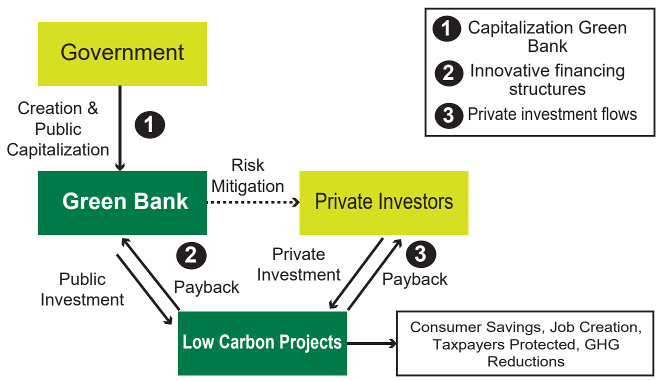
Green Banking in Pakistan

By: ICMA Research and Publications Department

Green banking refers to the integration of Environmental Sustainability into banking operations, products, and lending decisions, enabling financial institutions to reduce their carbon footprint while financing climate-friendly and resilient economic activities. As Pakistan ranks 15th on the Climate Change Performance Index (CCPI), with very high ratings in GHG emissions and energy use, but low performance in climate policy and very low penetration of renewable energy. The country stands at a critical juncture where climate finance has become central to its sustainable development and resilience agenda. Despite this urgency, Green Banking in Pakistan is in its evolutionary phase, with the debt market gradually internalizing environmental risks in bank financing. While the Equity Market continues to lag due to limited investor awareness and the absence of sustainability pricing in banking stocks. Given Pakistan's high vulnerability to climate-induced disasters and the mounting risks of poverty escalation and GDP losses, the expansion of green banking is now a strategic necessity rather than a discretionary policy choice.



GREEN BANK STRUCTURE

Tracing Pakistan's Transition from Traditional Banking to Green Banking Practices		
2013	Climate Change Vulnerability Recognized	Massive floods of 2010 highlighted Pakistan's climate vulnerability, emphasizing the need for sustainable business and banking practices with SECP issuing voluntary CSR guidelines.
2015	Initial Regulatory Alignment	SBP joined IFC's Sustainable Banking Network (SBN) to initiate ESG integration.
2016	Renewable Energy Financing Began	Launch of SBP's Renewable Energy Financing Scheme with **717** projects (**1,082 MW**) financed and subsidized lending for more renewable projects.
2017	Green Banking Framework Formalized	SBP issued Green Banking Guidelines covering environmental risk management, green business facilitation, and impact reduction.
2018	Early Bank-Level Green Adoption Initiated	JS Bank accredited by GCF with implementing solar-powered branches, energy-efficient infrastructure, ESG credit rating matrix, Smart Roshni and Ghar Apna Solar Financing, sponsored WWF Green Innovation Challenge and planted **20,000** trees.
2019	Building Regulatory & Industry Momentum	➢ SECP issued Green Bond Guidelines. ➢ SBP planted **73,417** trees. ➢ Khushhali Microfinance Bank planted **6,000** trees. ➢ Bank Alfalah developed Environment & Social Management System. ➢ Bank Islami launched 'One-Touch' Banking. ➢ Habib Bank introduced paperless credit card applications.
2021	Green Financing Instruments Introduced	➢ WAPDA issued **USD 500** million green Eurobond for dams. ➢ SECP provided green bond issuance framework.
2022	Capacity Building & ESG Integration	➢ SBP strengthened banks' ESG capacity through the ESRM manual, climate risk guidelines, training programs, and international partnerships. ➢ Task Force on Climate-related Financial Disclosures (TDCF) reporting in Pakistan remains largely voluntary, supported by capacity-building workshops & institutional engagement.
2023	Strategic Planning & Global Alignment	SBP refined guidelines, finalized draft of Green Taxonomy, aligned regulations with global standards, and announced its strategic plan "SBP Vision 2028."
2025	Sovereign & System-wide Green Banking Adoption	➢ SBP directed banks to adopt "Pakistan Green Taxonomy" and align policies with the national climate framework. ➢ First rupee-denominated green bond of **Rs. 1 billion** and inaugural Green Sukuk worth **Rs. 30 billion** issued. ➢ Sovereign sustainable finance framework launched with Citi/Deutsche Bank coordination rated "Excellent" by Sustainable Fitch. ➢ **79%** of banks adopted green policies and **69%** integrated E&S risk in lending.

Key ROI Components of Green Banking Practices

ROI Metric	Definition	Financial Impact
Return on Assets (ROA)	Net income as a percentage of total assets, reflecting profitability achieved through environmentally and socially responsible practices	Multi-year analyses suggest that adopting green practices, including energy-efficient operations and sustainable lending, positively impacts ROA by lowering risks, reducing costs, attracting customers and investors, and generating new green revenue streams.
Return on Equity (ROE)	Net income as a percentage of shareholders' equity, reflecting profitability achieved through sustainable and environmentally responsible practices, such as green lending and investments in renewable projects.	Green loans and practices improve ROE by lowering credit risk, reducing operational costs, enhancing reputation, providing access to concessional funding, and managing environmental risks, thereby strengthening asset quality and long-term profitability.
Green Tobin's Q	A ratio of a firm's market value to its asset replacement cost, reflecting how the market values its green initiatives.	Green banking adoption enhances Green Tobin's Q as green financing, risk-aware lending, and operational efficiency improvements enhance asset valuation and strengthen market-based returns for banks and firms.
Credit Risk / NPL Improvement	Non-performing Loan ratios relative to green loan portfolios.	Green financing linked to lower credit risk and reduced NPLs due to structured risk assessments and project viability filters, improving asset quality a component of ROI via risk cost reduction.
Risk-adjusted Profit Contribution	Profits after adjusting for environmental risk.	Green banking adoption enhances Risk-adjusted Profit Contribution, as loans and projects screened for climate and environmental risks deliver higher expected returns through reduced default probabilities and improved portfolio stability.

Current Adoption Status, Hopes and Hurdles

Green banking in Pakistan has evolved steadily over the past decade, guided by the Green Banking Guidelines issued by the State Bank of Pakistan, which provide a comprehensive framework for integrating environmental and social risk management into banking operations.

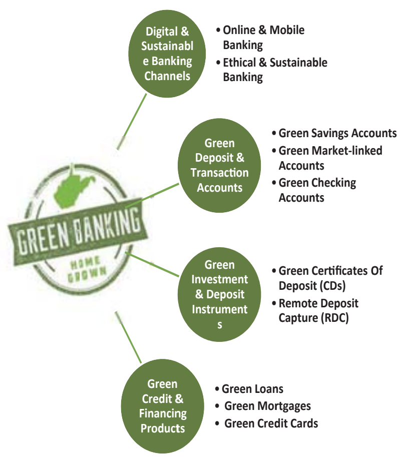
These guidelines require financial institutions to allocate funding to projects that improve carbon efficiency, adopt resource-saving technologies, and reduce environmental impacts, while promoting sustainable sectors such as renewable energy, clean transportation, and climate-resilient agriculture.

To implement these directives, the Environmental and Social Risk Management Manual offers standardized tools for risk classification, monitoring, and reporting, enabling banks to track their carbon footprint and assess the environmental impact of their lending portfolios. The introduction of the Pakistan Green Taxonomy last month further streamlines investment by defining eligible green activities, providing clarity for both local and foreign investors.

In 2024, practical outcomes include the disbursement of over Rs. 94 billion under the Renewable Energy Refinance Scheme, supporting more than 4,500 installations generating over 2,000 MW, and the issuance of Pakistan's first sovereign Green Sukuk, which raised over Rs. 31 billion to fund major hydropower projects across Balochistan, Sindh, and Gilgit-Baltistan.

These initiatives align with Pakistan's Third Nationally Determined Contribution (NDC 3.0) announced in September, which targets a 50% reduction in projected greenhouse gas emissions by 2035, including 17% unconditional and 33% conditional on international support, emphasizing cross-sectoral climate adaptation in the energy, water, agriculture, and health sectors. Despite these strides, significant challenges remain, including uneven institutional capacity, a shallow domestic green capital market, inconsistent enforcement of guidelines, and macroeconomic pressures such as inflation and currency volatility, which are increasing the cost of green financing.

Future Outlook and Way Forward for Pakistan's Green Banking



Pakistan's green banking is evolving from an emerging policy initiative into a strategic pillar of the financial system. With climate financing needs approaching USD 340 billion by 2030, integrating climate risk into lending, portfolio management, and capital allocation will be essential, and all local banks would be required to mainstream climate considerations in credit and investment decisions to support sustainable financial stability.

With recent milestones such as the sovereign Green Sukuk, expanding refinance facilities, and rising ESG recognition reflecting growing market confidence, Pakistan faces several strategic imperatives:

- **Climate Disclosure Standards:** Pakistan must mandate standardized, sector-wise disclosure of banks' domestic loan portfolios and financed emissions, aligned with IMF and PCAF methodologies. This enables accurate measurement of the Carbon Footprint of Bank Loans (CFBL), strengthens climate-risk supervision, and ensures transparent low-carbon credit allocation.
- **Green Finance Diversification:** Banks should expand green financial instruments beyond renewable energy into electric mobility, climate-smart agriculture, and resilient housing, with a focus on financing SMEs for green policy adaptation.

- **Transparency Through Green Taxonomy:** Implementing the Green Taxonomy and standardized disclosures will improve transparency, strengthen data integrity, and align Pakistan with global green finance benchmarks. Banks must institutionalize climate disclosures and strengthen risk analytics to enhance portfolio resilience and investor trust.
- **Digital Finance for Inclusion:** Digital Financial Services can enhance financial inclusion while reducing operational carbon footprints. Fintech solutions can expand access to green finance for underserved communities and regions.
- **Climate in Accounting and Audit:** Accounting, Audit, and Assurance functions should embed climate considerations into planning, execution, reporting, and governance oversight. Banks must provide mandatory role-specific training for auditors and monitor climate risk exposures, especially in carbon-intensive sectors such as textiles, cement, and construction.
- **Global Standards Alignment:** Banks and organizations must align governance, reporting, and operations with national and international climate goals, such as UN SDG 13: Climate Action, ISO 14001, IFRS S2, and GRI standards. Structured ESG assurance processes including carbon footprint verification, emissions validation, and climate-related disclosures ensure credibility and investor confidence.
- **Emerging Frameworks Integration:** Harmonizing with frameworks such as the ISSB and embedding TCFD recommendations strengthens transparency and facilitates decision-useful reporting. Banks can integrate TCFD-aligned reporting at Board and Executive levels to support sustainable investment and long-term value creation.
- **Long-term Green Financing:** Beyond 2030, banks must fully embed climate risk into strategic, operational, and investment frameworks. They are expected to finance low-carbon projects, support climate adaptation, mobilize private capital for sustainable development, and innovate financial products to build a resilient, net-zero-aligned economy in Pakistan.

Strategic S.W.O.T Overview of Green Banking in Pakistan

The following provides a brief overview of Green Banking in Pakistan using the S.W.O.T framework and does not represent a detailed analysis

STRENGTHS

- Promotes NDC targets, aligns with SDGs, enhances brand reputation among environmentally conscious stakeholders.
- Engagement with international organizations (IFC, World Bank, UNDP, COP) attracts foreign investment with building technical capacity of local banks.
- Potential to scale green lending and finance renewable energy, climate-smart agriculture, resilient housing, and SME adaptation projects, leveraging Pakistan's solar, wind, and hydro resources.
- Operational and financial advantages include reduced costs (paperless banking, solar-powered branches, energy efficiency), improved profitability, and strengthened risk management through ESG integration.

WEAKNESSES

- Underdeveloped domestic green capital market and limited investor awareness in equity markets.
- Green finance constitutes a small fraction of total lending, with exposure concentrated in climate-sensitive sectors.
- Inconsistent enforcement of green banking guidelines across local banks reduces uniform adoption, financial efficiency and effectiveness.
- Macroeconomic constraints, including inflation and currency volatility, increases the cost of green financing and limit its scope and scale.

S W SWOT O T

OPPORTUNITIES

- Strengthen transparency, ESG integration, and investor confidence by implementing standardized disclosures, climate risk reporting, and adherence to frameworks such as IFRS-S2, UN SDGs, and Pakistan Green Taxonomy promises smooth transition to net-zero-aligned economy of Pakistan.
- Scaling up climate finance to meet Pakistan's projected USD 340 billion demand by 2030 across renewable energy, climate-resilient infrastructure, climate-smart agriculture, and SME adaptation projects will create more green jobs.
- Enhancing operational resilience and institutional capacity by embedding ESG risk management, technical training, and capacity-building programs across the banking sector will increase the local banks technical skills.
- Establishing green banking as a strategic competitive advantage by creating a niche market and enhancing long-term climate risk management position Pakistan as strong regional player.

THREATS

- Policy uncertainty, inconsistent regulatory enforcement, political instability, and macro-financial pressures including interest rate hikes, fiscal deficits, and currency volatility undermining market confidence and increasing costs for green projects.
- Socio-economic, cultural, and regulatory barriers, limited public-private coordination, transition risks, and high compliance costs hindering the adoption and scaling of green banking practices.
- Weak investor confidence and risk of greenwashing in green bonds, sukuks, and other climate-linked financial products if ESG initiatives are implemented superficially or without measurable impact.
- High exposure to climate and environmental risks such as floods, heatwaves, glacial lake outbursts, and air pollution affecting borrowers, assets, and financial stability, compounded by rising non-performing loans in climate-sensitive sectors.