



# INTEGRATED NDC X SDG INSIGHTS UZBEKISTAN

This initiative explores the NDC - SDG impact and leverages data, systems and finance analysis to pinpoint policy accelerators tailored to national context and sustainable development vision.



# OBJECTIVES

This initiative explores the NDC-SDG connections by leveraging data, systems and finance analysis to pinpoint policy accelerators tailored to national context and a sustainable development vision.

## A ROBUST CASE FOR NDC 3.0



Backed by national data and AI-driven tools, to pinpoint where key investments through NDCs can drive progress across national development priorities.

## ALIGN POLICY PATHWAYS



Build coherence and common ground to help decision-makers maximize positive outcomes across climate and development goals.

## ACT WITH CONFIDENCE

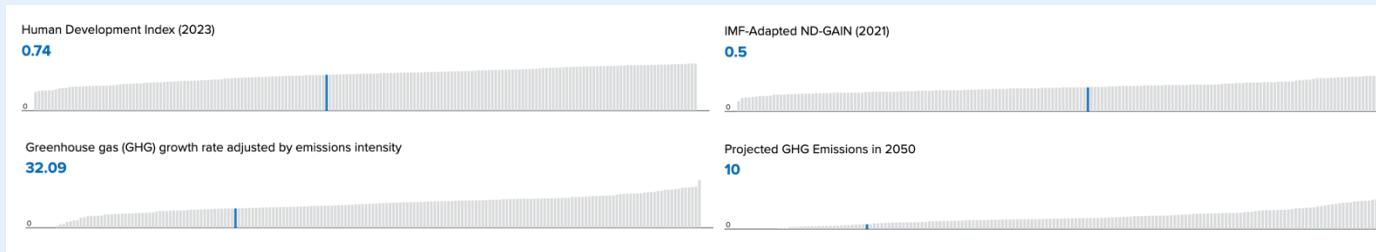


Tailored recommendations on integrated policy approaches, investment strategies, and finance opportunities to implement national strategies that align climate actions with development goals.

# HOW TO READ THIS REPORT

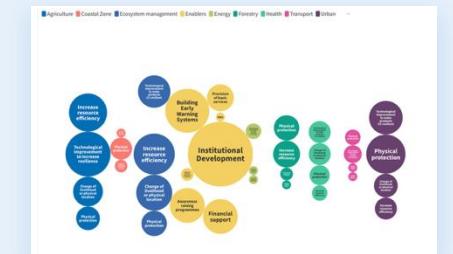
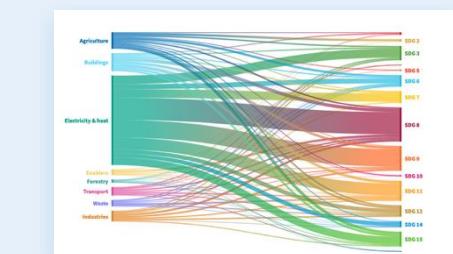
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**NDC x SDG Moment:** human progress within planetary boundaries is the next development frontier. This section provides a snapshot of key climate and human development data.



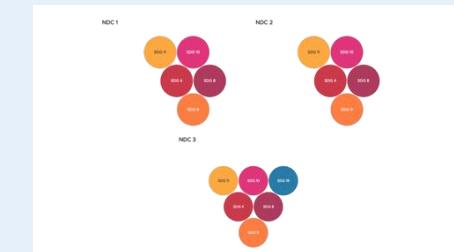
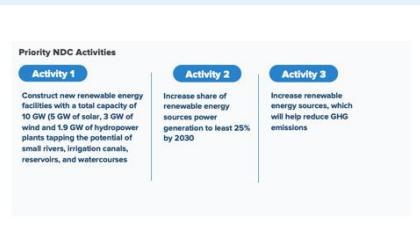
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**NDC x SDG Alignment:** maps climate commitments and national development priorities using custom machine learning tool that draws from an SDG vocabulary of 100k terms.



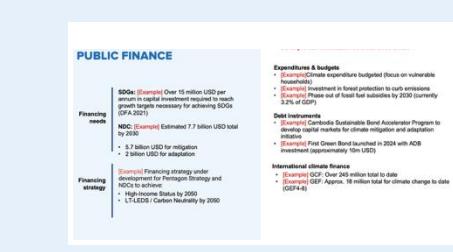
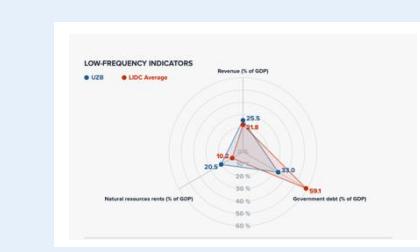
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**NDC x SDG Interlinkages:** identifies national-level actions through enhanced NDCs that accelerate SDG achievement and advances a robust development case.



4

**Finance & Stimulus:** charts fiscal constraints and stimulus opportunities to ensure climate and development policy choices can be advanced with greatest impact.



# SDG Moment

- 01 NDC X SDG Moment
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# NDc X SDG MOMENT:

As part of their mitigation measures, Uzbekistan has set a target of reducing emissions per unit of GDP by

35%

Human activities are causing significant climate change with severe environmental and socio-economic consequences. Integrating climate action for emissions reduction and enhanced resilience into development strategies can **advance human development and provide multiple co-benefits**.

Uzbekistan is in the high human development category (107 out of 193 countries and territories) and the country's IMF Adapted ND-GAIN index indicates vulnerability to climate disruptions and readiness to leverage investments to adaptation actions.

With a projected emissions levels score of 10/100 in 2050, Uzbekistan needs to make significant investments in achieving carbon neutrality at the current pace. Uzbekistan's projected Biodiversity Intactness Index indicates a relatively low impact on biodiversity in 2050.

**Uzbekistan's ambition is to become an upper middle-income country by 2030.** The government is building a humane state by raising the honor and dignity of a person and further developing a free civil society; the transformation of the principles of justice and the rule of law into a fundamental and necessary condition for the development of the country; accelerated development of the national economy and ensuring high growth rates; implementation of a fair social policy, development of human capital; ensuring spiritual development and raising this area to a new level; approach to global problems based on national interests; strengthening the security and defense potential of the country, conducting an open, pragmatic and active foreign policy.

Uzbekistan's Green Economy Strategy aims to reduce greenhouse gas emissions by 25% by 2026 and increase renewable energy production capacity to 15 GW by 2030, while also enhancing environmental diplomacy and implementing water- and energy-efficient technologies alongside climate-aligned agricultural policies. To support these goals, the Climate Council was established in 2024 as the highest advisory body on climate change, and a Climate Science Forum at the Central Asian University for the Study of the Environment and Climate Change is planned.

## Human Development

Human Development Index (2023)

0.74



## Climate Impact and Adaptation

INFORM Climate Change Risk Index

● Historical (2022) ● RCP 4.5 SSP 1 (2050) ● RCP 8.5 SSP 3 (2050)

2.5

2.7

2.9

IMF-Adapted ND-GAIN (2021)

0.5



## Mitigation

Greenhouse gas (GHG) growth rate adjusted by emissions intensity

32.09



Projected GHG Emissions in 2050

10



## Biodiversity

Biodiversity Intactness Index

● Historical (2014) ● RCP 2.6 SSP 1 (2050) ● RCP 7.0 SSP 3 (2050)

0.7

0.7

0.71

Sources European Commission 2023 (INFORM Climate Change Risk Index), IMF 2022 (IMF-Adapted ND-GAIN Index); Environmental Performance Index 2024 (GHG growth rate adjusted by emissions intensity & Projected Emissions in 2050); Helen Phillips; Adriana De Palma; Ricardo E Gonzalez; Sara Contu et al. 2021 (Biodiversity Intactness Index).

# NDC X SDG Alignment

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# NDC x SDG Alignment

## Goal Level

These visuals are generated by analyzing the NDCs and National Development Plans **through the SDG framework at goal level**. This analysis **shows the most prominent SDGs in each of the two national strategies on climate and development**. This approach helps to **identify areas of common action and potential synergies across national climate and development priorities**.

### NATIONALLY DETERMINED CONTRIBUTION (NDC)



Note: Based on Updated Nationally Determined Contribution (2021)

### NATIONAL DEVELOPMENT PLAN(S) (NDP)



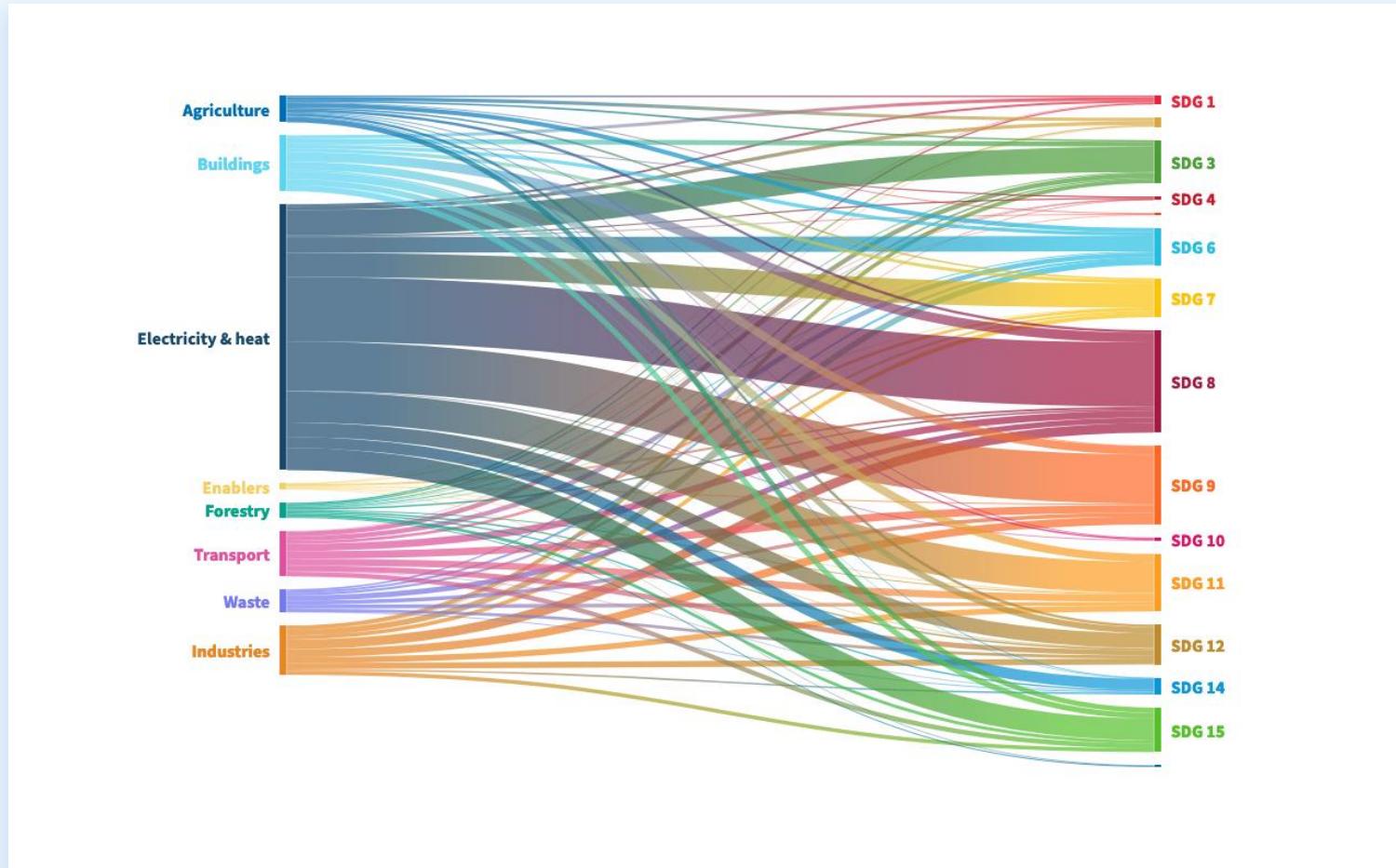
Note: Based on: 1) Uzbekistan 2030 Strategy; 2) Development Strategy of New Uzbekistan for 2022-2026

# NDC X SDG ALIGNMENT

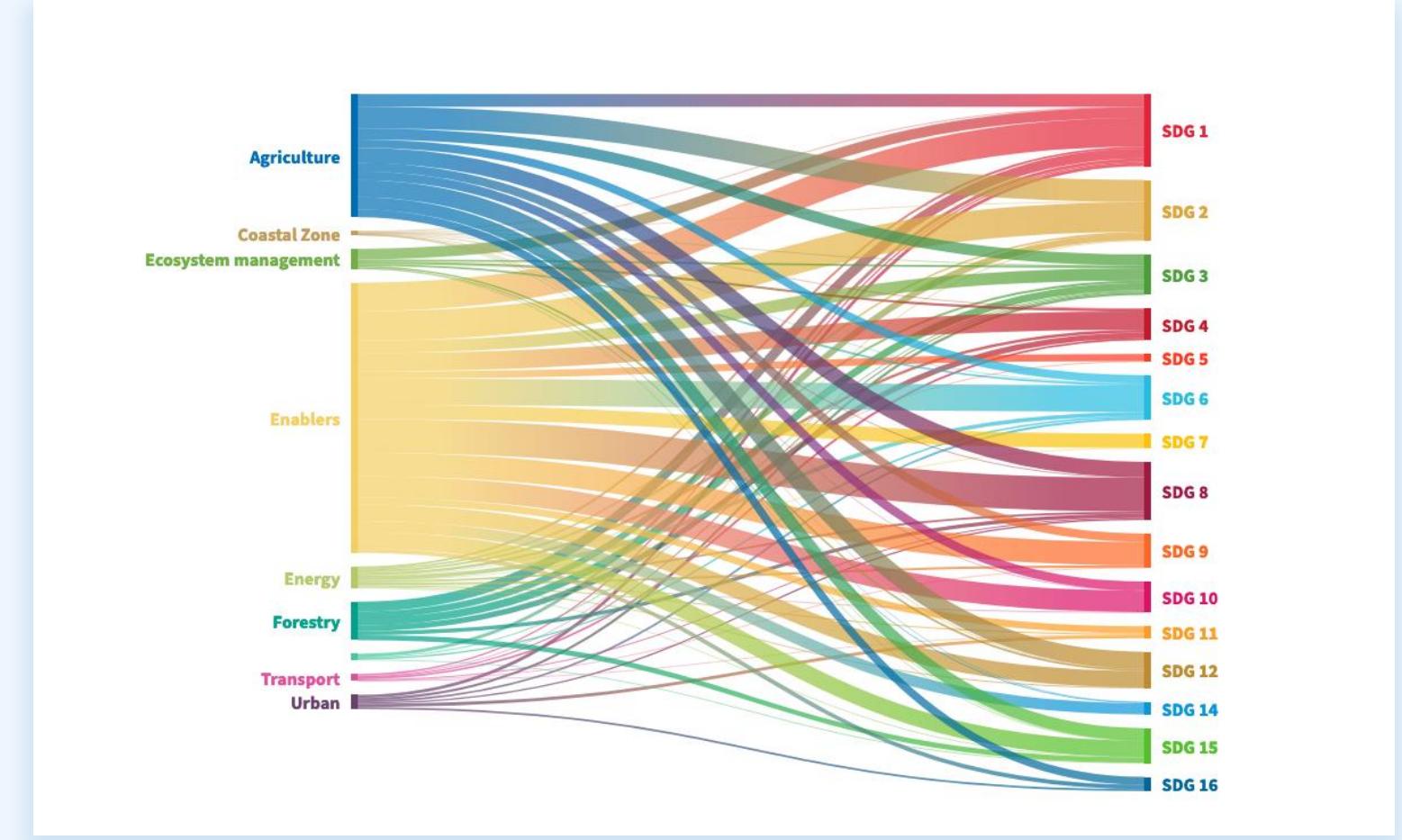
## Target Level

These visuals are generated by analyzing NDC actions through a custom-built AI tool, and categorized using the SCAN tool to surface relevant SDG synergies at the target level. This methodology provides a target level alignment of climate actions (mitigation and adaptation) with impact the SDGs for Uzbekistan.

### MITIGATION NDCs



### ADAPTATION NDCs



# NDC X SDG ALIGNMENT

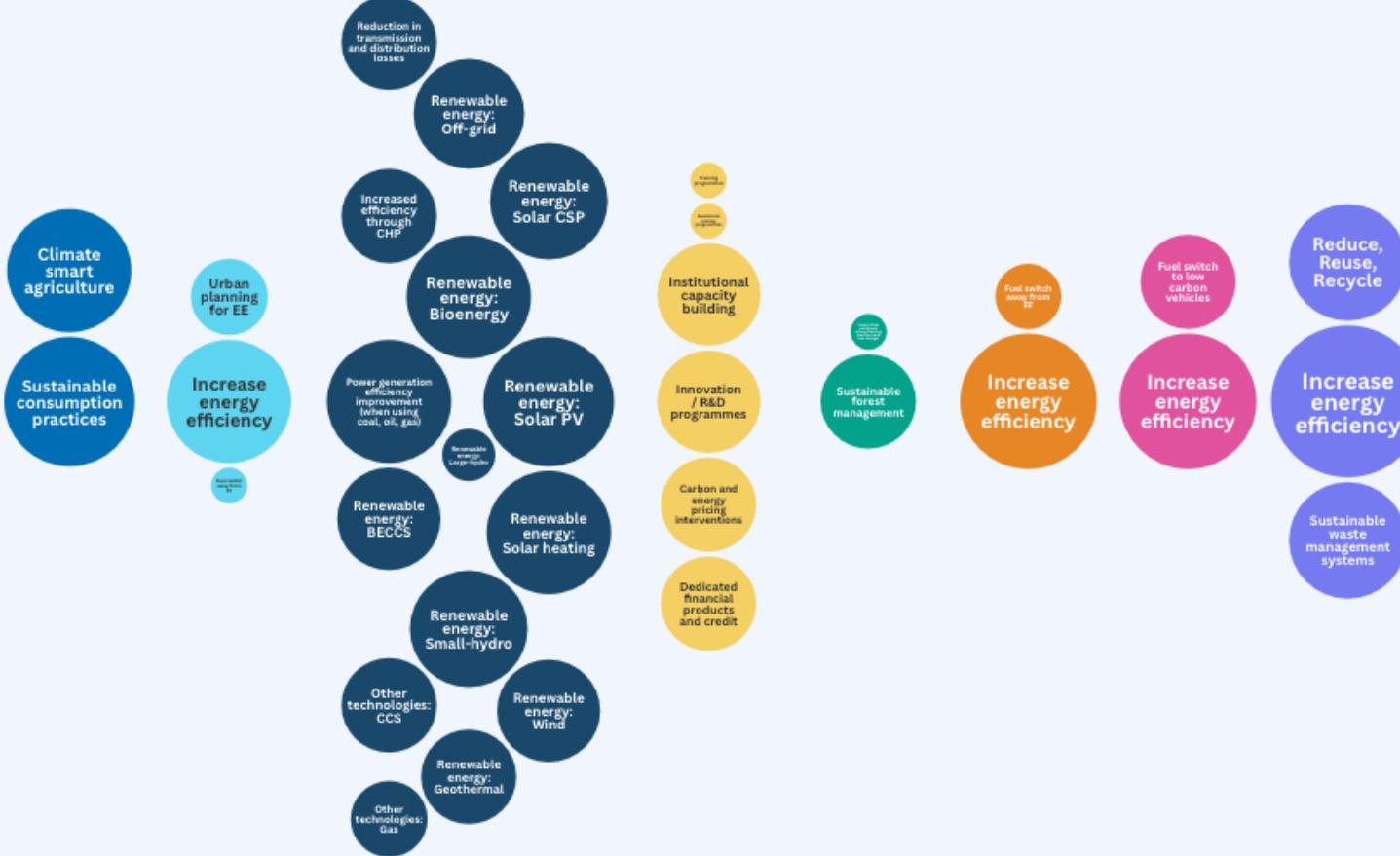
## Action Level

This visual unpacks the NDC categories into the specific actions committed in Uzbekistan. The size of the bubbles reflects the number of NDC actions identified under each category, to identify NDC x SDG accelerators with precision.

### Uzbekistan's NDC includes actions in these sectors:

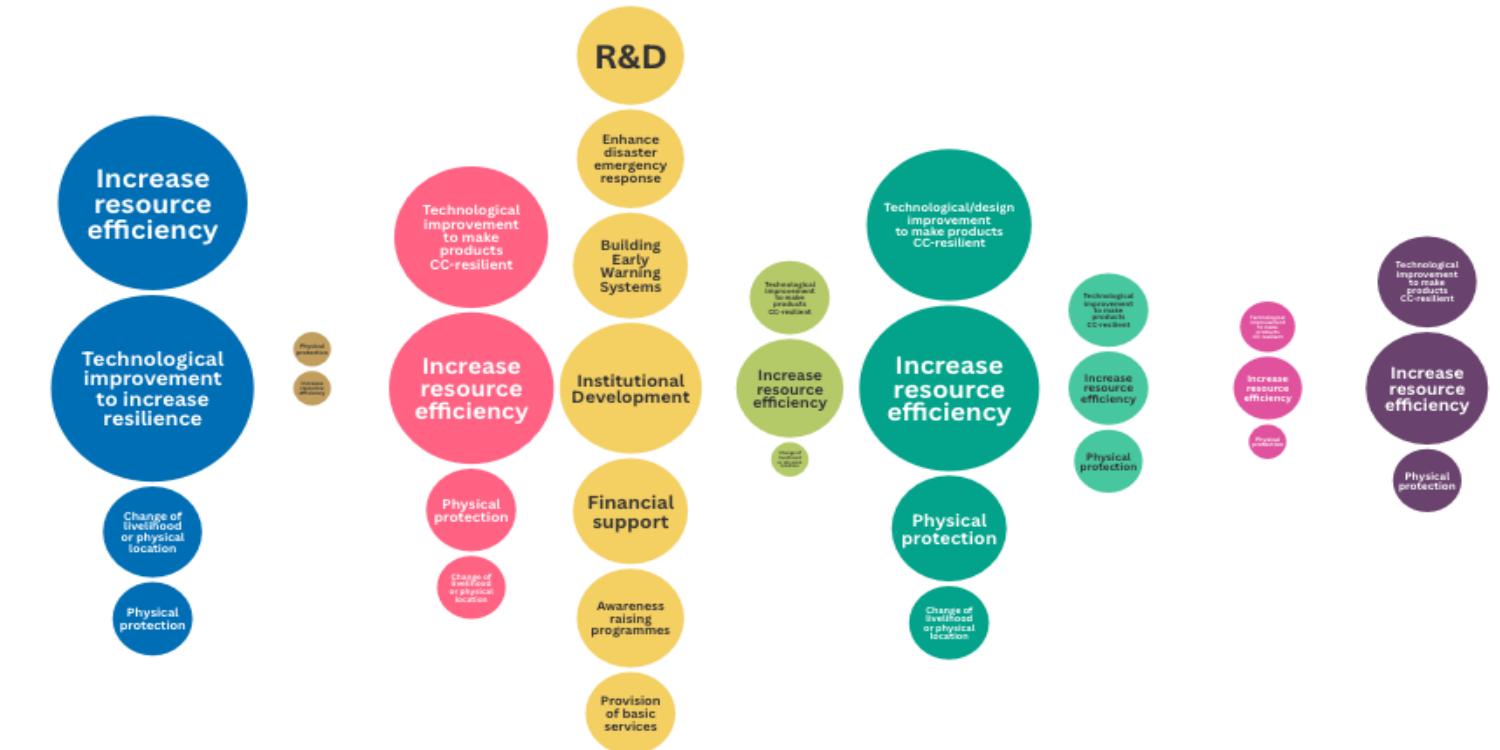
#### Mitigation

■ Agriculture ■ Buildings ■ Electricity & heat ■ Enablers ■ Forestry ■ Industries ■ Transport ■ Waste → pos



#### Adaptation

■ Agriculture ■ Coastal Zone ■ Ecosystem management ■ Enablers ■ Energy ■ Forestry ■ Health ■ Transport ■ Urban → pos

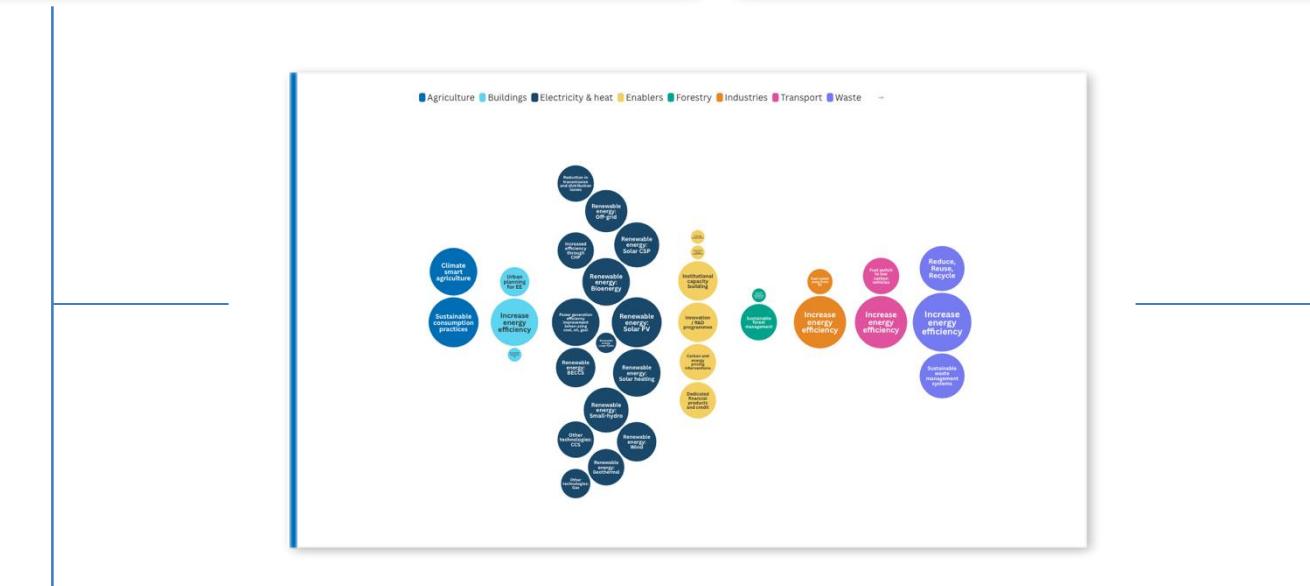
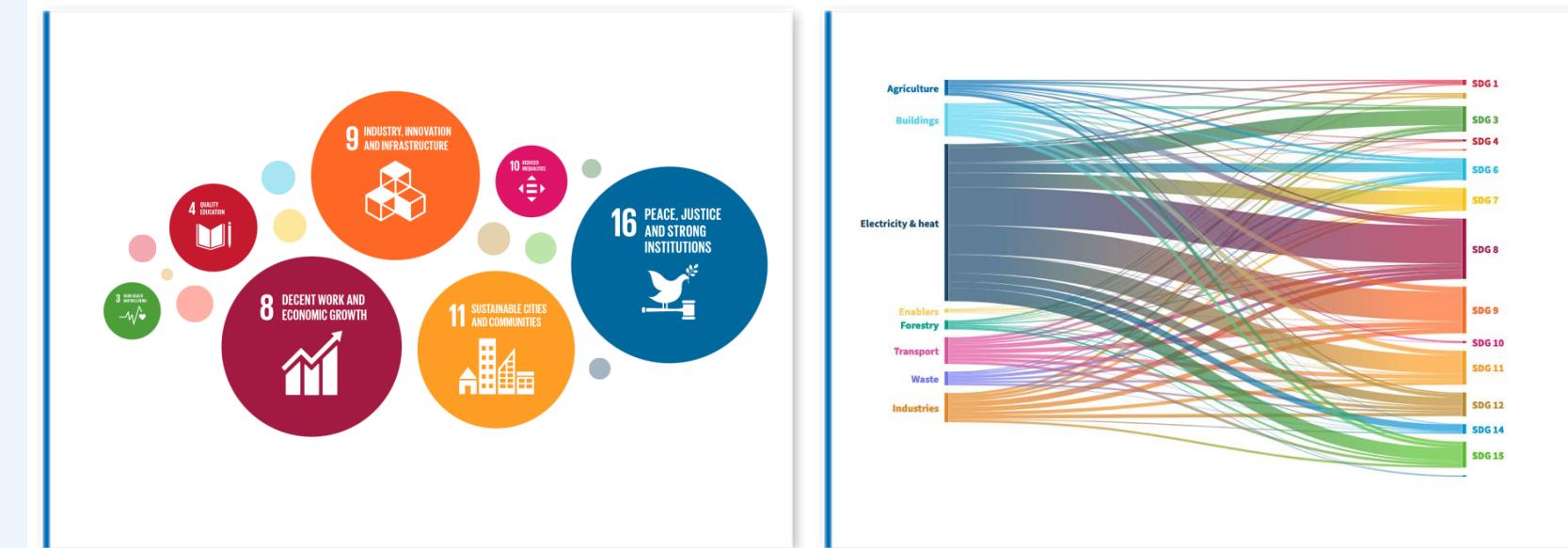


# NDC x SDG INTERLINKAGES Overview

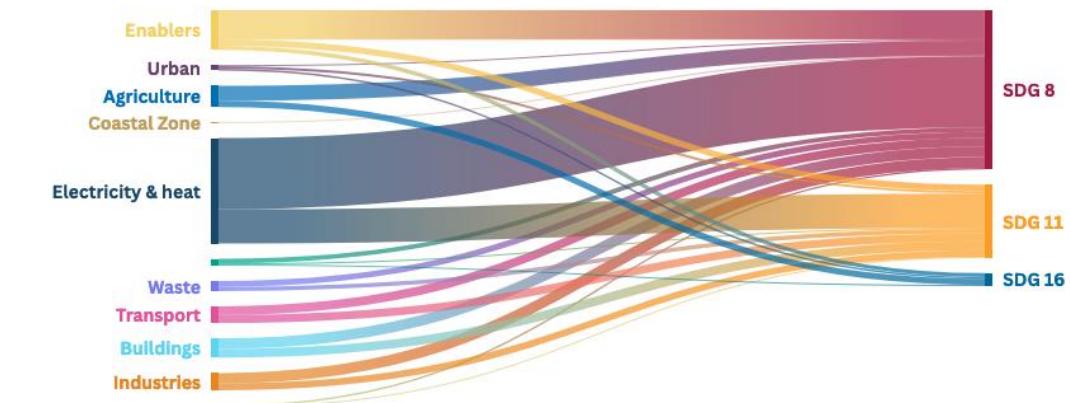
NDC-SDG interlinkages reveal how climate actions can impact SDG progress. Understanding these interactions can help Uzbekistan to achieve the 2030 Agenda while fulfilling its climate ambitions and navigating trade-offs.

Building from the NDC actions and SDG priorities, the following integrated SDG pathways are identified as critical to achieve Uzbekistan's development outcomes:

- **SDG Target 8.3** – Promote development-oriented policies that support productive activities, decent job creation...
- **SDG Target 11.1** – Adequate, safe and affordable housing and basic services
- **SDG Target 16.6** - Effective, accountable and transparent institutions at all levels



# ACCELERATION PATHWAYS



# NDC X SDG Interlinkages

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# INTERLINKAGES

## SDG 8.3

### Promote policies to support job creation and growing enterprises.

By reducing energy costs for businesses (SDG 9.3) and households (SDG 1.4 and 1.5), the actions enhance economic resilience and competitiveness (8.2), fostering sustainable economic growth. To support the growth of MSMEs, an innovative e-market web platform (energymarket.uz) has been established. This platform connects over 200 local suppliers and installation companies, fostering entrepreneurship and the formalization of businesses within the RE/EE sector.

In 2024, the country generated 8.9 billion UZS (691,296 USD) from surplus solar electricity sales. To further incentivize the adoption of RE a subsidy of 1,000 UZS (0.081 USD) per kilowatt-hour is allocated for surplus electricity generated by solar panels installed on private properties and transferred to the national power grid. Additionally, individuals and legal entities who have installed renewable energy sources are exempt from land and property taxes. At COP-29, UAE's "Masdar" signed a deal with Uzbekistan to build a 1,000 MW wind power plant, creating 600–800 jobs. The project will generate 3.5 billion kWh annually, saving 1 billion cubic meters of gas and reducing emissions by 1.4 million tons per year.

By scaling up renewable energy installations (e.g., solar, wind), NDC actions increase the share of clean energy in Uzbekistan's energy mix, directly supporting SDG 7.2. The primary focus of the NDC is to reduce greenhouse gas (GHG) emissions through cleaner energy sources and increased energy efficiency. These actions are key to achieving the country's climate targets, supporting SDG 13.2 on integrating climate change measures into national policies. By targeting multiple SDGs simultaneously, these measures contribute to a just and sustainable transition for Uzbekistan, paving the way for a low-carbon and resilient future.

## Priority NDC Activities

### Activity 1

Construct new renewable energy facilities with a total capacity of 10 GW (5 GW of solar, 3 GW of wind and 1.9 GW of hydropower plants tapping the potential of small rivers, irrigation canals, reservoirs, and watercourses

### Activity 2

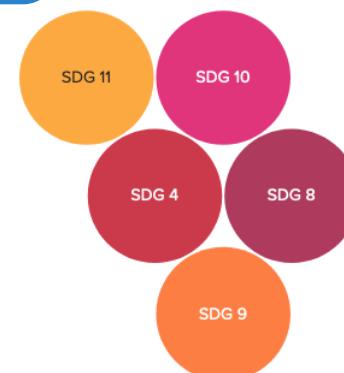
Increase share of renewable energy sources power generation to least 25% by 2030

### Activity 3

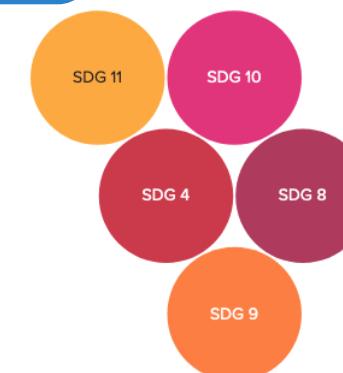
Increase renewable energy sources, which will help reduce GHG emissions

## NDC SYNERGIES WITH THE PRIORITY SDGS

### Activity 1



### Activity 2



### Activity 3



# INTERLINKAGES

## SDG 11.1

By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Expanding drip irrigation to 1 million hectares increases water use efficiency, raising crop yields by 20–40%, boosting food security, and enhancing the economic value of agriculture. Advanced irrigation and water-saving technologies will attract investment and create new jobs, particularly in rural areas (SDGs 2.3 and 8.3).

Improved water efficiency and real-time monitoring through smart water technologies enhance resource management and reduce waste. Increasing access to centralized drinking water from 77% to 91% by 2030, along with expanding sewage coverage, will improve public health and sanitation (SDG 6.1, SDG 6.4).

Energy-efficient technologies and the modernization of pumping stations aim to reduce annual electricity consumption by 30%, cutting carbon emissions. These measures support a transition to cleaner energy and align with Uzbekistan's climate goals (SDG 7.3, SDG 13)

By expanding centralized drinking water supply and upgrading wastewater infrastructure, the NDC actions will contribute to healthier and more resilient urban environments. Improved water management and reduced pollution will lead to cleaner cities, mitigating environmental health risks. (SDG 12.2) The introduction of energy-efficient technologies and smart water management systems will promote more sustainable consumption patterns, decreasing resource waste and lowering the environmental impact of water and energy use across economic sectors. Climate Resilience (SDG 13.1 and SDG 15.1) Reducing energy consumption and emissions will contribute to climate mitigation, while better water management enhances adaptation capacity. By improving water and energy efficiency, and expanding access to clean water and sanitation, Uzbekistan's NDC actions are interconnected with and can accelerate progress across SDG 1 (No Poverty), SDG 3 (Good Health and Well-being), and SDG 12 (Responsible Consumption and Production).

## Priority NDC Activities

### Activity 1

Widely apply energy-efficient and water-saving technologies for crop irrigation, information and communication technologies and innovations in water management

### Activity 2

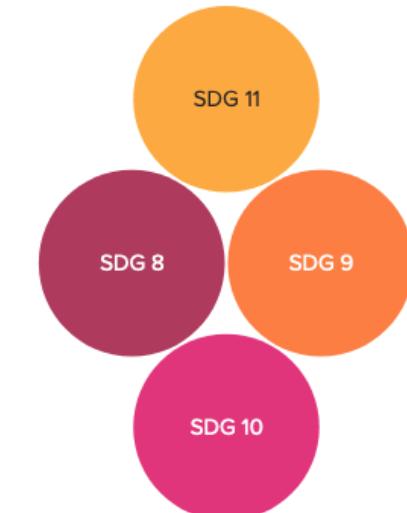
Use alternative energy sources at Municipal solid waste (MSW) management facilities up to 35%

## NDC SYNERGIES WITH THE PRIORITY SDGS

### Activity 1



### Activity 2



# INTERLINKAGES

## SDG 16.6

### Develop effective, accountable and transparent institutions

Enhancing the participation of public scientific institutions, women, and local communities in planning and management is vital for advancing multiple Sustainable Development Goals (SDGs), particularly SDG 16.6, which focuses on building effective, accountable, and transparent institutions. By integrating diverse perspectives and mainstreaming gender approaches, these stakeholders can improve decision-making processes, thereby supporting SDGs related to gender equality (SDG 5), reduced inequalities (SDG 10), and sustainable cities and communities (SDG 11). This collaborative effort fosters trust and accountability, ultimately leading to stronger governance and better outcomes that benefit all members of society, while also contributing to the overall achievement of the SDGs.

The Ministry of Economy and Finance, is designated as the national authority responsible for the implementation and oversight of the MRV system (in partnership with several other agencies). Systems like this including the establishment of an online reporting platform and a national GHG reduction registry are effective for not only improving NDCs but can be replicated to improve systems such as social protection (SDG 1), SDG 3, and several other SDGs.

Interlinkages between SDG 16 and other goals, such as poverty reduction (SDG 1), gender equality (SDG 5), and quality education (SDG 4), can create synergies that enhance overall development outcomes.

## Priority NDC Activities

### Activity 1

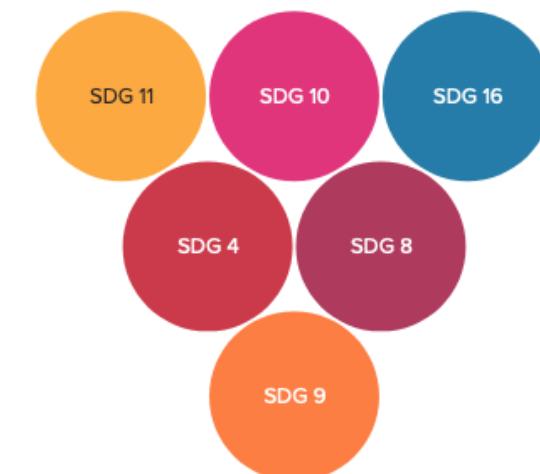
Increased participation of public scientific institutions, women and local communities in planning and management, mainstreaming gender approaches and practices

### Activity 2

Integrated Monitoring, Reporting and Verification system (MRV)

## NDC SYNERGIES WITH THE PRIORITY SDGS

### Activity 1



### Activity 2



# Finance & Stimulus

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# FINANCE & STIMULUS

Many countries are facing reduced fiscal space, high debt levels, rising interest rates and downgrades on credit ratings. Fiscal and financial constraints tend to slow or even reverse SDG progress.

The radar diagram shows low frequency data points linked to government revenue, debt and natural resources rents as a proportion of GDP. The financial indicator graphs show external debt servicing relative to revenue and the sovereign credit rating and the country's latest Debt Sustainability Assessment (DSA) risk rating.

Uzbekistan's gross government debt, projected at 33.0% of GDP in 2025, is 26.1 percentage points (pp) below the low-income developing countries (LIDC) group of 59.1%. The country is projected to collect 25.5% of GDP in revenue this year, or 3.7pp higher than LIDC group's 21.8%.

Uzbekistan's external debt servicing this year is projected at 9.2% of revenue compared to 14.1% for the LIDC average. The World Bank and IMF DSA from April 2024 rated the country as at 'low risk of debt distress'.

Each year, the government establishes limits on the volume of its external borrowing. For 2025, this limit is set at USD 5.5 billion, with USD 3.0 billion allocated to support the national budget deficit and the remaining USD 2.5 billion dedicated to funding new investment projects. This strategic allocation aims to balance immediate fiscal needs with long-term development objectives.



# PUBLIC FINANCE

## Financing needs

**SDGs:** Estimates from 2019 revealed Uzbekistan needs **at least an additional, annual investment of USD 6.0 bn** to meet the nationalized SDGs. (DFA 2021):

	USD 0.55 bn		USD 0.58 bn
	USD 1.9 bn		USD 0.46 bn
	USD 1.1 bn		USD 1.4 bn

**NDC: Estimated 19,3 billion USD total by 2030**

- 14.3 billion USD for mitigation
- 4.3 billion USD for adaptation
- 0.7 billion USD for capacity building actions

## Financing strategy

### Financing strategy for Uzbekistan 2030 under development

- Consideration of carbon tax and related climate fiscal policies
- Consolidated government revenue amounted to an equivalent of 28.6 percent of GDP, up from 24.9 percent of GDP in 2017
- In 2018-19, tax reforms lowered tax rates but maintained tax ratio of 28.6 percent of GDP in 2019 due to higher compliance and growth

## Expenditures & budgets

- Since 2019 the Government of Uzbekistan performs the SDG budget Tagging exercise using a basic model and regularly presents the results in the publications of a Citizen's Budget.
- According to the tagging results during the last few years in average around 70% of the state budget expenditures in Uzbekistan were allocated and aligned with SDGs.

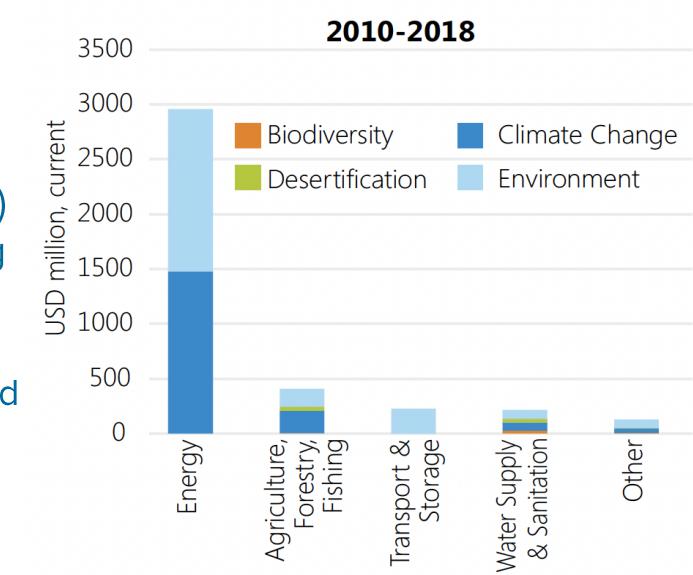
## Debt instruments:

- In July 2021, the Government of Uzbekistan issued a first sovereign SDG Bonds in the region (UZS denominated, USD Equiv. 235 Million)
- In October 2023, the Government of Uzbekistan issued a debut sovereign Green Bonds (UZS denominated, USD Equiv. 350 Million)
- In May 2024, the Government of Uzbekistan issued SDG Bonds (USD Equiv. 650 Million).

## International climate finance GEF, GCF & Adaptation Fund:

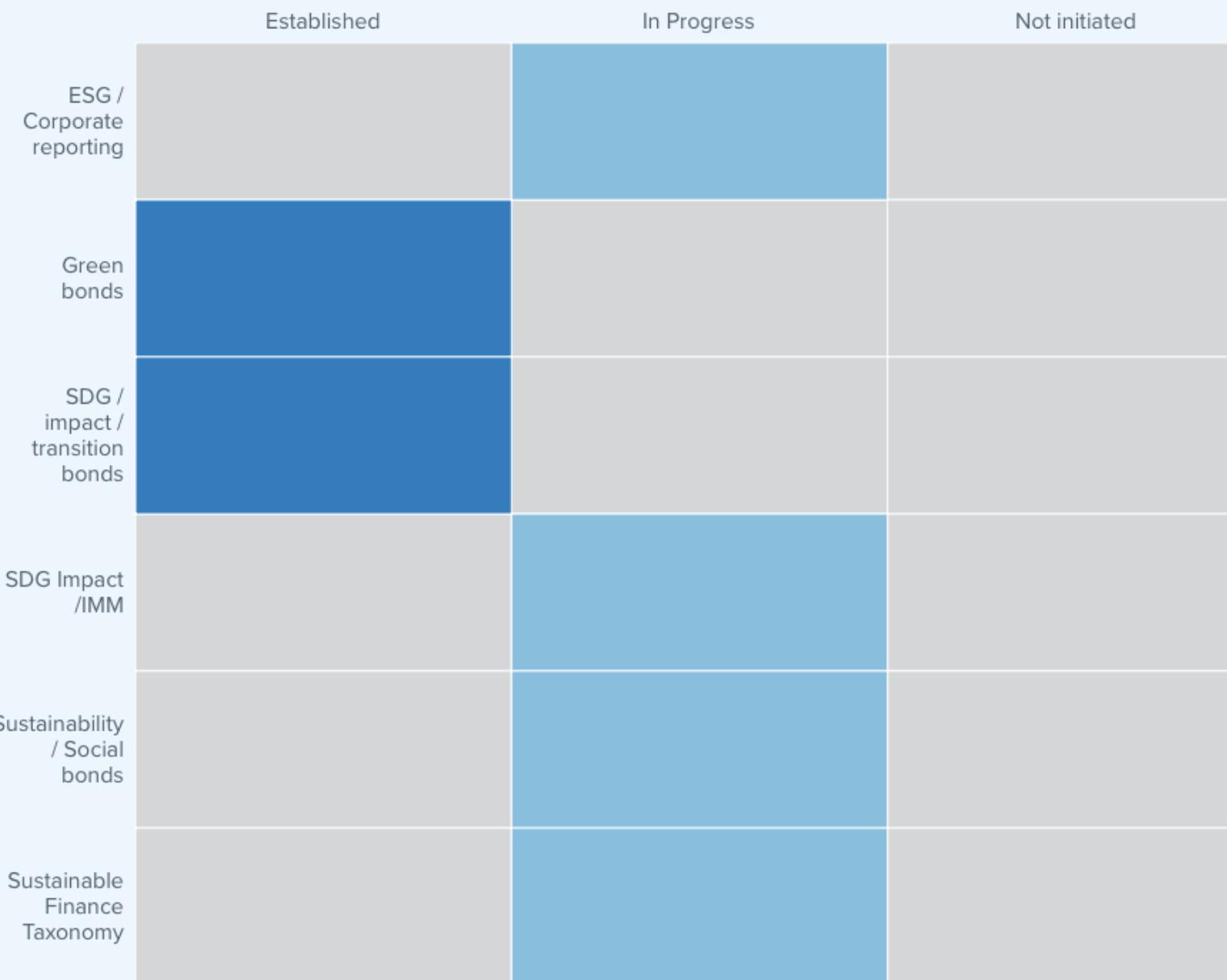
- 55 million in total GEF funding for climate (GEF, 2024)
- 160 million in total GCF funding (GCF, 2024)
- 16.5 million in total Adaptation Fund funding (Adaptation Fund, 2024)

Capacity building for preparing Green Climate Fund project proposals, tailored to Uzbekistan's context implemented.



# PRIVATE FINANCE & ECONOMY

## Policy & Regulatory Measures:



### Innovative Instruments:

#### Sustainability Taxonomies / ESG

- [SDG Bond Framework](#), providing a comprehensive tool to maintain coherence across performance monitoring criteria and indicators
- SDG and Green sovereign bond issuances

#### Derisking & Inclusive Finance

- Green Economy Financing Facility (GEFF), EUR 4.4 million EBRD credit line for on-lending to private companies

### International Investment:

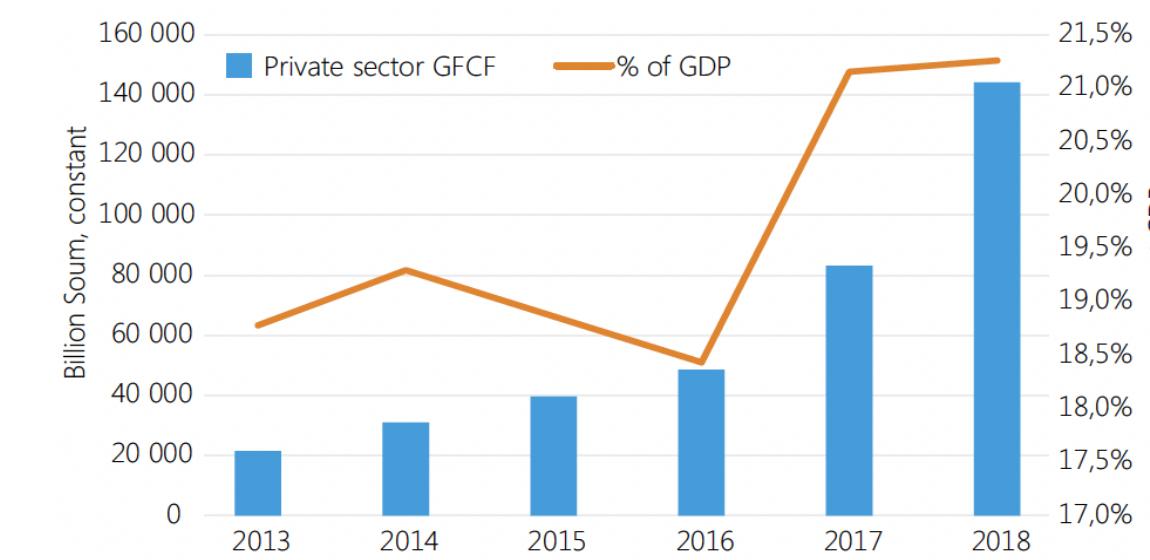
Initiatives launched under the Integrated National Financing Framework (INFF) to catalyze foreign investment in sustainable development, leveraging innovative financing mechanisms for sustainable and inclusive economic growth

**3.1%**

Foreign direct investment, net inflows (of GDP) (2022)

### Domestic Investment:

Unlocking domestic private finance through financing reforms, fostering an environment conducive to domestic investments in green technologies and sustainable infrastructure



Gross Fixed Capital Formation by the Private Sector (DFA 2021)

# METHODOLOGY



## NDC X SDG MOMENT

### Methodology

Assesses challenges and opportunities in national growth trajectories with insights on environmental sustainability.

### Data Sources

Current emissions data considered from [Climate Watch](#), and projected emissions in 2050 and GHG intensity of growth from the [Environmental Performance Index](#).



## ALIGNMENT & INTERLINKAGES

### Methodology

NDC activities from Uzbekistan's NDC submission are extracted. These are mapped with Mitigation or Adaptation Actions defined by SCAN-Tool initiative, which finds interlinkages between these Actions and the SDGs. Accordingly, synergies and trade-offs between NDC activities and the SDGs are identified.

### Data Source

NDC activities data are from NDC-SDG Connections([Connecting climate action to the Sustainable Development Goals | NDC-SDG Connections \(idos-research.de\)](#)); Mitigation or Adaptation Actions are defined by SCAN-Tool ([Scan tool - Ambition To Action](#)).



## FINANCE & STIMULUS

### Methodology

Provides an overview of the financing options for NDC implementation.

### Data Source

TBD