

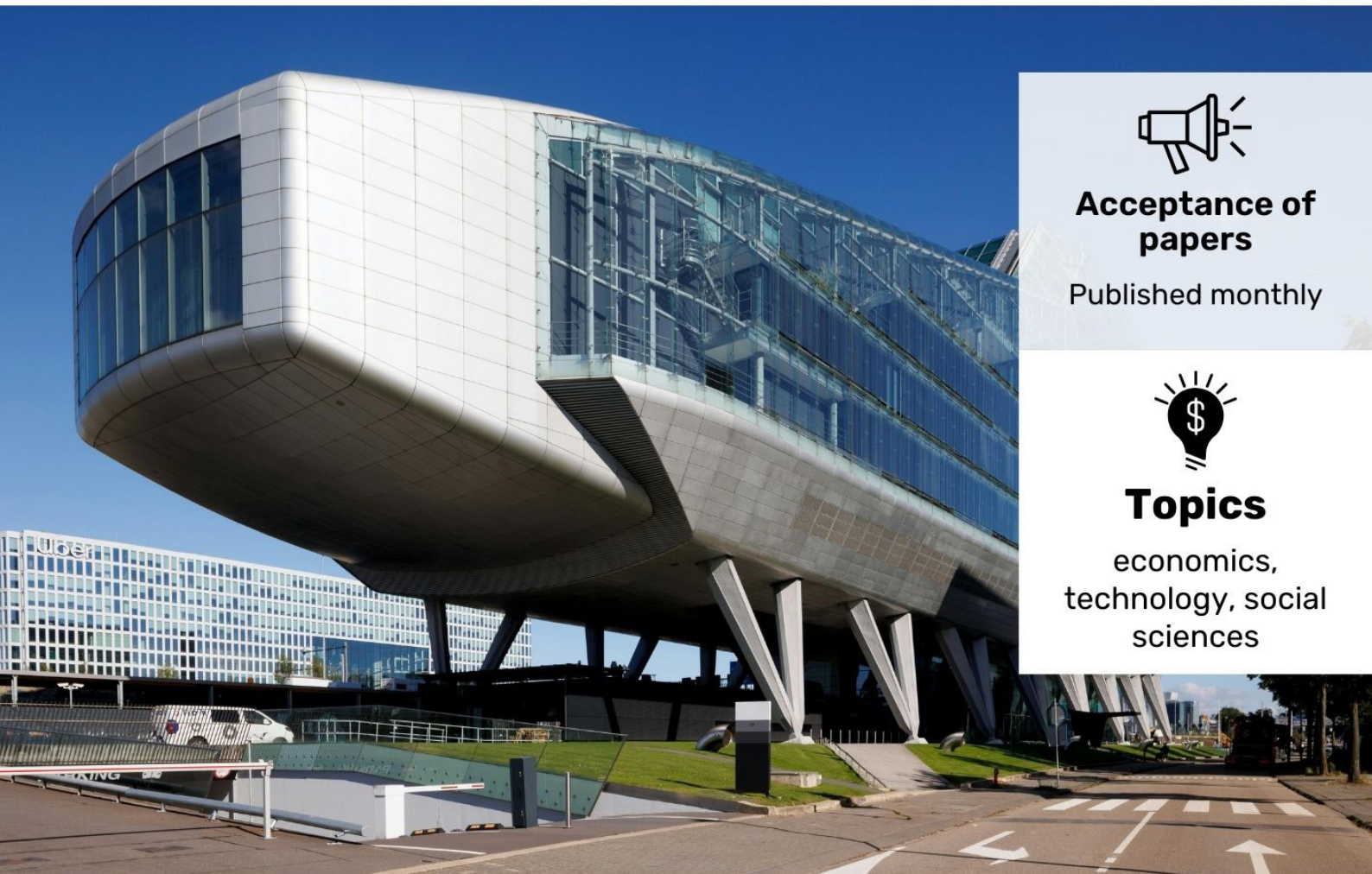
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DEVELOPMENT OF GREEN FINANCE IN UZBEKISTAN IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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Abstract: Green financing is a key mechanism for achieving sustainable development goals, providing investments in projects aimed at reducing carbon footprints, preserving ecosystems, and supporting the "green" transformation of the economy. In Uzbekistan, the development of green financing institutions and the use of various financial instruments play a crucial role in modernizing the economy and increasing its resilience amid ongoing reforms. This article explores the role of international and national green financing institutions, analyzes the growing application of green financing tools, and examines measures to overcome existing challenges and create conditions for the active implementation of green financing mechanisms in Uzbekistan.

Key words: Green financing, sustainable development, green economy, green loans, green bonds, climate funds, ESG standards, financial instruments.

INTRODUCTION

Green finance serves as a foundational mechanism for promoting sustainable development, as it mobilizes capital flows toward projects and initiatives that aim to reduce greenhouse gas emissions, protect biodiversity, enhance energy efficiency, and enable the green transition of economies. By integrating environmental, social, and governance (ESG) criteria into financial decision-making, green finance also contributes to long-term financial stability and risk mitigation in the face of climate-related uncertainties (OECD, 2020; World Bank, 2022).

As a strategic driver of sustainable development, green finance holds particular relevance for emerging and transitioning economies, such as Uzbekistan, which is currently undergoing profound economic and social transformations. Following decades of limited participation in international capital markets, Uzbekistan has reoriented its economic policy toward openness and reform, placing green finance at the forefront of its national development strategy. The country's ratification of the Paris Agreement in 2018 and the issuance of its first sovereign green Eurobonds in 2023 signify a clear institutional commitment to climate goals and sustainable growth.

In the context of Uzbekistan's ongoing structural reforms, the establishment of green financial institutions and the introduction of green financial instruments (such as green bonds, concessional loans, and public-private partnerships) represent a crucial step toward enhancing the resilience and inclusiveness of the national economy. These reforms aim to address environmental vulnerabilities, promote low-carbon development, and align national financing practices with international sustainability standards.

Moreover, Uzbekistan's green transition is unfolding through a series of key stages, including the development of a green taxonomy, integration of ESG criteria into public investment management, and expansion of climate-related disclosures. These efforts are further supported by cooperation with international financial institutions such as the Asian Development Bank (ADB), Islamic Development Bank (IsDB), and the International Finance Corporation (IFC), which provide both technical assistance and concessional financing for green infrastructure and renewable energy projects.

In summary, green finance not only supports environmental objectives but also acts as a catalyst for institutional modernization, capital market development, and long-term macroeconomic sustainability in Uzbekistan. Its strategic application has the potential to create synergies between climate resilience and economic competitiveness, thereby positioning the country as a regional leader in sustainable finance.

LITERATURE REVIEW

Issues of green finance and its role in ensuring sustainable development are actively explored within the framework of modern economic science. Green finance is regarded as a key instrument for reducing the carbon footprint, preserving natural ecosystems, and supporting the green transformation of the economy (UNEP, 2016; IFC, 2021).

In a global context, green finance is defined as a set of financial instruments (green bonds, climate funds, sustainable loans) aimed at financing environmentally significant projects (OECD, 2019; World Bank, 2022). Studies emphasize that the transition to a green economy requires the active involvement of both public and private financial institutions (Zhang & Wang, 2020; G20 Green Finance Study Group, 2018). Special attention is paid to the role of green finance in countries with transition economies, such as Uzbekistan. According to a number of international reports (ADB, 2022; UNDP Uzbekistan, 2023), in recent years Uzbekistan has taken steps toward the institutionalization of green finance, including the ratification of the Paris Agreement (2018) and the issuance of the country's first green Eurobonds (2023). These developments are supported by data from the Ministry of Finance of Uzbekistan and initiatives related to the issuance of sovereign green bonds (MinFin UZ Report, 2023).

Researchers (IsDB, 2022; Böhmer et al., 2021) note that for the sustainable implementation of green finance, it is important to address risks associated with insufficient institutional maturity, low financial literacy, limited access to international capital markets, as well as the need for cross-sectoral cooperation. In addition, issues such as the development of a national green taxonomy, reporting transparency, and ESG integration also require thorough elaboration (CBU Report, 2023; IFC Uzbekistan, 2024).

Thus, the literature review demonstrates growing interest in green finance at both the international level and within the context of Uzbekistan. Academic and applied sources emphasize that the further development of this field requires both regulatory and institutional consolidation of efforts by the state, businesses, and international partners.

RESEARCH METHODOLOGY

This research adopts a mixed-methods approach combining qualitative and quantitative analysis to explore the development, challenges, and prospects of green finance in Uzbekistan within the broader context of sustainable development.

ANALYSIS AND RESULTS

Since the ratification of the Paris Agreement in 2018 and the issuance of Uzbekistan's first sovereign green Eurobonds in 2023, the country has taken meaningful steps toward integrating sustainability into its national development agenda. These efforts reflect Uzbekistan's commitment to achieving its Nationally Determined Contributions (NDCs) and aligning with international environmental and climate obligations. However, the green transition remains a complex and multifaceted process, accompanied by a set of economic, institutional, and social risks, including insufficient regulatory frameworks, limited green finance literacy, and the need for broader stakeholder engagement across sectors.

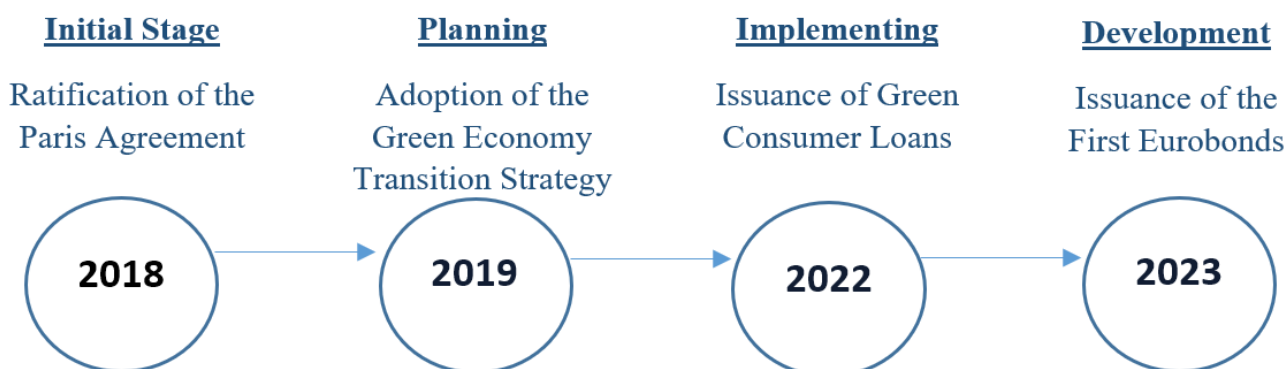


Figure 1. Stages of green economy development in Uzbekistan.

As global priorities increasingly shift toward low-carbon, climate-resilient development, green finance has emerged as a critical pillar of sustainable economic transformation. It represents a convergence of environmental policy and financial strategy, aimed at mobilizing capital for environmentally sound investments,

enhancing climate resilience, and promoting inclusive economic growth. According to the United Nations Environment Programme (UNEP), green finance involves both the reallocation of financial flows and the reform of institutional systems to ensure consistency with sustainability goals.

In this context, financial institutions specializing in green finance play a central role, not only in mobilizing capital but also in developing enabling regulatory environments, designing innovative financial instruments, and coordinating multi-stakeholder projects. In Uzbekistan, green finance institutions can be categorized into international and domestic actors.

International financial institutions (IFIs) such as the Green Climate Fund (GCF), World Bank, Asian Development Bank (ADB), and the European Bank for Reconstruction and Development (EBRD) have been instrumental in financing large-scale projects in renewable energy, infrastructure modernization, clean water and sanitation systems, waste management, and climate-smart agriculture. These institutions not only provide long-term concessional financing and technical expertise, but also serve as platforms for disseminating international best practices and enhancing Uzbekistan's visibility and credibility in global financial markets.

In particular, the EBRD has emerged as a key partner in Uzbekistan's green transition. As of early 2025, the EBRD has invested €4.46 billion in 146 projects across the country, with approximately 40% of its active portfolio dedicated to the green economy. These investments have targeted renewable energy generation (e.g., solar and wind power), energy efficiency retrofits, and sustainable urban development initiatives. Furthermore, during the 29th Conference of the Parties (COP29) held in Baku in November 2024, the EBRD announced its intent to extend a \$200 million green loan facility to Uzbekistan. This initiative forms part of a broader strategy to green the financial system, supporting the adoption of environmental, social, and governance (ESG) standards across domestic financial institutions.

Such efforts reflect a growing consensus among development partners that climate finance is integral to macroeconomic stability, energy security, and long-term competitiveness. For Uzbekistan, collaboration with IFIs has accelerated institutional capacity-building, promoted policy dialogue on sustainable finance, and facilitated the transfer of clean technologies.¹

To date, the EBRD has invested nearly €4.46 billion across 146 projects throughout Uzbekistan.² Moreover, on November 14, 2024, on the sidelines of the United Nations Climate Change Conference (COP29) in Baku, the EBRD considered extending a \$200 million loan to Uzbekistan as part of a special financial program aimed at greening the country's financial system.

Table 1. Volume and directions of green investments in Uzbekistan.

Year	Source of Investment	Investment Amount	Main Direction
2023	German Society for International Cooperation (GIZ)	€9 million	Implementation of green economic solutions and industrial technologies
2023	World Bank	\$12 million	Renewable energy project
2024	European Union (EU)	€600 thousand	Support for environmental financial initiatives
2024	German Society for International Cooperation (GIZ)	€3 million	Project to support the private sector in green industrialization
2024	Korea International Cooperation Agency (KOICA)	\$6.5 million	Agreement «On Supporting the Transition to a Green Economy»
2024	European Bank for Reconstruction and Development (EBRD)	\$20 million	Uzbekistan Green Economy Financing Program
2024	European Bank for Reconstruction and Development (EBRD)	\$200 million	Financing environmental programs and the green economy
2024	London Stock Exchange (Green Bonds)	\$1 billion	Financing sustainable agriculture and technologies

Despite its clear advantages, working with international institutions involves certain risks. One of the key challenges is the strict conditions for funding allocation, which include detailed reporting requirements and rigorous oversight to ensure the proper use of resources. Additionally, the high standards for project management necessitate substantial efforts from local authorities and companies to enhance their competence and efficiency.

1 Green Climate Fund (2014) Decisions of the Board – Eighth Meeting of the Board, October 14–17, 2014.

2 European Bank for Reconstruction and Development (2023) EBRD promotes green lending and trade in Uzbekistan.

National green finance institutions play a crucial role in fostering a sustainable economy in Uzbekistan. The key government bodies actively engaged in this process include the Ministry of Energy, the Ministry of Economic Development and Poverty Reduction, and the Ministry of Finance. These institutions are responsible for developing strategies and regulatory frameworks aimed at implementing sustainable development projects. They coordinate interactions with international donors to ensure the effective mobilization of funds for green initiatives and oversee their execution at the national level.³ A significant step in this direction was Presidential Decree No. DP-4477 of October 4, 2019, which approved the “Strategy for Uzbekistan’s Transition to a Green Economy for the Period 2019–2030”.⁴

The banking sector also plays a crucial role in the development of green finance. National banks, such as “Uzpromstroybank” and the National Bank of Uzbekistan (NBU), have begun implementing preferential lending programs for environmentally significant projects. These initiatives include financing for the installation of solar panels, energy-efficient equipment, and other sustainable technologies.

In 2021, during a visit by a delegation from the European Bank for Reconstruction and Development (EBRD), an agreement was signed under which “Uzpromstroybank” became a participant in the Green Economy Financing Facility (GEFF). As part of this program, the EBRD allocated a credit line of up to \$25 million.⁵ Additionally, banks are developing specialized loan products to support small and medium-sized enterprises (SMEs), thereby encouraging entrepreneurs to implement projects with a low carbon footprint.

However, despite these opportunities, national green finance institutions face several risks. The main challenges include limited financial and technical resources, as well as a lack of transparency, which undermines trust in government institutions. Green finance instruments serve as key mechanisms for supporting sustainable development by enabling the mobilization of resources for the implementation of environmentally significant projects. Among the primary instruments of green finance are green bonds, loans, climate funds, subsidies, and other mechanisms that play a crucial role in the global economic transformation. One of the most significant instruments is green bonds. These are debt securities whose proceeds are exclusively used to finance projects related to renewable energy, energy efficiency, waste management, or biodiversity conservation. Such bonds are issued by both public and private entities.⁶ The green bond market has demonstrated rapid growth. While its volume stood at \$37 billion in 2014, by 2023, it had surged to \$587 billion.⁷

Uzbekistan’s growing interest in issuing green bonds is driven by the widening gap between the necessary investments, particularly in sustainable infrastructure, and actual expenditures, a substantial portion of which is currently covered by the state budget.⁸

Following its successful debut in the international bond market in 2019, the country has issued three thematic bonds: a sovereign sustainability bond in 2021 (also known as a Sustainable Development Goals (SDG) bond) and two green bonds in 2023, one of which was sovereign and the other corporate. These initiatives have positioned Uzbekistan as a regional leader in Central Asia, where the use of thematic bonds remains a relatively new phenomenon.⁹

Another important mechanism of green financing is green lending, provided by banks and financial institutions under favourable terms. These loans are aimed at supporting projects such as the modernization of industrial enterprises, the installation of solar panels, or the development of waste recycling infrastructure. The preferential interest rates on such loans make environmental projects more accessible to businesses and the population, stimulating the transition to more sustainable technologies.¹⁰ Therefore, by October 27, 2023, commercial banks in Uzbekistan had issued over 1 trillion UZS in the form of “green” loans during the first nine months of the year, aimed at acquiring energy-efficient and renewable energy sources. Of this amount, over 700 billion UZS were allocated to support businesses, while more than 300 billion UZS were directed to individuals. Additionally, according to the presidential decree “On measures for the implementation of the Program to provide the population with housing through mortgage loans based on market principles for 2023,” it is planned to introduce a program for the provision of “green” mortgage loans to individuals starting April 1, 2025.

3 Decree of the President of the Republic of Uzbekistan, May 31, 2023, No. RP-171 “On measures for the effective organization of the Ministry of Ecology, Environment Protection, and Climate Change.” Available at: <https://lex.uz/docs/6479136>

4 Decree of the President of the Republic of Uzbekistan, December 2, 2022, No. RP-436 On measures to enhance the effectiveness of reforms aimed at transitioning Uzbekistan to a “green” economy by 2030. Available at: <https://lex.uz/docs/6303233>

5 Gazeta.uz (2021) EBRD allocated \$25 million to Uzpromstroybank for supporting the green economy. Available at: <https://www.gazeta.uz/ru/2021/06/11/uzsqb/>.

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Uzbekistan is actively developing the mechanisms of “green” financing, and the country has already made significant strides in this direction, gradually expanding the use of financial instruments to implement environmentally-oriented projects. Despite the progress made, the transition to sustainable financing in Uzbekistan faces several challenges. One of the key issues is the insufficient legislative and regulatory framework. The country has yet to form a comprehensive legal basis regulating ESG (Environmental, Social, and Corporate Governance) standards and mechanisms for “green” financing. This creates difficulties for banks and financial organizations seeking to develop environmentally-oriented products.

Another issue is the insufficient popularization and awareness among the population. Both businesses and the general public are not sufficiently informed about the advantages of green financing. The lack of awareness limits the demand for environmentally-oriented financial products.

CONCLUSIONS AND SUGGESTIONS

There is a pressing shortage of qualified specialists in the field of green finance in Uzbekistan. For the successful implementation of green initiatives, it is essential to develop educational programs aimed at training personnel who can effectively manage environmentally-oriented projects and assess their economic and ecological impact. To address the existing challenges, Uzbekistan needs to integrate ESG standards into national legislation, establish comprehensive regulatory mechanisms to support green finance, attract grants and technical assistance for environmental initiatives, and foster joint projects with international partners to facilitate knowledge and technology exchange. Furthermore, it is necessary to organize professional training sessions and courses on green finance and improve the qualifications of existing personnel working in the banking and financial sectors. Implementing these measures will enable Uzbekistan to accelerate its transition to a green economy and strengthen its position as a regional leader in sustainable development across Central Asia.

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