



DIGITAL FINANCE AND ECOLOGICAL SUSTAINABILITY: PROSPECTS FOR IMPLEMENTING THE GREEN FINTECH CONCEPT IN UZBEKISTAN

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Article history:	Abstract:
Received: 10 th February 2026 Accepted: 8 th March 2026	The article examines the problems of harmonization of digital technologies with the principles of environmental sustainability in the financial market of Uzbekistan. The essence of the concept of green fintech, its application in international experience, and the possibilities of practical implementation in the conditions of Uzbekistan are studied. The importance of digital infrastructure in creating ecological financial solutions, mechanisms for supporting green investments, and the role of state policy are also underlined. The results of the research allow considering the green fintech system as an innovative factor in ensuring sustainable economic development and environmental safety in the country.
Keywords: Green fintech, digital finance, environmental sustainability, sustainable development, financial technologies, green investments, Uzbekistan	

In the last decades, digital technologies have permeated almost all sectors of the financial system in the global economy. With the expansion of the concept of a green economy based on the principles of sustainable development, demand for environmentally friendly solutions in the field of fintech (financial technologies) has increased enormously. Thus, in the framework of this process, the concept of green fintech, meaning a support mechanism for environmental sustainability with the help of digital finance, has become one of the important innovative trends in the global financial system.

The main focus of green fintech is to develop eco-friendly, socially responsible, and economically efficient financial solutions using the help of digital technologies. Such solutions may encourage environmental protection and also allow the rational use of resources, reduce the carbon footprint, and increase the volume of green investments.

Under the leadership of the President of the Republic of Uzbekistan, several strategic documents have been adopted aimed at the development of a green economy, achieving carbon neutrality, and speeding up the processes of digital transformation. In this respect, the creation of a green fin-tech system may become a significant contributor to ensuring financial stability in the republic and supporting environmental projects.

Therefore, this paper considers the theoretical grounds, foreign experience, and practical outlook for the development of green fintech in the system of Uzbekistan. The relevance of the research is that the integration of digital finance with environmental sustainability is not only an important guarantee of

increasing economic efficiency but also of sustainable development.

In recent years, the modernization of the digital economy and financial system in the Republic of Uzbekistan has become one of the priority areas of state policy. A number of documents have been adopted on the introduction of digital technologies, automation of banking services, development of electronic payment systems and creation of innovative financial products. Among them, the "Digital Uzbekistan – 2030" strategy, "Transition to a Green Economy Strategy (2019–2030)" and "Carbon Neutrality – 2050" target programs are of particular importance.

Accordingly, the task at hand is to develop, within the frameworks of given programs, financial mechanisms in the environmental direction and, above all, to create the necessary infrastructure for the development of green finance and fintech systems. To this end, such directions as green bonds, sustainable investment projects, environmental initiatives based on online payments, and encouragement of resource efficiency by means of electronic banking services will be created in the country.

The Uzbekistan banking sector is also gradually introducing green financial technologies, including green credit lines, financing programs for energy-efficient technologies, and systems of environmental reporting. Certain measures have been taken by the Central Bank, Ministry of Finance, and Green Economy Center under the Ministry of Economy and Finance in support of financial incentives for environmental sustainability.



Meanwhile, the fintech ecosystem of Uzbekistan is also growing rapidly. Nowadays, more than 30 fintech companies operate in the country, including payment systems, microcredit, electronic wallets, and digital investment platforms. In the future, introducing green financial products to this digital financial infrastructure, such as "carbon footprint-reducing payment systems," "ecological credit scoring," and "green insurance," will take this digital financial infrastructure to a whole new stage of development.

However, a complete realization of green fintech in Uzbekistan requires further strengthening of the legal and regulatory framework, a digital environmental information system, and an investment incentive mechanism. At the same time, cooperation with international financial institutions should be expanded, with consideration given to the experience of organizations such as the European Bank for Reconstruction and Development, Asian Development Bank, and United Nations Development Programme.

Generally speaking, the development of a green fintech system opens great opportunities not only for environmental sustainability but also for accelerating the digital transformation of the national economy, increasing the financial inclusion of the population with the help of innovative financial solutions, and including it in the global chain of the "green economy".

Building a green fintech system in Uzbekistan has just begun and faces a set of systemic and institutional barriers to its full development. The root causes include regulatory, institutional, technological, investment, and social problems.

Clear regulatory and legal mechanisms that would regulate green finance and fintech activities in the Republic of Uzbekistan have not yet been fully developed. A unified system of standards regarding green loans, green bonds, and environmental investment criteria is not available; therefore, it constrains practical initiatives in this direction.

The relevant solution to this problem would be to develop the law "On Green Finance and Digital Technologies", regulating the activity of green fintech and providing legislative support for novel projects through the use of tax incentives, benefits, and a regime of a regulatory sandbox for green fintech entities.

One of the main problems of green fintech projects is the lack of stable sources of financing for them. The private sector still perceives environmental projects as high risk, which reduces investor activity.

We can also get rid of this problem if we expand financial support programs for green fintech startups in cooperation with international financial institutions

(EBRD, ADB, UNDP, IFC) and introduce interest-free credit lines, grants and venture capital mechanisms for fintech companies implementing environmental innovations.

The environmental responsibility, digital financial culture and technological literacy of the population are important factors for the development of a green fintech system. The majority of the population does not have sufficient knowledge of the content, benefits and methods of application of green financial instruments.

We can also eliminate this problem by organizing ecological financial trainings, hackathons and startup competitions in cooperation with banks, fintech companies and universities, and promoting ecological payment and investment systems through digital financial mobile applications in the Uzbek language, which are convenient for the population.

Systematic solutions to the above problems are the main factor in building a green fintech ecosystem in Uzbekistan. By strengthening the regulatory framework, expanding the investment infrastructure and increasing the level of financial literacy of the population, it will be possible to form a digital and environmentally sustainable financial system in the country. This will serve to turn Uzbekistan into one of the centers of the green digital economy in the region.

The concept of green fintech is an innovative direction aimed at harmonizing the modern financial system with the principles of environmental sustainability, which is also of urgent strategic importance for Uzbekistan. The rapid development of the digital economy in the country, the presence of a state policy on the introduction of financial technologies and the transition to a green economy create a solid foundation for the broad development of this direction.

The results of the study show that there are a number of problems in the process of forming a green fintech system in Uzbekistan - in particular, the insufficient development of the regulatory and legal framework, limited investment resources, and low environmental and financial literacy of the population. However, by systematically addressing these problems, the green fintech ecosystem can be transformed into an important sector of the country's economy.

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