	Uzbekistan Soums

FOREWORDS

Uzbekistan is firmly advancing towards greater economic integration and enhancing its role in global capital markets. In recent years, the country has implemented extensive reforms aimed at driving sustainable, long-term economic growth.

These reforms address diverse areas such as governance, legal systems, economic structures, social development, and security. They also reflect a more open foreign policy approach, underscoring Uzbekistan's commitment to globalization.

At the core of these efforts is the goal to reduce social inequalities and establish a resilient economy. Key objectives include reducing poverty, improving living conditions, expanding access to healthcare, enhancing education quality, promoting gender equity, ensuring clean water availability, supporting economic development, and enhancing infrastructure resilience.

Through a comprehensive reform agenda, Uzbekistan has laid out a strategic framework for the sustainable use of economic resources. This framework is underpinned by 16 national Sustainable Development Goals (SDGs), aligning with the UN's 2030 Agenda for Sustainable Development. This alignment reflects the country's determination to achieve the SDGs and foster inclusive growth.

Achieving these ambitious goals requires substantial investment across critical sectors and infrastructure. According to the UNDP's Development Financing Assessment for Uzbekistan, the country needs an annual investment of \$4.6-6 billion to realize its SDG commitments.

To meet these financing demands, Uzbekistan has adopted innovative strategies, including issuing thematic bonds to attract global investor demand. These financial instruments adhere to both international transparency standards and environmental, social, and governance (ESG) principles.

Building on the success of the first SDG bond issued in July 2021, Uzbekistan issued its first Green Bond in 2023, raising UZS 4.25 trillion, followed by a second SDG bond issuance in hard currency in 2024, generating EUR 600 million. These sovereign instruments underscore the country's dedication to sustainable development, helping to attract a wider range of investors and mobilize essential financial resources.

By leveraging these thematic sovereign financial instruments, Uzbekistan is narrowing gaps in achieving sustainability, resilience, and economic prosperity. These instruments are supported by strong governance structures ensuring transparency in planning, and monitoring, and are aligned with international standards and third-party validation.

The Ministry of Economy and Finance of Uzbekistan (MoEF) extends its sincere gratitude to Citi team for their instrumental role as Green Structuring Bank in the country's debut issuance of Green bond and UNDP Uzbekistan for their unwavering support in post-issuance reporting. Their support has been invaluable, and the ministry looks forward to continued collaboration to advance Uzbekistan's sustainable development initiatives

EXECUTIVE SUMMARY

In October 2023, Uzbekistan issued its inaugural Green Bond, demonstrating the country's commitment to achieving the United Nations' 2030 Agenda for Sustainable Development through innovative sustainable financing instruments. This report outlines the allocation of funds raised through the bond issuance and highlights the impact of funded projects across various sectors.

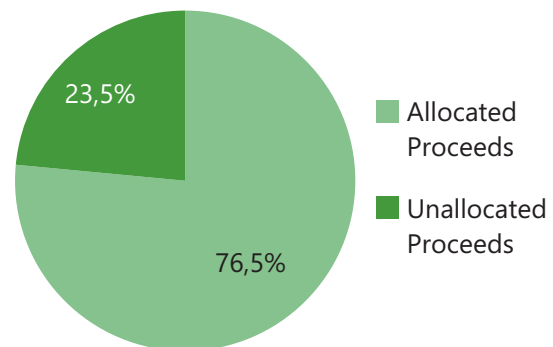
SDG BOND ISSUANCE

- Total amount raised (net proceeds): UZS 4,25 trillion
- Bond tenor: 3 years
- Coupon rate: 16,25%
- Issue date: October 12, 2023

ALLOCATION OF NET PROCEEDS

Uzbekistan's national authorities showed great capacity to use the net proceeds of the October 2023 Green Bond. By December 2023, they were able to allocate around 76,5% (UZS 3,25 trillion) of the total net proceeds of the Bond. The remaining unallocated 23,5% of net proceeds will be allocated by October 2025, within 24 months from the date of issuance as per the SDG Bond Framework.

Figure 1 Proportion of allocated and unallocated net proceeds (%)



Source: Ministry of Economy and Finance

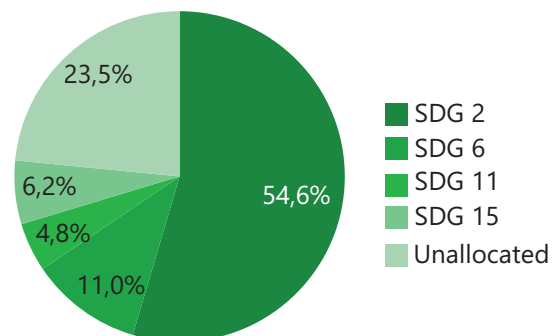
The allocated net proceeds from the October 2023 Green Bond have been applied for refinancing the programs and project portfolios across multiple sectors, under implementation from 2021 to 2023, and in alignment with specific SDGs.

Figure 2 Allocation of Net Proceeds (%) by SDGs

2 ZERO HUNGER Zero Hunger (SDG 2) – Sustainable Water Supply and Wastewater Management and Flood Defense Systems:

Percentage of total allocation: 54,6%

Key projects and programs: Construction and reconstruction of irrigation facilities and melioration facilities; subsidies for implementing water-saving technologies in agriculture; and subsidies to cover the cost of implementing drip irrigation systems.



Source: Ministry of Economy and Finance



Clean Water and Sanitation (SDG 6) – Sustainable Water Supply and Wastewater Management and Flood Defense Systems:

Percentage of total allocation: 11,0%

Key projects and programs: construction and reconstruction of drinking water and sewage facilities; and subsidies to cover the costs of drilling wells to extract groundwater for irrigation of residential plots.



Sustainable Cities and Communities (SDG 11) – Pollution Prevention and Control:

Percentage of total allocation: 4,8%

Key projects and programs: Purchase of special vehicles for organization of sanitation works and maintenance of cleanliness of settlements.



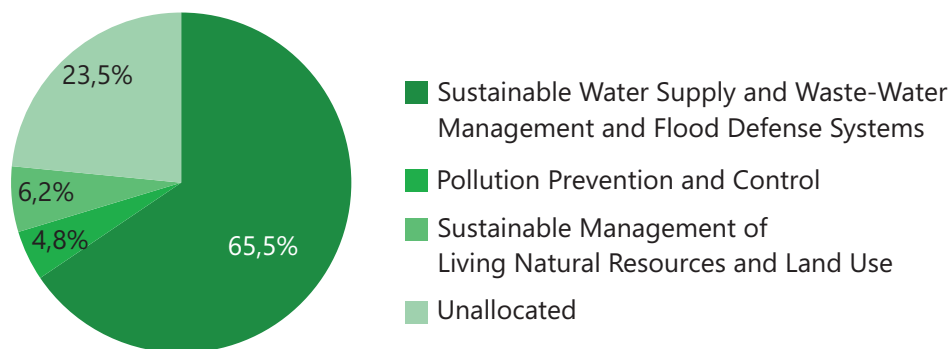
Life on Land (SDG 15) – Sustainable Management of Living Natural Resources and Land Use (Terrestrial and Aquatic):

Percentage of total allocation: 6,2%

Key projects and programs: establishment of protective forests (encirclement) to prevent desertification and sand migration, water and soil erosion, as well as to improve the ecological environment in desert and mountain areas; and funding of expenses related to purchase and planting of seedlings within the nationwide project “Yashil Makon” (Green Nation)¹.

The allocated net proceeds from the October 2023 Green Bond have been applied to three eligible expenditure categories under implementation from 2021 to 2023, with the category of *Sustainable Water Supply and Waste-Water Management and Flood Defense Systems* having received 65,5% of the total net proceeds, as outlined below:

Figure 3 Allocation of Net Proceeds (%) by Eligible Expenditure Category



Source: Ministry of Economy and Finance

Some examples of projects and programmes financed with the net proceeds of the issuance of this bond can be considered in the case study chapter of this report.

IMPACT ASSESSMENT (2021-2023)

The impact assessment of the use of proceeds from Uzbekistan’s October 2023 Green Bond considers the implementation period of the eligible programs and project portfolios financed by them. The funded programs and portfolio of projects have demonstrated significant

¹ <https://www.yashilmakon.eco>

progress in outputs and impacts towards achieving the targeted green related SDGs from public expenditures made between 2021 and 2023, as outlined below:

SDG 2 – Zero Hunger

Table 1 Outputs and impacts from construction and reconstruction of irrigation systems

Construction and reconstruction of irrigation facilities	Sustainable Agriculture			
	2021	2022	2023	Total
Irrigation network, km	214	268	308	790
Other irrigation facilities, pcs	84	42	56	183
Land area with newly established irrigation or with improved irrigation (hectares) (pro-rata)	193 723	225 137	285 491	704 351
Number of farmers / landowners benefited (pro-rata)	5 074	6 980	11 686	23 740
Total average water saving (m ³) (pro-rata)	41 697 469	59 305 116	55 342 300	156 344 885

Source: Ministry of Economy and Finance

Table 2 Outputs and impacts from construction and reconstruction of melioration facilities

Construction and reconstruction of melioration facilities	Land and Water Management			
	2021	2022	2023	Total
Collector, km	173	242	130	545
Closed Horizontal Drainage, km	27	147	129	302
Vertical Drainage Well, pcs	16	78	6	100
Number of farmers / landowners benefited (pro-rata)	118	343	110	570
Land areas with improved reclamation (ha) (pro-rata)	10 503	32 093	92 077	134 673
Of which, reduction of saline land areas (ha)	2 084	7 821	24 646	34 551
and land areas with reduced seepage water (ha)	2 981	10 020	29 387	42 388

Source: Ministry of Economy and Finance

Table 3 Outputs and impacts from implementing water-saving technologies in agriculture

Subsidies for implementing water-saving technologies in agriculture	Water Efficiency in Agriculture			
	2021	2022	2023	Total
Land area covered with water saving technologies (ha)	4 107	1 772	7 463	13 341
Number of farmers provided with water saving technologies	32	77	321	430
Total average water saving (m ³)	8 368 964	3 682 218	14 844 373	26 895 555

Source: Ministry of Economy and Finance

Table 4 Outputs and impacts from implementing drip irrigation systems

Subsidies to cover the cost of implementing drip irrigation systems	Efficient Irrigation Practices			
	2021	2022	2023	Total
Land area covered by drip irrigation (ha) (pro-rata)	30 175	2 853	3 876	36 904
Number of farmers benefited (pro-rata)	562	60	139	761
Total average water saving (m ³)	96 559 623	9 128 989	12 403 840	118 092 452

Source: Ministry of Economy and Finance

SDG 6 – Clean Water and Sanitation

Table 5 Outputs and impacts from construction and reconstruction of drinking water and sewage facilities

Construction and reconstruction of drinking water and sewage facilities	Water Quality and Access			
	2021	2022	2023	Total
Extension and improvement of drinking water network (km)	93	392	605	1090
Extension and improvement of sewage network (km)	28	45	48	121
Total number of people provided with clean drinking water and sanitary facilities (pro-rata)	65 031	80 909	421 780	567 720

Source: Ministry of Economy and Finance

Table 6 Outputs and impacts from drilling wells to extract groundwater for irrigation of residential plots

Subsidies to cover the costs of drilling wells to extract groundwater for irrigation of residential plots	Groundwater Management			
	2021	2022	2023	Total
Number of wells drilled	256	1 127	567	1 950
Area of residential plots covered (ha)	875	2 919	1 620	5 414
Number of people benefited	7 274	24 327	13 504	45 105
Average amount of groundwater extracted from the wells (m ³)	5 494 390	22 951 655	11 164 067	39 610 112
Volume of annual average production of agriculture products (in tons) (pro-rata)	32 013	106 271	59 197	197 481
Annual average increase in productivity on household farms (%)	37%			

Source: Ministry of Economy and Finance

SDG 11 – Sustainable Cities and Communities

Table 7 Outputs and impacts from the purchase of special vehicles for organization of sanitation works and maintenance of cleanliness of settlements

Purchase of special vehicles for organization of sanitation works and maintenance of cleanliness of settlements	Urban Sanitation Management			
	Number of garbage trucks purchased	Number of compactor trucks purchased	Annual waste collection (tons)	Population covered
	274	29	517 860	1 918 000

Source: Ministry of Economy and Finance

SDG 15 – Life on Land

Table 8 Outputs from establishing protective forests (encirclement) to prevent desertification and erosion

Cost of the establishment of protective forests (encirclement) to prevent erosion	Forest Restoration and Erosion Control			
	2021	2022	2023	Total
Land areas covered with forest/tree plantations (encirclement) (ha)	2 500	2 500	2 500	7 500

Source: Ministry of Economy and Finance

Table 9 Outputs from planting of seedlings within the nationwide project "Yashil Makon"

Planting of seedlings within the nationwide initiative "Yashil Makon" (Green Nation)	Afforestation and Reforestation	
	Green areas created by the program (ha)	Number of trees/plants planted within the program
	457	166 226

Source: Ministry of Economy and Finance

GOVERNANCE AND MONITORING

Development of a green development finance assessment.

Update of Sustainability-related bond frameworks.

Establishment of a dedicated Sustainability-related Bond Committee to oversee fund allocation and project implementation.

Regular audits and impact assessments conducted in-house and by independent third-party evaluators.

Transparent reporting mechanisms to ensure accountability and stakeholder engagement.

CHALLENGES

Market Familiarity: As a relatively new entrant in the Green bond market, Uzbekistan faced the challenge of gaining investor confidence and familiarity with its economic and governance structures.

Regulatory Framework: Establishing a robust regulatory and reporting framework for green finance to ensure transparency and accountability in the use of proceeds was crucial.

Capacity and Expertise: There was space for development of local expertise in structuring and managing green bonds, as well as in assessing and reporting their environmental impacts and social co-benefits.

Economic Conditions: The global economic environment, including the impacts of the COVID-19 pandemic, posed additional risks and uncertainties for investors.

Sustainability Metrics: Defining and measuring the impact of the projects funded by the Green Bond required clear and credible sustainability metrics.

FUTURE OUTLOOK

Government Commitment: The Uzbek government has shown a commitment to sustainable development and environmental protection, which is likely to support the further issuances of green bonds.

Sustainable Development: The bond funded various projects aligned with the UN's Sustainable Development Goals, accelerating Uzbekistan's progress in areas such as agriculture, water quality and access, water management, waste management and pollution control and environmental protection. The validation of this progress with the first issuance of a Green Bond, further raised expectations in future issuances. These were partially achieved with the second issuance of SDG Bonds in 2024.

International Investment: The successful issuance of the 2023 Green Bond attracted more foreign investors, leading to increased capital inflows and economic growth in Uzbekistan through the green economy, as the results of the country's thematic bond issuance in 2024 demonstrated.

Market Credibility: This bond issuance enhanced Uzbekistan’s credibility in international financial markets, leading to improved credit ratings and lower borrowing costs in the future, as happened in subsequent issuances.

Sustainable Finance: The 2023 Green Bond issuance established a precedent for current and future green and sustainable finance initiatives in Uzbekistan, encouraging more socially and environmentally friendly investments.

Economic Reforms: The bond issuance was part of broader economic reforms in Uzbekistan, signaling the country’s commitment to modernization and integration into global financial markets.

Transparency: To maintain investor confidence, Uzbekistan demonstrated transparency in the use of proceeds and progress on Sustainability-related projects, leading to improved monitoring and governance practices. As the market matures, there will be an increasing emphasis on transparency and accountability in impact reporting, aligning with global standards to attract investors.

CONCLUSION

The Uzbekistan 2023 Green Bond has successfully channeled funds into critical sustainable development projects, demonstrating tangible progress across multiple SDGs with environmental benefits. The government remains committed to transparent reporting and continuous improvement in its sustainable finance initiatives, setting a positive example for other emerging economies in the pursuit of the 2030 Agenda for Sustainable Development.

INTRODUCTION

In October 2023, Uzbekistan made history by becoming the one of the few countries in the Commonwealth of Independent States (CIS) and in Central and Eastern Europe, Middle East and Africa (CEEMEA) to issue a local currency Green Bond. The adoption of this groundbreaking sustainable financial instrument represents a significant milestone in the nation's commitment to achieve green growth through the United Nations' 2030 Agenda for Sustainable Development. At the same time, as already revealed by the literature², it allows the country to increase the potential base of its sources of financing for green growth, showcasing its innovative approach to financing critical development projects, and deepen the credibility of its integration in international capital markets, which can be followed by other countries.

This report aims to provide a comprehensive overview of the allocation of funds raised through the 2023 Green Bond issuance and the subsequent impact of these investments on Uzbekistan's progress towards its green strategy. By detailing the projects funded and their outcomes, the national authorities seek to offer transparency to investors, policymakers, and the public while highlighting the tangible benefits of this pioneering financial initiative in the country.

CONTEXT AND BACKGROUND

Uzbekistan has placed a strong emphasis on achieving the Sustainable Development Goals as part of its national development strategy. The country's primary focus is on reducing poverty and inequality, which aligns with SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities). To address these issues, Uzbekistan is prioritizing economic reforms, job creation, and the improvement of social protection systems. Additionally, the government is working towards enhancing education quality and access (SDG 4), as well as promoting gender equality (SDG 5) through various initiatives and policy changes.

Another key priority for Uzbekistan is environmental sustainability and climate action, which corresponds to SDG 13 (Climate Action) and SDG 15 (Life on Land). The country is investing in renewable energy sources, implementing water conservation measures, and working to combat desertification and land degradation. Uzbekistan is also focusing on improving healthcare services and infrastructure (SDG 3) to ensure better health outcomes for its population. By addressing these priorities, the country aims to make significant progress towards achieving the SDGs and improving the overall quality of life for its citizens.

Uzbekistan has been making significant strides in recent years to transition towards a greener economy and more sustainable development. The country has recognized the importance of addressing climate change and environmental challenges while promoting economic growth. As part of this effort, Uzbekistan has developed a comprehensive strategy that focuses on renewable energy, energy efficiency, and sustainable resource management.

One of the key priorities in Uzbekistan's green transition is the expansion of renewable energy sources. The government has set ambitious targets to increase the share of renewable energy in its total energy mix, with a particular focus on solar and wind power. Uzbekistan aims to generate 25% of its electricity from renewable sources by 2030. To achieve this goal, the country is attracting foreign investments and implementing supportive policies to encourage the development of solar and wind farms across its vast territory.

² See, as example, Cheng, G.; Ehlers, T.; Packer, F.; Xiao, Y. (2024) – Sovereign Green Bonds: A Catalyst for Sustainable Debt Market Development? WP/24/120, IMF: Washington.

Figure 4 Contribution of the green economy to achieving SDGs



Source UNDP (2022)

Another important aspect of Uzbekistan’s green strategy is improving energy efficiency across various sectors. The country is working on modernizing its industrial infrastructure, implementing energy-saving technologies in buildings, and promoting more efficient transportation systems. These efforts not only contribute to reducing greenhouse gas emissions but also help in conserving resources and reducing energy costs for businesses and households.

Uzbekistan is also prioritizing sustainable water management and agriculture practices as part of its green transition. The country faces significant challenges related to water scarcity and land degradation, particularly in the Aral Sea region. To address these issues, Uzbekistan is implementing water-saving irrigation techniques, promoting drought-resistant crops, and working on restoring degraded lands. Additionally, the government is focusing on developing eco-tourism and protecting biodiversity to ensure a more sustainable approach to economic development while preserving the country’s natural resources.

A significant aspect of Uzbekistan’s green financing strategy is its collaboration with international financial institutions and development partners. The country has been engaging with organizations such as the Asian Development Bank, the World Bank, and the European Bank for Reconstruction and Development to secure funding and technical assistance for green initiatives. These partnerships are aimed at leveraging financial resources and expertise to implement projects that reduce carbon emissions, improve energy efficiency, and enhance the resilience of infrastructure to climate change.

Another key lever in Uzbekistan’s green financing strategy is the issuance of sustainable financial instruments such as Green Bonds and other sustainable finance instruments that

can attract private sector investment. By diversifying its financial tools, Uzbekistan aims to mobilize additional resources for environmental projects. The government's commitment to green financing is also reflected in its national policies and strategies, which emphasize the integration of environmental considerations into economic planning and decision-making processes.

The first Green Bond issued by Uzbekistan on October 12, 2023, included two tranches, with the first tranche of \$660 million with a 5-year maturity at a coupon of 7,850% p.a. (conventional bond) and a second tranche of UZS 4,25 trillion (~US\$ 348 million) with a 3-year maturity at a coupon of 16,250% p.a. labelled as a sovereign Green Bond. This successful issuance not only provided Uzbekistan with much-needed capital but was also a major achievement in the UZS capital market.

REPORT STRUCTURE AND OBJECTIVES

This report is structured to provide a clear and detailed account of how the funds raised through the Uzbekistan 2023 Green Bond have been allocated and the impacts they have generated. The following chapters will delve into:

- **SDG Bond Framework:** A comprehensive summary of the country's SDG Bond Framework that enabled this Green Bond issuance by Uzbekistan as well as its allocation and impact report.
- **Bond Issuance:** A brief recap of the bond issuance process, including key financial details and investor demographics.
- **Bond Allocation Report:** A comprehensive breakdown of how the proceeds from the 2023 Green Bond issuance have been distributed across various projects and initiatives.
- **Bond Impact Report:** An analysis of the effective environmental impacts of the funded projects, using both quantitative metrics and qualitative assessments.
- **Case Studies Highlights:** Detailed case studies of selected projects, showcasing their objectives, implementation progress, and preliminary outcomes.
- **Challenges and Lessons Learned:** A candid discussion of the obstacles encountered during implementation and the valuable insights gained from this pioneering initiative.
- **Future Outlook:** An exploration of how this bond issuance fits into Uzbekistan's broader sustainable development strategy and plans for future green financing initiatives.
- **Conclusion:** A summary of key findings and reaffirmation of Uzbekistan's commitment to sustainable development.

By providing this comprehensive overview, this report aims to:

- Ensure transparency and accountability in the use of proceeds raised through the Green Bond.
- Demonstrate the tangible impact of sustainable financing on Uzbekistan's development trajectory.
- Share best practices and lessons learned with other nations considering similar financial instruments.
- Engage stakeholders, including investors, development partners, and civil society, in Uzbekistan's sustainable development journey.

As this report is being presented, readers are invited to consider not only the immediate impacts of the projects funded but also the long-term implications of this innovative approach to development financing. The Uzbekistan 2023 Green Bond represents more than just a financial transaction; it is a testament to the country's vision for an environmentally sustainable future and its willingness to embrace innovative solutions to complex challenges.

In the following pages, the report will take you on a journey through Uzbekistan's efforts to translate the promise of sustainable finance into concrete actions and measurable impacts. We hope that this report will not only inform but also inspire further collaboration and innovation in the pursuit of a more sustainable and prosperous future for all.

SDG BOND FRAMEWORK

Prior to the issuance of its first sovereign thematic bond, the Government of Uzbekistan approved and published in July 2021 the SDG Bond Framework for the country.³ With this framework, the Government signaled to capital markets and potential investors its intention to use Sustainability-related thematic sovereign bonds to finance and/or refinance the development of projects with positive social and environmental impacts in alignment with the UN 2030 Agenda for Sustainable Development. To this end, the national authorities designed the SDG Bond Framework of Uzbekistan under the guidance of the best international standards and practices for the issuance of thematic bonds and with consideration of international administering bodies of these standards, namely with the Green Bond Principles (GBP)⁴, Social Bond Principles (SBP)⁵ and Sustainability Bond Guidelines (SBG)⁶, all administered by the International Capital Market Association (ICMA). Uzbekistan's SDG Bond Framework has adopted all four core components of these principles for the issuance of thematic bonds and its their recommendations pertaining to external reviews:

- Use of Proceeds
- Process for Project Evaluation and Selection
- Management of Proceeds
- Reporting

The issuance of the 2023 Green Bond was conducted under the Uzbekistan's SDG Bond Framework.

USE OF PROCEEDS

In the country's SDG Bond Framework, the Government of Uzbekistan has committed to capital markets and potential investors to use proceeds from SDG-related sovereign thematic bond issuances to finance or refinance projects that aim to advance the national development plan's targets aligned with the national targets for SDGs, based on a list of Eligible SDG Expenditure categories and a list of excluded activities. Among the Eligible SDG Expenditure categories of thematic areas defined by the national authorities in the Uzbekistan's SDG Bond Framework are:

- Access to Education
- Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Access to Essential Health Services
- Delivery of Essential and Clean Transportation Services
- Pollution Prevention and Control
- Sustainable Management of Living Natural Resources and Land Use
- Clean and Efficient Energy Production and Consumption

³ Republic of Uzbekistan (2021) – SDG Bond Framework. Ministry of Finance: Tashkent.

⁴ ICMA (2021), <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf>

⁵ ICMA (2021), <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Social-Bond-Principles-June-2021-140621.pdf>

⁶ ICMA (2021), <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Sustainability-Bond-Guidelines-June-2021-140621.pdf>

The types of Eligible SDG Expenditures defined by the national authorities in Uzbekistan's SDG Bond Framework are:

- **Investment Expenditures:** capital investments, including facilities, structures, networks systems, plant property, equipment or physical assets
- **Subsidies, Grants and Loans:** Financial incentives in the forms of grants or lower interest rate loans to guarantee basic services
- **Tax Expenditures:** Tax forfeitures and any exceptions to normal taxation policies (including rates, fiscal base) to pursue or encourage social or environmental objectives
- **Operating Expenditures:** Expenditures from Central Government to run public services and provide public goods. These expenditures are restricted to direct costs associated with Eligible Expenditures
- **Intervention Expenditures:** Financial Transfers or contributions from Central Government to public entities with their own legal status. For example, state-owned enterprises and Public-Private Partnerships (PPPs)

Finally, Uzbekistan's SDG Bond Framework clearly excludes some activities from being financed by proceeds from the issuance of SDG-related thematic sovereign bonds, namely:

- Exploration, production or transportation of fossil fuels
- Generation of nuclear power
- Alcohol, weapons, tobacco, palm oil, cattle / beef production, conflicted minerals or adult entertainment industries

In addition to this, the national authorities have committed to scrutinize all expenditure to ensure that it does not involve any of the following activities:

- Deforestation or degradation of biodiversity
- Child labor or forced labor
- Breach of anti-corruption laws, and all environmental, social and governance laws, policies and procedures

As this report will show, the national authorities strictly observed its commitments to the eligibility criteria in the selection of projects for financing by the net proceeds of the 2023 Green Bond issuance. All selected projects fall into one of the following Eligible Expenditure categories included in Uzbekistan's SDG Bond Framework:

- Reconstruction of irrigation systems – Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Construction and reconstruction of melioration facilities – Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Construction and reconstruction of drinking water facilities and sewage systems – Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Subsidies for implementing water-saving technologies in agriculture – Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Subsidies to cover the costs of drilling wells to extract groundwater for irrigation of residential plots – Sustainable Water Supply and Waste-Water Management and Flood Defense Systems

- Subsidies to cover the cost of implementing drip irrigation systems – Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Purchase of special vehicles for organization of sanitation works and maintenance of cleanliness of settlements – Pollution Prevention and Control
- Costs for the establishment of protective forests (encirclement) to prevent desertification and sand migration, water and soil erosion and to improve the ecological environment in desert and mountain areas – Sustainable Management of Living Natural Resources and Land Use
- Funding of expenses related to purchase and planting of seedlings within the nationwide project “Yashil Makon” (Green Nation) – Sustainable Management of Living Natural Resources and Land Use

PROCESS FOR PROJECT EVALUATION AND SELECTION

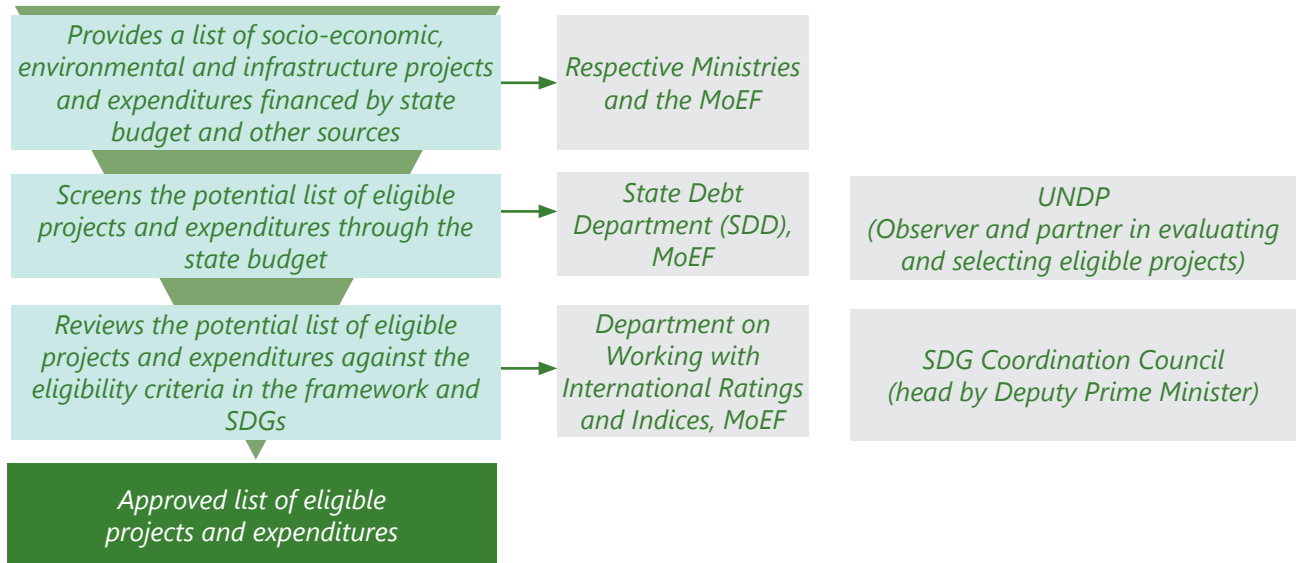
The national authorities of Uzbekistan have committed and implemented a transparent process for the preparation, evaluation and selection of projects in line with the financeable thematic areas against the Eligible SDG Expenditures and exclusion criteria defined in Uzbekistan’s SDG Bond Framework. The Ministry of Economy and Finance (MoEF), through its State Debt Department (SDD), is the main unit responsible for supervising the evaluation and selection processes of the projects and respective proposal reports. It also guides, as mentioned in by the SDG Bond Framework, the relevant ministries for the eligible sustainable thematic areas in the preparation of the projects to be submitted for financing by the net proceeds of the Green Bond issuance.

As a preliminary step to the evaluation and selection process, the MoEF has created an online digital tool for the submission of projects in accordance with the transparency requirements and obligations defined by Uzbekistan’s SDG Bond Framework. This tool specifies the need of alignment with the exclusion criteria, eligible sustainable thematic areas and themes and eligible expenditure, as well as a set of proposed key performance indicators through which the impact of projects on environment and climate can be measured. With it, the MoEF was able to invite simultaneously all line ministries and agencies with relevance to the eligible sustainable thematic areas to submit their projects in a standardized manner and to carry out an objective and transparent analysis and evaluation of the submitted projects in relation to the defined selection criteria.

Arising from the submission of project proposals by the relevant line ministries for the core thematic areas of the Uzbekistan’s SDG Bond Framework, a long list of proposed projects was brought through the evaluation and selection process, with the supervision of UNDP and the MoEF. This long list of projects submitted by the relevant line ministries, together with their detailed descriptions, have been shortlisted and prioritized according to the eligibility criteria defined by the SDG Bond Framework and priority themes chosen for the October 2023 issuance.

The final list of projects selected by the evaluation and selection process was approved by the SDG Coordination Council, created under Uzbekistan’s Agenda 2030 and led by the country’s Deputy Prime Minister. The selected projects were included in a Green Bond Register managed by the State Debt Department of the Ministry of Economy and Finance, as part of the monitoring and review system defined by the SDG Bond Framework.

Project Evaluation and Selection⁷



MANAGEMENT OF PROCEEDS

Considering the final list of selected projects by the evaluation and selection process and approved by the SDG Coordination Council, an amount equivalent to UZS 3,25 trillion out of the total net proceeds of the 2023 Green Bond issuance was allocated to Eligible SDG Expenditures, corresponding to 76,5% of the Green Bond net proceeds being allocated within 12 months from the date of issuance. As per the SDG Bond Framework, Uzbekistan will aim to allocate 100% of the bond within 24 months from the date of issuance.

The MoEF oversaw the allocation and tracking of expenditures on Eligible Expenditures up to an amount equal to UZS 3,25 trillion. The net proceeds of Green Bond were deposited in the general funding accounts and earmarked for allocation.

Uzbekistan established a Green Bond Register to manage the proceeds allocation of each Green Bond, and make sure that the proceeds are used in accordance with this framework. The Green Bond Register will continue to be reviewed annually by the MoEF. The Register contains all relevant information including:

- Summary of projects details
- Amount of proceeds allocated to each Eligible Expenditure
- Expected environmental and /or social impacts of Eligible Expenditures
- Aggregate amount of proceeds of Green Bond allocated to Eligible Expenditures
- Remaining balance of unallocated proceeds
- Other necessary information so that the aggregate of issuance proceeds allocated to the Eligible Expenditures is always recorded

The respective ministries utilizing the proceeds tracked, monitored and reported to the MoEF and the SDG Coordination Council on the environmental and social benefits of the Eligible Expenditures in their portfolio, which are funded by Green Bond net proceeds.

⁷ 2021. Republic of Uzbekistan SDG BOND FRAMEWORK. Ministry of Economy and Finance of the Republic of Uzbekistan.

There were no cases of asset divestment or where projects ceased to be eligible, therefore, the MoEF had no need to mark any allocated proceeds subsequently as “unallocated” until the proceeds are used to finance and / or refinance other eligible expenditures.

REPORTING

Under its SDG Bond Framework, Uzbekistan committed to provide investors with both Allocation and Impact Reporting on an annual basis in an open and public portal. This first report provides to investors the following allocation details among others:

- Net proceeds of the outstanding 2023 Green Bond
- Aggregate amount of net proceeds allocated to Eligible green related SDG Expenditure categories
- Examples of environmental projects from each relevant Eligible green related SDG Expenditure category.

It also provides investors the details on the environmental impacts and social co-benefits of the Eligible Expenditures, according to available and relevant data on impact metrics.

EXTERNAL REVIEW

As part of alignment with the ICMA principles, a Second Party Opinion (SPO) was sought prior to publication of the SDG Bond Framework. The purpose of this was to obtain an external review that confirmed that the framework complied fully with ICMA guidelines, amongst other things. The SPO provider, Sustainalytics, concluded that the SDG Bond Framework is credible and impactful, and aligns with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, and Social Bond Principles 2021.

As part of Uzbekistan’s commitments with post-issuance external review as defined in its SDG Bond Framework, for the 1st Green Bond Allocation and Impact Report, an Annual Assurance Report from Sustainalytics will be obtained and before launching this final report to the public, the MoEF had already requested to an external reviewer an Annual Assurance Report on the allocation of the 2023 Green Bond net proceeds to Eligible Expenditures.

2023 GREEN BOND ISSUANCE

BACKGROUND

The SDG bond issued by Uzbekistan on 12 July 2021 was the first step of a broader strategy to integrate sustainability into the nation's financing framework. After this bond issuance, the national authorities also moved towards the first Green Bond issuance in 2023. The bond was designed to fund projects that contribute to achieving environmental goals and green-related SDGs. In Uzbekistan's SDG Bond Framework, national authorities have previously identified seven thematic areas to be financed by Sustainability-related Bonds based on national priorities for sustainable development, with priority given to the development challenges most in need of being addressed. Together, the proceeds from the 2023 Green Bond issuance have been and will be allocated directly or indirectly to the pursuit of environmental benefits under five of the seven thematic areas previously defined:

- Sustainable Water Supply and Waste-Water Management and Flood Defense Systems (SDG 2, 6, 11)
- Delivery of Essential and Clean Transportation Services (SDG 9, 11 and 13)
- Pollution Prevention and Control (SDG 11 and 1)
- Sustainable Management of Living Natural Resources and Land Use (SDG 11, 13 and 15)
- Clean and Efficient Energy Production and Consumption (SDG 7, 11 and 13)

ISSUANCE DETAILS

The first Green Bond issuance by Uzbekistan in 2023 had the following key details:

Currency: The Green Bond was denominated in Uzbek Soums (UZS).

Amount (Net Proceeds) and Maturity: The green tranche was issued with an amount of UZS 4,25 trillion and a maturity of 3 years.

Interest Rate: The green tranche carried a fixed interest rate of 16,250% p.a. payable s/a, reflecting both the favorable market conditions and investor confidence in Uzbekistan's sustainable development initiatives.

Investor Types: The main group of investors was Asset Managers & Funds, representing about 94% of the total amount of proceeds from the green bond issuance. Sovereign Wealth Funds and Banks & PBs also participated in the issue, but only accounted for an investment equivalent to 5% and 1%, respectively, of the total proceeds of the green bond issuance.

Investor Locations: The main location of investors in the 2023 Green Bond was the USA (38%), followed by Switzerland (22%) and the Nordics Countries (22%), UK (7%), Asia & MENA Regions (5%) and Other European Countries (5%). This tranche received more attention from Swiss and the Nordic Countries investors than the tranche in US\$, representing around 44% of the total amount of proceeds from the green bond issuance (compared to just 5% for the US\$ bond).

For further details on the terms of Uzbekistan's 2023 Green Bond issuance, see the tables below.

Table 10 Uzbekistan's 2023 dual-tranche conventional and Green Bond key issuance terms

Issuer	The Republic of Uzbekistan (represented by the Ministry of Economy and Finance of the Republic of Uzbekistan)	
Issue Ratings	BB- (Fitch) / BB- (S&P)	
Documentation	GMTN programme of the Issuer	
Status	Senior unsecured notes	
Format	Regulation S / Rule 144A	
Currency	US\$	UZS Green
Tenor	5 years	3 years
Maturity	12 October 2028	12 October 2026
Settlement	12 October 2023	12 October 2023
Yield	8,125%	16,250%
Coupon	7,850%	16,250%
Price	98,88	100,00
Spread over UST	343,6bp	-
Tranche size	US\$ 660mm	UZS 4,25tn (~US\$ 348m equiv.)
Tranche denoms	US\$200k x US\$1K	UZS2,500mm x UZS10mm
Listing	London Stock Exchange	London Stock Exchange – Sustainable Bond Market
Use of Proceeds	General Budgetary Purposes	To finance eligible Green expenditures as per Uzbekistan's SDG Bond Framework
SPO Provider	N/A	Sustainalytics
Final Book Size	US\$ 1,37bn	UZS 4,47tn
Orderbook at peak	US\$ 2,15bn	UZS 5,00tn
Settlement	US\$ (all payments in USD, incl. settlement, coupon and principal)	
Governing Law	English	
Joint Bookrunners	Citi +4	
Sole Green Structuring Bank	Citi	

Source: Citi

Table 11 Proceeds by Investor Type

Investors Type	US\$ Tranche	UZS (Green) Tranche
Asset Managers & Funds	91%	94%
Insurers & Pension Funds	8%	-
Sovereign Wealth Funds	-	5%
Banks & PBs	1%	1%

Source: Citi

Table 12 Proceeds by Investor Geographical Origin

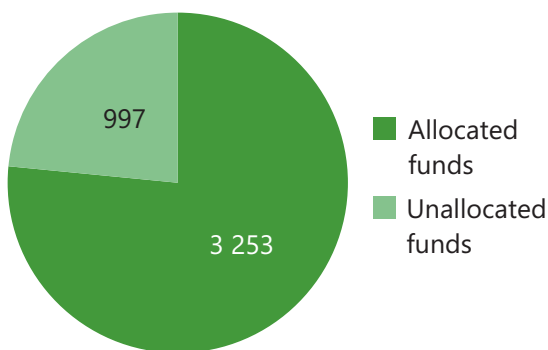
Investors Geographical Origin	US\$ Tranche	UZS (Green) Tranche
UK	46%	7%
USA	42%	38%
Continental Europe	11%	49%
Asia & MENA Region	2%	5%

Source: Citi

2023 GREEN BOND ALLOCATION REPORT

The Government of Uzbekistan committed in its SDG Bond Framework to report on the allocation of proceeds from the issuance of green and SDG bonds. An allocation report on Green Bond proceeds is a key document that provides detailed information on how the funds raised from the bond issuance have been allocated to various Eligible Expenditures and initiatives. These reports are critical for transparency and accountability in sustainable finance markets, and to comply with the regulatory requirements and guidelines related to environmental sustainability and to enhance investors' confidence and attract more investment in future Green and SDG bond issuances.

Figure 5 Allocated and Unallocated funds, UZS billion



The country issued its first Green Bond in October 2023. Observing their commitments, a year later the national authorities, through the MoEF in collaboration with UNDP Uzbekistan, are publishing their first report on the allocation of net proceeds from the issuance of the Green Bond. In this first report, the allocation of proceeds made during the first year after the issuance is disclosed, which corresponded to the amount of UZS 3,25 trillion out of the UZS 4,25 trillion total net proceeds raised from the issuance of this Green Bond.

The allocation of funds from the issuance of the 2023 Green Bond enabled the government of Uzbekistan to finance and re-finance Eligible Expenditures to achieve the national targets for the environmental sustainability, including them in its state budget for that year. None of these eligible expenditures were co-financed by other bodies or financial institutions.

ALLOCATION OF NET PROCEEDS BY SDG

The final list of projects generated by the project evaluation and selection process overseen by the UNDP and MoEF and approved by the SDG Coordination Council has a specific profile that guides funding resources for three of the thematic areas envisaged by the SDG Bond Framework:

- Sustainable Water Supply and Waste-Water Management and Flood Defense Systems
- Sustainable Management of Living Natural Resources and Land Use
- Pollution Prevention and Control

Each thematic area has a primary link to a specific SDG, without preventing direct or indirect links or impacts on the national targets of other SDGs. The detailed analysis from the project purposes to the potential impacted SDGs, considering the stronger relationship between the outputs of the projects and the SDG indicators, allowed the establishment of a primary link with a specific SDG and thus describe the primary allocation of the net proceeds by SDG. The allocation of the net proceeds directly impacted to a greater or lesser extent four SDGs: SDG 2 – Zero Hunger, SDG 6 – Clean Water and Sanitation, SDG 11 – Sustainable Cities and Communities and SDG 15 – Life on Land. The largest share of the total net proceeds was allocated to projects with a direct impact on SDG

2, corresponding to 54,6% (UZS 2 319bn) of the total amount of the net proceeds. This was followed by SDG 6 and SDG 15, representing 11,0% (UZS 466bn) and 6,2% (UZS 264bn), respectively, of the total net proceeds. The remaining 4,8% (UZS 203bn) was allocated to SDG 11. For more details on the amount allocated to each SDG and their relative importance in the allocation of proceeds during the period under consideration, see the following table.

Figure 6 Allocation of Net Proceeds by SDG in UZS'bn

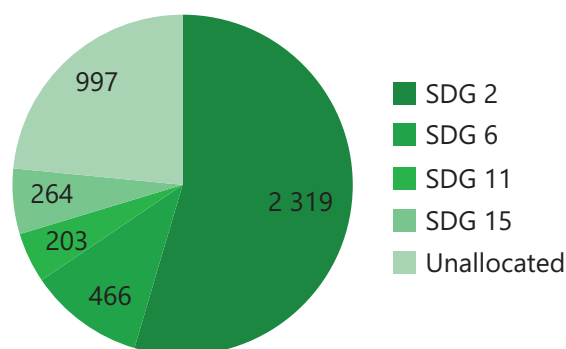


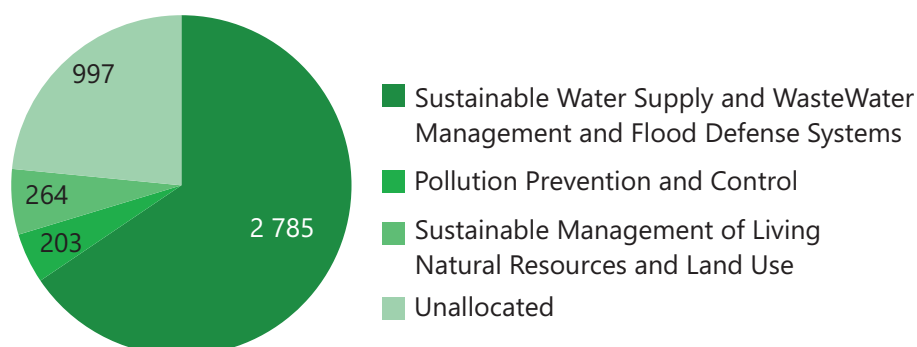
Table 13 Allocation of net proceeds by year and by Primary SDGs, (UZS million)

No.	Primary SDGs	2021	%	2022	%	2023	%	Total	%
1	SDG 2 – Zero hunger	1 059 267	77,7%	539 290	71,5%	534 331	61,9%	2 132 890	54,6%
2	SDG 6 – Clean water and sanitation	57 402	2,3%	275 669	20,3%	319 541	26,3%	652 612	11,0%
3	SDG 11 – Sustainable cities and communities	203 317	14,6%	-	0,0%	-	0,0%	203 317	4,8%
4	SDG 15 – Life on land	76 501	5,5%	73 075	8,2%	114 780	11,8%	264 356	6,2%
5	Unallocated	-	0,0%	-	0,0%	-	0,0%	996 827	23,5%

Source: Ministry of Economy and Finance

ALLOCATION OF NET PROCEEDS BY ELIGIBLE EXPENDITURE CATEGORY

Figure 7 Allocation by Eligible Expenditure Categories in UZS'bn



The analysis was extended to establish a link between the categories of Eligible SDG Expenditure as defined in the Framework, the primary and secondary impacts on the different SDGs and the allocation of the proceeds. As a result of the selection criteria

applied to the submitted projects, prioritizing eligibility and alignment with national environmental SDG targets, **UZS 2 785bn (65,5%)** of the total net proceeds during the review period were allocated to the thematic area of **“Sustainable Water Supply and Wastewater Management and Flood Defense Systems”**, covering projects/programs #1 to #6 listed in the table below. The thematic area of **“Sustainable Management of Living Natural Resources and Land Use”** followed with the allocation in the projects/programs #8 and #9, representing **UZS 264bn (6,2%)** of the total amount of the net proceeds. The remaining **UZS 203bn (4,8%)** of the total net proceeds went towards to the thematic area **“Pollution Prevention and Control”**, covering program #7 in the table below.

For more details on the allocation of proceeds by type of Eligible SDG Expenditure, as well as their primary and secondary linkages to the SDGs, see the following table in the next page.

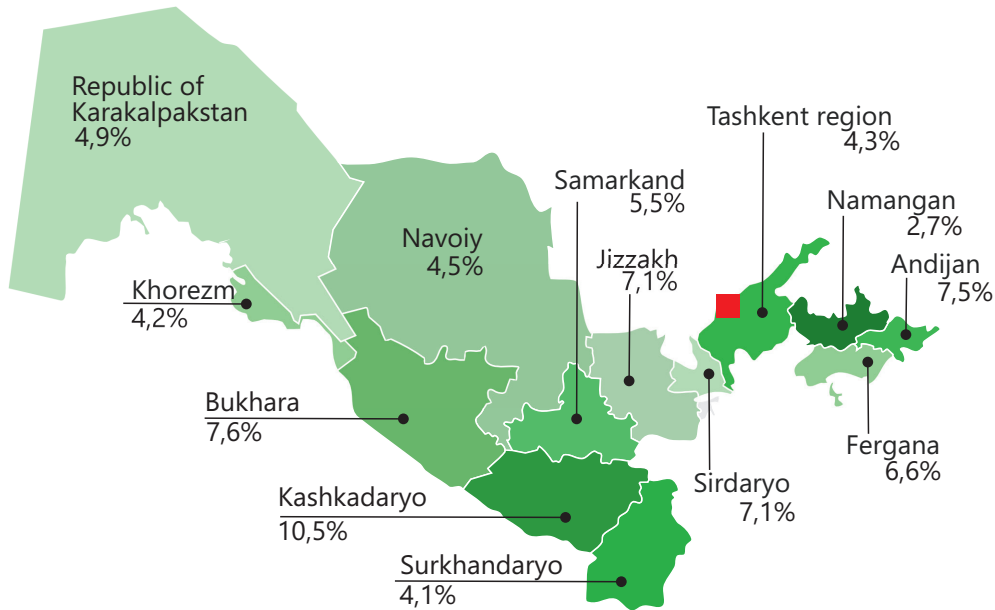
Table 14 Allocation of net proceeds by expenditure category with primary and secondary SDGs interlinkages

No.	Project / Program description	Allocation of Net Proceeds (UZS million)				Eligible Expenditure category	Primary SDG Alignment	Secondary SDG Alignment
		2021	2022	2023	%			
1	Construction and reconstruction of irrigation facilities	227 309	354 707	358 026	16,3%	39,9%	37,0%	Goal 6: Clean Water and Sanitation (Ensure availability and sustainable management of water) Goal 13: Climate Action (Improve resilience and adaptive capacity to climate-related hazards) Goal 15: Life on Land (Sustainably manage forests, combat desertification)
2	Construction and reconstruction of melioration facilities	48 959	108 093	53 004	3,5%	12,2%	5,5%	Goal 6: Clean Water and Sanitation (Ensure availability and sustainable management of water) Goal 15: Life on Land (Sustainably manage forests, combat desertification)
3	Construction and reconstruction of drinking water and sewage facilities	31 773	180 019	254 515	2,3%	20,3%	26,3%	Goal 3: Good Health and Well-Being (Ensure healthy lives and promote well-being for all) Goal 11: Sustainable Cities and Communities (Make cities inclusive, safe, resilient and sustainable)
4	Subsidies for implementing water-saving technologies in agriculture	28 628	5 170	26 396	2,0%	0,6%	2,7%	Goal 12: Responsible Consumption and Production (Ensure sustainable consumption and production patterns) Goal 13: Climate Action (Improve resilience and adaptive capacity to climate-related hazards)
5	Subsidies to cover the costs of drilling wells to extract groundwater for irrigation of residential plots	25 630	95 650	65 026	1,8%	10,8%	6,7%	Goal 2: Zero Hunger (Ensure sustainable food production systems) Goal 6: Clean Water and Sanitation (Ensure availability and sustainable management of water)
6	Subsidies to cover the cost of implementing drip irrigation systems	754 372	71 320	96 905	54,0%	8,0%	10,0%	Goal 2: Zero Hunger (Ensure sustainable food production systems) Goal 13: Climate Action (Improve resilience and adaptive capacity to climate-related hazards)
7	Purchase of special vehicles for organization of sanitation works and maintenance of cleanliness of settlements	203 317	-	-	14,6%	0,0%	0,0%	Goal 12: Responsible Consumption and Production (Ensure sustainable consumption and production patterns) Goal 13: Climate Action (Improve resilience and adaptive capacity to climate-related hazards)
8	Costs for the establishment of protective forests (encirclement) to prevent desertification and sand migration, water and soil erosion and to improve the ecological environment in desert and mountain areas	76 501	73 075	80 984	5,5%	8,2%	8,4%	Goal 3: Good Health and Well-Being (Ensure healthy lives and promote well-being for all) Goal 12: Responsible Consumption and Production (Ensure sustainable consumption and production patterns) Goal 13: Climate Action (Improve resilience and adaptive capacity to climate-related hazards)
9	Funding of expenses related to purchase and planting of seedlings within the nationwide project "Yashil Makon" (Green Nation)	-	-	33 796	0,0%	0,0%	3,5%	Goal 13: Climate Action (Improve resilience and adaptive capacity to climate-related hazards) Goal 3: Good Health and Well-Being (Ensure healthy lives and promote well-being for all)

* Percentage figures are calculated with respect to allocated funds between 2021-2023
Source: Ministry of Economy and Finance

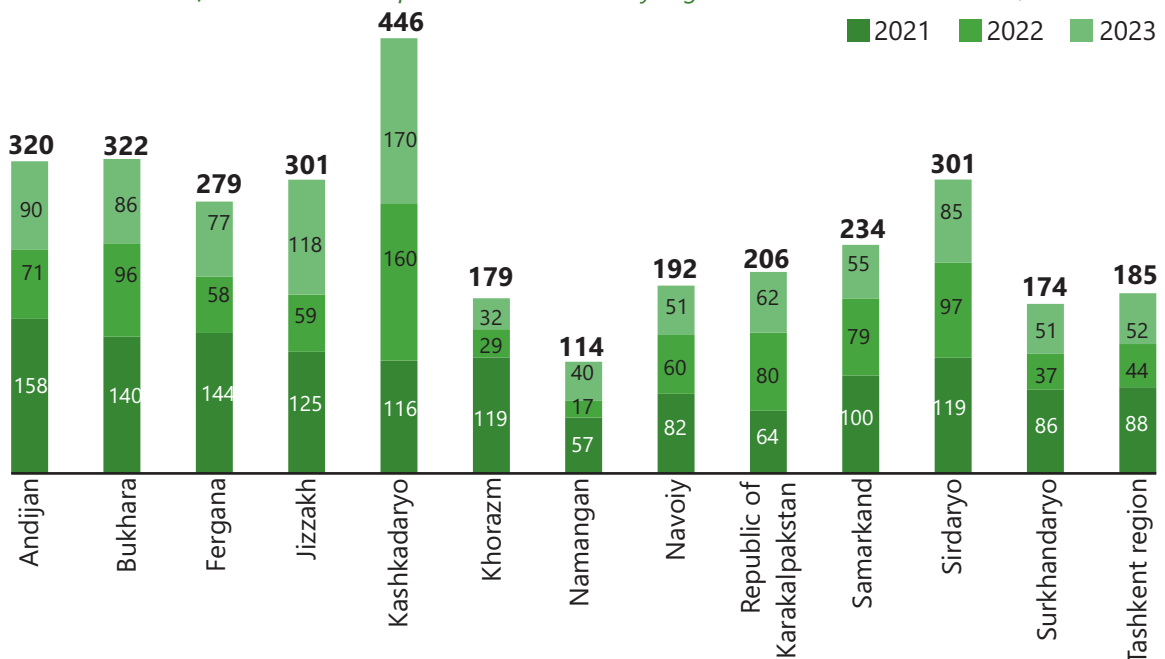
ALLOCATION OF PROCEEDS BY REGION

Figure 8 Allocation of Net Proceeds by Regions



Uzbekistan is not a territorially homogeneous country if we consider the resources and needs or the opportunities and challenges that each region faces in pursuing the objectives of sustainable development. In this context, it is also important to report on the allocation of proceeds considering the territorial dimension. The data show that the allocation of Uzbekistan's 2023 Green Bond issuance proceeds by region was very balanced. The proportion of the amount allocated to each of the thirteen regions varies from a minimum of 2,7% of the total net proceeds for Namangan region to a maximum of 10,5% of the total net proceeds for Kashkadaryo region, one of the most water-scarce regions, with an average proportion of the total amount per region of 5,9%. For more details on the allocation of total net proceeds by region, see the following table.

Figure 9 Distribution of Green Bond net proceeds allocation by region between 2021 and 2023, UZS billion



Source: Ministry of Economy and Finance

ALLOCATION OF NET PROCEEDS BY PROJECT

This allocation report for the Uzbekistan 2021 SDG Bond issuance is also committed to sharing data about the projects, namely the list of projects, descriptive details of their purposes, goals, targets and outcomes, their location, the amount allocated to each project, etc. However, the volume of information to be shared is enormous and impractical here. Therefore, all the data on each of the projects is available in the separate Excel spreadsheet annexed to this report.

2023 GREEN BOND IMPACT REPORT

IMPACT MEASUREMENT

Framework

A standardized framework based on ICMA's Harmonized Framework for Impact Reporting was adopted to define clear targets, track progress, and assess the effectiveness of the programs and project portfolios funded by the 2023 Green Bond proceeds. This framework is also aligned with the specific SDGs targeted and considers their relevant indicators.

Capacity building

Considering the need to develop national capacities for the monitoring and evaluation of the impact generated by the projects and programs funded by the 2023 Green Bond, the MoEF with the support of UNDP organized a training program on allocation and impact reporting in accordance with the guidelines of harmonized frameworks for impact reporting, such as ICMA's Harmonized Framework for Impact Reporting. This training program also included content on methodologies and metrics for impact measurement and monitoring. In this context, the questions of the draft survey used in the collection of qualitative and quantitative data on the projects and programs were also discussed and validated with all stakeholders participating in the training. Finally, the MoEF and UNDP prepared the final version of the survey questionnaire and organized online training sessions for project executors and other responsible bodies on how to correctly fill in the questionnaire and answer the questions.

Figure 10 Training by UNDP Uzbekistan for the representatives of the MoEF and relevant ministries



Monitoring and internal auditing

At the request of the MoEF, UNDP experts accompanied by the representatives of MoEF visited several project sites to make sure that the projects have been completed and the intended impacts have been achieved.

Data collection and analysis

The collection of all data for impact measurement was carried out with the support of digital tools, with the review and validation ensured by the MoEF and UNDP teams. The analysis of

the raw data collected and the production of the impact metrics for reporting was carried out by the UNDP team.

SDG 2 – ZERO HUNGER – SUSTAINABLE FOOD PRODUCTION SYSTEMS

Sustainable Water Supply and Waste-Water Management and Flood Defense Systems

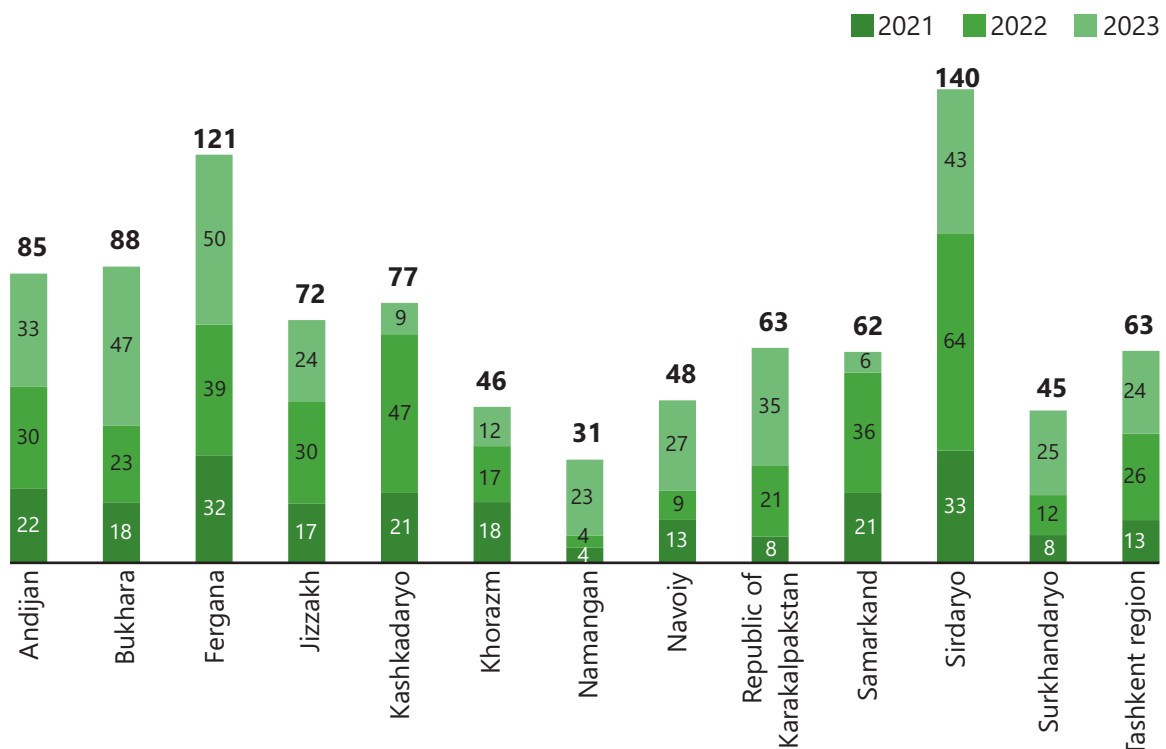
As one of the eligibility criteria established is the development and upgrade of water irrigation systems, namely with the construction and reconstruction of irrigation facilities, the construction and reconstruction of melioration facilities, subsidies for implementing water-saving technologies in agriculture, and subsidies to cover the cost of implementing drip irrigation systems.

It is expected that these projects will improve agricultural productivity, especially for small hold-farmers, increase the number of people provided with safe, nutritious and sufficient food systems, and help the country to pursue its national targets for the SDGs, in the first place for SDG 2, but also for SDG 3, SDG 6, SDG 12, SDG 13, and SDG 15.

As mentioned earlier, the Government of Uzbekistan allocated the equivalent of 54,6% of the total net proceeds of the 2023 Green Bond issuance to a portfolio of projects related to water resources management in different regions of the country, with environmental benefits in the fields of sustainable agriculture, land and water management, water efficiency in agriculture and efficient irrigation practices. The purpose of these projects was to increase the installed capacity of agricultural irrigation systems and improve their efficiency.

Irrigation systems

Figure 11 Allocation of Funds to Irrigation Projects by Regions, UZS billion



Source: Ministry of Economy and Finance

In the case of project portfolios linked to the green alignment of sustainable agriculture (construction and reconstruction of irrigation facilities), these objectives had as output metrics the extension of reconstructed irrigations networks (km) and other irrigation facilities (pcs), the size of the affected land areas (ha), the number of farmers benefited from the projects, and as impact metric the average volume of water saving as a result of the project (m3). For more details on the impacts of “construction and reconstruction of irrigation facilities”, see the table below.

Table 15 Outputs and impacts from irrigation projects by regions

Region	Irrigation network, km			Land area with improved irrigation system, ha			Average water saving, m3		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Andijan	29	16	40	1 087	6 307	16 458	4 088 365	1 751 969	6 741 258
Bukhara	34	32	78	2 776	6 019	68 767	6 108 594	5 799 086	14 187 995
Fergana	2	1	7	7 087	5 391	19 538	-	200 750	1 618 775
Jizzakh	29	32	3	4 617	4 875	2 163	8 393 674	17 197 921	492 750
Kashkadaryo	14	27	13	11 330	60 731	11 252	2 555 000	4 369 500	1 609 650
Khorazm	6	17	5	6 733	13 028	4 291	2 117 000	2 947 740	874 175
Namangan	1	3	10	13 000	1 366	22 114	143 445	547 500	1 872 500
Navoiy	-	4	14	62 400	3 500	4 799	42 000	1 300 000	2 800 000
Republic of Karakalpakstan	9	28	62	24 872	39 041	90 734	1 642 500	5 055 250	11 315 000
Samarkand	17	13	1	25 078	31 480	6 576	3 011 250	2 883 500	273 750
Sirdaryo	59	70	37	32 959	48 714	21 476	10 757 767	12 734 546	6 739 725
Surkhandaryo	2	12	24	445	2 752	13 510	301 125	2 254 354	3 945 171
Tashkent region	14	12	15	1 339	1 934	3 813	2 536 750	2 263 000	2 871 550
Total	214	268	308	193 723	225 137	285 491	41 697 469	59 305 116	55 342 300

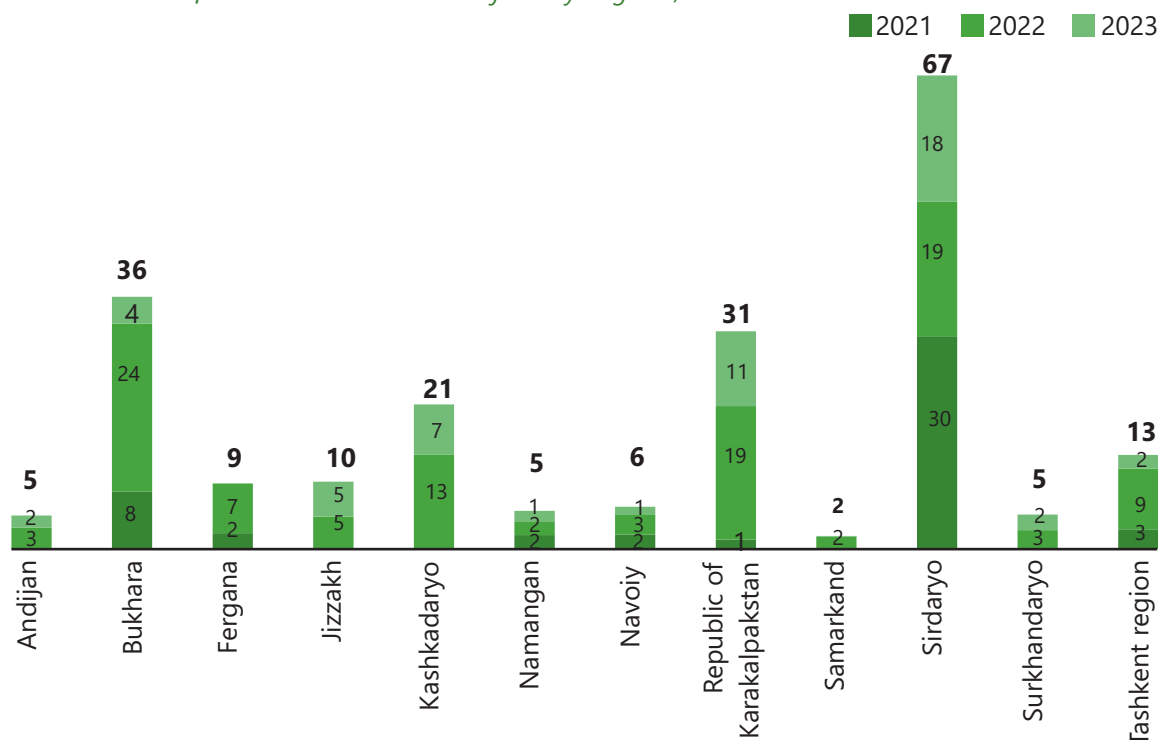
Source: Ministry of Economy and Finance



Canal in “Mash’al” and “Pakhtakor” neighborhoods of Markhamat district and canal in Asaka district of Andijan region

Melioration facilities

Figure 12 Allocation of Funds to Melioration Projects by Regions, UZS billion



Source: Ministry of Economy and Finance

For the project portfolios linked to land and water management (construction and reconstruction of melioration facilities), these objectives had as output metrics the extension of collectors (km), the extension of closed horizontal drainage (km), the number vertical drainage wells (pcs), and the number of farmers / landowners benefited from the project, and as impact metric the land areas with improved reclamation as a result of the project (ha), including the reduction of saline land areas (ha) and areas with reduced seepage water (ha). For more details on the impacts of “construction and reconstruction of melioration facilities”, see the table below.

Table 16 Outputs and impacts from melioration projects by regions

Region	Irrigation Collector and Closed Horizontal Drainage, km			Land areas with improved reclamation, ha			Number of farmers / landowners benefited		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Andijan	-	3	14	-	120	92	-	11	4
Bukhara	24	67	6	1 796	8 156	1 618	31	67	5
Fergana	21	22	-	195	932	-	3	18	-
Jizzakh	-	28	30	-	908	918	-	25	16
Kashkadaryo	-	96	50	-	2 552	77 600	-	56	-
Namangan	20	19	10	3 695	2 950	1 810	21	17	14
Navoiy	7	10	3	215	880	123	7	16	3
Republic of Karakalpakstan	8	64	37	2 299	12 918	9 148	37	95	52
Samarkand	-	15	-	-	600	-	-	5	-
Sirdaryo	115	57	99	2 224	582	399	13	7	4
Surkhondaryo	-	5	8	-	510	220	-	10	5
Tashkent region	4	2	-	80	983	150	5	15	6
Total	199	390	258	10 503	32 093	92 077	118	343	110

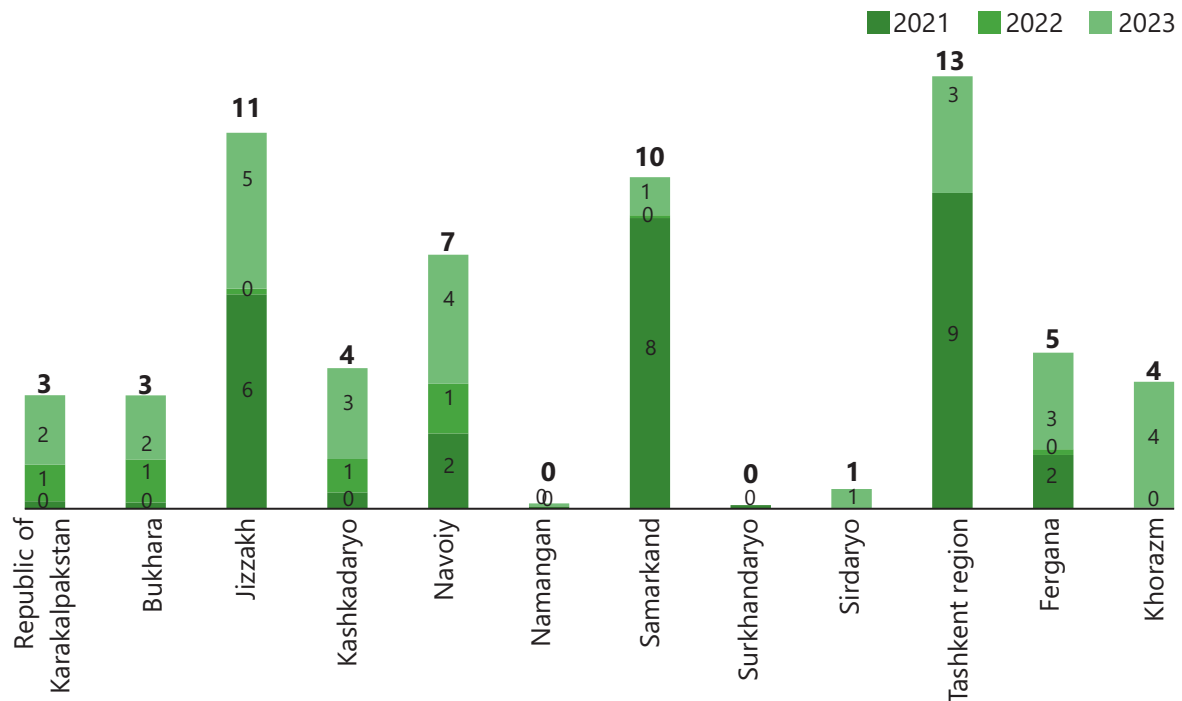
Source: Ministry of Economy and Finance



Construction of melioration facilities, closed horizontal drainage and collector

Water-saving technologies in agriculture

Figure 13 Allocation of Funds to Water-saving Technologies by Regions, UZS billion



Source: Ministry of Economy and Finance

For the programs linked to water efficiency in agriculture (subsidies for implementing water-saving technologies in agriculture), these objectives had as output metrics the land area covered by water saving technologies (ha) and the number of farmers provided with water saving technologies, and as impact metric the average water saving as a result of the implementation of the program (m3). For more details on the impacts of “subsidies for implementing water-saving technologies in agriculture”, see the table below.

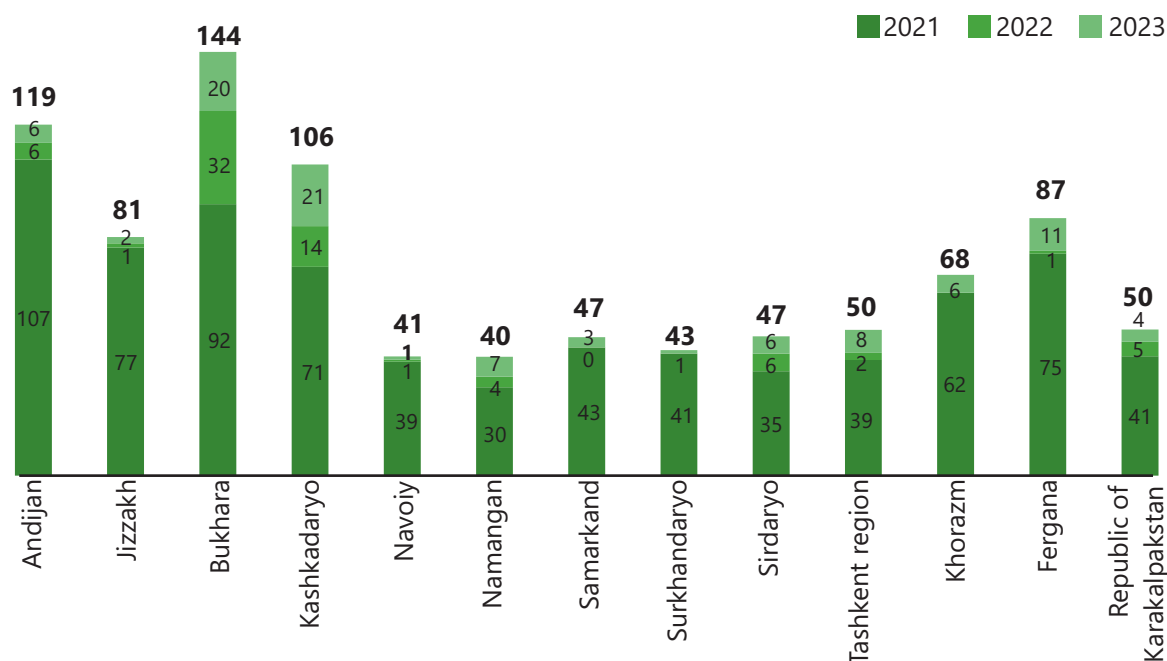
Table 17 Outputs and impacts from water saving technologies by regions

Region	Land area covered by water saving technologies, ha			Number of farmers provided with water saving technologies			Average water saving (m3)		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Republic of Karakalpakstan	25	322	627	1	28	59	48 750	627 296	1 223 216
Bukhara	60	458	677	1	38	35	122 400	933 504	1 381 162
Jizzakh	792	160	1 168	6	1	12	1 742 400	352 000	2 568 544
Kashkadaryo	137	295	769	2	3	30	327 600	708 000	1 844 400
Navoiy	525	447	992	3	3	21	1 050 000	893 140	1 984 600
Namangan	11	-	26	1	-	1	22 550	-	53 300
Samarkand	1 290	20	307	5	1	12	2 708 370	42 000	643 650
Surkhandaryo	65	-	-	3	-	-	181 944	-	-
Sirdaryo	-	-	184	-	-	3	-	-	378 020
Tashkent region	987	-	811	3	-	12	1 776 960	-	1 459 620
Fergana	216	61	736	7	2	15	387 990	109 278	1 324 404
Khorazm	-	10	1 167	-	1	121	-	17 000	1 983 458
Total	4 107	1 772	7 463	32	77	321	8 368 964	3 682 218	14 844 373

Source: Ministry of Economy and Finance

Drip irrigation

Figure 14 Allocation of Funds to Drip Irrigation by Regions, UZS billion



Source: Ministry of Economy and Finance

For the programs linked to efficient irrigation practices (subsidies to cover the cost of implementing drip irrigation systems), these objectives had as output metrics the land area covered by drip irrigation within the program (ha) and number of farmers benefited from the program and as impact metric the average water saving as a result of the implementation

of the program (m³). For more details on the impacts of “subsidies to cover the cost of implementing drip irrigation systems”, see the table below.

Table 18 Outputs and impacts of implementing drip irrigation systems by regions

Region	Land area covered by drip irrigation, ha			Number of farmers benefited			Average water saving, m ³		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Andijan	4 295	226	248	129	0	3	13 744 747	722 641	795 136
Jizzakh	3 688	1 267	801	87	43	45	11 800 392	4 055 270	2 563 712
Bukhara	3 098	59	85	36	0	1	9 912 564	188 186	270 976
Kashkadaryo	2 836	555	837	65	13	51	9 075 423	1 774 580	2 677 120
Navoiy	1 548	27	46	32	0	0	4 952 664	85 699	145 792
Namangan	1 201	143	270	12	0	9	3 844 703	457 200	865 536
Samarkand	1 739	4	138	19	0	4	5 565 329	13 824	442 240
Surkhondaryo	1 658	-	47	2	-	0	5 305 258	-	150 016
Sirdaryo	1 418	239	236	3	0	2	4 539 159	765 046	755 328
Tashkent region	1 571	97	313	15	0	6	5 028 591	309 077	1 002 112
Khorazm	2 486	-	243	76	-	4	7 954 207	-	778 112
Fergana	3 014	41	444	67	0	10	9 645 060	130 266	1 421 696
Republic of Karakalpakstan	1 622	196	168	21	2	6	5 191 526	627 200	536 064
Total	30 175	2 853	3 876	562	60	139	96 559 623	9 128 989	12 403 840

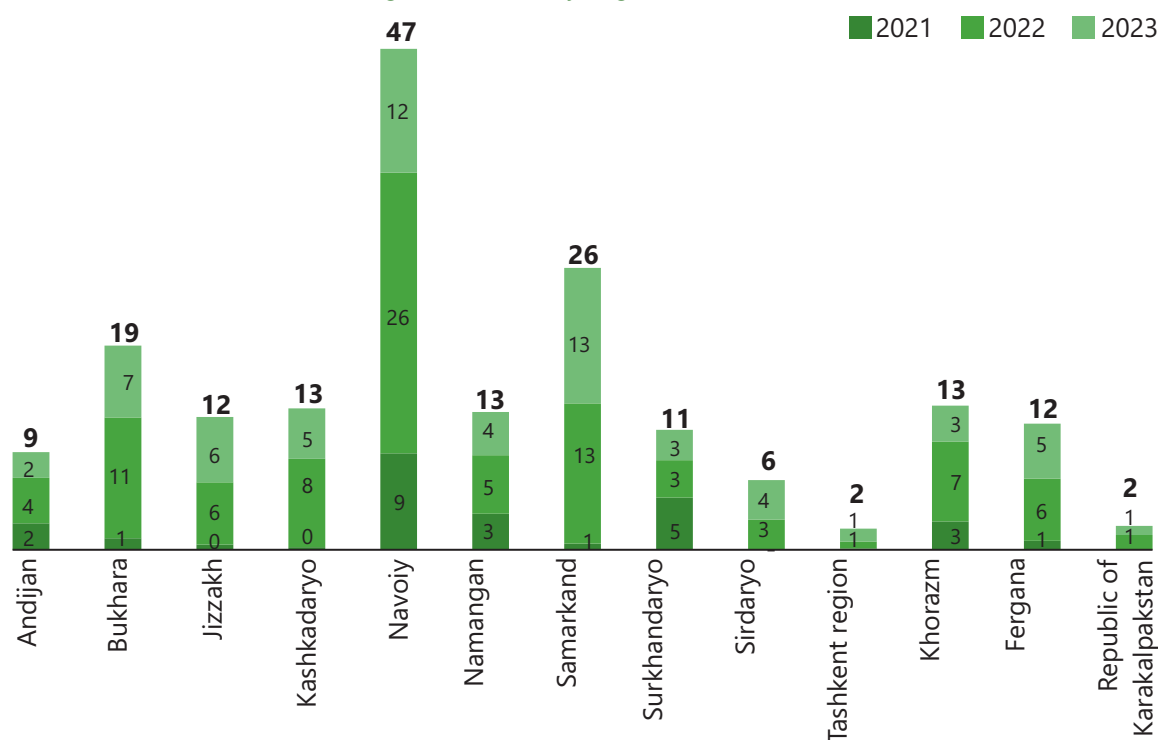
Source: Ministry of Economy and Finance



Drip irrigation system installed in Surkhondaryo region

Water wells

Figure 15 Allocation of Funds to Drilling Water Wells by Regions, UZS billion



Source: Ministry of Economy and Finance

For the portfolio of projects linked to groundwater management (subsidies to cover the costs of drilling wells to extract groundwater for irrigation of residential plots), these objectives had as output metrics the number of wells drilled within the program, the area of farmland or residential plots covered by the program (ha), and as impact metric the total average amount of groundwater extracted from all wells in 2021-2023 (m³), the volume of annual average production of agriculture products (tons). For more details on the aggregated outputs and impacts generated by this portfolio of projects, see the table below.

Table 19 Outputs and impacts of drilling water wells for groundwater by regions

Region	Number of wells drilled	Area of residential plots covered, ha	Number of people benefited	Average groundwater extracted, m ³	Average harvest, tons
Andijan	73	263	2 190	1 194 280	10 460
Bukhara	158	562	4 680	5 468 380	20 935
Jizzakh	166	323	2 689	3 585 600	11 527
Kashkadaryo	223	354	2 949	4 652 672	12 522
Navoiy	424	1 293	10 771	9 158 400	44 909
Namangan	100	357	2 971	2 381 500	13 955
Samarkand	213	703	5 862	4 068 300	25 908
Surkhondaryo	94	324	2 704	2 149 780	11 713
Sirdaryo	47	169	1 410	1 015 200	5 942
Tashkent region	14	51	420	230 020	1 896
Khorazm	182	655	5 460	3 394 300	24 072
Fergana	89	320	2 670	1 546 820	12 317
Republic of Karakalpakstan	167	39	329	764 860	1 326
Total	1 950	5 414	45 105	39 610 112	197 481

Source: Ministry of Economy and Finance



New groundwater well built in one of the water-scarce villages of the country

SDG 6 – CLEAN WATER AND SANITATION – SUSTAINABLE WATER MANAGEMENT

Sustainable Water Supply and Waste-Water Management and Flood Defense Systems

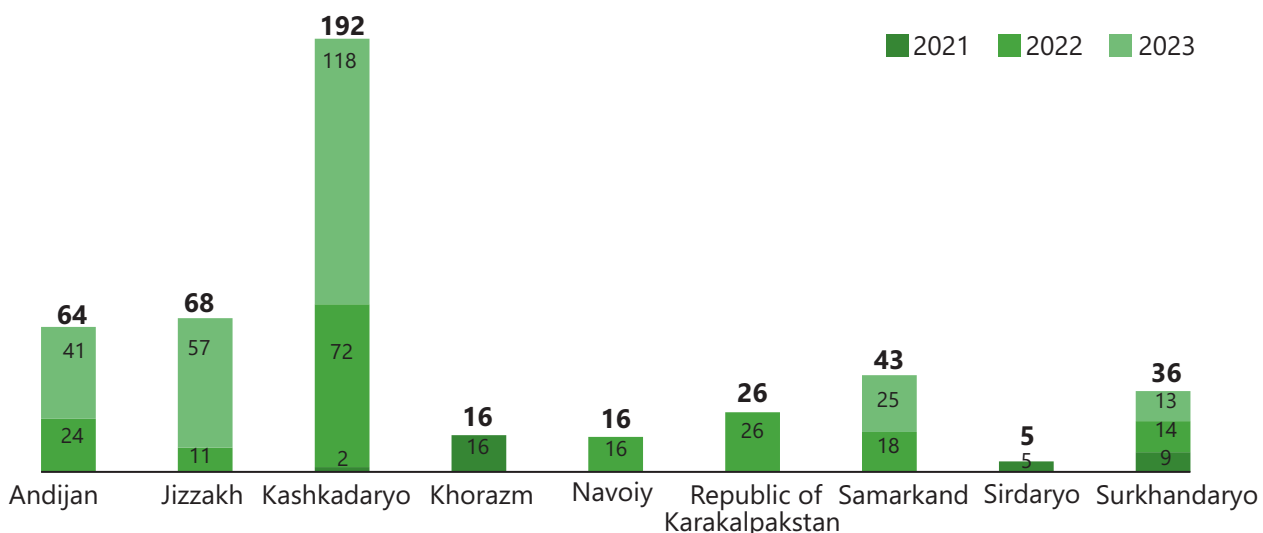
As an eligibility criterion, it defines the promotion of sustainable water management including enhancing water efficiency and wastewater treatment to guarantee the water supply, with the expectation of generating benefits such as conservation of water resources and reduction of the number of people suffering from water scarcity. In addition to SDG 6 – Clean Water and Sanitation, projects in this category are expected to have at least an indirect impact also on the pursuit of the national targets for SDG 3 – Good Health and Well-Being and SDG 11 – Sustainable Cities and Communities.

The SDG Coordination Council approved the inclusion in the final list of projects that went through the evaluation and selection process of a portfolio of water supply and waste-water management projects in different regions of the country.

Drinking water and sewage facilities

The Government of Uzbekistan has allocated an amount equivalent to 11,0% of the total net proceeds of the 2023 Green Bond Issuance to the projects of drinking water and sewage facilities.

Figure 16 Allocation of Funds to Drinking Water and Sewage Facilities by Regions, UZS billion



Source: Ministry of Economy and Finance

For the portfolio of projects linked to water quality and access (construction and reconstruction of drinking water and sewage facilities), output metrics included the improvement of drinking water network (km), and sewage pipelines (km), and the impact metric was the number of people benefited from the project (provided with clean drinking water and sanitary facilities). For more details on the aggregated outputs and impacts, generated by this portfolio of projects, see the table below.

Table 20 Outputs and impacts of drinking water and sewage facilities by regions

Region	Drinking water network, km			Sewage pipelines, km			Number of people benefited		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Andijan	-	91	65	-	-	39	-	13 990	52 910
Jizzakh	-	48	121	-	-	-	-	6 437	34 913
Kashkadaryo	11	-	277	-	-	9	35 000	-	316 679
Khorazm	57	-	-	20	-	-	17 160	-	-
Navoiy	-	91	-	-	-	-	-	14 929	-
Republic of Karakalpakstan	-	84	-	-	-	-	-	12 706	-
Samarkand	-	-	15	-	45	-	-	19 726	3 560
Sirdaryo	19	-	-	-	-	-	4 315	-	-
Surkhandaryo	6	78	127	8	-	-	8 556	13 121	13 718
Total	93	392	605	28	45	48	65 031	80 909	421 780

Source: Ministry of Economy and Finance



Sewage facility in Markhamat district of Andijan region



SDG 11 – SUSTAINABLE CITIES AND COMMUNITIES – MAKE CITIES INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

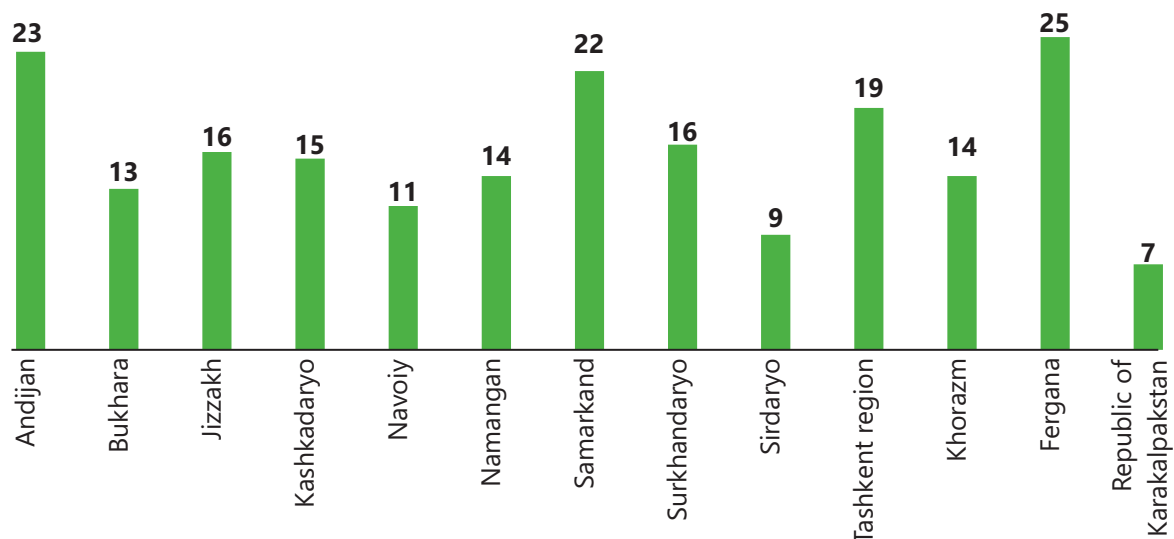
Pollution Prevention and Control

Eligibility criteria include the expenditures related to waste collection projects development, maintenance and operation of waste sorting and treatment centers, expecting positive social and environmental impacts such as effective and cost-efficient waste management collection and treatment, to pursue national targets in the first place for SDG 11, but also for SDG 3, SDG 6 and SDG 13.

The project evaluation and selection process include in the final list approved by the SDG coordination Council the program of purchasing special vehicles for the organization of sanitation works and maintenance of cleanliness of settlements. An amount equivalent to 4,8% of the total net proceeds of the 2023 Green Bond issuance went towards this program.

Waste collection and sanitation

Figure 17 Allocation of Funds to Waste Collection and Sanitation in 2021 by Regions, UZS billion



Source: Ministry of Economy and Finance

For the program linked to urban sanitation management (Purchase of special vehicles for organization of sanitation works and maintenance of cleanliness of settlements), these objectives had as output metrics the number of garbage trucks, the number of compactor trucks, the number of population covered within the program, and as impact metric the annual average waste collection and sorting (tons). For more details on the aggregated outputs and impacts generated by this portfolio of projects, see the table below.

Table 21 Outputs and impacts of waste collection and sanitation program in 2021 by regions

Region	Number of garbage trucks	Number of compactors	Annual average waste collection (tonns)	Population covered
Andijan	30	4	56 700	210 000
Bukhara	14	3	26 460	98 000
Jizzakh	19	3	35 910	133 000
Kashkadaryo	26	–	49 140	182 000
Navoiy	14	2	26 460	98 000
Namangan	21	1	39 690	147 000
Samarkand	30	3	56 700	210 000
Surkhandaryo	20	3	37 800	140 000
Sirdaryo	13	1	24 570	91 000
Tashkent region	25	3	47 250	175 000
Khorazm	21	1	39 690	147 000

Region	Number of garbage trucks	Number of compactors	Annual average waste collection (tonns)	Population covered
Fergana	32	4	60 480	224 000
Republic of Karakalpakstan	9	1	17 010	63 000
Total	274	29	517 860	1 918 000

Source: Ministry of Economy and Finance



Garbage truck and compactor purchased for waste collection and sorting

SDG 15 – LIFE ON LAND – PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS

Sustainable Management of Living Natural Resources and Land Use (Terrestrial and Aquatic)

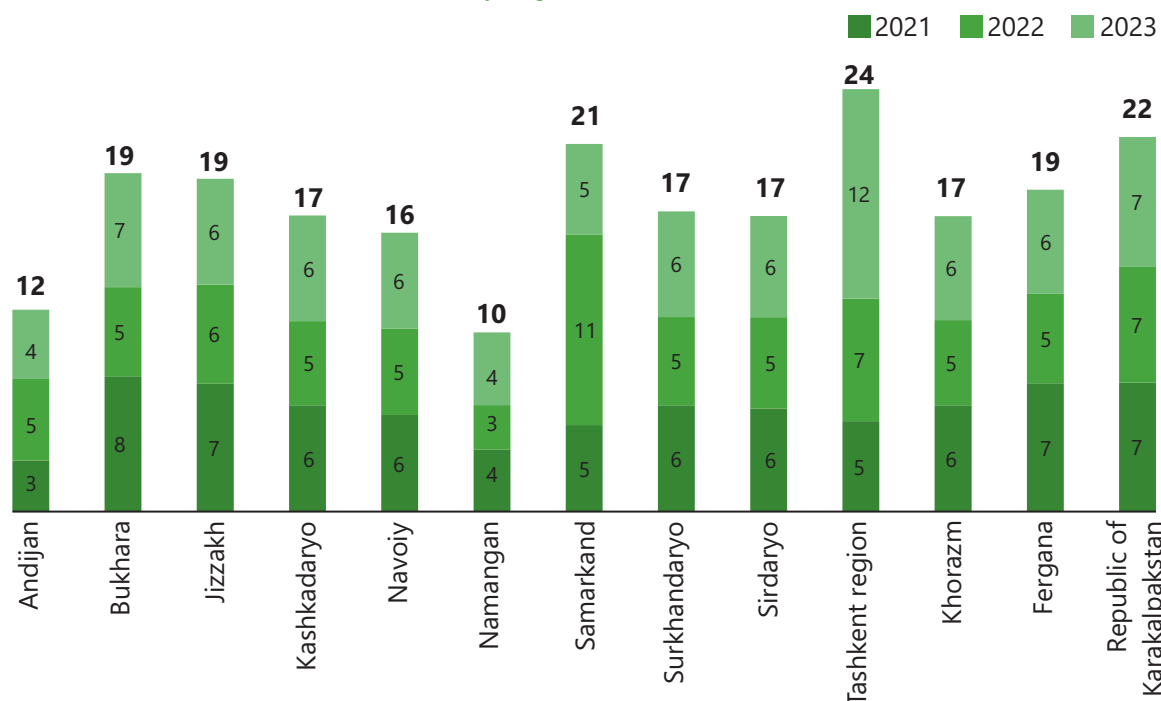
Eligibility criteria include the expenditure related to programs and projects for conservation and restoration of protective trees in the region and expenditures related to sustainable management and maintenance of national parks and conservation areas expecting positive social and environmental impacts such as climate change mitigation, conservation and sustainable use of terrestrial ecosystems, conservation of biodiversity and protection for terrestrial and aquatic ecosystems, to pursue national targets in the first place for SDG 15, but also for SDG 3 and SDG 13.

The project evaluation and selection process include in the final list approved by the SDG coordination Council the programs for the establishment of protective forests (encirclement) to prevent desertification and sand migration, water and soil erosion and to improve the ecological environment in desert and mountain areas, and the funding of expenses related to purchase and planting of seedlings within the nationwide project “Yashil Makon” (Green Nation). An amount equivalent to 6,2% of the total net proceeds of the 2023 Green Bond issuance went towards these programs.

Based on the average carbon sequestration rates for tree species, the average reduction in carbon emissions from the first project, which involves planting mulberry, paulownia, poplar and oleaster trees across 2 500 ha annually (7 500 ha for 2021-2023), is estimated to be around 50 000 tons of CO₂ per year. The second project, covering 457 ha by planting 166 226 trees of various types such as mulberry, poplar, oleaster, saxaul, fir tree and fruit trees like apple, pear, cherry is expected to achieve an average reduction of about 6,920 tons of CO₂ per year.

Encirclement

Figure 18 Allocation of Funds to Encirclement by Regions, UZS billion



Source: Ministry of Economy and Finance

For the program linked to forest restoration and erosion control (establishment of protective forests (encirclement) to prevent desertification and sand migration, water and soil erosion and to improve the ecological environment in desert and mountain areas), these objectives had as output metrics the land areas covered with forest/tree plantations (encirclement) to reduce drought and soil/wind erosion, to improve soil's water holding capacity and organic matter content (ha) with long-term impact of the prevention of desertification and sand migration, and the reduction of water and soil erosion. For more details on the aggregated outputs generated by this program, see the table below.

Table 22 Outputs of Encirclement program by regions

Region	Land areas covered with plant/tree plantations (encirclement), ha			Types of trees/plants planted
	2021	2022	2023	
Andijan	140	140	140	Mulberry, paulownia, poplar, oleaster
Bukhara	210	210	210	
Jizzakh	200	200	200	
Kashkadaryo	200	200	200	
Navoiy	200	200	200	
Namangan	140	140	140	
Samarkand	200	200	200	
Surkhandaryo	220	220	220	
Sirdaryo	200	200	200	
Tashkent region	140	140	140	
Khorazm	200	200	200	
Fergana	200	200	200	
Republic of Karakalpakstan	250	250	250	
Total	2 500	2 500	2 500	

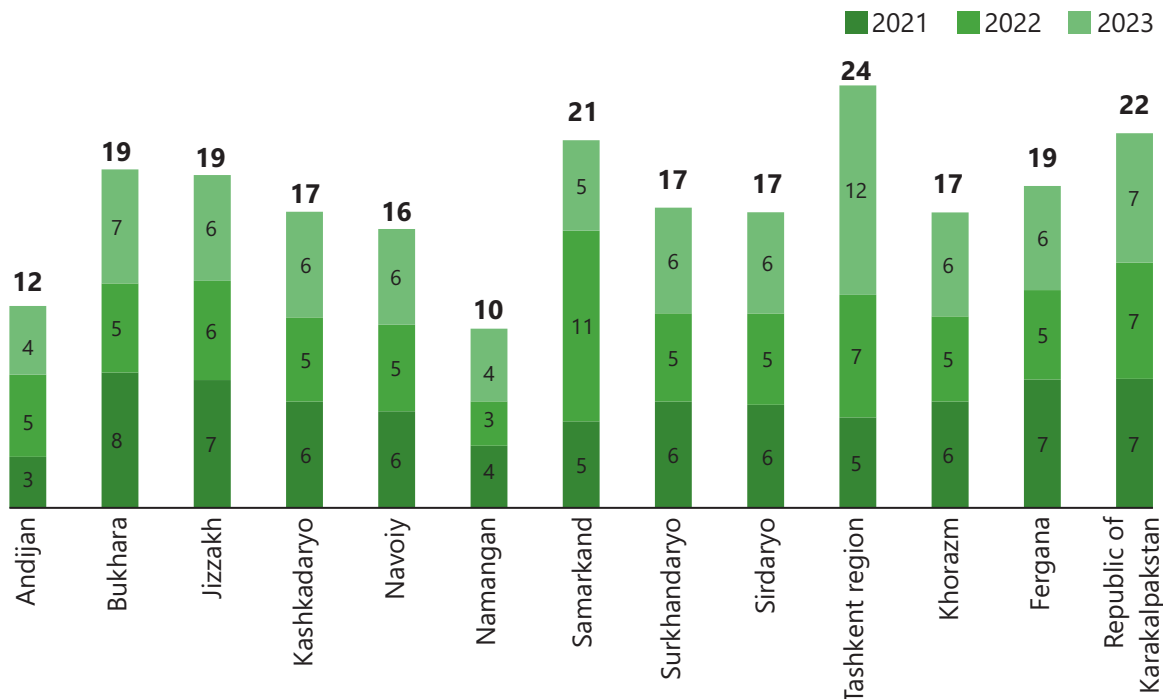
Source: Ministry of Economy and Finance



Encirclements in Dustlik district of Jizzakh region and Termiz district of Surkhondaryo region

“Yashil Makon” program (Green Nation)

Figure 19 Allocation of Funds to “Yashil Makon” program in 2023 by Regions, UZS billion



Source: Ministry of Economy and Finance

For the program linked to afforestation and reforestation (purchase and planting of seedlings within the nationwide project “Yashil Makon”), these objectives had as output metrics the green areas created within the program (ha) and the number of trees/plants planted within the program with long-term impact of preventing desertification, improving air quality and mitigating climate change. For more details on the aggregated outputs generated by this program, see the table below.

Table 23 Outputs of “Yashil Makon” program in 2023 by regions

Region	Green areas created, ha	Number of trees/plants planted	Types of trees/plants planted
Andijan	36	11 648	Mulberry, paulownia, poplar, oleaster, saxaul, fir tree, other fruit trees like apple, pear, cherry etc.
Bukhara	8	2 585	
Jizzakh	133	51 286	
Kashkadaryo	26	8 772	
Navoiy	19	5 520	
Namangan	25	9 135	
Samarkand	28	11 394	
Surkhandaryo	18	7 215	
Sirdaryo	21	6 730	
Tashkent region	26	8 532	
Khorazm	35	15 341	
Fergana	35	13 488	
Republic of Karakalpakstan	47	14 580	
Total	457	166 226	

Source: Ministry of Economy and Finance

For more details on the output and impacts of all programs and project portfolios presented above, see the data available in the separate Excel spreadsheet annexed to this report.

CASE STUDIES HIGHLIGHTS

SDG 2 – ZERO HUNGER

Case Study 1 – Reconstruction of the “Chovkar” canal in Romitan district

Project Summary: The reconstruction of the Chovkar canal in Romitan district has significantly enhanced its capacity and efficiency. Over a 5 km stretch, the canal’s edges and ditch were fully renewed with concrete, while partial repairs were made along an additional 4.2 km. The canal, measuring 3 meters in depth and 9.8 meters in width, has seen its flow rate increase from 8 m³/s to 12–14 m³/s, enabling water delivery to farms and households across approximately 10–12 thousand hectares of land. At the water distribution point, the canal achieves a flow rate of 22 m³/s, distributing water into three smaller canals. As a result of these improvements, water loss has decreased by 5-10%, and crop yields have increased by an average of 10-15%. The upgraded part of the canal now has a capacity of delivering between 1 036 800 – 1 209 600 cubic meters of water daily, ensuring more reliable irrigation and efficient water management.

Location: Romitan district, Bukhara region

Area: Rural

Amount allocated: 9 468 UZS'm

Implementation period: 2023

Eligible category: Sustainable Water Supply and Waste-Water Management and Flood Defence Systems

Eligible expenditure: Investment Expenditure – Capital Investment (Reconstruction)

Outputs

Reconstruction of irrigation network (canal): 9.2 km with water distribution facility

Land area affected (ha): 11 020

Number of farmers / landowners benefited: 558

Impacts

Average water saved (m³): 1 677 175



Case Study 2 – Reconstruction of the “Qoradaryo” river in Samarkand region

Project Summary: A project has been implemented to construct 4 water-carrying waterfalls and reconstruct the banks and bed of the “Qoradaryo” river, aiming to prevent erosion while offering multiple additional benefits. By stabilizing the river’s flow, the initiative contributes to significant water conservation, reducing water loss through uncontrolled flows and ensuring more efficient use of this vital resource. This improved management directly enhances irrigation systems, providing a consistent and reliable water supply for agricultural lands downstream. Furthermore, the project supports flood control, protects aquatic ecosystems, manages sediment transport, and adds aesthetic and recreational value to the area, making it a comprehensive solution for sustainable water and land management.

Location: Samarkand district, Samarkand region

Area: Rural

Amount allocated: 26 866 UZS'm

Implementation period: 2022 – 2023

Eligible category: Sustainable Water Supply and Waste-Water Management and Flood Defence Systems

Eligible expenditure: Investment Expenditure – Capital Investment (Reconstruction)

Outputs

Reconstruction of irrigation network (river): reconstruction of river’s banks and bed with construction of 4 water-carrying waterfalls

Land area affected (ha): 24 560

Number of farmers / landowners benefited: 985

Impacts

Average water saved (m³): 730 000



SDG 6 – CLEAN WATER AND SANITATION

Case Study 1 – Reconstruction of the water distribution facility in the city of Karshi

Project Summary: The 3rd elevated water distribution facility in the city of Karshi has been comprehensively reconstructed to enhance its efficiency and reliability. The facility now comprises approximately 100 pumps installed at a depth of 100 meters below the ground, alongside the refurbishment of three existing reservoirs and the construction of an additional reservoir. Prior to the reconstruction, the exhausted water pipes resulted in water losses of approximately 40% in certain areas. Following the centralized reconstruction of the water pipeline system, water losses have been significantly reduced to a maximum of 5%. In addition, a new advanced monitoring room has been established to oversee and promptly address any incidents along the pipeline network.

Location: Karshi city, Kashkadaryo region

Area: City

Amount allocated: 15 005 UZS'm

Implementation period: 2022 – 2023

Eligible category: Sustainable Water Supply and Waste-Water Management and Flood Defence Systems

Eligible expenditure: Investment Expenditure – Capital Investment (Reconstruction)

Outputs

Reconstructed drinking water networks: 21 km with new pumping station

Impacts

Number of population (directly benefited) in the Area: 288 000 (city of Karshi)



Case Study 2 – Reconstruction of drinking water distribution station in Gulbog neighbourhood of Koson district

Project Summary: The renovation of the drinking water distribution station in Koson district has significantly improved the area's water supply infrastructure. The project included the construction of 7 new wells and the connection of 8 kilometers of new drinking water network, supplementing the 2 existing wells that previously served only the nearby population. New 2 reservoirs with a capacity of 500 cubic meters each were established to enhance storage and supply capacity. This upgraded station supports the central water pipeline from Yakkabog district to Mubarak district, spanning 168 kilometers and passing through Koson district, in delivering 45,000,000 liters of water annually. As a result, the project improved the water supply of nearby residential areas, ensuring a reliable and expanded water distribution network for the larger population. This comprehensive upgrade addresses both immediate and future water needs in the area.

Location: Gulbog neighbourhood, Koson district, Kashkadaryo region

Area: Rural

Amount allocated: 7 585 UZS'm

Implementation period: 2022 – 2023

Eligible category: Sustainable Water Supply and Waste-Water Management and Flood Defence Systems

Eligible expenditure: Investment Expenditure – Capital Investment (Reconstruction)

Outputs

Constructed new drinking water networks: 8 km with new pumping station and water reservoirs

Impacts

Number of population (directly benefited) in the Area: 4 650



CHALLENGES AND LESSONS LEARNED

Uzbekistan's 2023 Green bond issuance presented several challenges and lessons:

Challenges

Market Familiarity: As a relatively new entrant in the green bond market, Uzbekistan faced the challenge of gaining investor confidence and familiarity with its economic and governance structures.

Regulatory Framework: Establishing a robust regulatory and reporting framework for green finance to ensure transparency and accountability in the use of proceeds was crucial.

Capacity and Expertise: There was space for development of local expertise in structuring and managing green bonds, as well as in assessing and reporting their environmental impact.

Economic Conditions: The global economic environment, including geopolitical headwinds, posed additional risks and uncertainties for investors.

Sustainability Metrics: Defining and measuring the impact of the projects funded by the green bonds required clear and credible sustainability metrics.

Lessons learned

Investor Engagement: Effective communication and engagement with investors are essential to build trust and attract investment. This includes providing detailed information on how the funds will be used and the expected impact.

Transparency and Reporting: Establishing clear reporting standards and regular updates on the use of proceeds and project outcomes can enhance credibility and investor confidence.

Collaboration with International Bodies: Partnering with international financial institutions and development organizations can provide technical assistance and enhance the credibility of the bond issuance.

Focus on Impact: Clearly linking the bond proceeds to specific environmental targets and demonstrating the tangible impact of funded projects can attract socially responsible investors.

Economic Diversification: Using the proceeds to fund projects that diversify the economy and promote sustainable development through green economy can help mitigate economic risks and enhance long-term stability.

By addressing these challenges and applying these lessons, Uzbekistan can improve future Green Bond issuances and contribute to sustainable development goals more effectively.

FUTURE OUTLOOK

In 2023, Uzbekistan issued its first Green Bond, marking a significant step in the country's commitment to sustainable development through developing the green economy and attracting international investment. This brings with it several implications for the future of Uzbekistan's green financing strategy. Here's a brief outlook on the future implications of this bond issuance:

Sustainable Development: The bond funded various projects aligned with the UN's SDGs, accelerating Uzbekistan's progress in areas such as zero hunger, clean water and sanitation, sustainable cities and communities, and life on land. The verification of the progress with the first issuance of an SDG Bond, further raised these expectations in future issuances. These were partially realized with the first issuance of Green Bonds by the country in 2023 raising an amount of UZS 4,25 trillion, and with a second issuance of SDG Bonds in 2024 raising an amount of EUR 600 million.

International Investment: The successful issuance of the 2023 Green Bond attracted more foreign investors, leading to increased capital inflows and economic growth in Uzbekistan, as can be seen by the results of the country's thematic bond issuances in 2024.

Market Credibility: This bond issuance enhanced Uzbekistan's credibility in international financial markets, which lead to improved credit ratings and lower borrowing costs in subsequent issuances.

Sustainable Finance: The 2023 Green Bond issuance established a precedent for current and future green and sustainable finance initiatives in Uzbekistan, encouraging more socially and environmentally friendly investments.

Economic Reforms: The bond issuance was part of broader economic reforms in Uzbekistan, signaling the country's commitment to modernization and integration into global financial markets.

Transparency: To maintain investor confidence, Uzbekistan showed persistent efforts for transparency in the use of funds and progress on SDG-related projects, which led to improved governance practices.

This outlook suggests that the 2023 Green Bond issuance had positive short-term effects and will have positive long-term effects on Uzbekistan's economic development and sustainability efforts, showing that the country effectively managed the funds and implemented the intended projects.

CONCLUSION

The Uzbekistan 2023 Green Bond Allocation and Impact Report demonstrates the country's commitment to sustainable development and green growth and its efforts to align financial investments with the United Nations SDGs and environmental benefits. This report showcases the allocation of funds raised through the Green Bond issuance and highlights the tangible impacts achieved across various sectors.

Key Achievements:

1. Successful allocation of a majority of net proceeds: The report indicates that 76,5% of the net proceeds from the Green Bond have been efficiently allocated to Eligible Expenditures across multiple sectors, including agriculture, green infrastructure and environmental sustainability.
2. Alignment with SDGs: The funded projects show a clear alignment with several SDGs, particularly in areas such as agriculture (SDG 2), water management (SDG 6), waste management (SDG 11) and environment protection and restoration (SDG 15).
3. Transparency and accountability: The detailed breakdown of fund allocation and impact metrics demonstrates Uzbekistan's commitment to transparency in reporting and accountability to investors and stakeholders.
4. Positive social and environmental impacts: The report highlights significant progress in areas such as improved access to agriculture, water quality and access, water management, pollution control, and environmental protection and restoration.
5. Economic benefits: The investments have contributed to job creation, skills development, and overall economic growth, supporting Uzbekistan's transition towards a more green and inclusive economy.

Areas for Improvement:

1. Data collection and measurement: While the report provides valuable insights, there is room for improvement in data collection methodologies and impact measurement techniques to ensure more comprehensive and accurate reporting in future iterations.
2. Capacity building: The Government of Uzbekistan could benefit from further capacity building in Green, SDG and ESG-related regulatory and reporting frameworks.
3. Long-term sustainability: The report could benefit from a more detailed discussion on the long-term sustainability of the funded projects and their potential to create lasting positive change beyond the initial investment period.
4. Stakeholder engagement: Future reports could include more information on stakeholder engagement processes and how feedback from beneficiaries and local communities is incorporated into project design and implementation.
5. Climate resilience: Given the increasing importance of climate change adaptation, future allocations and reports could place greater emphasis on projects that enhance Uzbekistan's resilience to climate-related risks.

Looking Ahead:

The Uzbekistan 2023 Green Bond Allocation and Impact Report marks a significant milestone in the country's journey towards sustainable development. It sets a strong foundation for

future green finance initiatives and demonstrates Uzbekistan's potential to become a regional leader in environment-aligned investments.

Moving forward, the Government of Uzbekistan should consider the following recommendations:

1. **Expand the scope:** Consider broadening the range of eligible categories and expenditures addressed in future green bond issuances to cover additional areas of sustainable development.
2. **Enhance impact measurement:** Invest in more sophisticated impact measurement tools and methodologies to provide even more detailed and accurate reporting on the outcomes of funded projects.
3. **Promote knowledge sharing:** Share best practices and lessons learned from this initiative with other countries in the region to encourage similar sustainable finance efforts.
4. **Strengthen partnerships:** Continue to foster partnerships with international organizations, private sector entities, and civil society to leverage additional resources and expertise for SDG implementation.
5. **Integrate with national development strategies:** Ensure that future Green Bond allocations are closely aligned with Uzbekistan's broader national development strategies and long-term sustainability goals.

In conclusion, the Uzbekistan 2023 Bond Allocation and Impact Report represents a commendable effort in channeling financial resources towards sustainable development. By addressing the identified areas for improvement and building on its successes, Uzbekistan can further strengthen its position as a committed player in the global effort to achieve the SDGs by 2030. This report serves as a valuable tool for investors, policymakers and other stakeholders to assess the progress made and inform future decision-making in green sustainable finance and development initiatives in Uzbekistan.

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