YASHIL IQTISODIYOT&TARAQQIYOT

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MUNDARIJA

MUNDARIJA СОДЕРЖАНИЕ CONTENTS

GREEN LENDING PRACTICED AMONG UZBEK COMMERCIAL BANKS: SURVEY- BASED ASSESSMENT OF READINESS AND CONSTRAINTS

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Abstract. This article presents a survey-based assessment of the readiness of Uzbek commercial banks to implement green lending practices and the barriers they face. The study analyzes the banking sector’s potential to finance environmentally sustainable projects, its level of institutional preparedness, and the existing challenges. The findings identify key constraints, including bank employees’ awareness of green finance, regulatory framework requirements, and resource shortages.

Keywords: green lending, Uzbek commercial banks, green finance, bank readiness, financial constraints, environmental sustainability, survey-based assessment.

Annotatsiya. Ushbu maqola O‘zbekiston tijorat banklarining «yashil» kreditlash amaliyotini joriy etishga tayyorlik darajasini baholash hamda ular duch kelayotgan to‘siqlarni o‘tkazilgan so‘rovnoma asosida aniqlashga bag‘ishlangan. Tadqiqot doirasida mamlakat bank sektorining ekologik jihatdan barqaror loyihalarni moliyalashtirish salohiyati, institutsional tayyorgarlik darajasi va mavjud qiyinchiliklar tahlil qilingan. Olingan natijalar bank xodimlarining «yashil» moliya to‘g‘risidagi xabardorlik darajasi, normativ-huquqiy baza talablari va resurslar yetishmasligi kabi asosiy cheklovlarni aniqlash imkonini berdi.

Kalit so‘zlar: yashil kreditlash, O‘zbekiston tijorat banklari, yashil moliya, banklarning tayyorligi, moliyaviy cheklovlar, ekologik barqarorlik, so‘rovnoma asosidagi tahlil.

Аннотация. Данная статья посвящена оценке готовности коммерческих банков Узбекистана к внедрению практики «зелёного» кредитования и выявлению стоящих перед ними препятствий на основе проведённого опроса. В рамках исследования анализируются потенциал банковского сектора страны в финансировании экологически устойчивых проектов, уровень институциональной готовности и существующие трудности. Полученные результаты выявляют ключевые ограничения, такие как осведомлённость сотрудников банков о «зелёных» финансах, требования нормативно-правовой базы и нехватка ресурсов.

Ключевые слова: зелёное кредитование, коммерческие банки Узбекистана, зелёное финансирование, готовность банков, финансовые ограничения, экологическая устойчивость, анализ на основе опроса.

INTRODUCTION

Today, the “greening” of the economy and the implementation of sustainable development principles on a global scale are becoming priority tasks. The intensification of environmental problems, climate change, and the depletion of natural resources are also placing new demands on the financial sector. In particular, the transition of commercial banks from traditional lending mechanisms to a “green” financing system that reduces negative impacts on the environment is an important condition for building a “green” economy in the country.

In recent years, Uzbekistan has also implemented large-scale reforms aimed at supporting green energy and environmentally sustainable projects. However, an in-depth scientific and practical examination of the level of preparedness of commercial banks for this process, their internal capacity, and the financial and institutional barriers encountered in practice is of considerable importance.

This article provides a comprehensive assessment of the readiness of commercial banks in Uzbekistan to introduce green lending practices and the constraints they face, based on the results of a questionnaire survey.

LITERATURE REVIEW

Green lending has become an increasingly important sustainable finance instrument for supporting environmentally responsible economic development. Compared with green bonds, which mobilize capital through the issuance of debt securities, green lending enables commercial banks to provide targeted and accessible financing for renewable energy, energy efficiency, sustainable agriculture, clean transportation, waste management, and other environmentally beneficial projects. By integrating environmental, social, and governance (ESG) principles into credit allocation processes, banks can strengthen risk management, reduce exposure to climate-related financial risks, and contribute more actively to long-term sustainable economic growth.

Uzbekistan has achieved significant progress in developing its sustainable finance framework following the adoption of the Green Economy Transition Strategy for 2019–2030 and the country’s commitments under the Paris Agreement. The Government of Uzbekistan, in cooperation with the Central Bank and the Ministry of Economy and Finance, has introduced a range of reforms aimed at expanding green financial instruments, improving the investment environment, and encouraging greater private-sector participation in climate-related projects. These measures have created a favorable foundation for the gradual integration of green finance into the national banking system. International financial institutions have also become important strategic partners by providing financial resources, technical expertise, and institutional support through commercial banks.

The European Bank for Reconstruction and Development (EBRD) has played a particularly important role in advancing green finance in Uzbekistan. In 2024, the EBRD provided Ipoteka Bank with a US$20 million financing package, including US$10 million under the Green Economy Financing Facility (GEFF II) to support energy-efficient technologies and climate-resilient investments. Ipak Yo‘li Bank similarly received a US$45 million financing package, of which US$20 million was specifically allocated to green lending projects. In 2025, Hamkorbank secured an additional US$30 million green financing facility from the EBRD, further expanding its capacity to finance environmentally sustainable investments. By the end of 2025, the EBRD’s cumulative investment portfolio in Uzbekistan had exceeded €5 billion, demonstrating growing international confidence in the country’s reform agenda and highlighting Uzbekistan’s strengthening position as an emerging regional center for sustainable and green finance.

Despite being at an early stage of development, green lending in Uzbekistan’s commercial banking sector demonstrates considerable potential for further expansion. International development institutions have played an important role in supporting this process by providing dedicated credit lines and transferring relevant expertise to domestic banks. At the same time, commercial banks are gradually strengthening their institutional and operational capacities, including environmental risk assessment, internal ESG policies, green project evaluation, and client awareness. The development of standardized national guidelines and a broader pipeline of bankable green projects would further accelerate this progress. These emerging opportunities provide a strong foundation for integrating green lending into regular banking operations and expanding the role of commercial banks in financing Uzbekistan’s transition toward a sustainable and green economy.

RESEARCH METHODOLOGY

This study aims to comprehensively assess the readiness of commercial banks in Uzbekistan to introduce green lending practices, as well as the existing constraints, using logical, comparative, and statistical analysis methods and a sociological questionnaire survey. The research process is based on the following main stages and approaches:

1. To establish the empirical basis of the study, a specially designed questionnaire survey was conducted among employees of commercial banks in Uzbekistan, including credit department specialists, risk managers, and managerial staff. The questionnaire included questions aimed at identifying banks’ practical experience in financing environmental projects, their level of institutional readiness, employees’ awareness of green finance, and the main obstacles encountered in the process.

2. Scientific works by domestic and foreign researchers, reports published by international financial institutions, and strategic and regulatory documents of the Republic of Uzbekistan concerning the transition to a green economy served as the theoretical and methodological basis of the study. In preparing and linguistically refining the text of the article, artificial intelligence tools were used to a limited extent, accounting for no more than 10% of the overall work.

ANALYSIS AND RESULTS

1. This section assesses the readiness of Uzbek commercial banks to implement green lending practices by drawing on recent developments in the country's sustainable finance sector and evidence obtained through the survey. The analysis combines descriptive statistics with econometric interpretation to evaluate institutional readiness, identify areas for further development, and examine the potential contribution of green lending to Uzbekistan's transition toward a green economy.

2. Several commercial banks in Uzbekistan have already begun successfully integrating green lending into their financing activities. In 2025, the European Bank for Reconstruction and Development (EBRD) approved a US$30 million credit line for Hamkorbank under the Green Economy Financing Facility (GEFF II), enabling the bank to expand financing for energy-efficient technologies and climate-resilient investments. During the same period, Ipak Yo'li Bank received a US$50 million financing package, including US$15 million specifically allocated to green lending for micro, small, and medium-sized enterprises. Earlier, Ipoteka Bank obtained a US$20 million financing package, half of which—US$10 million—was allocated to green finance projects.

3. These investments demonstrate the expanding role of international financial institutions in strengthening the capacity of Uzbek commercial banks to finance environmentally sustainable projects. Although green lending currently represents a relatively modest share of total commercial bank lending, the growing number of dedicated financing programmes indicates strong potential for further expansion. Concessional credit lines provided by international organizations have created an important foundation for the development of this market. Building on this progress, the long-term growth of green lending can be supported through stronger institutional capacity, more advanced environmental risk assessment systems, and the gradual expansion of domestic green finance resources.

4. The questionnaire consisted of five dimensions designed to measure institutional readiness: knowledge of green finance, management support, environmental risk assessment, regulatory awareness, and customer demand for green financial products. Responses were measured using a five-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"), enabling a comprehensive assessment of banks' preparedness to develop green lending practices.

5. The reliability of the questionnaire was assessed using Cronbach's alpha coefficient. The estimated value of 0.89 indicates a high level of internal consistency and confirms that the survey instrument provides a statistically reliable basis for assessing institutional readiness.

Descriptive Statistics

1. The descriptive statistics show that respondents generally demonstrate positive attitudes toward green lending. The highest mean score was recorded for management commitment (Mean = 4.18), indicating that senior management increasingly recognizes sustainable finance as an important strategic direction. Staff awareness also received a relatively high score (Mean = 3.97), reflecting the expanding dissemination of ESG principles and green finance knowledge within Uzbek commercial banks.

2. Environmental risk assessment (Mean = 3.42) and customer demand (Mean = 3.29) received comparatively lower, yet still encouraging, scores. These results indicate that commercial banks have already established a foundation in these areas, while also highlighting considerable opportunities for further progress. Continued staff training, improved environmental assessment tools, stronger customer engagement, and greater promotion of green financial products can further strengthen the practical implementation of green lending across Uzbekistan's banking sector.

Table 2. Descriptive Statistics of the Survey Variables

Variable	Mean	Standard Deviation
Staff awareness	3.97	0.72
Management support	4.18	0.64
Regulatory support	3.76	0.69
Environmental risk assessment	3.42	0.81
Customer demand	3.29	0.88
Overall readiness	3.84	0.67

The results indicate that institutional commitment to green lending is steadily increasing across Uzbekistan's commercial banking sector. At the same time, the findings identify several operational areas in which further capacity-building and market development could accelerate the broader implementation of green lending practices.

Survey participants were asked to identify the most important factors requiring additional attention to support the wider adoption of green lending.

As illustrated above, 71% of respondents identified technical expertise as the leading area for further development. This finding highlights the growing need for additional specialists who can assess environmental risks, evaluate the sustainability of investment projects, and determine project eligibility in accordance with established green finance principles. Expanding professional training and specialized expertise would therefore significantly strengthen banks' ability to develop and manage green loan portfolios.

Approximately 68% of respondents identified customer awareness as another important area for improvement. This result suggests considerable potential to increase demand for green financial products by providing enterprises with more information about available financing opportunities and the long-term economic benefits of investing in energy-efficient and environmentally sustainable technologies.

Furthermore, 64% of respondents emphasized the importance of introducing standardized environmental assessment procedures, which could improve consistency, transparency, and efficiency in green credit decision-making. In addition, 59% highlighted the need to expand the pipeline of bankable green investment projects. This presents an opportunity for closer cooperation among commercial banks, government institutions, international financial organizations, and private enterprises in preparing financially viable and environmentally beneficial projects.

Nearly half of the respondents also emphasized the value of clearer regulatory guidance. The development of comprehensive implementation guidelines could further support financial institutions, reduce uncertainty, and create a more favorable environment for integrating green lending into mainstream banking operations.

To identify the key determinants of institutional readiness and assess the contribution of these factors to the development of green lending, the following Ordinary Least Squares (OLS) regression model was estimated:

$$\mathbf{Readiness_i = \beta_0 + \beta_1 Awareness_i + \beta_2 Management_i + \beta_3 Training_i + \beta_4 RiskAssessment_i + \beta_5 Regulation_i + \varepsilon_i}$$

The regression results indicate statistically significant positive relationships between institutional readiness and four explanatory variables.

Table 3. OLS Regression Results

Variable	Coefficient	t-value	p-value
Staff awareness	0.284	4.63	0.000
Management support	0.311	5.18	0.000
Professional training	0.267	4.05	0.001
Environmental risk assessment	0.241	3.74	0.002
Regulatory support	0.198	2.96	0.004

Model Statistics:
$R^2 = 0.73$
Adjusted $R^2 = 0.71$
F-statistic = 39.84
$P < 0.001$

The model explains approximately 73% of the variation in institutional readiness, indicating strong explanatory power. Management support has the largest standardized coefficient, suggesting that the strategic commitment of senior management is the most influential determinant of the successful implementation of green lending. Staff awareness and professional training also significantly enhance institutional readiness, confirming that human capital remains a fundamental component of sustainable banking development.

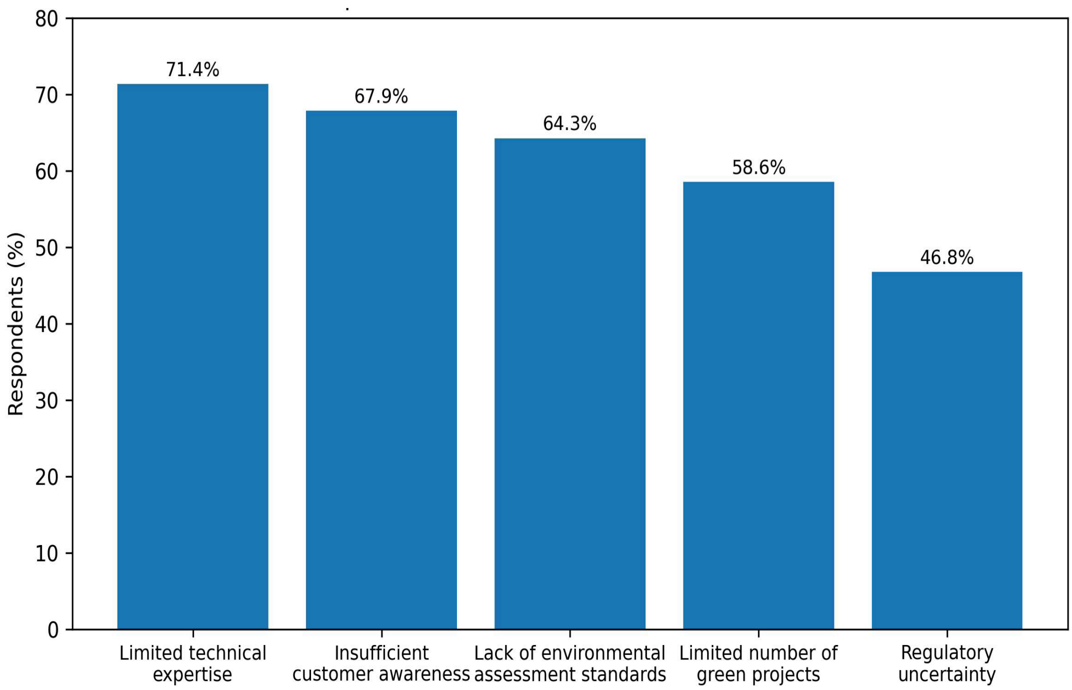

Figure 1. Major Constraints Affecting the Implementation of Green Lending in Uzbek Commercial Banks Based on Survey Results

Overall, the survey findings demonstrate that Uzbek commercial banks have established a strong and increasingly supportive institutional foundation for the development of green lending. The continued expansion of green credit portfolios can be further accelerated through greater investment in employee training, the introduction of standardized environmental risk assessment methodologies, stronger regulatory coordination, and wider public awareness of sustainable financial products. Together, these measures will enhance the effectiveness, accessibility, and long-term sustainability of green lending and strengthen the contribution of the banking sector to Uzbekistan's transition toward a green economy.

Conclusion and suggestions

This study assessed the readiness of Uzbek commercial banks to implement green lending practices and examined the key institutional and operational factors influencing their further development through a survey-based approach. The findings demonstrate that Uzbekistan's banking sector has made substantial progress in integrating sustainable finance principles into its activities. This progress has been reinforced by government reforms, the Green Economy Transition Strategy for 2019–2030, and financial and technical support from international development institutions, including the European Bank for Reconstruction and Development (EBRD), the World Bank, the International Finance Corporation (IFC), and the Asian Development Bank (ADB). These initiatives have created a favourable foundation for commercial banks to introduce green financial products, strengthen their institutional capacity, and expand financing for renewable energy, energy efficiency, and environmentally sustainable investment projects. The continued development of these initiatives is expected to further enhance the contribution of the banking sector to Uzbekistan's transition toward a green and resilient economy.

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