



**EMBEDDING ESG INTO CORPORATE LENDING DECISIONS VIA
ESMS: EVIDENCE FROM UZBEK COMMERCIAL BANKS**

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ABSTRACT	KEY WORDS
<p>This study examines how Environmental, Social, and Governance (ESG) considerations can be embedded into corporate lending decisions through an Environmental and Social Management System (ESMS), drawing evidence from Uzbek commercial banks. The paper proposes an implementation logic in which ESG screening becomes a formal component of credit risk governance and complements traditional financial assessment. Empirical results indicate that ESMS was introduced in cooperation with ERM GmbH and the EBRD and institutionalized mandatory ESG screening for all new corporate loan applications above 10 billion UZS by the end of Q3 2024. The same evidence shows that seven projects potentially harmful to the environment were rejected and that ecological risks in the loan portfolio declined by 11%. The findings support the view that ESG integration is not merely reputational, but operationally actionable and measurable when embedded into credit decision workflows.</p>	<p>ESG, ESMS, sustainable finance, corporate lending, credit risk, emerging markets, Uzbekistan.</p>

Introduction

The global banking agenda increasingly treats sustainability considerations as part of core governance rather than as an optional add-on. In parallel with digital transformation and model-based risk management, ESG approaches are being incorporated into banks' management perimeter, including risk systems and decision procedures. [3,5] For emerging markets, the practical challenge is methodological: it is often unclear how to translate ESG concepts into concrete credit decisions while maintaining transparency and auditability. [6,7] This paper addresses that challenge by focusing on ESMS as an institutional mechanism that embeds ESG into corporate lending. The aim is to explain the operational role of ESMS and summarize measurable effects for Uzbek commercial banks, emphasizing (i) decision-level screening coverage, (ii) exclusion outcomes (rejected projects), and (iii) portfolio-level risk implications.

Literature Review

Sustainable finance research frames ESG factors as economically material because environmental and social risks can translate into cash-flow volatility, regulatory exposure, and operational disruptions, ultimately affecting default risk and recovery rates.[1,2] ESG integration is explicitly interpreted as an extension of the traditional credit risk concept, incorporating environmental, social, and governance parameters into borrower assessment and enabling preventive evaluation of non-credit risks. This position implies that ESG is not a separate “ethical” layer but a risk-relevant information set that can reshape portfolio quality through more diversified and sustainable lending. A second stream concerns governance and implementation. International discussions increasingly link ESG integration to risk-management modernization, where analytics and structured procedures help maintain consistency across credit decisions. Contemporary research agendas (including major international organizations and research centers) emphasize integrating advanced analytics and ESG indicators into risk management and innovation governance. In practice, ESMS provides the procedural infrastructure for such integration by standardizing screening rules, documentation, and monitoring.[3,4,5]

Despite these developments, the literature frequently remains either conceptual (why ESG matters) or macro-institutional (how regulation evolves), while fewer studies provide implementation-linked evidence in emerging banking systems. The evidence used here contributes by reporting measurable outcomes from real adoption of ESMS-linked ESG screening in Uzbek commercial banks.

Methods

ESMS adoption and its outcomes are treated as an institutional change in credit governance. The empirical inputs include reported screening coverage, exclusion decisions, and portfolio-level ecological risk change for the period up to the end of Q3 2024. ESG embedding is interpreted as the point at which ESG assessment becomes a binding step in the lending workflow. This is operationalized through a threshold-based rule: corporate applications at or above 10 billion UZS undergo mandatory ESG screening. Outcomes are evaluated through process and portfolio indicators (screening coverage, rejected projects, ecological risk change), which allows assessment of whether ESG screening materially alters financing decisions and risk exposure.

Results

ESMS (Environmental & Social Management System) was introduced jointly with ERM GmbH and the EBRD and included ESG assessment of corporate clients. By the end of Q3 2024, 100% of new corporate loan applications above 10 billion UZS were subject to mandatory ESG screening. This indicates that ESG evaluation was not applied selectively, but institutionalized as a systematic filter within corporate lending decisions at the defined exposure threshold. The same evidence indicates that financing was denied to seven projects considered potentially harmful to the environment, and ecological risks in the loan portfolio declined by 11%.

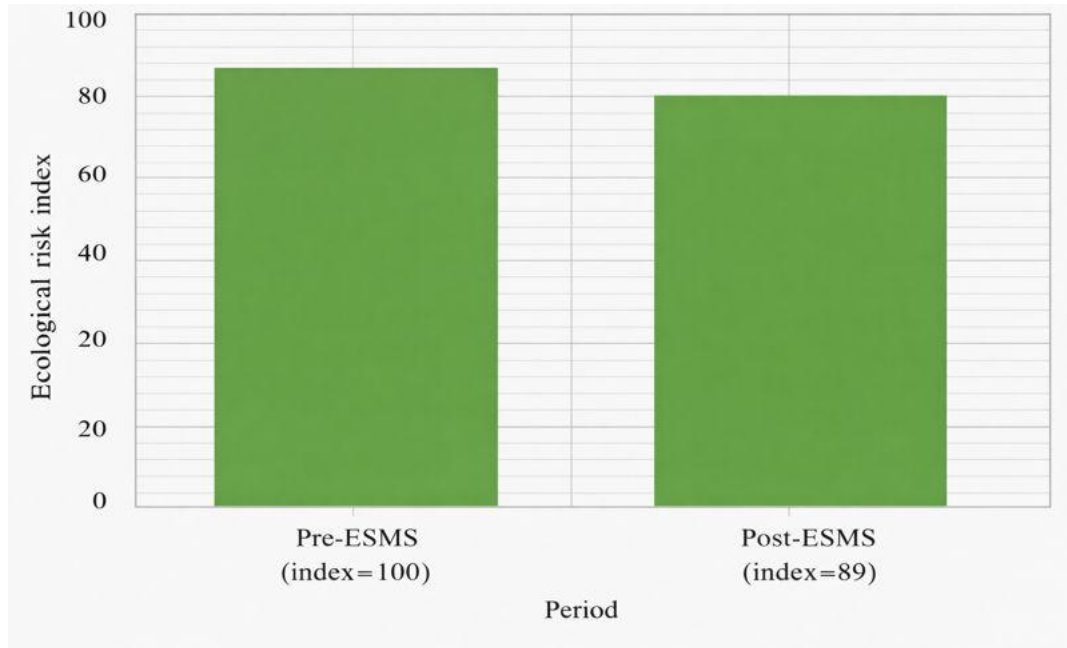


Figure 1 provides an index-based illustration of the reported reduction.

Table 1. ESMS-enabled ESG screening outcomes.

Indicator	Reported outcome (up to end of Q3 2024)
ESG screening tool	ESMS with ESG assessment
Implementation partners	ERM GmbH; EBRD
Screening rule	Mandatory for new corporate applications ≥ 10 bln UZS
Coverage	100% of eligible applications screened
Exclusion outcome	7 projects rejected
Portfolio outcome	Ecological risks reduced by 11%

Beyond front-end screening, the introduction of a digital monitoring platform for sustainable finance projects to improve transparency and facilitate interactions with international partners. The reported outcomes include mobilizing USD 47.98 million via international credit lines, increasing reporting transparency by 70%, and reducing administrative costs of green loans by 15%. While this component extends beyond the immediate credit approval stage, it is consistent with the ESMS logic because it strengthens post-disbursement ESG information quality and accountability.

Table 2. Digital monitoring of sustainable finance projects

Indicator	Reported outcome
Funding mobilized via international credit lines	USD 47.98 MЛH
Reporting transparency	+70%
Administrative costs of green lending	-15%

Discussion

The evidence supports three substantive interpretations. First, the ESMS case demonstrates that ESG integration can be operationalized in a measurable manner when it is embedded into the credit decision workflow as a binding screening rule. The 100% screening coverage at a defined threshold suggests

that ESG assessment became part of governance rather than an ad hoc practice. Second, the rejection of seven projects indicates that ESG screening can change credit outcomes, thereby altering the composition of financed projects and plausibly reducing exposure to environmental risk. Third, the reported 11% decline in ecological risk at the portfolio level is consistent that ESG integration expands the risk lens and improves portfolio quality by incorporating non-financial risk parameters into credit risk logic. At the same time, the results are KPI-based and reported at an aggregated level. Stronger causal interpretation would require granular loan-level data and counterfactual comparisons (e.g., phased rollout or matched portfolio segments). The reported indicators already provide a policy-relevant signal: ESMS-enabled ESG screening can be implemented at scale and associated with both decision-level exclusions and portfolio risk improvements.

A further implication of the ESMS-based approach is that it strengthens the internal “line of defense” architecture by making ESG screening an explicit, documented control point in the credit workflow. [6][7] When ESG assessment is standardized and tied to defined thresholds (e.g., mandatory screening for applications ≥ 10 bln UZS), it reduces discretion and helps ensure comparability of decisions across branches and credit committees, which is critical for auditability and for managing reputational and regulatory exposure in sustainable finance. [3][5] In this sense, ESMS functions not only as a sustainability tool but also as a governance mechanism that improves the transparency of risk acceptance and the traceability of why specific projects are financed or excluded. [9]

In addition, ESMS implementation can be interpreted as a step toward aligning portfolio strategy with longer-term transition risks and international funding expectations. [5] The documented rejection of environmentally harmful projects suggests that ESG screening affects the selection margin of financed activities and may gradually shift the credit portfolio toward lower environmental risk exposure, consistent with the reported 11% decline in ecological risk. However, the transmission mechanism from screening decisions to portfolio outcomes warrants deeper empirical validation, including monitoring of post-disbursement ESG performance, risk migration across stages, and whether excluded projects would have generated higher default losses under adverse scenarios. [8] Future work could therefore extend the evaluation from “coverage and exclusions” to dynamic portfolio tracking, incorporating ESG scoring trajectories and linking them to conventional credit risk metrics such as PD/LGD movements. [6][7]

Conclusion

This paper shows how ESG can be embedded into corporate lending decisions through ESMS in Uzbek commercial banks, using thesis-based evidence up to the end of Q3 2024. ESMS implementation in cooperation with ERM GmbH and the EBRD institutionalized mandatory ESG screening for all new corporate applications above 10 billion UZS, led to the rejection of seven environmentally harmful projects, and corresponded to an 11% reduction of ecological risks in the loan portfolio. Complementary digital monitoring of sustainable finance projects strengthened transparency and supported mobilization of international funding. Overall, the findings support ESMS as a practical governance instrument that transforms ESG from a declarative principle into a measurable component of credit risk management.

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