Mobilizing Green Finance while Managing Climate Finance Risks in India

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CLIMATE
POLICY
INITIATIVE

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ABOUT CLIMATE POLICY INITIATIVE

Climate Policy Initiative (CPI) is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has six offices around the world—in Brazil, India, Indonesia, Kenya, the United Kingdom, and the United States.

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EXECUTIVE SUMMARY

Climate change has far-reaching impacts that are not limited to a particular sector or geography; it impacts the entire financial system. If left unchecked, this impact will be severe. The financial system plays a crucial role in every country's transition to a sustainable economy—especially in unlocking private investments needed to bridge the gap between supply and demand in green activities.

This transition towards a sustainable economy requires focusing on two primary objectives: 1) increasing green finance, and 2) managing climate-related risks that impact financial risk. However, targeting both these objectives can create a potential dilemma.

In the current scenario, if we try to increase green finance through policy and regulation, it tends to increase overall financial risk, as green loans and assets are currently 'perceived' to be of lower credit quality. So, expanding green finance could lead to an overall higher credit risk profile—both at the individual bank/asset manager level and at the macro-prudential level. On the other hand, if we focus on managing financial risks through climate policy and regulation, we may end up reducing green finance flows, because in the current models the 'perceived' higher risk of green loans and assets produces a higher cost of capital. **Therefore, a balancing act to address this potential dilemma is crucial.**

Existing policies and frameworks do not lend themselves to this balancing act. According to a Network for Greening the Financial System (NGFS) study[1], **current regulatory and supervisory frameworks do not adequately factor in the climate-related risks impacting financial risk.** This is compounded by the fact that current fiscal frameworks are not conducive to green activities, particularly in emerging economies, mainly because green activities are usually new and have limited track records, inconsistent information, and less proven collaterals. Another gap in the existing frameworks is how climate risk is currently addressed in capital markets. While there is a slow but growing appreciation of how climate risk threatens assets, we still do not have adequate risk mitigation options in place. This leads to reduced capital flows towards green investment. In addition, there is heavy reliance on the current credit rating system for loan issuance, which funnels long-term capital without factoring in climate-related risks. Similarly, Environmental, Social, and Governance (ESG) evaluation is gaining popularity in India, however, it is not equipped in its current form to effectively mobilize green finance. Current ESG rating systems suffer from integrity issues as well as the lack of ability to extract the data driving those ratings, in order to focus on the environmental aspects evaluated.[2]

To address these challenges, we have identified the key areas of intervention that would achieve the twin objectives of increasing finance to green activities and managing climate-related financial risk[3]. We look at three key pillars: **Policy Interventions, Regulatory Prescriptions, and Market and Institutional Mechanisms**. While some of the details of these

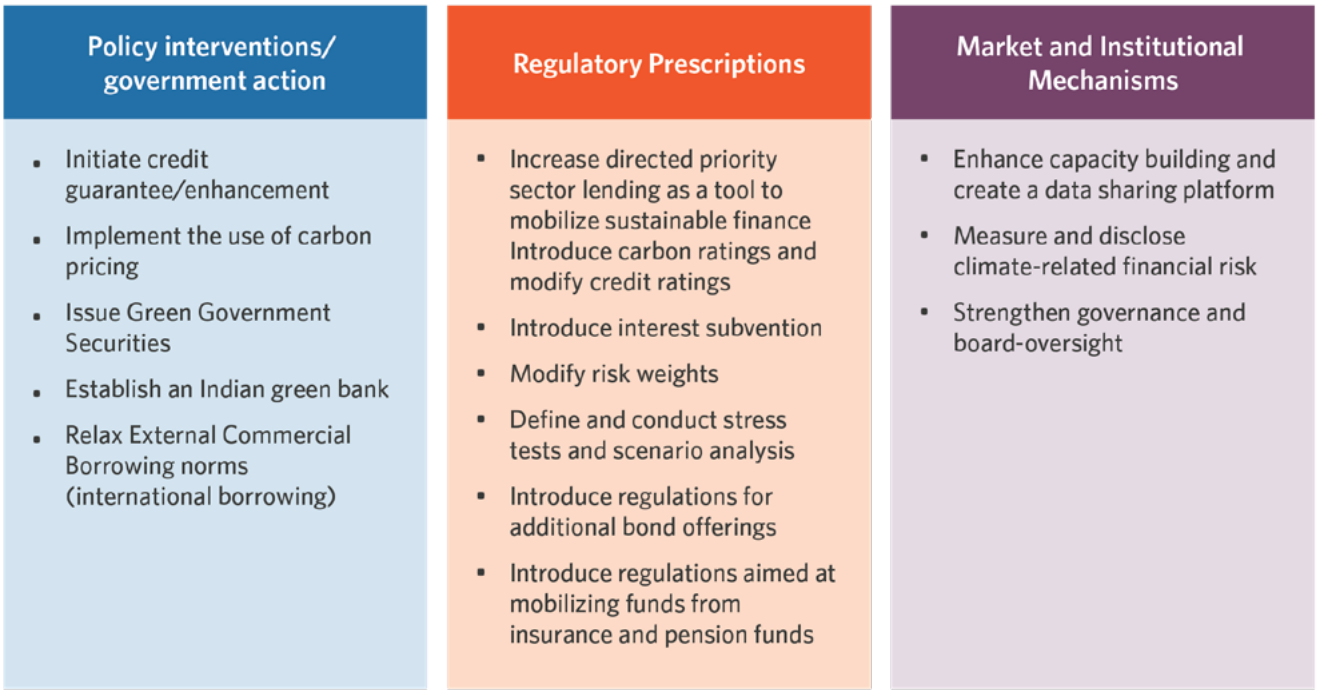
1 NGFS (2019). A call for action - Climate change as a source of financial risk: Executive Summary.

2 SEBI, recognizing the need for standardization, has issued a consultation paper which aims to distinguish ratings factoring in impact of environment on companies vis-à-vis impact of companies on environment

3 For the purpose of the report climate risks are referred to as climate-related financial risks

recommendations are specific to the Indian financial system, the overall guidance applies to many middle-income developing economies. The recommendations under each pillar are presented in Table 1 and details for each are covered in the report.

Figure 1. Regulating Green Finance – Three Key Pillars



Source: CPI Analysis

Our recommendations aim to increase green finance, manage risks, or do both. They address constraints faced by banks, institutional investors, and capital markets among others. Regulators, policymakers, and central banks will have a pivotal role to play in achieving the twin objectives mentioned, and in coordinating such activities closely.

Achieving both objectives of increased climate flows and better risk management is necessary to reach India's climate and sustainability goals, and be on track to meet the 1.5-degree pathway. Focusing on one over the other will not suffice.

1. CONTEXT

India is one of the most vulnerable countries to the impacts of climate change. India has pledged to reduce the carbon intensity of its economy by 33-35%—as compared to 2005 levels—by 2030, and to be carbon neutral by 2070. To achieve this, it is estimated that the country will require ~INR 162.5 trillion (USD 2.5 trillion) from 2015 to 2030, or roughly INR 11 trillion (USD 170 billion) per annum for climate action[4]. Current investment, according to the *Landscape of Green Finance in India*, is around USD 18 billion per annum.

It is increasingly clear that public finance—through budgetary allocation and direct investments—is inadequate for meeting the required climate investments. While public finance does have a major role to play, other commercial sources of climate investments, along with domestic financial intermediation through banks and financial markets, are also important and need to be supplemented by international development finance and institutional investments.

Building on our previous work *Accelerating Green Finance in India: Definitions and Beyond*, which focused on establishing a definition for green finance and the subsequent evolution of a green taxonomy, this report discusses possible policy, regulatory, and institutional approaches to increase green finance and manage climate-related financial risks[5].

4 Department of Economic Affairs, Government of India (2020). Report of the Sub-Committee for the Assessment of the Financial Requirements for Implementing India's Nationally Determined Contribution (NDC). Available at: https://dea.gov.in/sites/default/files/Sub%20Committee%20Report%20Final.pdf

5 This refers to physical risk and transition risk. **Physical Risks** cause direct harm to assets or disrupt Industry / company value chains. **Transition Risks** arise from the overall shift to a low carbon economy through changes in policy, technology and market sentiment.

2. CONSTRAINTS TO GREEN FINANCE

Green finance in India is well below the required levels. Increasing green finance requires addressing multiple barriers: policy, regulatory, markets, and institutional.

Policy and regulatory barriers pertain to those rules and regulations which constrain green finance either by lack of supportive regulation or by way of not factoring in climate risks in investment or lending decisions. In the absence of more robust green finance enabling regulations, financial markets and banks continue to adhere to conventional investment and financing practices, underpinned by current financial sector regulations that constrain green finance mechanisms, products, and services that could otherwise be offered.

Some initiatives taken to increase green finance and for greening the financial system, are:

- the introduction of green bond guidelines for disclosure requirements for issuance and listing of green debt securities by the Securities and Exchange Board of India (SEBI)
- inclusion of certain green activities in Priority Sector Lending (PSL)[6] norms by the Reserve Bank of India (RBI)
- increased marketing of ESG funds
- building on the Responsible Business disclosures report by MCA, SEBI launched the Business Responsibility & Sustainability Reporting Format[7] for the top 1,000 listed companies
- introduction of green Fixed Deposits (FDs) by banks

Green financing is also supported by policy actions such as tax breaks on purchase of electric vehicles (EVs); participation in international initiatives such as the International Platform for Sustainable Finance (IPSF); and the central bank of India, RBI, joining the Network of Central Banks for Greening Financial Systems (NGFS).

Despite these laudable efforts, a lot more needs to be done. There is a lack of a comprehensive regulatory and supervisory framework for green finance. The incorporation of environmental and climate risks in investment strategies is currently nascent at best.

It is also becoming increasingly important to manage the financial risk arising out of climate change—both at entity and systemic levels. Increasing green finance, by itself, introduces financial risks brought about by the transition, and needs a fine balancing act on the part of policymakers and regulators. If an institution focuses only on increasing green finance, risk management may take a back seat and vice versa. The crux is that financing the shift to green will require some relaxation on risk (since currently green is 'perceived' as higher risk). Conversely, if the focus stays on risk management, capital flows will get constrained since pricing, currently, is directly related to risk. Therefore, to achieve the twin objectives of increasing green finance and managing increased financial risks, a balanced approach

6 RBI (June 2021). Master Directions. Priority Sector Lending (PSL) – Targets and Classification.
7 SEBI (2021). Business Responsibility & Sustainability Reporting Format.

with the participation of regulators, policymakers, market players, and industry as a whole is required.

GENERAL CHALLENGES FOR BANKING AND CAPITAL MARKET SECTORS

To enable sufficient capital availability, institutions must have sound governance and strategy; use tools and technology prudently; have strong risk management principles in place, and have uniform disclosure and operating norms. To ensure these, there are regulations put in place by the RBI. These regulations are based on the guidelines issued by the Basel Committee on Banking Supervision (BCBS).

Basel III, the current Basel Accord framework, introduced concepts to address issues of excess leverage, quantity and quality of capital, and creation of liquidity buffers (Basel Committee on Banking Supervision, 2017). It also introduced counter-cyclical buffers ensuring liquidity and limiting leverage to address situations like the global financial crisis, thereby ensuring the financial stability of banks during a financial crisis.

However, the outcome of Basel III has been an increased conservatism through enhancement of capital requirements, regulatory tools like effective risk-weights for longer-term exposures, and increasing and widening use of credit ratings (internal and external)—all of which contribute to either increasing lending rates or constraining the allocation of capital for climate investments.

Table 1 lists out the implications of the Basel III guidelines on climate change.

Table 1. Basel III Framework – Climate Implications

Pillar	Provision	Comment
Pillar I: Capital tenure of financing risk weights	Basel III discourages longer-term funding and illiquid investments. Risk weights are mostly determined by historical data.	Unfavorable to climate investments that require long-term finance. Cannot be applied to climate investments—the reason why climate lending receives a lower rating.
Pillar II: Supervisory review	The Supervisory Review process does not consider climate change risk as a material risk, so banks exclude this risk in stress tests.	Leads to distortion in the assessment of overall systemic risk.
Pillar III: Market discipline	Market Discipline does not make it mandatory for banks to make public their exposure to climate change risk,* leading to information asymmetries.	Effectively, no information on aggregate climate risk exposure features in the financial system.

**Source: Task force for Climate Disclosures (TCFD, 2017) and CPI Analysis*

A growing body of work highlights the link between systemic environmental risks and banking sector stability. However, current Basel II and III guidelines on risk management are limited in scope in the assessment of an obligor's ability to repay a loan in compliance with environmental safeguard laws. Therefore, risks associated with climate change

that impact financial stability are not fully captured. BCBS' November 2021 Consultative Document puts special emphasis on scenario analysis and stress testing[8]; however, these are at a very high level. Some jurisdictions, including the UK and the EU, have been front runners in this area, having released stress testing guidelines as well as putting in place base guidelines for assessment and incorporation of climate risks. The Indian financial system, while acknowledging the role of green finance[9], is yet to put in place guidelines for the same. Forward-looking action by the RBI, in terms of guidelines for stress testing, scenario analysis, and measurement of climate-related financial risks, is needed.

Apart from guidelines for measuring climate risk, there are initiatives regarding uniform disclosures that are granular yet not difficult for firms to measure and report and, therefore, should be seriously considered for near-term implementation. The creation of the International Sustainability Standards Board (ISSB)[10] is a step towards acknowledging the importance of standardized disclosure norms. Currently, Business Responsibility and Sustainability Reporting (BRSR)[11] is the only disclosure norm that has some focus on climate risk; however, that is geared more towards the real sector than the financial one. A framework focused on the financial sector, which takes cues from international frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD), is required for the collection of the required metrics.

A problem faced by capital markets similar to that of banks and other financial institutions, is that of capital allocation to green activities. **The reliance on, and excessive use of, conventional credit ratings play a pivotal role here, creating a distortion in capital allocation away from green and climate-related investments[12]**. While credit ratings attempt to include climate risk in rating methodologies to the extent that climate risks impact credit quality, the work here is still not complete.

Additionally, limited financial instruments are currently available to direct capital towards green activities. Though SEBI issued disclosure norms for green bonds, other bonds such as sustainable bonds and sustainability-linked bonds, among others, were not included. There is a need to increase the diversity of instruments as well as increase the issuance of existing instruments.

8 Ibid

9 RBI (2021). Green Finance in India: Progress and Challenges, RBI Bulletin January 2021. Available at: https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/04AR_2101202185D9B6905ADD465CB7DD280B88266F77.PDF

10 IFRS (2021). Available at: https://www.ifrs.org/groups/international-sustainability-standards-board/

11 SEBI (2021). Business Responsibility & Sustainability Reporting Format. Available at: https://www.sebi.gov.in/sebi_data/commondocs/may-2021/Business%20responsibility%20and%20sustainability%20reporting%20by%20listed%20entitiesAnnexure1_p.PDF

12 The current approach adopted by credit rating agencies is not conducive to capital allocation for green activities, especially those activities concerned with resilience and adaptation. Given the impact of climate change on business results, it is expected that green projects would have good credit quality over the longer term. However, the current rating framework does not capture this. A study by the World Bank states, "The historical default experience of infrastructure debt suggests a 'hump-shaped' credit risk profile, which converges to investment-grade quality within a few years after the financial close—supported by a consistently high recovery rate with limited cross-country variation in non-accrual events. However, the resilient credit performance of infrastructure—also in emerging market and developing economies—is not reflected in the standardized approaches for credit risk in most regulatory frameworks." This is the constraint mentioned earlier—applicable to adaptation infrastructure projects (resilient infrastructure) and to some extent in certain mitigation projects—which leads to distortion of capital allocation where the use of credit ratings is mandated.

CHALLENGES FOR INSURANCE AND PENSION FUNDS

Another large source of capital that is currently not directed towards green, is investments by insurance and pension funds. The Indian market has three main organizations: Employee Provident Fund (EPF), National Pension Scheme (NPS), and Public Provident Fund (PPF), catering to the needs of different segments of the population. **Both pension funds and insurance fund corpus are invested in long-term projects, which make them vulnerable to the impacts of climate change.** Pension funds are particularly invested in government securities and other related debt instruments. All investments are mandatorily made in graded securities, and the grading can not be less than of a 'very strong' rating by a reputed and independent rating agency. According to the Insurance Act of India, 1938 (last amended in 2021), traditional Life and General insurance companies are required to invest, and at all times stay invested, for not less than 15% and 10% of their investments respectively, in Infrastructure/Social/Housing sectors[13]. However, there are no regulatory requirements for the insurance funds to conduct Excess & Surplus (E&S) risk assessments of these investments to better understand their exposure to long-term climate risk. Currently, there are no disclosure and reporting mechanisms to assess the existing landscape of sustainable investments by insurance funds. Both these funds are likely to come into usage after a very long term as per their construct. Green investments require long-term funding, thereby making these funds more suited, given similar maturities. Thus, policy changes to allow wider investment opportunities are recommended, supported by more focused and granular disclosures prescribed by the regulator.

13 IRDAI (2016). Insurance Regulatory and Development Authority of India (Investment) Regulations, 2016. Available at: https://www.irdai.gov.in/admincms/cms/frmGeneral_Layout.aspx?page=PageNo2934&flag=1

3. SOLUTIONS: INCREASING GREEN FINANCE

Once the systemic issues discussed earlier are addressed, it will be possible to affect the required headway towards making the financial system more resilient to risks emanating from climate change. This section discusses a way forward, with recommendations clustered under three categories: (i) regulatory prescriptions; (ii) policy interventions; and (iii) market mechanisms and institutional implementation. The aim of the proposed solutions is to either **increase green finance, manage increased climate-related financial risks, or use combinations of both.**

3.1 POLICY INTERVENTIONS

Policy directions could focus on increasing public finance for green investments, raising ring-fenced revenues for climate investments, and facilitating green investments by international lenders/investors.

There are several policy interventions that India could pursue in the near term to increase government revenue specifically for climate action:

Policy intervention	Description
Initiate credit guarantee/ enhancement	For domestic investments, there are two main areas of focus: (1) increasing revenue for the government and (2) increasing investment directly in green activities. For increasing investment directly in green activities, credit guarantees/enhancements may be a possible route since one of the key enablers of sustainable investments is risk mitigation. Enabling regulation for credit guarantees/enhancement[14] , both bond and loans from banks, and setting up risk-sharing facilities are some key steps to achieve this. **Currently there are no comprehensive enabling regulations governing the issuance of credit guarantees in India.** Possible approaches to providing credit guarantees/enhancement could be through a public credit guarantee facility, and regulators could provide enabling regulation so that banks, financial institutions, and funds could offer credit guarantees in the financial services market.
Implement the use of carbon pricing	Carbon Pricing, as defined by World Bank,[15] is an instrument which captures the external costs of GHG emissions and ties them to their source through a price. This is usually done by putting a price on CO2 emissions. This helps in placing the burden of carbon emissions costs on the emitter. There are multiple mechanisms for achieving this; the two most popular being carbon tax, and an emissions trading system. The money collected through these mechanisms may be used for climate investments.
Issuance of green government securities	Government of India could issue green government securities (G-secs) to attract investment for green activities. Precedence of using green G-secs exists with the UK issuing its first Green Gilt with GBP 10 billion on the London Stock Exchange in September 2021, and the second Green Gilt worth GBP 6 billion in October 2021[16].

14 Currently there are no clear regulatory guidance/rules for independent credit guarantees/enhancements.
15 https://carbonpricingdashboard.worldbank.org/what-carbon-pricing
16 Government of UK (2021). HM Treasure. Available at: https://www.gov.uk/government/news/second-uk-green-gilt-raises-further-6-billion-for-green-projects

Policy intervention	Description
Set up an Indian green bank	A nationalized green bank in India could be instrumental in increasing capital flows, and also aid in raising capital for green activities. India has, to some extent, adopted this approach in order to direct capital to specific sectors in the past. Two notable examples are the setting up of ICICI and IDFC banks. ICICI was set up with the objective of creating a development financial institution for providing medium-term and long-term project financing to Indian businesses[17]. IDFC was set up[18] to finance infrastructure, focusing primarily on project finance and the mobilization of capital for private sector infrastructure development.
Relax external commercial borrowing norms (international borrowings)	Government of India can increase international capital flows through the External Commercial Borrowings (ECB). The current ECB Guidelines are not fully conducive to promoting investments in green activities. Although relaxations in the ECB Guidelines issued in 2019 had some positive changes, including widening the set of eligible borrowers, certain concerns still remain. Even though new entities have been included, the exclusion of real estate activities, investments into capital markets, equity investments, and on-lending, continue to act as impediments to international fund flows. Relaxation on the end-use, along with relaxation of minimum maturity requirements, and revisiting withholding tax, could be some areas of positive change.

UK Green Gilt

The UK Budget 2021 made the following commitments:

- The UK will conduct at least two Green Gilt issuances in 2021
- Green Gilt issuance in the 2021-22 financial year will total a minimum of GBP 15 billion
- The UK will also issue retail Green Savings Bonds via NS&I, the first standalone retail product tied to a Sovereign Green Bond
- In another first for comparable sovereign issuers, the UK will report on social co-benefits of expenditures financed by the Green Gilt and retail Green Savings Bonds, such as job creation, access to affordable infrastructure, and socioeconomic advancement

HM Treasury and the Debt Management Office published the UK Government Green Financing Framework in June 2021. It sets out the government's climate and environment agenda and also explains how proceeds from the Green Gilt and retail Green Savings Bonds will finance expenditures bucketed in six categories, while creating green jobs across the UK. The six categories are:

- Clean Transportation
- Renewable Energy
- Energy Efficiency
- Pollution Prevention and Control
- Living and Natural Resources

17 ICICI Bank. Available at: https://www.icicibank.com/aboutus/history.page#:~:text=ICICI%20was%20formed%20in%201955,project%20financing%20to%20Indian%20businesses.
18 IDFC.

3.2 REGULATORY PRESCRIPTIONS

Regulatory prescription	Description
Increase directed priority sector lending as a tool to mobilize sustainable finance	**Banking and capital markets:** Savings and international funds flow through banks and capital markets into different sectors. Therefore, this prescription is directed towards increasing green finance and keeping a cross-check on macro-prudential climate-related financial risk. Regulatory prescriptions for the banking sector look at various tools to manage risks and/or increase green finance.
	Directed Lending: The banking sector plays a pivotal role in meeting the needs of the private sector, delivering credit to individuals and households. In this regard, directed lending is a useful tool to allocate capital to sectors and activities defined as sustainable. To ensure capital flow to sectors which may not be lucrative to banks and FIs on their own, or where the risk return may not be in line with the banks' strategy, central banks use tools to intervene and direct capital flows. One such tool used in India is Public Sector Lending (PSL). Under PSL, the RBI mandates Scheduled Commercial Banks (SCBs) to lend at least 40% of their total Adjusted Net Bank Credit to specific pre-defined sectors. Through this, the RBI has been able to ensure that credit reaches the intended sectors—either directly via loans, or via funds. PSL in its current form does not sufficiently cover green economic activities, and there are no minimum investments mandated. To increase capital flows to green sectors, the regulator can look at increasing the coverage of green activities, and mandate minimum investment norms. Further, given the funding requirement for green activities, assigning a minimum percentage outside of PSL for lending to green activities can also be explored. This would not only ensure greater capital flow to the required activities, but also ensure that the mandate of PSL is maintained.
Introduce carbon ratings and modify credit ratings	**Credit and Carbon Ratings:** Given the increased focus on carbon emissions, it is important that carbon emissions measurement be incorporated in ratings, and standardized. Current mechanisms include credit ratings and ESG ratings, none of which are adequate for measuring carbon emissions. ESG, by design, is more of a compliance evaluation and it evaluates carbon emissions along with various other factors including those concerned with social and governance aspects. Credit ratings, in their current construct, do not capture climate-related financial risks—neither transitional nor long-term physical risks. **There is need for the development of a carbon emissions rating system to be mandatorily used for loans and bonds. It could look at carbon emissions per unit of capital, and the framework could be developed for rating of an entity as opposed to that of a project, as advised by a BIS paper[19].**
	Modification to the current credit rating methodology: Positive externalities from sustainable/green financing— loans and bonds—are not positively incorporated in the current framework of credit assessment in credit ratings. Credit Rating Agencies (CRAs) could evaluate risks emanating from climate change and include their views in the credit rating rationale.
Introduce interest subvention	**Interest subvention** could effectively be a tool to help increase debt financing to green activities. Currently, interest subventions exist for the Micro, Small and Medium Enterprises (MSME) sector, as well as for farmers. It can be a useful tool for risk mitigation while ensuring that the pricing for borrowers is not too high. Introduction of interest subventions for green lending would encourage lenders to lend to borrowers whom they perceive to be high risk, while also ensuring that the cost of capital for the borrowers is not exorbitant.[20]
Modify risk weights	Another significant tool could be **the use of risk weights** to ensure that banks set aside adequate capital buffers to provide for potential credit losses from loans (Basel Pillar I). The regulator may look at either increasing risk weight for lending to carbon intensive projects, and/or reducing risk weights for lending to activities defined as green, or do both.

19 BCBS. BIS Quarterly Review, September 2020. Green bonds and carbon emissions: exploring the case for a rating system at the firm level. Available at: https://www.bis.org/publ/qtrpdf/r_qt2009c.pdf

20 BCBS. BIS Quarterly Review, September 2020. Green bonds and carbon emissions: exploring the case for a rating system at the firm level. Available at: https://www.bis.org/publ/qtrpdf/r_qt2009c.pdf

Regulatory prescription	Description
Define and conduct stress tests and scenario analysis	Stress test and scenario analysis can be used to assess the climate-related impact in financial risk. The banking regulator could consider **integrating climate risk analysis into existing risk assessment processes**[21]. Guidance may be taken from the recently released BCBS Consultative Paper on *Principles for the effective management and supervision of climate-related financial risks*.[22]
Introduce regulations for additional bond offerings	Current bond market offerings classified as 'green' and 'sustainable' are limited by SEBI guidelines for disclosure requirements for issuance and listing of green debt securities, and they exist only for green bonds. Instruments such as social bonds,[23] sustainability bonds,[24] and sustainability-linked bonds[25] to name a few, exist and could be mainstreamed in the Indian market. The regulator could facilitate this by issuing guidelines similar to the green bond guidelines, for these products. Given that demand is greater than the current supply, issuance of the bonds mentioned above may help in attracting more capital. A few examples of institutions/countries that have issued bonds across all the four categories—green, social, sustainable, sustainability-linked—and have been successful in raising funds, are IFC, World Bank, AfDB, the US, the UK, Japan, and Canada.
Introduce regulations aimed at mobilizing funds from insurance and pension funds	India's provident fund and pension savings from Insurance, EPFO, and NPS could also be directed towards sustainable investments. Current regulations require investments to meet minimum rating requirements, and mandate a stipulated share in government securities. Relaxation in investment criteria (with adequate provision of credit enhancement) and that of the share of investment in government securities, could be considered by regulators. There is a need to prescribe a standardized disclosure framework for the financial sector. Business Responsibility and Sustainability Report (BRSR), the current framework being used, is aimed more for the real sector and thus may not be sufficient for the financial sector. Guidance from the recently released Basel Committee on Banking and Supervision (BCBS) Consultative Paper on *Principles for the effective management and supervision of climate-related financial risks*[26] could be a starting point for determining the disclosures required for the financial sector. Another reference point could be the International Financial Reporting Standard (IFRS) paper on *Climate Related Disclosure Prototype*[27] and the *General Requirements for Disclosure of Sustainability-related Financial Information Prototype*.[28]

21 Further information on these climate risk management approaches can be found in the World Bank Toolkits for Policymakers to Green the Financial System

22 BCBS (2021). Consultative Document - "Principles for the effective management and supervision of climate-related financial risks. Available at: https://www.bis.org/bcbs/publ/d530.pdf

23 Social Bonds are any type of bond instrument where the proceeds, or an equivalent amount, will be exclusively applied to finance or re-finance in part or in full new and/or existing eligible Social Projects and which are aligned with the four core components of the SBP. ICMA. Social Bond Principles (2021).

24 Sustainability Bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance a combination of both Green and Social Projects. ICMA. Sustainability Bond Guidelines (2021).

25 Sustainability-Linked Bonds ("SLBs") are any type of bond instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined Sustainability/ ESG objectives. ICMA. Sustainability-Linked Bond Principles (2020).

26 BCBS (2021). Consultative Document - "Principles for the effective management and supervision of climate-related financial risks. Available at: https://www.bis.org/bcbs/publ/d530.pdf

27 IFRS (2021). Climate-related Disclosures Prototype.

28 IFRS (2021). General Requirements for Disclosure of Sustainability-related Financial Information Prototype. Available at: https://www.ifrs.org/content/dam/ifrs/groups/trwg/trwg-general-requirements-prototype.pdf

3.3 MARKET AND INSTITUTIONAL MECHANISMS

Market and institutional mechanism	Description
Enhance capacity building and create data sharing platform	Institutional players and the market also have important roles to play in increasing capital flows and managing risks. Given the challenges of information asymmetry and knowledge existing in pockets, efforts around **capacity building as well as creating a data sharing platform** could help both in managing risks and increasing capital flows to green economic activities. The creation of a platform that captures information pertaining to GHG emissions and carbon pricing by the market is recommended. This would help in standardizing information since current classifications used by the industry and the government may vary. This could also help in carbon emissions rating.
Measure climate-related financial risk	Given that the RBI's approach to incorporating climate risk would need to adhere to Basel II/III regulatory frameworks, it would be useful to follow recent guidelines on *Climate Related Financial Risks—Measurement Methodologies* (April 2021). There would be a need to establish both macro- and micro-prudential guidelines for assessing increased financial risks from climate change. Establishing appropriate supervisory review processes for oversight on climate-related financial risks could form a part of disclosure requirements from banks.
Strengthen governance and board-oversight	**Strong governance and well-defined board oversight** is required to ensure increased capital flow while managing risks. This has also been highlighted in the Consultative Document published by Basel in November 2021. The first three principles[29] look at corporate governance while principles four and five focus on the internal control framework. We believe these lay a strong foundation for financial institutions to build on, and reiterate that required changes in governance structure and Board oversight should be made.

NEXT STEPS

Next steps towards this end could include creation of a financial institution collaborative to coordinate and accelerate the required changes, putting regulatory prescriptions in place to increase green capital markets and increased participation in the same, as well as regulations for the assessment and management of climate-related financial risks.

29 BCBS (2021). Consultative Document - "Principles for the effective management and supervision of climate-related financial risks. Available at: https://www.bis.org/bcbs/publ/d530.pdf

4. CONCLUDING REMARKS

The need of the hour is to ensure capital allocation to green investment while ensuring financial stability; in other words, managing climate risks at the macro- level. Fortunately, there is increasing acknowledgement among regulators, of the need to recognize and address climate risks. Furthermore, India's ambitious climate and sustainability goals require regulators to play an active role in shifting financial flows to green and climate sectors.

Various analytical reports, such as from BIS and NGFS, lay the foundation of how climate-related financial risks impact the banking system and possible methodologies that can be used by banking regulators and institutions as the base for forming new risk management strategies for climate-related financial risk. These are broadly classified as transition and physical risks—the twin aspects of climate-related financial risks impacting the financial system.

Policy makers and regulators must work in tandem to manage the micro- and macro-prudential risks arising out of climate change and, at the same time, shift the playing field towards green finance. It is also equally important to recognize that both increasing green finance and managing climate risk may not be aligned under current frameworks. Hence, policies must be put in place that can help increase green finance and not let risk management become a bottleneck for financial flows towards green investments. Initiatives such as a nationalized green bank, issuance of green sovereign bonds, and green treasury bills will help direct public finance to green activities and crowd in market finance. These could be further supported by directed lending, interest subventions, carbon pricing, lower risk weights, green ratings, and by adopting appropriate disclosure standards.

It is important to note that financing green may lead to increased 'perceived risks'[30] in the short-term. However, it is imperative that the shift to green takes place. Through this paper, we have looked at some of the steps that may be taken to further green finance in India while ensuring stability of the financial system. We also believe that these recommendations, in different forms and in varying degrees, would also be applicable to other developing economies.

In the end, the question is not about what is more important—increasing green capital flows or managing increased climate-related financial risks; rather, it is about how to achieve both while ensuring that the climate-finance gap is reduced.

30 We are of the view that the risks for green are not higher than for non-green and there is evidence to support the same. Further, financing green would ultimately lead to lower financial risk.

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