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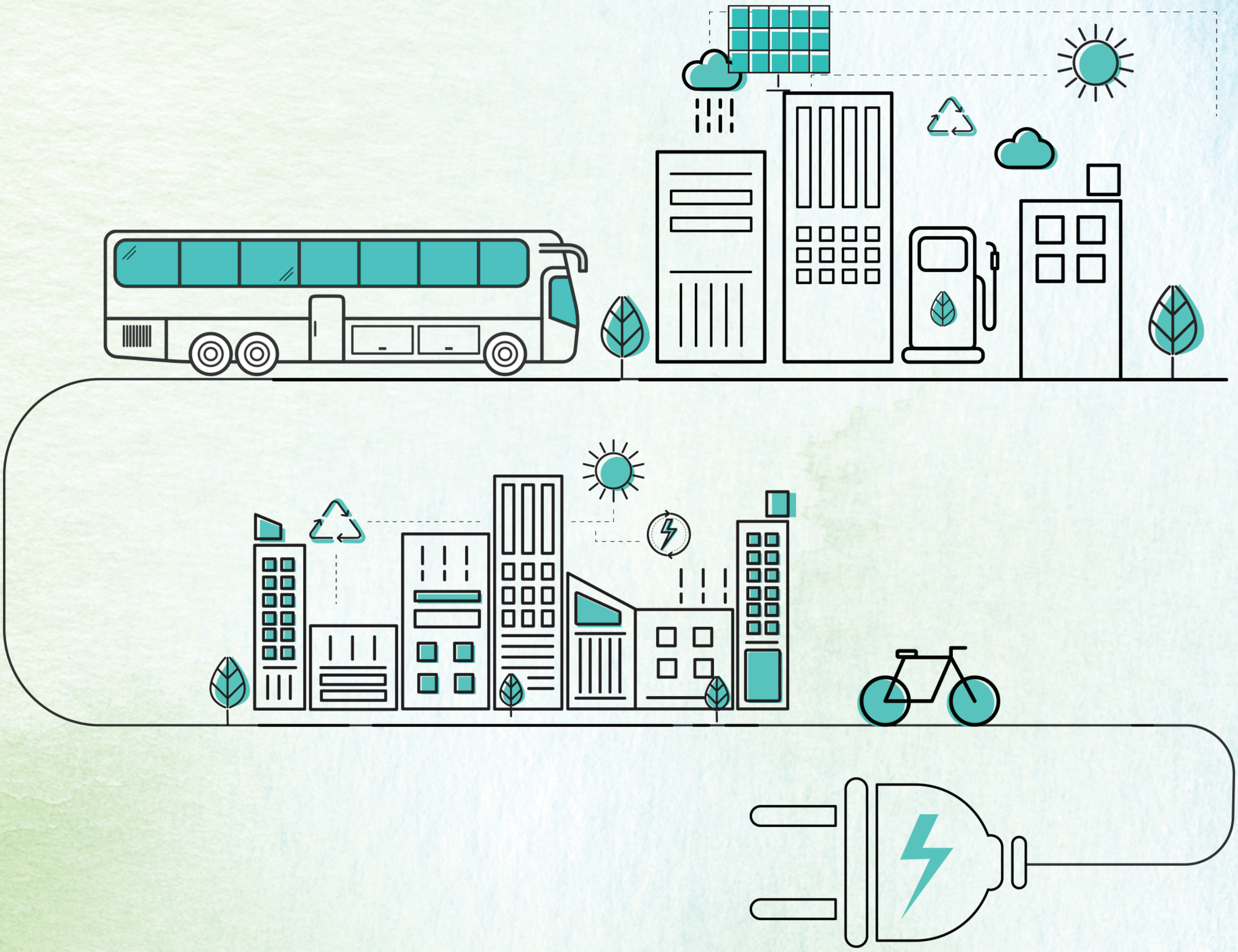
Government of India
Ministry of Housing and Urban Affairs

Green Urban Mobility Partnership

GUIDELINES FOR ISSUING MUNICIPAL GREEN BONDS IN INDIA



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1. Background

Municipal bonds are financial instruments that enable governments to raise funds for public infrastructure projects. They are essentially loans taken by the government from investors, with a promise to repay the principal amount along with interest over a specified period. Bonds are preferred for financing public infrastructure due to their ability to mobilize large amounts of capital at relatively low costs, while also spreading the repayment burden over a long duration. This makes them particularly suitable for large-scale public infrastructure projects like highways, bridges, and public transit systems, which require significant upfront investment but generate returns over time. There are several types of bonds used for public infrastructure financing such as general obligation bonds, revenue bonds and municipal bonds.

In India the concept of municipal bonds was introduced in the 1990s as an alternative financing mechanism for public infrastructure projects. The first municipal bond without government guarantee was issued by the Ahmedabad Municipal Corporation in early 1998. Ahmedabad Municipal Corporation's bond was the first municipal bond issue to rely entirely on its own cash flows for supporting debt repayments through a structured payment mechanism involving escrow of cash flows. Since then, the market has seen rapid growth, with several cities tapping into this financial instrument to fund various infrastructure initiatives While municipal bonds are used to raise capital for public infrastructure, green bonds (a type of debt instrument) are used to raise capital specifically for projects with environmental benefits such as renewable energy, clean transportation, sustainable water management and climate change mitigation. The concept of green bonds originated globally in the mid-2000s, with the World Bank issuing the first green bond in 2008[1]. In India, the green bond market started gaining traction in 2015 when Yes Bank issued the country's first green bond, raising INR 1,000 crore to finance renewable energy projects[2].

With the incentive by the Ministry of Housing and Urban Affairs (MoHUA) for raising green bonds of Rs 10 crore for raising Rs 100 crore worth green bonds up to a maximum of INR 200 crores, more Indian cities are increasingly turning to green bonds to finance sustainable projects, with Ghaziabad Nagar Nigam being the first municipal corporation to issue green bonds, worth INR 150 crore (US$20 million)[3] to fund a project for recycling wastewater into clean drinking water. Indore Municipal Corporation entered the green bond market in 2023, raising a significant US$87 million. This capital will finance the construction of a solar power plant in the Khargone district, contributing to a cleaner energy mix for the city and lower energy costs for pumping drinking water from large distance. The trend extends beyond major cities. Raipur Municipal Corporation exemplifies how smaller cities are embracing green bonds. They recently approved a ₹2 billion (US$26 million) issuance to fund sustainable projects, including the introduction of

[1] From Evolution to Revolution: 10 Years of Green Bonds
[2] The Essential Guide to Green Bonds in India: A Game-Changer for Sustainable Finance - NetZero India
[3] https://www.pib.gov.in/PressReleasePage.aspx?PRID=2125188

electric buses and a new sewage treatment plant. Most recently, Vadodara Municipal Corporation achieved a milestone in February 2024 by issuing the first-ever certified green municipal bond in India. The proceeds from this US$12 million bond will be directed towards sustainable water infrastructure projects[4].

The global green bonds market is guided by the International Capital Market Association's Green Bond Principles (GBP) and supported by the Climate Bond Initiative (CBI), which classifies green bonds into certified, labelled, and unaligned categories. CBI-labelled bonds require at least 95% of proceeds for green assets and detailed project disclosures. Various national regulations, like those in China, France, and India, complement these international standards.

1.1 SEBI's Framework on Green Debt Security

In May 2017, the Securities and Exchange Board of India (SEBI) issued a pivotal circular (CIR/IMD/DF/51/2017) establishing the framework for the issuance and listing of Green Debt Securities (GDS) in India. This initiative aimed to align India's capital markets with global sustainable finance practices and to facilitate funding for environmentally beneficial projects.

Definition of Green Debt Securities

According to the SEBI circular, a debt security is classified as "Green" or a "Green Debt Security" if the proceeds are exclusively applied to finance or refinance projects or assets that fall under specific environmentally sustainable categories.

Eligible Categories for Green Projects

The circular outlines the following broad categories of projects eligible for financing through green bonds:

1. Renewable and sustainable energy: Projects involving wind, solar, bioenergy, and other clean energy technologies.
2. Clean transportation: Initiatives like mass/public transportation systems.
3. Sustainable water management: Projects ensuring clean and/or drinking water, water recycling, etc.
4. Climate change adaptation: Efforts to adapt infrastructure and communities to climate change impacts.
5. Energy efficiency: Including efficient and green buildings.
6. Sustainable waste management: Recycling, waste-to-energy projects, and efficient waste disposal methods.
7. Sustainable land use: Sustainable forestry, agriculture, and afforestation projects.
8. Biodiversity conservation: Initiatives aimed at preserving biological diversity.

Evolution of SEBI Framework

1. Amendment to 2023 regulations
   SEBI broadened the original green debt securities framework by enhancing disclosure standards, mandating third-party review and certification, and expanding eligible use-of-proceeds categories to include:
   I. Climate change adaptation
   II. Pollution prevention and control
   III. Circular economy products, technologies & processes
   IV. Blue bonds (marine & freshwater projects)
   V. Yellow bonds (marine conservation/

[4] Gujarat: Vadodara Municipal Corporation Makes History With Asia's First Certified Green Municipal Bonds

waste)

This strengthened transparency and accountability in green bond issuance.

2. Launch of the ESG Debt Securities Framework in June 2025

SEBI introduced a **comprehensive ESG debt framework** under the NCS Regulations, effective **June 5, 2025. This unified framework now includes**:

- Green Debt Securities – continues under prior rules.
- Social Bonds – finance projects like affordable housing, healthcare, education, employment, food security, etc.
- Sustainability Bonds – hybrid instruments financing both environmental and social projects
- Sustainability Linked Bonds (SLBs) – general purpose bonds with coupon adjustments linked to issuer-defined sustainability Key Performance Indicators and targets

The amendment came with rigorous governance, disclosure and review requirement. The amendment came with the following disclosure requirements:

- Pre issuance:The issuer should define the projects as green debt security, social bond or sustainability bond based on the underlying primary objective of the projects selected, and the expected impacts and benefits of the projects to the society and the environment as the case may be. The issuer will be required to define the key performance indicators (KPIs), or the sustainability performance targets (SPT) definitions accordingly.
- The debt security shall be labelled as 'social bonds' or 'sustainability bonds' or 'sustainability-linked bonds', only if the funds raised through the issuance are proposed to be financed for projects which are aligned with any of the international framework:
  1. International Capital Market Association (ICMA) Principles / Guidelines;
  2. Climate Bonds Standard;
  3. ASEAN Standards;
  4. European Union Standards;
  5. Any framework or methodology specified by any financial sector regulator in India
- Verification and certification: Appointment of an independent third party reviewer/ certifier to ascertain that the projects are in alignment with the mentioned standards, relevance and robustness of the KPIs identified.
- Post issuance: Annual reports on utilization, qualitative and quantitative performance indicators, deployment of mitigation plan as disclosed in offer document, impact reporting, unutilized proceeds
- Third Party Review: Mandatory independent review by external reviewers or SEBI-registered ESG rating providers, covering both pre and post issuance documentation
- Anti Purpose Washing: Strict checks – non-compliance or misallocation may trigger early redemption and public disclosure

2. Key Actors, roles and responsibilities, and pre-requisites for raising Green Bonds

2.1 Pre-requisites for ULBs for the issuance of Green Bonds

2.1.1 SEBI Regulations for Issuance of Municipal Debt Securities, 2015

The SEBI regulations for issuance of Municipal Debt Securities, 2015 lays certain requirements that the issuer must follow before issuance of municipal bonds, which are as given below[5]:

1. The issuer should not have defaulted in repayment of debt securities or loans obtained from banks or financial institutions in the preceding 365 days
2. The issuer or its promoters or its directors should not have any order or direction of restraint, prohibition or debarment by the Board
3. An issuer or its promoter, group company or director(s), should not have been named in the list of the wilful defaulters
4. Any promoter or director(s) of the issuer should not be declared as a fugitive economic offender
5. The issuer's income and expenditure statement should have surplus income in any one of the immediate preceding three financial years.
6. As per SEBI guidelines, the issuer must contribute atleast 20% of the total project cost through internal resources and grants
7. Issuers which are SPVs formed under the Companies Act 2013 should not have negative net worth in any of the immediate preceding three financial years.
8. The issuer will be required to obtain credit ratings from atleast one credit rating agency. The process followed by a credit rating agency is detailed in the next chapter.
9. Appointment of merchant banker, debenture trustee. The roles and responsibilities of both are detailed in the next section.
10. The issuer must formally partner with a registered depository (such as NSDL or CDSL in India) before the issuance of municipal debt securities. This arrangement ensures that the securities are issued in dematerialized or electronic form, rather than physical certificates.
11. The ULB is required to present the annual financial statements using double entry system of accounting in accordance with the National Municipal Accounts Manual, or the relevant State Municipal Accounts Manual

Accounting Standards requirements for ULBs

As per the National Municipal Accounting Manual[6], all the ULBs are required to shift to accrual based double-entry accounting system, replacing traditional single entry, cash based bookkeeping. The double-entry accounting system, distinguishes

[5] SEBI | Revised Disclosure Requirements for Issuance and Listing of Green Debt Securities
[6] NMAM.pdf

revenue and capital items, and recognises revenue and expenses when they are incurred, and not when cash is transferred. This enables the system to match income and expenses in the same period, allowing accurate portrayal of service costs, usage and liability. This practice strengthens the ULBs internal control, revenue management, and budgeting processes. The accrual based double entry accounting system facilitates a clear view of the assets, liabilities, enhancing transparency, governance and fiscal planning, supporting the ULBs for market-based financing, including municipal and green bonds and enhancing investor confidence.

As per the NMAM, the ULBs are required to prepare standardized financial reports each year, which includes:

- Opening balance sheet
- Receipt and payment account
- Income and expenditure statement
- Balance sheet
- Cash flow statement

ULBs need to adopt double-entry accounting for atleast three years, to qualify for central grants, or issue municipal bonds. The annual accounts are to be audited by local auditors, state auditor or the CAG.

NMAM rollout includes developing e-municipality systems, enabling ULBs to integrate ACCRUAL accounting with their existing financial software.

1. 2.2 Key Actor, and their roles and responsibilities

There are multiple actors involved in the process of raising Green Bonds, ranging from the issuer, merchant banker, rating agency, certifier and regulator. This chapter discusses the roles and responsibilities of various actors and the pre-requisites essential for the ULBs to go forward for raising green bonds.

1. **Issuer:** Issuer is an entity, which can be an urban local body, a para-statal agency, or a national entity, which intends to raise funds through non-convertible debt securities, for environmentally sensitive projects-falling under the categories identified by SEBI.
2. **Green Bond Committee:** The green bond committee is an internal team constituted by the issuer to oversee the process of issuing green bonds. The green bond committee is entrusted with overseeing the entire process of issuing green bonds, from project identification according to the guidelines provided by the Green Bond Principles, Climate Bonds Standard, and SEBI, to post-issuance monitoring on behalf of the issuer. It is responsible for drafting the Green Bond Framework and filling out the information framework for SEBI.
3. **Rating Agency:** A credit rating agency is an entity which assesses the ability and willingness of the issuer company for timely payment of interest and principle on a debt instrument. Obtaining a credit rating for your bond is one of the important steps in issuance of debt securities as it entails confidence in investors about the repayment worthiness of a bond. Few of the rating agencies registered with SEBI are provided in the Annexure-I
4. **Merchant Banker / Underwriter:** Merchant banker is registered with SEBI and appointed by the issuer to manage the

issue of non-convertible debt securities, providing advisory services to the issuer right from the identification of the projects till the mobilization of funds from investors. The list of merchant banker accredited by MoHUA is provided in Annexure- II. The merchant bank takes up the following responsibilities:

- Provides advisory service in the entire issuance process.
- Structuring terms of the green bonds and its credit enhancement to obtain the desired credit rating
- Underwrite the bond issuance and ensure successful placement of bonds
- Facilitating the discussions with the verifier, certifier and auditors
- Developing the offer document for the issuer
- Guide the issuer in the issuance and listing of green bonds.

5. **Verifier or External reviewer:** Verifier is an independent third-party assurance or external review provider that is approved by relevant organization or regulatory authority such as here Climate Bond Initiative and SEBI. Only approved verifiers are authorised to issue verification opinions in relation to certificate application in accordance with the Climate Bond Standards. The list of verifiers approved by CBI are provided Climate Bonds | Approved Verifiers. In India, KPMG India, Emergent Ventures of India, are few organisations accredited by CBI as verifiers. Verifiers must follow best practice guidelines concerning ethics, independence, management of conflicts of interest, competence, documentation, and quality controls. Members of the verification teams must have appropriate qualifications and professional experience to enable them to conduct their work to a high standard as well as proven competencies in both financial and environmental/technical fields.
   - Verifiers are entrusted with following responsibility:
   - Reviewing green bond framework, ensuring it aligns with green bond principles.
   - Evaluating projects eligibility and verifying it meets the defined green criteria.
   - Assessing allocated proceeds making sure the bond proceeds are used for eligible green projects.
   - Overseeing project implementation and ensuring compliance with the green bond framework. Development of independent assurance report for the issuer, which evaluates and certifies the green credentials of the projects, as per the requirements of the third party certifier.
6. **Certification agency:** A certification agency—such as the Climate Bonds Initiative—is a non-profit, independent third-party organization that plays a key role in validating the green integrity of bonds. The certification agency is responsible for developing standards, define taxonomies, sector-criteria, and requirements for certifying green bonds; review the verifier's assurance report for certifying the bonds. The June 2025 amendment to the SEBI's framework for green debt securities mandates all the issuers to certify the green bonds through international certification agency.
7. **Debenture trustee:** A debenture trustee is a third party professional entity, often a bank or financial services company that represent the interests of the bondholders/ investors. The debenture trustee:
   - Monitors whether the municipality is following the terms of the bond issue (such as paying interest on time, maintaining required financial conditions, etc.)
   - Takes action on behalf of

bondholders in case the issuer defaults or violates terms (e.g., initiating legal proceedings)

8. **SEBI:** SEBI is the regulatory authority for Indian securities market, established to protect investor interests, promote market growth, and ensure the fairness and transparency of financial transactions.
    - It develops and enforces the regulations and guidelines for the issuance of green bonds.
    - It reviews and approves the green bond issuance proposals, ensuring ensure compliance with regulatory requirements.
    - It monitors the green bond market to ensure transparency, fairness and investor protection.
    - Mandates specific disclosure requirements for issuance to ensure transparency in the use of proceeds and environmental impact reporting.
9. **External Auditor:** The external auditor of the ULB is responsible for verifying and confirming that the operational practices aligns as per the disclosures made in the offer document, including the governance framework, achievement of the environmental and social indicator, and fund utilization process declared by the issuer.

2.3 How can cities enhance their revenue base

As part of the reforms under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), all Urban Local Bodies (ULBs)—including Municipal Corporations and Municipalities—were mandated to undergo credit rating assessments to enable them to issue municipal bonds for resource mobilization. Of the 500 cities selected under the Smart Cities Mission and AMRUT, 94 cities undertook credit ratings in 2017[7]. However, only 15 of these cities achieved a credit rating of A+ or above, qualifying them to issue municipal or green bonds. The remaining cities must undertake targeted interventions to improve their financial performance and enhance their creditworthiness.

Improving the revenue base of Indian cities is essential to strengthen their financial health and gain access to long-term infrastructure financing. Currently, most ULBs face critical challenges such as low revenue autonomy, inefficient tax administration, and overdependence on central and state government grants. Property tax is the most significant own-source revenue for ULBs, yet its potential remains largely untapped due to outdated records, low property valuations, poor collection efficiency, and the absence of GIS-based property mapping and digitization. Additionally, user charges for essential services like water supply and solid waste management are often set far below cost-recovery levels, further weakening municipal finances.

Non-tax revenue sources such as rent from public properties, land monetization, parking fees, and advertising rights are also underutilized. Many cities lack strategies to leverage these assets effectively. To address these gaps, ULBs must begin by strengthening their tax systems through digitization, GIS-based property surveys, and improved billing and collection mechanisms. Rationalizing and gradually increasing user charges—linked to service quality improvements—can help build public acceptance and financial sustainability.

Cities should also explore land value capture instruments such as betterment

[7] Press Release:Press Information Bureau

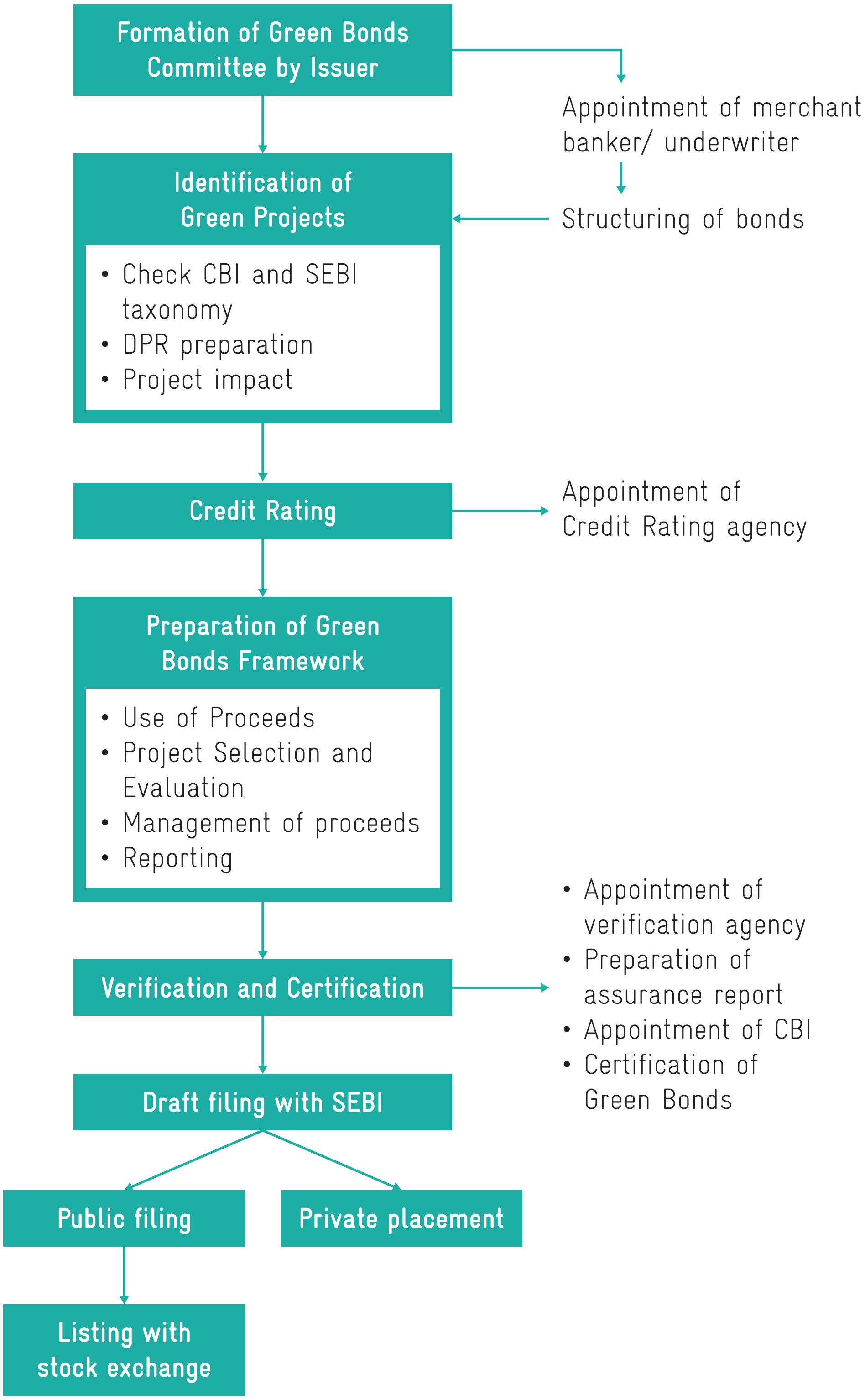
charges, impact fees, and town planning schemes, which allow them to benefit from increased land values driven by public infrastructure investments. Additionally, monetizing underutilized land and facilities through structured leasing and PPP models can open new revenue streams.

Sound financial management is equally important. ULBs must adopt transparent and modern accounting practices, ensure timely audits, and make financial data publicly accessible. These practices build investor confidence and improve credit ratings. With stronger credit profiles and a pipeline of viable, revenue-generating projects, cities can access municipal and green bond markets more effectively.

State governments also play a key role by providing ULBs with greater fiscal autonomy and support for responsible borrowing. When cities successfully increase their own-source revenues and demonstrate prudent financial management, they enhance their creditworthiness. This allows them to raise capital at lower interest rates, attract private investment, and deliver better infrastructure and services—ultimately leading to more liveable, resilient, and financially self-reliant cities.

3. Process of raising green bonds in India

This chapter dwells into the process of raising green bonds in India, right from the identification of the projects, appointment of merchant banker, to certification and filing with SEBI. The below image showcases the process, which explained in detail in the next section.



3.1 Formation of a Green Bonds Committee

The green bond committee is an internal team constituted by the issuer to oversee the process of issuing green bonds. The committee members can include the municipal commissioner, deputy municipal commissioner, chief auditor, chief accountant, and officials of the "green project" department . The green bond committee is entrusted with overseeing the entire process of issuing green bonds, from project identification according to the guidelines provided by the Green Bond Principles, Climate Bonds Standard, and SEBI, to post-issuance monitoring on behalf of the issuer. It is responsible for drafting the Green Bond Framework and filling out the information framework for SEBI.

3.1.1 Identification of "Green Projects"

Projects that contribute to the reduction of greenhouse gas (GHG) emissions or support climate change mitigation efforts are generally categorized as "green" projects. To bring clarity and standardization to this classification, the Securities and Exchange Board of India (SEBI) and the Climate Bonds Initiative (CBI) have developed a taxonomy—a structured classification system—which outlines specific sectors and categories of projects that can be considered eligible as green projects.

For a project to qualify under this framework, it is essential that the capital expenditure be financed using the proceeds raised through the issuance of green bonds. The issuer can estimate the amount to be raised based on the current stage of the project (e.g., planning, implementation, expansion) and the availability of supplementary funding from national or state-level government schemes or programs. As per SEBI guidelines, the issuer must contribute atleast 20% of the total project cost through internal resources and grants.

In order to ensure transparency and accountability, the issuer is required to submit a Detailed Project Report (DPR) for the proposed green project. This report must clearly outline the project components, implementation processes, and technologies intended to be used. Additionally, the issuer will also be required to detail out the expected environmental and social benefits, such as reductions in carbon emissions, improvements in air or water quality, or positive community-level impacts. These benefits must be explicitly declared and disclosed by the issuer.

A comprehensive list of eligible project types and categories across various sectors is provided in Annexure-III, which serves as a reference for stakeholders to determine whether a specific project aligns with the green bond framework.

3.1.2 Credit rating for the Issuer

The credit rating of an entity provides an insight on the ability of the entity to service financial obligations. The credit rating ranges from AAA to D, with entities having AAA rating having the lowest credit risk, and the entities having a rating of D expected to be in default soon. In the case of municipal bonds, most of the issues have achieved AA credit rating using appropriate credit enhancement structures in order to access provident fund and insurance companies (where regulations restrict investments having a credit rating below AA, which indicates high safety of investment).

The credit rating process conducted by rating agency for municipal bodies intending to issue bonds—such as municipal or green bonds—is a comprehensive assessment of their financial and institutional strength. The process starts with an initial engagement, where the rating agency shares a checklist of information and documents needed. These usually include:

- Audited financial statements for the last 3–5 years
- Annual budgets (past and current)
- Details of existing loans and liabilities
- Revenue records (tax revenue, non-tax revenue, grants)
- Details of pending dues (including contractor payments, salaries)
- Reports on asset ownership and management
- Project reports for the bond-funded initiative (technical, financial, environmental)
- State and central scheme support documents (like Smart Cities, AMRUT, Swachh Bharat Mission etc.)

The rating agency then applies a structured evaluation framework that covers key areas:

1. Economic Base and Revenue Profile – This involves analyzing the economic strength of the city, the diversity and size of the tax base, and the efficiency of revenue collection. It includes property tax recovery trends, user charges (e.g., water, sanitation), and dependency on state/central transfers.
2. Financial Position – Evaluation of the past performance on revenue surplus or deficits, capital expenditure, borrowing trends, cash flow adequacy, and working capital management. The Debt Service Coverage Ratio (DSCR) is often used to assess repayment capacity.
3. Governance and Institutional Capacity – Here, the focus is on the strength of the municipal administration, the frequency and accuracy of financial disclosures, internal audit systems, and reforms undertaken in line with national/state missions. The municipality's track record in implementing projects is also reviewed.
4. Project Viability – The specific project for which bonds are being raised is examined for its technical soundness, financial feasibility, environmental sustainability, and implementation timeline. The Detailed Project Report (DPR) is crucial here.
5. State Government Support – Assessment of the level of institutional and financial backing from the respective state government, including guarantees, grants, letters of comfort, and the regularity of fiscal transfers.

Following this, the rating agency conducts management meetings with key municipal officials (Commissioner, Deputy Commissioners, Chief Accounts Officer, Project Engineers) to understand plans, clarify data, and discuss risks and mitigation strategies.

The findings from all these assessments are compiled and presented to an internal Rating Committee, which decides on the final rating. The rating reflects the municipality's ability and willingness to service its debt on time, and ranges from AAA (highest safety) to D (default risk).

Once the rating is assigned and accepted, it is published and shared with investors. The rating agency also undertakes regular surveillance of the municipality's performance, requiring periodic updates on financial health, project execution, and any material changes in revenue streams or governance, and either re-affirms the credit rating or awards a revised credit rating. The rating agencies are bound by regulation to disclose the credit rating decisions arrived at after completion of the surveillance exercise in the public domain for the benefit of the investors.

3.1.3 Preparation of a "Green Bonds Framework"

The Green Bond Framework (GBF) serves as a disclosure document, outlining key aspects such as the identified projects, process and evaluation for selection of the projects, their expected environmental and social impacts, and the assurance provided

to investors regarding the appropriate use of proceeds in line with the Climate Bonds Initiative (CBI) taxonomy and SEBI guidelines. It also details the processes for managing the proceeds, as well as reporting and verification mechanisms.
The following section describes the information required under the various components of the GBF:

Use of Proceeds:
This section summarizes the details of the projects identified for which the proceeds would be used, and the categories under which projects have been identified, aligned with SEBI regulations and the CBI taxonomy. It should include details of the selected projects and their contribution to the Sustainable Development Goals (SDGs), national priorities, and climate objectives. Additionally, the section should specify:

1. The technology to be adopted in the implementation of the projects
2. The total amount to be raised through green bonds
3. Any financial contributions from the issuer
4. Support from national and/or state-level funds

Cities are encouraged to elaborate on the technological and economic advantages of the chosen solutions. Furthermore, they should quantify the expected environmental and social impacts of the projects. Below are examples of few indicators for reference:

1. Reduction in greenhouse gas (GHG) emissions through the implementation of the projects
2. Improved service coverage
3. Increase in public transport ridership
4. Level of waste segregation/ recycling
5. Improved water quality and coverage
6. Volume of water treated

Additional benefits from implementing efficient and sustainable systems should also be clearly articulated.

Project Selection and Evaluation Process:
Under this section, the issuer will be required to provide:

1. Climate friendly goals and objectives: Description of the goals and objectives of the issuer towards climate-resilience and environmental protection, considering the project categories, their initiatives, and proposed projects to achieve the climate related goals and objectives.
2. Rational for issuing green bonds
3. Process followed to identify the eligible projects: Details of the green bonds committee, approval for the identified projects, discussions/ consultations held with various experts to finalise the eligible projects, discussions with the project departments to understand the status, technology, and environmental and social impact of the project.
4. Development of climate adaptation and mitigation plan for the project: As per the CBI guidelines, for certain projects, climate adaptation and risk mitigation plan is required to be prepared and submitted as part of the documents required for certification. The background paper issued by CBI for each sector (Climate Bonds | Sector Criteria) provides the specific projects for which the plan is required to be prepared and the guidelines for framing the plan.
5. Project implementation monitoring mechanisms: As per the SEBI and CBI guidelines, the issuer is to send an annual audited report providing the details of utilization of funds, status of project development and implementation, environmental and social impact of the projects with respect to the indicators (described in the previous section). Under this section, the issuer will be required to describe the measures that will be put in place to monitor the progress achieved till the full utilisation of the

funds raised.

Management of Proceeds

The issuer must clearly outline how the proceeds from the green bonds will be managed and how investors will be kept informed. To ensure transparency and accountability, the local body should ring-fence the revenues and expenses related to the identified green projects.

A designated escrow account may be opened for this purpose. This account helps in tracking and managing the green bond proceeds separately from the corporation's general funds, ensuring the money is used only for the approved green projects listed in the bond framework.

The escrow account is operated by a bank and is responsible for:

- Managing and recording all inflows and outflows,
- Safeguarding the proceeds,
- Releasing funds upon task completion, and as per the conditions set forth
- Submitting financial statements and utilisation certificates to the city authority.

The Accounts Department or the Chief Accounts and Finance Officer (CAFO) coordinates with the bank for account-related matters. The Green Bonds Committee may authorise withdrawals from the designated escrow account and verifies the utilisation of funds.

An external auditor, typically the corporation's chartered accountant firm, conducts an independent audit of the escrow account to ensure proper use and reporting of the funds.

3.1.4 Reporting

As per the SEBI and CBI guidelines, the issuer is required to report to the investors, verifier, SEBI and certifier on the aspects of:

1. Impact reporting
2. Fund utilization

Towards this, an annual report may be generated by the issuer until the funds are utilised. The annual report should comprise of the following:

1. List of projects for which the proceeds have been allocated
2. Amount allocated, verified by external auditor
3. Assets developed using the proceeds
4. Environmental and social impact achieved with reference to the impact numbers quoted in the green framework submitted
5. Methodology used for estimating the environmental and social impact
6. Details of unutilised funds, and
7. Reallocation of the unutilised funds

The unallocated funds can be utilised only for investment in permitted avenues- for example in Fixed Deposits in scheduled commercial banks, and cannot be used for any other project. Further, the permitted investment avenues must be declared upfront by the issuer in the green bond framework.

3.1.5 Verification and Certification

With the SEBI circular issues in 2023, the issuers are required to get the projects reviewed or certified by an independent third party. Towards this, CBI has accredited few organisations as verifiers.. The verifier develops an assurance report based on the review of the green bonds framework prepared by the city- assessing the eligibility of the projects as per the CBI taxonomy, use of proceeds, project selection criteria, and reporting mechanisms, against the standards set by CBI, and verifies all the details of the projects with the supporting documents- such as the DPR.

The issuer then submits the assurance report with other required documents to CBI. Based on the review of the report and the documentation, CBI allows the issuer to label the bonds as "Certified Green Bond".

Certification by CBI, enhances the credibility of the green bonds, and makes it more attractive for the investors, particularly those investors who are looking to invest in climate positive projects.

3.1.6 Filing with SEBI

Once the Green Bonds are certified, and all disclosures listed above are complied with, the issuer will be required to file the documents with SEBI. The issuer can go for either a public issue or for private placement of the bonds.

A bond is said to be issued publicly if it is available as an investment tool to the public at large. If the issuer opts for public placement of bonds, then the bond issue is open to public review and is listed on an exchange, from where the public can apply to subscribe to the bond. Further, since the bonds are listed on an exchange, investors can also purchase the bonds from existing subscribers should they be available for trade. As a result, such bonds have greater liquidity. However, the issuer must file documentation regarding their finances and the bond transactions since the issue is available to the public at large – i.e., the public securities exchange has a large investor base. As per SEBI regulations, the face value of these bonds should be INR 1000. To undertake a public issue of non-convertible debt securities in India, an issuer must make an application to one or more recognized stock exchanges for listing of debt securities, obtain in-principle approval for listing of debt securities, and enter into an arrangement with a depository registered with SEBI for dematerialization of debt securities proposed to be issued.

For the issuer to list their debt security on the stock exchanges in India, they must meet the following eligibility requirements[8]

1. having a track record of distributable profit for a stipulated period of time;
2. having a minimum category of rating by a credit rating agency (investors typically expect a minimum 'AA' credit rating in the case of municipal bonds);
3. having no regulatory action pending against the issuer or its promoters or directors before certain identified authorities;
4. not having defaulted on certain identified financial obligations

The issuer may also opt for a Green Shoe Option (GSO), also known as an over-allotment option, which serves as a vital mechanism to ensure post-listing price stability in the stock market. This option allows the issuer to issue additional shares—typically up to 15% of the original issue size—in case of excess demand following the launch of an Initial Public Offering (IPO) or a public bond issue. By enabling the underwriter to sell more shares than originally planned, the GSO helps manage volatility and maintain an orderly market for the newly issued securities.

As per SEBI (Securities and Exchange Board of India) guidelines, the Green Shoe Option can be exercised within 30 days from the date of allotment, and the proceeds from the additional allotment are generally used to stabilize the post-issue price through market interventions. This option benefits both issuers and investors:

- For issuers, it enhances market confidence, supports successful price discovery, and helps maintain the

[8] https://www.lexology.com/library/detail.aspx?g=2a084ddb-3c74-481d-a939-d499604a5ff6

stock's or bond's credibility post-listing.

- For investors, it provides a safeguard against excessive price fluctuations, ensuring fair valuation and smoother market performance in the initial trading phase.

For implementing the GSO, in an IPO, the issuer will be required to:

1. The issuer and merchant banker will be required to assess the potential demand for the IPO and determine the necessity for the option
2. Issuer and merchant banker will be required to agree on the terms of the GSO, and include it in the underwriting agreement, ensuring transparency and compliances
3. If there is surge in the demand for the IPO, the merchant banker can exercise the GSO and issue additional shares[9].

A recent example of innovative use of such mechanisms in India is the Surat Municipal Corporation's launch of the country's first internationally certified public issue of green bonds. The base issue size was ₹100 crore, with an option to retain oversubscription of up to an additional ₹100 crore, aggregating up to ₹200 crore[10]. The funds raised are earmarked for multiple environmentally sustainable infrastructure projects, aligning with the national and global goals of promoting green and sustainable finance.

By contrast, a bond is said to be privately placed if the issue is only available to selected investors or institutions, instead of listing it on an open market. Typically, a bond is said to be privately placed if the issue is available to fewer than 50 investors[11]. As of 1st January 2023, SEBI has prescribed that the face value of these bonds should be INR 1 lakh[12]. Unlike public issuance, bonds which are privately placed are exempt from having to file the offer document with SEBI for public comments, though they need regulatory approval for the placement memorandum filed with SEBI for private placement. Further, private placement of bonds may not require any form of general announcement, solicitation or advertising to publicize the offering to retail investors.

Documentation requirement for filing with SEBI

For obtaining approval from SEBI for its proposed green municipal bond issue, the issuer will have to submit the following documents:

1. Green Bonds Framework
2. Assurance report of the verifier
3. General Body/Council Resolution
4. Standing Committee resolution
5. Green Bonds Certification
6. Audit reports
7. Ratings report
8. State Government approval
9. Offer document or the placement memorandum

The offer document or the placement memorandum is prepared by the merchant banker, and includes details such as:

1. Issuer profile: Nature of the issuer with its governance structure
2. Financial disclosures: Audited financial statements for past three years, including borrowings and revenue grants, as mandated by SEBI
3. Details on coupon rate, frequency of interest payments, maturity terms, and

[9] Greenshoe Option - Meaning, Types, Examples and Benefits
[10] Surat_Municipal_Corporation_Offer_Document_dated_September_18_2025.pdf
[11] https://www.moneycontrol.com/news/business/mc-explains-why-do-firms-prefer-private-placement-of-bonds-over-public-issues-9101181.html
[12] https://www.indiabonds.com/news-and-insight/what-is-a-public-and-private-placement-of-bonds/

repayment structure
4. Analysis of project, market, and regulatory risks
5. Undertaking confirming the issuer is not under regulatory default
6. Appointment of a debenture trustee to oversee escrow accounts and ensure proper use of funds.
7. Inclusion of certificates from the trustee and merchant banker that attest to compliance with SEBI norms
8. Define the minimum subscription threshold. If unmet, funds must be refunded within 12 days, with interest penalties for delay
9. Details of all pending material litigations, outstanding dues, statutory violations, or defaults over the past five years
10. Required government and regulatory approvals necessary to execute both the bond issuance and underlying projects

All these documents are required to be filed by the merchant banker, with the identified stock exchange. All these documents are also required to be posted on the issuer's website, and shared with the investors and stakeholders. Once SEBI reviews all the documents, and approves it, the green bonds are listed on the stock exchange.

Pros and Cons of Public and Private Placement of Debt Securities

In general, most of the entities in India prefer private placement of bonds (In FY22, corporate entities raised INR 11,589 crore through publicly issued debt securities – about 2% of the roughly INR 5.88 lakh crore raised through private placement)[13] as they are relatively time and cost effective – they involve significantly lower underwriting costs and advertising costs, nor do they require compliance with stringent SEBI regulations for public issues. By contrast, public issuance of debt involves meeting more stringent listing and disclosure requirements, as well as advertising costs to promote interest amongst retail investors. Therefore, both the time frames for issue preparation and issuance costs tend to be much higher in the case of a public issue. Privately placed debt can be structured to meet the specific requirements of the investors and the issuers – intermediaries, in the form of investment bankers – are available who solicit private investors on the issuer's behalf, facilitating price discovery and negotiations. As a result, the matching of investors and issuers – and the allocation of securities to investors – happens relatively quickly and funds become available to issuers quicker. In fact, large issuers generally have an in-house team dedicated to capital-raising, hence the costs required for intermediaries are minimum. However, due to this customization in structuring and the higher minimum ticket size, the pool of potential investors for private placement of bonds is smaller and such debt tends to be less liquid than publicly issued bonds, which are traded on the exchange.

3.1.7 Marketing and Distribution

Once all preparatory steps are complete, the focus shifts to executing the Green Bond issuance effectively. The issuer should ensure the following:

- Issuance is completed without disruption from market volatility or external shocks.
- Work towards achieving the most

[13] Public and Private Placement of Bonds | IndiaBonds

competitive pricing by evaluating market conditions.

- Building a Green Bond Curve: If multiple issuances are planned, aim to establish a strong presence in the market to support future issuances.
- Target ESG-focused investors while also attracting existing and non-ESG investors through well-planned communication and engagement efforts.

The underwriter's role is critical in guiding the ULB through market execution. The underwriter should recommend optimal windows for issuance, avoiding periods of market disruption, public holidays, or competing supply. The underwriter should also assist in organizing investor meetings tailored to the issuers targeted investor base. For wider participation, the underwriter may suggest a global call to engage investors unable to attend the initial meetings and those interested in credit updates. The issuer should decide on the most suitable investor outreach approach:

- Deal-Specific Roadshow: Conducted after announcing the intention to issue the Green Bond, focusing on transaction details.
- Non-Deal Roadshow: A general presentation of the ULB's creditworthiness and ESG credentials without announcing a specific bond issuance. This allows for market feedback before making formal commitments.

The issuer should highlight their broad sustainability goals, and how the green bonds support these objectives. Provide clear information about the bond using frameworks like the Green Bond Principles, covering financial terms and expected outcomes; and Offer insights into the ULB's financial health, including recent performance indicators or credit rating updates, especially helpful for new investors. The presentation should be transparent and tailored to build investor trust while being ready to address further questions if requested.

Once the underwriter and the issuer confirm sufficient investor demand and the issuance is priced appropriately, the bond can be finalized and distributed.

Additionally, the issuer should ensure that:

- The Green Bond Framework and any independent reviews (such as Second Party Opinions) are publicly accessible on the ULB's website.
- Investor communications are aligned with transparency and long-term engagement objectives.

Annexure

I. List of Credit Rating Agency

1. Acuite Ratings & Research Limited
2. Brickwork Ratings India Private Limited
3. Care Ratings Limited
4. Crisil Ratings Limited
5. ICRA Limited
6. India Ratings and Research Pvt. Ltd.
7. Infomerics Valuation and Ratings Pvt. Ltd.

I. List of Merchant Bankers empaneled with MoHUA

1. AK Capital Services Limited
2. Axis Bank Limited
3. Darashaw & Company Private Limited
4. ICICI Bank Limited
5. SBI Capital Markets Limited
6. SPA Capital Advisors Limited
7. SREI Infrastructure Finance Limited
8. Yes Bank Limited

I. Eligible "Green Projects"

1. Waste Management
   a. Waste Collection: bins, containers
   b. Waste storage: Storage and bulking facilities
   c. Waste sorting, separation, and MRFs: Sorting facilities
   d. Wate Recycling and reuse: Facilities processing recyclable waste, facilities collecting, sort, clean, refurbish, recondition, and repair products
   e. Composting: facilities processing food/ garden yard waste to produce compost for agricultural, municipal or consumer applications, facilities which produce power/ heat using the food/ yard waste
   f. Energy from waste: Facilities which produce power/ heat/ cooling by the thermal processing of residual waste (pls refer to Waste_Management_Criteria_August-2022.pdf for sector criteria
   g. Landfill gas recovery assets: projects to capture biogas from **closed** landfill facilities
2. Wind
   a. Onshore wind energy generation facilities
   b. Dedicated transmission infrastructure and support facilities (e.g. transformers, backbone, transmission terminus, grid connections, dedicated facilities for support vessels and vehicles, equipment storage, onshore assembly)
   c. Dedicated operational production, manufacturing or distribution facilities for key components for onshore or offshore wind energy generation, such as wind turbines, platforms etc
   d. Offshore wind facilities, dedicated transmission infrastructure, and dedicated support facilities, **are not eligible** for Certification under these Wind Criteria
3. Water Infrastructure
   Assets **not eligible** for certification:
   a. Integrated Water and Power Plants
   b. Desalination plants powered by waste heat from fossil fuel power plants or industrial processes

c. Desalination plants supplying water explicitly for: • Fossil fuel power stations • Nuclear power stations

Assets **eligible** for certification. For certain assets the issuer may need to provide documentation for mitigation, adaptation and resilience. The criteria and the framework for mitigation, adaptation and resilience documentation is available Water_Criteria_Document_August-2022.pdf - section 4

a. Water monitoring, including but not limited to:
   a) Smart networks
   b) Early warning systems for droughts,
   c) Floods water quality monitoring processes
b. Water storage, including but not limited to:
   a) Rainwater harvesting systems
   b) Storm water management systems
   c) Water distribution systems (excluding irrigation)
   d) Infiltration pond
   e) Aquifer storag
   f) Groundwater recharge systems
   g) Sewer system
   h) Pumps
   i) Sand dam
c. Water treatment, including but not limited to:
   a) Water recycling sy tems
   b) Wastewater treatment facilities
   c) Manure/ slurry treatment facilities
d. Water Desalination – the construction and/or operation of: Seawater desalination plants Brackish water desalination plants
e. Water distribution, including but not limited to:
   a) Rainwater harvesting systems
   b) Gravity fed canal systems
   c) Pumped canal or water distribution system
   d) Terracing systems
f. Flood defence, including but not limited to:
   a) Surge barriers
   b) Pumping stations
   c) Levees Gates
g. Water storage, including but not limited to:
   a) Rainwater harvesting systems
   b) Aquatic ecosystems (lakes, wetlands)
   c) Aquifer storage
   d) Snowpack
   e) Runoff
   f) Groundwater recharge systems
   g) Riparian wetlands
   h) Storm water management
h. Flood defences, including but not limited to: Ecological retention, current force reduction mechanisms Relocation of assets from floodplains / "room for the river"
i. Drought defences, including but not limited to: Aquifer / groundwater storage (pumped) Recharge zone management Wetland storage Snowpack management Evaporation reduction effort
j. Water treatment, including but not limited to
   a) Natural filtration / recycling systems (e.g. wetlands, watersheds, forests)
   b) Engineered natural filtration / settling systems
   c) Forest and forest fire management for water

quality / quantity management

k. Storm water management, including but not limited to
   a) Permeable surfaces (parks, roads, etc.) and evapotranspiration systems
   b) Groundwater recharge
   c) Rainwater harvesting
   d) Constructed ecological retention ponds
   e) Forests for water quality management
   f) Erosion control systems
l. Ecological restoration / management:
   a) Erosion control systems
   b) Hydrological restoration

Solar Energy

a. Onshore solar electricity generation facilities
b. Wholly dedicated transmission infrastructure, grid connections and other supporting infrastructure for onshore solar electricity generation facilities including inverters, transformers, energy storage systems and control systems
c. Onshore solar thermal facilities such as solar hot water systems
d. Onshore solar heat/cool and power cogeneration facilities
e. Dedicated operational production, manufacturing or distribution facilities for key components, such as solar panels, inverters etc.

Assets not eligible for certification:

a. Offshore solar electricity generation facilities
b. Wholly dedicated transmission infrastructure and other supporting infrastructure for offshore solar electricity generation facilities including inverters, transformers, energy storage systems and control systems.
c. Offshore solar thermal facilities such as solar hot water systems.

Relevant Regulations and Supporting Papers

1. Climate Bonds | Sector Criteria
2. SEBI | Framework for Environment, Social and Governance (ESG) Debt Securities (other than green debt securities)
3. SEBI | Revised Disclosure Requirements for Issuance and Listing of Green Debt Securities
4. SEBI | Revised Disclosure Requirements for Issuance and Listing of Green Debt Securities

Abbreviations

MoHUA - Ministry of Housing and Urban Affairs
GBP - Green Bonds Principles
CBI - Climate Bonds Initiative
SEBI - Securities and Exchange Board of India
GDS - Green Debt Securities
SLB - Sustainability-linked bonds
ESG - Environment, Social and Governance
ICMA - International Capital Market Association
SPT - Sustainability Performance Target
ULB - Urban Local Bodies
GHG - Green house gas
DPR - Detailed project report
SDG - Sustainable Development Goals
CAFO - Chief Accounts and Finance Officer
GSO - Green Shoe Option
IPO - Initial Public Offering

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