

Issues with Sustainable Finance in India

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Abstract

The strength of any modern economy is based on the soundness of its financial system. Sustainable finance refers to a school of thought that takes into consideration Environmental, Social and Governance (ESG) factors while making investments. Financial institutes play a major role in determining whether a country is pursuing sustainable economic development. The financial sector holds an immense amount of power and influence. Sustainable finance recognizes this and attempts to use it for the overall betterment of society. This study finds that sustainable corporations tend to provide higher return to investors. A study finds, is the companies put more efforts into ESG standards are more appealing to young professionals and can help companies engage with quality employees, enhance employee motivation and increase productivity overall. A study also finds that ESG companies tend to have a positive public image associated with them.

Keywords: Sustainable Finance, Environment, Social and Governance (ESG).

Introduction

Sustainable finance has emerged as an important concept in recent years, as concerns around climate change, inequality, and other systemic issues have grown. The basic premise of sustainable finance is that the financial system should account for environmental, social and governance (ESG) factors in its decision making and operations. This includes issues like climate change risks, natural resource scarcity, labor practices, diversity, and executive compensation. The goal is to better align the financial system with broader societal goals and values.

Table 1: Participation of Asian Financial Institutions in Global Initiatives

Name of the initiative	From Volz, 2018		As at end 2019	
	Global signatories	Asian Signatories	Global signatories	Asian Signatories
Principles for Responsible Investment	1,874	122	2,698	387 *
Equator Principles Financial Institutions	91	12	101	22 **
UNEP Statement of Commitment by Financial Institutions on Sustainable Development (2011)	214	38		
Sustainable Stock Exchanges	66	14 ***		

Notes: Asia includes Australia and New Zealand.

*: Includes 3 from India: SBI Funds Management Private Limited, Equicap Asia Management Private Limited and Indus Environmental Services Pvt. Ltd

**: Only IDFC from India.

***: Includes both Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) from India.

India faces a number of challenges in transitioning to a more sustainable financial system. As a developing economy with high growth ambitions, it continues to rely heavily on fossil fuel energy and extractive industries that strain the environment. Labor conditions in many industries remain poor. Corporate governance standards are uneven. At the same time, India has opportunities to channel its financial system toward more equitable and low-carbon growth. This paper examines some of the key issues India faces in implementing sustainable finance.

The Need for Sustainable Finance in India

There are several compelling reasons why India should embrace sustainable finance. First, environmental and social risks are material concerns for financial stability. Climate change, in particular, threatens to disrupt Indian agriculture, exacerbate water scarcity, raise sea levels, and cause other forms of economic damage (Mani et al., 2018). Managing these risks requires measuring and mitigating the carbon intensity of lending and investment portfolios.

Second, sustainable finance can unlock new opportunities. Renewable energy, eco-friendly infrastructure, and financial inclusion of marginalized communities offer potential for strong financial returns. Mainstreaming

sustainable investment approaches will help channel capital to these opportunities.

Third, investor and consumer interests are rapidly shifting. Surveys indicate that 87% of millennials consider a company's sustainability practices before deciding where to work (Cone Communications, 2021). If the Indian financial sector does not adapt, it risks losing access to capital and top talent.

Finally, sustainable finance aligns with India's development priorities around energy access, inequality reduction, and job creation. Finance that accounts for sustainability issues will better serve these long-term goals.

Key Challenges for Sustainable Finance in India

While the rationale for sustainable finance is strong, India faces a number of practical barriers to its adoption:

1. Lack of common standards and taxonomies. Unlike Europe, India does not yet have a common framework for evaluating the “sustainability” of assets and financial products. This makes it difficult to prevent “greenwashing” and channel capital toward credibly sustainable opportunities.
2. Limited disclosures from companies. Many Indian corporations provide limited ESG disclosures compared to global peers. This asymmetry of information constrains the ability of investors and lenders to assess sustainability risks and opportunities.
3. Dominance of public sector banks. Over two-thirds of Indian banking assets are with state-owned banks. These banks have limited autonomy to pursue

sustainability goals and inadequate risk management capacity.

4. Need for new financial products. Mainstreaming sustainable finance requires financial innovations like sustainability-linked loans, green bonds, and sustainability-focused investment funds. India's financial markets currently lack breadth and depth across these products.
5. Limited investor awareness and demand. Retail and institutional investors have limited awareness of sustainable finance options available globally. Without clear investor demand, banks and asset managers are slow to develop new offerings.
6. Regulatory gaps. Financial regulators like RBI and SEBI have made some initial steps to promote sustainable finance. However, significant gaps remain around climate risk disclosure, stewardship codes, and sustainability reporting.
7. Informality of small business finance. Much lending to small businesses in India remains informal. Sustainable finance principles around environmental and social risk management are difficult to impose on informal lenders.

Overcoming these barriers will require coordinated efforts across regulators, financial institutions, companies, and investors. The costs of inaction are high. Without progress, India may face capital flight, macroeconomic instability, stranded assets, and worsening inequality.

Policy Options to Promote Sustainable Finance

To promote sustainable finance, Indian policymakers have several options:

- Mandating climate risk disclosure for large companies and banks, in line with recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). This would make risks more transparent.
- Developing sustainability reporting standards for large corporates. This would encourage more rigorous ESG data collection and disclosure.
- Introducing stewardship codes for institutional investors. This would turn investors into drivers of

better ESG performance in their portfolio companies (Halder and Rao, 2021).

- Creating a green taxonomy to define climate-friendly economic activities. This would prevent greenwashing and clarify the universe of green investment options. Offering incentives like priority sector lending tags and lower capital requirements for green financial products. This would stimulate innovation and growth for these markets.
- Imposing mandatory ESG risk analysis in credit appraisal processes at banks and NBFCs. This would force internalization of ESG risks.
- Conducting awareness campaigns on sustainable finance for investors, companies and consumers. This would stimulate market demand.
- Providing capacity development for regulators, banks and investors on sustainability issues. This would build expertise across the system.
- A coordinated policy approach across these options can help mobilize India's financial system for sustainable development. Given India's climate vulnerability and social development needs, this must be seen as an urgent priority.

The Role of India's Banking Sector

India's banking sector has a crucial role to play in scaling sustainable finance. Banks are the largest financial intermediaries and their lending and investment choices shape corporate behavior and development pathways. However, public sector banks face particular challenges on sustainability:

- As arms of the government, they have limited autonomy to set sustainability policies and targets.
- Their poor accounting of ESG risks has led to balance sheet vulnerabilities, as with stranded coal assets. As of March 2022, gross non-performing assets at public sector banks linked to stressed coal assets stood at over \$12 billion (Chatterjee et al., 2022).
- They lack staff expertise and training on measuring climate and social risks.
- As public institutions, they face pressures to maintain

employment levels and lend to vulnerable sectors like agriculture, regardless of sustainability.

- They have large branch networks dependent on paper-intensive processes, raising their environmental footprint.
- To harness banks' potential, the government can take several steps:
- Grant greater autonomy to banks to pursue sustainability targets, linked to overall national goals.
- Phase in mandatory TCFD-aligned climate risk disclosures for banks from 2025. Create dedicated sustainable finance teams at banks to build internal expertise.

- Set up an online ESG risk database for banks to access third party due diligence reports.
- Offer banks financial incentives to issue sustainability-linked loans and green bonds.
- Fund special credit facilities at subsidized rates for banks to lend to green MSMEs.
- Support digitalization of bank processes to reduce paper usage and emissions.
- Over time, RBI should also consider incorporating sustainability into its regulatory framework through measures like differential capital buffers based on climate risks.

Table 2: Bank Credit Outstanding to the Non-conventional Energy as on March, 2020

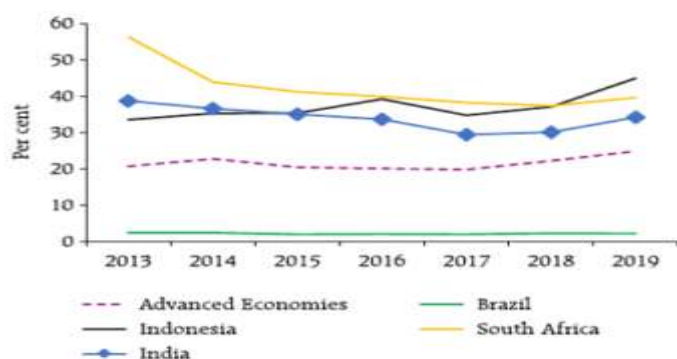
	Public Sector Banks	Public Sector Banks	Foreign Banks	All Banks
Amount outstanding (Cr.)	21,655	12,302	2,586	36,543
As per cent of power Sector credit	6.2	11.9	27.1	7.9
As per cent of total bank credit(excluding personal loans)	0.5	0.5	0.7	0.5

Note: Excludes Regional Rural Banks and Small Finance Banks

Opportunities in Green Finance

Within sustainable finance, green finance represents a major opportunity for India. Green finance refers specifically to funding of investments that deliver environmental benefits like climate change mitigation, adaptation, biodiversity protection, and pollution prevention. This includes renewable energy, clean transport, sustainable agriculture, green buildings, and ecosystem protection.

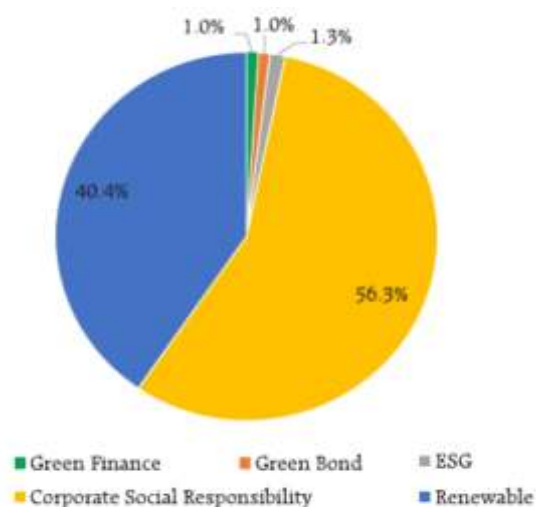
Figure 1: Green Finance: India's Comparative Score



- Globally, green finance flows have grown substantially, led by issuances of green bonds and loans. However, India captured less than 2% of the global green bond market in 2021 (IFC, 2021). To tap this opportunity:
- SEBI and RBI should establish clear standards and disclosure requirements for green bonds and loans to prevent greenwashing.
- Introduction of "green supporting factor" for preferential capital requirement treatment for banks' green loan books.
- Tax incentives for issuers and investors for green bonds and loans can help build market scale.
- Dedicated green funds by banks and asset managers can aggregate projects for structured green finance.
- Credit enhancements like first-loss guarantees can de-risk green projects for private capital.
- Listing guidelines for stock exchanges can be aligned with global ESG reporting standards like GRI to attract green FDI.
- Awareness campaigns on green products for institutional and retail investors will aid participation.

With the right policies, India can foster rapid growth in green finance as a tool for climate action and sustainable job creation.

Figure 2: Distribution of Google Search of Keywords (Per cent of total): 2013-2019 Average



The Role of India's Capital Markets

India's capital markets including stock exchanges and bond markets have significant potential to channel investment into sustainable businesses. However, at present they lack adequate standards, incentives and platforms for this transition:

- Listing requirements of exchanges like NSE and BSE do not yet mandate standardized ESG disclosures for public companies. Voluntary sustainability reports lack comparability.
- Key sustainability-focused market indices like

NIFTY100 ESG and green bond indices lack investor awareness and acceptance.

- Equity research lacks integration of material ESG factors. This perpetuates a short-term investment outlook (Saldanha et al., 2019).
- Limited placements of thematic funds focused on ESG and climate-aligned companies constrain asset owner participation.
- Underdeveloped green, social and sustainability bond markets limit options for outcome-oriented public and private investment.
- Some policy levers to activate capital markets for sustainability include:
 - Mandating TCFD-aligned climate risk disclosure and minimum ESG reporting for listed companies.
 - Integrating ESG into listing eligibility criteria over time.
 - Offering discounted listing fees for companies meeting sustainability criteria.
 - Launching dedicated platforms like SSEs for ESG-focused small and medium enterprises (SMEs).
 - Providing tax incentives for green and social bonds issuances and investments.
 - Conducting investor outreach by associations like FICCI on sustainable products.
 - Building capacity of research analysts on ESG integration and engagement.

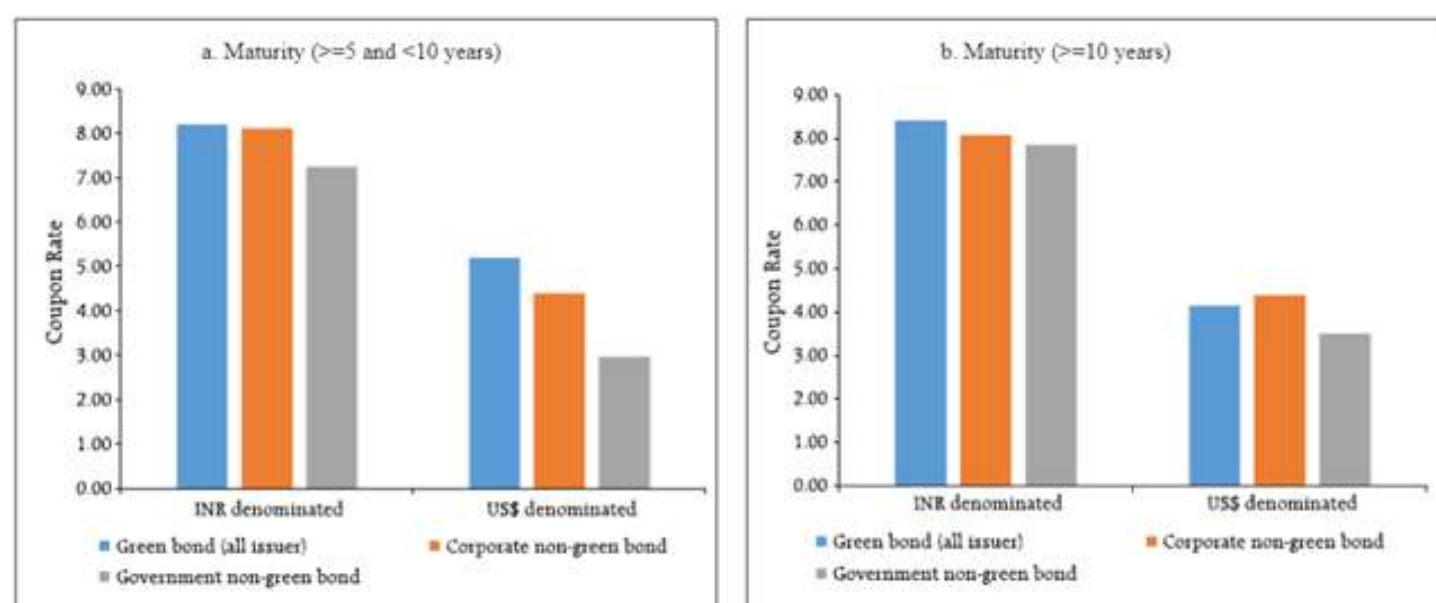
Capital markets can play a pivotal role in scaling up sustainable investment. But exchanges, investors and regulators must proactively adapt to enable this shift.

Table 3: Green Bonds Issuance Since January 1, 2018 (Corporate and Government: All Maturities)

Country	Amount issued (\$Mn)	Number of bond issued	Amount issued as percent of all bond issuance (per cent)	Number of bonds issued as per cent of all bond issuance (per cent)
Euro Area	1,96,854	594	1.7	0.4
China	63,023	183	0.3	0.2
USA	35,421	71	0.2	0.2
Japan	11,815	88	0.1	1.1
South Korea	11,781	44	1.0	0.4

Country	Amount issued (\$Mn)	Number of bond issued	Amount issued as percent of all bond issuance (per cent)	Number of bonds issued as per cent of all bond issuance (per cent)
Central and Southern America	8,869	53	0.5	1.0
India	7,992	22	0.7	0.3
South-east Asia	7,208	86	0.6	1.4
Australia and New Zealand	5,878	15	1.1	0.8
UK	5,311	17	0.4	0.5
Hong Kong	4,781	19	0.5	1.0
Singapore	496	9	0.5	1.2

Figure 3: Average Coupon Rate (per cent) for Bonds Issue



The Need for Innovative Financial Products

In addition to green bonds and loans, India needs greater innovation in sustainability-oriented financial products:

- Sustainability-linked loans (SLLs) - loans with interest rates linked to the borrower's ESG performance targets. SLLs incentivize improved sustainability performance through a pricing mechanism.
- Transition bonds - fixed income instruments for emission-intensive companies to raise capital for their low-carbon transition. As hard-to-abate sectors move to net zero, transition bonds can fund technology upgrades.
- Blue bonds - similar to green bonds, but focused on ocean-based projects like marine renewable energy and sustainable fisheries. This supports India's expanding blue economy.
- Social bonds - fixed income instruments funding projects with positive social outcomes like affordable housing, access to healthcare and financial inclusion. They align private capital with India's social development needs.
- Sustainability-linked derivatives like options, futures and swaps - derivatives whose payoffs are tied to achievement of ESG targets. These can help investors hedge sustainability-related risks.
- Low-carbon indexes and ETFs - equity/debt indexes tracking high ESG performers. Related exchange-

traded funds broaden access for retail investors.

- Climate-resilient infrastructure funds - For example, funds investing in climate adaptation-focused infrastructure like flood barriers, heat-resilient transport and green buildings.
- Policymakers should actively foster such financial innovation through hackathons, regulatory sandboxes, and capacity building to make sustainable finance mainstream.

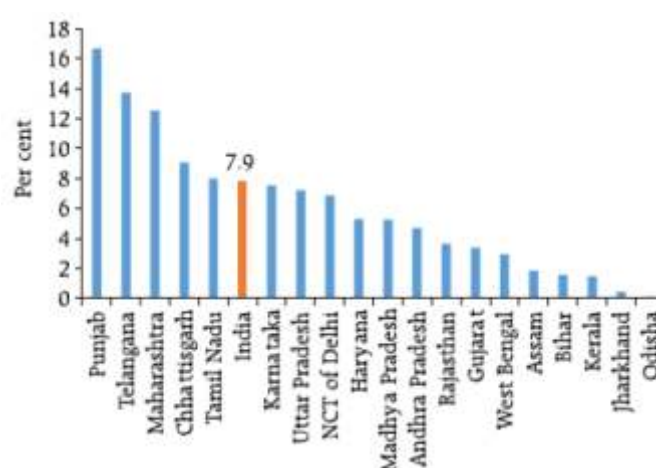
Technology as an Enabler

Technology has a vital role in powering India's sustainable finance transition:

- Fintech platforms can increase energy access by using alternative data for underwriting off-grid renewable energy loans and unlocking capital pools for funding (Sharma and Gopalan, 2019).
- Blockchain-based solutions can bring transparency to ESG reporting and verification. They can also tokenize green assets to broaden investor access through fractionalized ownership.
- Artificial intelligence can strengthen climate risk analysis by processing large alternative datasets on physical risk exposure (Campiglio et al., 2018). It can also personalize sustainability-focused investment management.
- Internet of Things sensors can enable real-time monitoring of environmental and social parameters for responsible supply chains and sustainable infrastructure (Mishra et al., 2019).
- Digital platforms like HDFC's Green Promise facilitate community-funded solar projects, connecting green investors to opportunities.
- Cellular connectivity can expand access to sustainability-focused financial products for rural and marginalized communities (Shrivastava and Reddy, 2022).
- Process automation can reduce the environmental footprint of financial institutions by dematerializing paper-intensive banking services (Singh and Singh, 2010).

- Big data analytics can correlate ESG performance with financial performance to convince mainstream investors of the value of sustainable investing (O'Rourke, 2019).
- Realizing these benefits requires proactive technology capacity building within financial institutions by regulators like RBI and SEBI. India's technology sector can play an important collaborative role as well.

Figure 4: Share of Non-conventional Energy Finance: As on March 2020



The People Dimension: Building Capacity

Beyond policies and platforms, sustainable finance ultimately depends on capacities of people and institutions:

- Education on sustainable finance needs to be incorporated across levels - in schools, colleges, professional certifications and on-the-job training (Chaudhary et al., 2021).
- Financial institutions need dedicated in-house capacity on sustainability through teams like chief sustainability officers and centres of excellence (Nasdaq, 2020).
- Regulators like RBI and SEBI need expanded supervisory resources to monitor climate and social risks in the financial sector (Schanz, 2019).
- Industry associations need to drive awareness and shape consensus on sustainable finance across the banking, investments and insurance sector (CFA Institute, 2020).
- Multilateral partnerships can facilitate knowledge transfer - for instance, between India's Bureau of Energy

Efficiency (BEE) and Germany's development bank KfW to collaborate on green finance (Shrimali et al., 2016).

- Dedicated research ecosystems involving think tanks, universities and data non-profits can inform policy development on sustainable finance (Andersson et al., 2016).
- Emphasizing gender equity in capacity building is crucial, given women's stake in sustainable development (Alves et al., 2020).
- Upskilling all types of financial system actors will unlock progress on India's sustainable finance agenda.

Conclusions

This paper has discussed a range of challenges and opportunities associated with scaling up sustainable finance in India. Key conclusions include:

- Sustainable finance is vital for managing India's environmental and social risks, unlocking new opportunities, and aligning finance with national development priorities.
- Banks, capital markets, regulators and corporations all have critical roles in the transition to sustainable finance.
- Policy signals and frameworks on issues like reporting requirements and taxonomies will be needed to provide direction and prevent greenwashing.
- Innovative financial products can crowd in private capital at scale into green, social and sustainability-focused investments.
- Technology and human capacity building are essential enablers for mainstreaming sustainable finance.
- With coordinated efforts, India can harness its financial system to put the country on a more resilient and equitable development trajectory.

Realizing this sustainable finance transition will require collaborative actions between policymakers, financial institutions, corporations and civil society. By accounting for sustainability issues, Indian finance can play its part in achieving wider national goals across climate action, job creation, poverty reduction and human development. India's conditional NDC

target aims to reduce emissions intensity of GDP by 45% by 2030 compared to 2005 levels (UNFCCC, 2021). The costs of delayed action are unaffordable.

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