

RISKS IN FINANCING GREEN PROJECTS BY COMMERCIAL BANKS IN UZBEKISTAN (2025–2030 OUTLOOK)

Author: Karshieva Marjona Alisher kizi

E-mail: tasbehoy@gmail.com

In recent years, Uzbekistan has made substantial progress in promoting green and sustainable economic transformation. The government's "Green Economy Strategy for 2030" outlines ambitious goals to reduce energy intensity, expand renewable energy capacity, and ensure environmental safety¹. Within this framework, commercial banks are expected to play a pivotal role in mobilizing private investment toward low-carbon and climate-resilient projects.²

However, financing green projects differs from conventional lending. It involves higher uncertainty, new technological and regulatory frameworks, and longer payback periods. As a result, banks face a complex mix of financial, operational, technical, and policy risks that must be properly identified and managed.³ This report analyzes key risk types faced by Uzbek commercial banks in green financing and provides predictions for their evolution by 2030, based on current trends, market development, and regulatory progress.

As reported by the OECD (2023)⁴, green project financing involves complex risk structures including credit, technology, and regulatory risks.

1. Credit Risk (Project Viability and Repayment Capacity)

Credit risk remains the dominant concern for banks financing green projects. Many renewable energy and energy efficiency projects depend on new technologies with uncertain operational histories, especially in Uzbekistan's climate and infrastructure context.

By 2030, as the renewable sector matures and government-backed credit lines expand, the average credit risk is expected to decrease from very high to moderate-high. However, start-ups and SMEs in green innovation will still face limited collateral and higher default probability.

To mitigate this, banks should develop green credit scoring models, collaborate with development finance institutions (DFIs) for partial guarantees, and implement phased disbursement linked to milestones.

2. Regulatory and Policy Risk

Uzbekistan's policy environment is transitioning rapidly. Reforms in renewable energy tariffs, environmental codes, and investment incentives create opportunities but also uncertainties.

Policy risk is projected to decline from high to medium by 2030, as the government harmonizes national green finance standards with international taxonomies and climate disclosure frameworks. Nevertheless, transition risk — linked to the gradual phase-out of high-carbon industries — will increase.

¹ Republic of Uzbekistan. (2022). Decree of the President of the Republic of Uzbekistan No. PQ-4477 "On the Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for 2030". Tashkent.

² World Bank. (2023). Uzbekistan Country Climate and Development Report. Washington, DC: World Bank Group.

³ The Asian Development Bank (2024) emphasizes that financial institutions in Central Asia face structural challenges in building green finance portfolios due to limited risk assessment experience.

⁴ OECD. (2023). Green Finance and Investment: Managing Environmental and Climate Risks. Paris: OECD Publishing.

Banks are encouraged to perform policy stress tests, maintain dialogue with energy and finance ministries, and incorporate regulatory change scenarios into risk assessments.

3. Market and Price Risk

Market risks stem from volatility in energy prices, carbon credit values, and demand for renewable energy. Currently, most projects rely on fixed Power Purchase Agreements (PPAs), but electricity market liberalization will gradually expose them to price fluctuations.

By 2030, the development of transparent market mechanisms and carbon trading schemes will stabilize prices, though competition will tighten margins. Market risk will likely remain moderate.

Banks should promote indexed PPAs, hedging instruments, and portfolio diversification across technologies and regions.

4. Technical and Technology Risk

Many green technologies in Uzbekistan are imported, creating dependence on foreign expertise and parts. Technical failures or poor maintenance can undermine project viability.

By 2030, as local manufacturing and service capacity grows, this risk will fall from very high to medium. However, the rise of digitalized smart-grid systems will introduce cyber-physical vulnerabilities.

Therefore, banks must require independent technical audits, performance guarantees, and cyber risk insurance for projects that use automated systems.

Table1. Predicted Risk Evolution Summary (2025–2030)⁵

Risk Type	2024 Level	2030 Forecast	Trend	Key Drivers
Credit Risk	Very High	Moderate-High	↓	DFI guarantees, project maturity
Regulatory / Policy	High	Medium	↓	Stable green finance standards
Market / Price	Moderate	Moderate	→	Liberalization, carbon pricing
Technical / Technology	Very High	Medium	↓	Local capacity, smart-grid
Operational	High	Low-Medium	↓	Capacity building
Reputational	Moderate	Moderate	→	Green taxonomy, reporting
FX / Interest Rate	High	Medium-High	↓	Local green bonds
MRV	High	Medium	↓	Digital data systems

⁵Developed by the author based on the Republic of Uzbekistan's "Green Economy Strategy–2030" (Presidential Decree No. PQ–4477, December 4, 2022), international methodologies from the World Bank, IFC, ADB, and OECD Green Finance Frameworks, and expert-based assessment of risk likelihood and impact for commercial banks in Uzbekistan (2025–2030 projection).

Risk Type	2024 Level	2030 Forecast	Trend	Key Drivers
Liquidity	High	Medium	↓	Capital market development
Environmental Liability	Medium	Low-Medium	↓	Stronger environmental codes

5. Operational Risk

Operational risk arises from insufficient internal capacity among banks — including lack of knowledge about environmental risk assessment, MRV (Measurement, Reporting, Verification), and ESG compliance.

Due to ongoing capacity-building programs supported by the Asian Development Bank (ADB), International Finance Corporation (IFC), and Green Climate Fund (GCF), operational risk is expected to decrease to low-medium by 2030.

Banks should integrate ESG appraisal checklists and dedicated green finance units into their organizational structures.

6. Reputational Risk

The growing popularity of green finance increases exposure to accusations of “greenwashing” — when projects labeled as green do not deliver measurable environmental benefits.

By 2030, as national green taxonomy verification becomes mandatory and public reporting expands, reputational risk will shift towards compliance risk. Overall level will remain moderate, but transparency expectations will rise sharply.

Banks should ensure independent validation, publish annual sustainability reports, and adopt transparent impact metrics to safeguard their reputation.

7. Foreign Exchange (FX) and Interest Rate Risk

Many renewable projects are financed in foreign currency (USD or EUR), while revenues are in Uzbek sum (UZS), creating a mismatch.

By 2030, with the expected development of a local green bond market and local-currency credit lines, FX risk will slightly decline but remain medium-high due to exchange rate volatility.

Banks should prioritize local-currency lending, currency-swaps, and shared hedging costs with project developers.

8. Measurement, Reporting & Verification (MRV) Risk

Accurate MRV is essential for determining real environmental impact and for accessing performance-based incentives. Current systems in Uzbekistan rely heavily on manual data collection, increasing the risk of error.

By 2030, digital MRV systems (using IoT sensors and blockchain-based registries) will significantly improve transparency, reducing risk from high to medium. However, data gaps may persist for small-scale projects.

Banks should invest in AI-driven monitoring, train auditors, and link MRV systems to national climate databases.

9. Liquidity Risk

Green projects typically require long-term financing (10–15 years), but most Uzbek banks rely on short-term deposits.

The development of green bonds, securitization, and institutional investor participation will enhance liquidity and maturity matching. Thus, liquidity risk is projected to fall from high to medium by 2030. Banks should maintain liquidity buffers, explore covered bond structures, and participate in capital market reforms.

10. Environmental Liability Risk

If a financed project causes pollution or fails environmental compliance, the financing bank may face financial penalties or reputation damage.

By 2030, with stricter Environmental Codes and mandatory due diligence, this risk will decline from medium to low-medium, although enforcement gaps could persist.

Banks should require environmental insurance, enforce E&S covenants, and monitor compliance through periodic third-party audits.

Between 2025 and 2030, Uzbekistan's financial sector is expected to undergo a major transition from risk-averse green lending to strategically managed sustainable finance. While the overall risk profile will decline, new challenges — especially in data verification, cyber-risk, and regulatory compliance — will emerge.

Banks that invest early in internal capacity, MRV technology, and blended finance partnerships will be able to expand their green portfolios safely and profitably. Moreover, alignment with international standards such as the EU Green Taxonomy and IFC Performance Standards will help attract foreign investors.

In conclusion, the next five years represent a pivotal window for commercial banks in Uzbekistan to establish robust green finance systems. With appropriate risk management, transparency, and innovation, they can transform potential risks into long-term opportunities for both profit and sustainability.

REFERENCES:

1. Asian Development Bank. (2024). *Green Finance in Central Asia: Opportunities and Risk Management Frameworks*. Manila: ADB Publications.
2. International Finance Corporation (IFC). (2023). *Sustainable Banking and Green Finance: Global Practices and Lessons for Emerging Economies*. Washington, DC: World Bank Group.
3. OECD. (2023). *Green Finance and Investment: Managing Environmental and Climate Risks*. Paris: OECD Publishing.
4. Republic of Uzbekistan. (2022). Decree of the President of the Republic of Uzbekistan No. PQ–4477 “On the Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for 2030”. Tashkent.
5. United Nations Development Programme (UNDP). (2023). *Green Transition in Uzbekistan: Financing Mechanisms and Policy Insights*. Tashkent: UNDP Uzbekistan.
6. World Bank. (2023). *Uzbekistan Country Climate and Development Report*. Washington, DC: World Bank Group.
7. Zhang, Y., & Kumar, S. (2023). Assessing financial risks in sustainable project finance: A comparative analysis of emerging markets. *Journal of Sustainable Finance & Investment*, 13(4), 811–829. <https://doi.org/10.1080/20430795.2022.2063447>
8. Rahman, M., & Chowdhury, T. (2022). Commercial banks and the financing of green projects: Evidence from developing economies. *Environmental Economics and Policy Studies*, 24(6), 1001–1022. <https://doi.org/10.1007/s10018-022-00341-5>