Improving the Efficiency of Banks' Green Financing in Uzbekistan and Kazakhstan

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Introduction

Climate change and the global shift toward low-carbon development are forcing banking sectors to rethink how capital is allocated. For emerging economies like Uzbekistan and Kazakhstan, efficient green financing is becoming a strategic requirement: both countries aim for carbon neutrality by 2060, both face outdated energy infrastructure, and both need private capital to modernize their economies.

Commercial banks sit at the center of this transition. However, their green lending remains limited due to weak project pipelines, insufficient ESG integration, low awareness, and limited regulatory incentives.

This thesis examines how commercial banks in Uzbekistan and Kazakhstan can improve the efficiency of green financing, drawing from theoretical concepts and successful practices abroad.

Theoretical Foundations of Efficient Green Financing

Green Finance Framework often refer to systematic approaches or taxonomies that define what activities qualify as "green" or sustainable. A well-known example is the EU Sustainable Finance Taxonomy, a science-based classification system identifying sustainable economic activities, which has become a template for other countries. "The importance of a clear framework is underscored in emerging markets literature: having a taxonomy and standards prevents "greenwashing" (mislabeling of activities as green) and guides capital to genuine climate solutions"[1]. Both Kazakhstan and Uzbekistan have recognized this; "Kazakhstan adopted a national green taxonomy in 2021 (developed by the AIFC Green Finance Centre) aligning with international norms"[2], and "Uzbekistan approved its own green taxonomy in October 2023"[3]. These frameworks theoretically improve efficiency by reducing information asymmetry – banks and investors can more easily identify eligible green projects and measure impacts, thus channeling funds more confidently to sustainable uses.

Green finance refers to financial products aimed at reducing environmental harm or generating environmental benefits. Efficiency in green finance requires:

- clear definitions (taxonomies),
- transparent reporting,
- alignment with national climate goals.

Both Uzbekistan and Kazakhstan recently introduced green finance taxonomies, but practical adoption in banks is still low.

ESG Integration in Banking. A significant body of research examines how banks integrate ESG factors into their governance, strategy, and risk management. ESG integration means that environmental and social risks/opportunities are considered alongside financial metrics in lending and investment decisions. For banks, one critical aspect is the adaptation of credit risk management to account for climate-related risks. Climate change introduces two main types of risks for banks' loan portfolios: physical risks (e.g. damage from extreme weather affecting borrowers) and transition risks (financial losses as carbon-intensive industries face policy changes, carbon pricing, or

[1] blogs.worldbank.org.
[2] aifc.kz
[3] documents1.worldbank.org

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technological disruption). If unmitigated, these risks can impair asset quality and increase default rates in banks, threatening financial stability.

Regulators and international bodies have increasingly provided guidance on this front. The Network for Greening the Financial System (NGFS) – a consortium of central banks and supervisors – has developed scenarios and guidelines for climate stress testing of financial institutions. In practice, many leading banks now conduct climate scenario analysis to gauge how their loan portfolios would perform under, say, a rapid decarbonization scenario versus a business-as-usual scenario. The European Central Bank (ECB) in 2022 ran a pioneering climate risk stress test for major eurozone banks, which, while largely qualitative, revealed that about 60% of banks had not yet integrated climate risk into their credit models and that losses under extreme climate scenarios could be significant, prompting supervisory follow-up. "The literature suggests that pricing climate risk appropriately (for instance, charging higher interest or requiring more collateral for loans to carbon-intensive projects) is a key mechanism for banks to drive an orderly transition"[4]. However, banks historically have struggled with limited data and methodologies to quantify these novel risks.

Integrating ESG also aligns with risk management beyond climate. Social risks (like labor issues or community opposition to projects) and governance issues (like corruption) can affect borrowers' creditworthiness. Studies have shown banks that proactively manage ESG risks tend to face fewer non-performing loans in the long run, indicating a positive link between sustainability and credit quality. Thus, from a theoretical standpoint, efficient green financing is facilitated when banks embed ESG considerations into their risk frameworks – they can better identify opportunities (e.g. financing a profitable wind farm) and avoid pitfalls (e.g. exposure to a stranded coal asset). The Central Bank of Uzbekistan (CBU) appears to be moving in this direction: it has developed a Sustainable Finance Strategy (as of 2023) which "includes actions to regulate climate change and ESG risks," and will "require banks to integrate climate risks and sustainability into their credit risk management framework"[5]. This illustrates how regulatory expectations are pushing theoretical concepts into practice. "In Kazakhstan, the Agency for Regulation and Development of Financial Market (ARDFM) has similarly issued Guidelines for Environmental and Social Risk Management (ESRM) for banks and is developing tools for banks to calculate the carbon footprint of their loan portfolios"[6]. These steps in both countries reflect global trends in credit risk adaptation to incorporate ESG factors.

In this chapter, green financing by commercial banks in Uzbekistan and Kazakhstan is reviewed through the lens of the earlier theoretical framework. Both states are post-Soviet, resource-dependent economies with strong government roles in the financial sector, yet their green finance trajectories differ in speed, depth and institutional design. The subsections below outline the main developments and constraints in each country, followed by a short comparative view.

Current situation of Uzbekistan's green finance market is still at an early stage but has moved forward quickly in some segments. The most visible progress so far has come from the sovereign and quasi-sovereign level. The government has issued a sustainability (SDG) bond and later a sovereign green bond, becoming a first mover in Central Asia in this area. One of the largest state-owned banks, Uzpromstroybank (SQB), has also placed a corporate green bond. These operations required the adoption of a sovereign green bond framework aligned with international standards and encouraged the securities regulator to develop technical rules for corporate green bonds. Multilateral institutions

[4] blogs.worldbank.orgblogs.worldbank.org
[5] documents1.worldbank.org
[6] aifc.kzaifc.kz

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such as AIIB and other MDBs have supported these issuances and invested in them, helping to shape market practices.

The banking sector, however, is still dominated by large state banks that historically implemented government lending programs and accounted for the bulk of sector assets. A medium-term reform agenda aims to privatize several of these institutions, improve governance and attract foreign investors. This process is directly relevant for green finance, since it tends to bring higher ESG expectations and pressure for stronger risk management. SQB and Ipoteka Bank, for example, have undergone advisory programs with IFIs, introducing green banking elements and new products, including energy-efficiency lending.

On the retail and SME side, a number of banks have started offering "green" consumer loans, mainly for small-scale renewable energy and energy-saving technologies such as rooftop solar and solar water heaters. Demand is supported by rising energy prices and concerns about supply reliability, especially in winter. Some of these products are backed by concessional credit lines from IFIs or by interest subsidies under government programs. This shows that banks are beginning to see green finance as a commercial opportunity in specific niches, even if volumes remain modest relative to their total loan books.

Institutionally, the Central Bank of Uzbekistan (CBU) has only recently begun to embed sustainability in financial sector oversight. A sustainable finance roadmap/strategy has been prepared, which envisages the gradual integration of climate and ESG aspects into banking supervision and the introduction of climate-related risk management and reporting requirements. Green finance is also referenced in the country's Green Economy Strategy and coordinated through a national body on green economy. Various initiatives with UNDP and other partners focus on knowledge sharing and coordination, though they are more informational platforms than direct funding mechanisms.

Kazakhstan (Current situation): Kazakhstan has gone somewhat further than Uzbekistan in formalizing a green finance framework and integrating sustainability into financial regulation, although actual green lending remains limited. The country positions itself as a regional financial hub through the Astana International Financial Centre (AIFC) and has set a long-term carbon-neutrality objective.

A central pillar of its progress is the National Green Taxonomy, introduced in 2021 and developed under the AIFC Green Finance Centre. The taxonomy is embedded in financial legislation and underpins definitions of green instruments, including requirements for external reviews of green bonds. This has enabled a growing market for sustainable bonds, with more than twenty green, social and sustainability bond issues by sovereign-linked entities, corporates and a few financial institutions, amounting to over one billion US dollars. Examples include a local-currency green bond issued by the Development Bank of Kazakhstan and a sustainability bond by Bank CenterCredit. In parallel, some banks and development institutions have extended dedicated green loans for renewable energy projects.

On the regulatory side, the Agency for Regulation and Development of the Financial Market (ARDFM) has adopted a roadmap for introducing ESG principles into financial markets. This includes mandatory ESG-related disclosure in annual reports, guidance on environmental and social risk management and methods for calculating financed emissions. Stock exchanges (KASE and AIX) have also promoted ESG reporting for listed companies. These steps create a top-down push for transparency and are intended to embed ESG considerations in banks' internal processes.

However, the direct contribution of commercial banks to green investment remains small. AIFC analyses indicate that banks account for only a low single-digit share of total fixed investment, with much of the green investment funded by the public sector, development banks or foreign investors. When development institutions are excluded, green loans represent only a little over one percent of total bank loan portfolios. Until recently, banks did not classify or report loans as "green"

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at all; this is just beginning to change as taxonomy-based reporting is rolled out. Major banks such as Halyk have started to disclose limited green loan figures and to offer products like green mortgages and electric vehicle loans, often with support from state programs or IFI credit lines.

Kazakh banks are also exposed to external ESG pressure. Membership in international networks (SBFN, NGFS) and listing of securities on foreign exchanges mean that regulators and investors increasingly expect banks to address climate and ESG issues. Regional development banks and international institutions have begun to sign up to global principles for responsible banking, setting examples for local players.

In sum, Kazakhstan has created a relatively sophisticated formal architecture for sustainable finance compared to its neighbours, and has initiated several important deals and regulatory reforms. Nevertheless, green finance still occupies a marginal place in banks' balance sheets. To move from frameworks to meaningful scale, banks must deepen ESG integration, regulators must support practical implementation and data quality, and public institutions must be leveraged to crowd in rather than crowd out private green capital.

Recommendations for Uzbekistan and Kazakhstan. *Strengthen Regulatory and Policy Frameworks:* make ESG reporting mandatory in Uzbekistan (as Kazakhstan already did), fully operationalize taxonomies in both countries and recognize "green loans" as a legal category. *Create Incentives for Banks:* introduce refinancing facilities for green loans (similar to China), provide partial credit guarantees for SME sustainability projects and offer temporary interest subsidies for solar energy, green housing, EV loans. *Improve Institutional Capacity:* train credit officers on green project risk assessment, develop standardized green loan appraisal tools and build environmental risk units inside banks.

Conclusion

Efficient green financing in Uzbekistan and Kazakhstan requires not only political will but also:

- standardized frameworks,
- integrated ESG risk management,
- targeted financial incentives,
- strong institutional capacity,
- and a steady pipeline of bankable projects.

By adopting lessons from Europe, China, and Southeast Asia, both countries can accelerate green lending, reduce transition risks, and align their banking sectors with long-term sustainability goals.

Commercial banks—once equipped with proper tools, regulations, and incentives—can become central drivers of the region's green transformation.

Sources:

- OECD (2023). Financing Uzbekistan's Green Transition – analysis of capital market development and green bond potentialoecd.orgoecd.org.
- IFC (2021). Uzbekistan, Ready for a Green Future – story on bank transformation and green lending with IFC supportifc.orgifc.org.
- AIFC Green Finance Centre (2023). Green Finance Market in Kazakhstan – market report detailing green loans share and regulatory measuresaifc.kzaifc.kz.
- The Astana Times (2024). Why Sustainable Finance is Vital for Central Asia's Growth – highlights of green finance progress in Kazakhstan and Uzbekistanastanatimes.comastanatimes.com.

ISSN 2277-3630 (online), Published by International journal of Social Sciences & Interdisciplinary Research., under Volume: 15 Issue: 04 in April-2026
https://www.gejournal.net/index.php/IJSSIR

- World Bank (2024). Banking the Transition in Kazakhstan (blog) – recommendations on climate risk management and green taxonomy impactblogs.worldbank.orgblogs.worldbank.org.
- AIFC (2024). State of Sustainable Finance in Central Asia – overview of ESG integration, taxonomies, and regulatory roadmaps in CAaifc.kzaifc.kz.
- Green Central Banking (2025). China's Green Financial Regulation – details on PBoC's five pillars, incentives, and green loan statisticsgreencentralbanking.comgreencentralbanking.com.
- Green Finance Platform / news sources – information on Bangladesh's green finance policy and outcomesvdb-loi.comswitch-asia.eu.

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