



Second Party Opinion  
FRAMEWORK FOR SOVEREIGN GREEN BONDS  
ISSUED BY  
**GOVERNMENT OF INDIA**





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In this section, liAS assesses alignment of the framework for Sovereign Green Bonds with SEBI regulatory guidelines on debt securities.

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The framework lists the eligible projects in which the funds may be invested. liAS has mapped the eligibility criteria of projects with the ongoing/proposed initiatives of the government and has provided an analysis of the probable focus areas.

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## OVERALL ASSESSMENT



## SECOND PARTY OPINION

A Second Party Opinion is a review of the green, sustainable or social bonds or the Issuer's Green Bond Framework to assess their alignment with accepted market principles and practices.

### ASSESSMENT OF THE FRAMEWORK FOR SOVEREIGN GREEN BONDS ISSUED BY THE GOVERNMENT OF INDIA

IiAS is of the opinion that [framework for Sovereign Green Bonds](#) to be issued by the government of India aligns with:

- International Capital Market Association's (ICMA) [Green Bond Principles 2021](#);
- [SEBI regulations](#) which include renewable and sustainable energy, green transportation, sustainable water management, climate change adaptation, energy efficiency, sustainable waste management and biodiversity conservation as eligible projects for issuance of green debt securities.
- Relevant UN SDGs.

The eligible projects align with India's climate goals and the projects are expected to have a positive environmental and social impact.

IiAS expects a higher level of transparency and disclosure on the eligible projects that will be funded out of the issue proceeds, their risk assessment and impact metrics to quantify potential impact of the projects.

The issue proceeds should be monitored by an external agency, with the CAG having oversight over the entire fundraise, deployment and reporting.

**IiAS believes that the framework for Sovereign Green Bonds issued by the Government of India aligns with the International Capital Market Association's (ICMA) Green Bond Principles 2021.**



NOT ALIGNED

PARTIALLY ALIGNED

ALIGNED

Note, this is an unsolicited opinion prepared without engagement with the issuer.



# 01

## INTRODUCTION

India has a population of over 1.4 bn people and is the world's most populous country. As a result, India has been the third largest emitter of carbon dioxide in terms of volume in 2020<sup>1</sup>, although its per capita emissions are lower than the world average.

India's green-house gas emissions are mainly derived from fossil fuel combustion, industry and agriculture.

In 2021, India ratcheted up its climate ambition to establish a new target - to reach net zero greenhouse gas (GHG) emissions by 2070. India also reaffirmed its aim to install 500 GW of non-fossil power capacity by 2030. Indian government's climate commitments<sup>2</sup> are as follows:

1. India will take its non-fossil energy capacity to 500 GW by 2030.
2. India will meet 50% of its energy requirements from renewable energy by 2030.
3. India will reduce the total projected carbon emissions by 1 bn tonnes by 2030.
4. By 2030, India will reduce the carbon intensity of its economy by more than 45%.
5. By the year 2070, India will achieve the target of Net Zero.

### **Sovereign Green Bond**

A green bond is a type of debt security created for funding or re-funding projects that contribute positively to the climate and/or the ecosystem. A Sovereign Green Bond is a green bond issued by the Government of India. This issue of Sovereign Green Bonds was proposed in the 2022-23 Union Budget. Through these bonds, the government will raise funds from potential investors that will be deployed in eligible projects. These projects will be environment friendly and will aid in reducing the carbon intensity of the economy.

### **Sovereign Green Bond Framework**

- The Sovereign Green Bond framework (framework) defines the obligations of the Government of India as the issuer of green bonds. The framework applies to all Sovereign Green Bonds issuances by the Government of India.
- The bonds issued under this framework will not carry any project related risks: payment of principal and interest on the issuances are not conditional on the performance of the eligible projects.
- The Department of Economic Affairs, Ministry of Finance will have the right to modify the framework according to international best practices or in accordance with the Government of India's international commitments and environmental priorities.
- Any proposed changes to the framework will be reviewed by an independent provider.

<sup>1</sup> United Nation's Emissions Gap Report (EGR)

<sup>2</sup> Ministry of External Affairs, 2021



# 02

## IIAS ASSESSMENT OF THE FRAMEWORK FOR SOVEREIGN GREEN BONDS

In this section, liAS assesses alignment of the framework for Sovereign Green Bonds with the ICMA Green Bond Principles 2021 on its four core components – Use of proceeds, Process for Project evaluation & selection, Management of proceeds and Reporting.

The framework is based on four components and key recommendations of the International Capital Market Association (ICMA) Green Bond Principles 2021 (GBP) namely:

- A. Use of proceeds**
- B. Project evaluation and selection**
- C. Management of proceeds**
- D. Reporting**

### A. Use of Proceeds

liAS is of the opinion that the use of proceeds under the framework for Sovereign Green Bonds aligns with the ICMA Green Bond Principles 2021. However, the issuer should have provided details regarding the various projects that will be funded under this framework, as well as their implementation schedule.

#### liAS' mapping of 'Use of Proceeds' under framework for Sovereign Green Bond with ICMA Green Bond Principles 2021

ICMA Green Bond Principles 2021	Framework for Sovereign Green Bond
<b>Renewable Energy:</b> including production, transmission, appliances and products	<b>Renewable Energy:</b> Investments in solar / wind /biomass /hydropower energy projects that integrate energy generation and storage.
<b>Energy Efficiency:</b> such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products	<b>Energy Efficiency:</b> <ul style="list-style-type: none"> <li>• Design and construction of energy-efficient and energy-saving systems and installations in government buildings and properties.</li> <li>• Supporting public lighting improvements (e.g. replacement with LEDs).</li> <li>• Supporting construction of new low-carbon buildings as well as energy-efficiency retrofits to existing buildings</li> <li>• Projects to reduce electricity grid losses.</li> </ul>




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## ICMA Green Bond Principles 2021

**Pollution prevention and control:** including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy

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### **Environmentally sustainable management of living natural resources and land use:**

environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes

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### **Terrestrial and aquatic biodiversity:**

conservation including the protection of coastal, marine and watershed environments

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**Clean transportation:** electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions

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### **Sustainable water and wastewater management:**

including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation

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**Climate change adaptation:** including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems

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**Green buildings:** that meet regional, national or internationally recognised standards or certifications for environmental performance

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## Framework for Sovereign Green Bond

### **Pollution prevention and control:**

Projects targeting reduction of air emissions, greenhouse gas control, soil remediation, waste management, waste prevention, waste recycling, waste reduction and energy/emission-efficient waste-to-energy

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### **Sustainable Management of Living Natural Resources and Land Use:**

- Environmentally sustainable management of agriculture, animal husbandry, fishery and aquaculture.
- Sustainable forestry management including afforestation / reforestation.
- Support to certified organic farming.
- Research on living resources and biodiversity protection.

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### **Terrestrial and aquatic biodiversity conservation:**

- Projects relating to coastal and marine environments.
- Projects related to biodiversity preservation, including conservation of endangered species, habitats and ecosystems.

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### **Clean transportation:**

- Promote public transportation including its electrification and transport safety.
- Subsidies to adopt clean fuels like electric vehicles including building charging infrastructure.

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### **Sustainable Water and Waste Management:**

- Promoting water efficient irrigation systems.
- Installation/upgradation of wastewater infrastructure including transport, treatment and disposal systems.
- Water resources conservation.
- Flood defence systems.

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**Climate change adaptation:** Projects aimed at making infrastructure more resilient to impacts of climate change, as well as investments in information support systems, such as climate observation and early warning systems.

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**Green building:** Projects related to buildings that meet regional, national or internationally recognized standards or certifications for environmental performance.



## B. Project Evaluation & Selection

The framework states that the projects will be evaluated for their eligibility by a climate specialist from NITI Aayog (public policy thinktank of the Government of India) and a representative from the Ministry of Environment, Forests and Climate Change. The issuer may consult external experts. Further, the issuer also proposes to align the projects with various national strategies/policies and the respective state's environmental and social objectives.

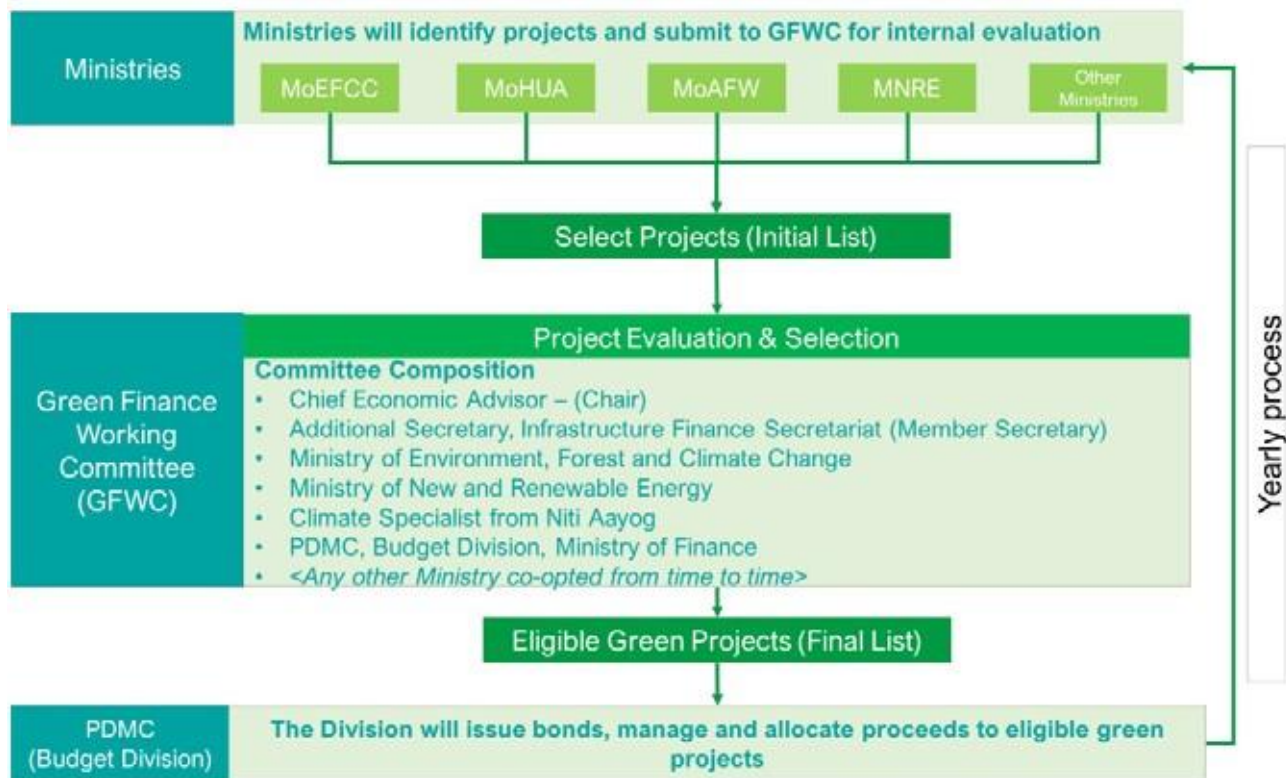
While the project evaluation and selection process under the framework for Sovereign Green Bonds aligns with the ICMA Green Bond Principles 2021, the social and/or environmental risks associated with the projects and the mitigation measures for the same should have been disclosed.

### IIAS' mapping of 'Process for Project evaluation and selection' under framework for Sovereign Green Bond with ICMA Green Bond Principles 2021

ICMA Green Bond Principles 2021	Framework for Sovereign Green Bond
<p><b>Issuer needs to clearly communicate:</b></p> <ul style="list-style-type: none"> <li>The environmental sustainability objectives of the eligible Green Projects;</li> <li>The process by which the issuer determines how the projects fit within the eligible Green Projects categories; and</li> <li>Complementary information on processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant project(s)</li> </ul> <p><b>Issuers are also encouraged to:</b></p> <ul style="list-style-type: none"> <li>Position the information communicated above within the context of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability.</li> <li>Provide information, if relevant, on the alignment of projects with official or market-based taxonomies, related eligibility criteria, including if applicable, exclusion criteria; and also disclose any green standards or certifications referenced in project selection.</li> <li>Have a process in place to identify mitigants to known material risks of negative social and/or environmental impacts from the relevant project(s). Such mitigants may include clear and relevant trade-off analysis undertaken and monitoring required where the issuer assesses the potential risks to be meaningful.</li> </ul>	<ul style="list-style-type: none"> <li>The GFWC will evaluate all submitted projects for their eligibility under the framework and their alignment with the framework's overall objectives. The assessment will be based on environmental and social aspects identified by the climate specialist from NITI Aayog as well as the representative from the Ministry of Environment, Forests and Climate Change. The GFWC may also consult sector experts to assess projects' eligibility. The Ministry of Finance will oversee the evaluation process from a financial fit point of view.</li> <li>Projects with highest environmental benefits will be prioritized. Projects must align with ICMA Green Bond principles, UN Sustainable Development Goals and the framework itself.</li> <li>Eligible Green Expenditures must align with the objectives of the following laws: National Conservation Strategy and Policy Statement on Environment and Development, 1992; National Forest Policy, 1988; Policy Statement on Abatement of Pollution, 1992; and the National Environment Policy, 2006. Additionally all expenditures will adhere to minimum social safeguards as accorded by the Constitution as well as the laws of the country (such as The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013)</li> <li>Projects must also align with the respective state's environmental and social objectives and will only be included if they run no risk of "double counting" through any other mechanism/financing instrument.</li> </ul>



**Exhibit 1: Procedure for selection of eligible green expenditure**



Source: Framework for Sovereign Green Bonds

**Projects excluded under the framework:**

- Projects involving new or existing extraction, production and distribution of fossil fuels, including improvements and upgrades; or where the core energy source is fossil-fuel based;
- Nuclear power generation;
- Direct waste incineration;
- Alcohol, weapons, tobacco, gaming, or palm oil industries;
- Renewable energy projects generating energy from biomass using feedstock originating from protected areas;
- Landfill projects;
- Hydropower plants larger than 25 MW;





## C. Management of Proceeds

The proceeds received from the issue of Sovereign Green Bonds will be transferred to the Consolidated Fund of India and a separate account will be dedicated to the proceeds. The Public Debt Management Cell (PDMC) will be responsible for the management of proceeds.

The management of proceeds under framework for sovereign green bond are aligned with the ICMA Green Bond Principles. The framework states that the management of proceeds will be audited by the Comptroller and Auditor General of India (CAG). Even so, we believe it will be advisable to appoint an external auditor with an oversight by CAG for utilization of green bond proceeds.

### IIAS' mapping of 'Management of proceeds' under framework for Sovereign Green Bond with ICMA Green Bond Principles 2021

ICMA Green Bond Principles 2021	Framework for Sovereign Green Bond
<ul style="list-style-type: none"> <li>The net proceeds of the green bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for eligible green projects.</li> <li>As long as the green bond is outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible green projects made during that period.</li> <li>The proceeds of green bonds can be managed per bond (bond-by-bond approach) or on an aggregated basis for multiple green bonds (portfolio approach).</li> <li>The GBP encourage a high level of transparency and recommend that an issuer's management of proceeds be supplemented by the use of an external auditor, or other third party, to verify the internal tracking method and the allocation of funds from the Green Bond proceeds</li> </ul>	<ul style="list-style-type: none"> <li>The proceeds will be provided to the Consolidated Fund of India, and a separate account dedicated to green bond proceeds will be created.</li> <li>The Public Debt Management Cell (PDMC) in the Department of Economic Affairs, Ministry of Finance will be responsible for the management of proceeds.</li> <li>Projects with highest environmental benefits will be prioritized. Projects must align with ICMA Green Bond principles, UN Sustainable Development Goals and the framework itself.</li> <li>A register will be set up by the Ministry of Finance to track green bond issuances and allocation to eligible projects, including a summary of project details, allocation of proceeds, expected climate and environmental impact, as well as any unallocated proceeds</li> <li>The management of proceeds will be audited by the Comptroller and Auditor General of India (CAG). We recognize that the audit will be carried out by a government body while the green bond principles essentially encourage an external auditor to review the tracking and allocation of funds.</li> </ul>

## D. Reporting

The framework states that an annual report will be published and disclosed on the government's website. The report will contain a brief description of the project, project-wise details of proceeds allocated and environmental impacts of the projects. These disclosures are in alignment with the ICMA Green Bond Principles.

The ICMA Green Bond Principles recommends use of qualitative and quantitative performance indicators while reporting on the projects. The framework has listed examples of potential metrics that will be used for reporting. We expect the report to quantify and include exact benefits such as the GHG emissions avoided, energy saved, amount of water treated and consumed for the projects.



## IIAS' mapping of 'Reporting' requirements under framework for Sovereign Green Bond with ICMA Green Bond Principles 2021

### ICMA Green Bond Principles 2021

- Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments.
- The annual report should include a list of the projects to which Green Bond proceeds have been allocated, as well as a brief description of the projects, the amounts allocated, and their expected impact.
- Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the GBP recommend that information is presented in generic terms or on an aggregated portfolio basis (e.g. percentage allocated to certain project categories).
- The GBP recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination.

### Framework for Sovereign Green Bond

- An annual report will be published by the government on its websites ([www.finmin.nic.in](http://www.finmin.nic.in) & [www.dea.gov.in](http://www.dea.gov.in))
- The report shall comprise of the allocation of proceeds and associated environmental impacts of the projects. The report will also include a description of the project, implementation status, deployment of funds, nature of expenditures incurred, type of financing, and outstanding proceeds.
- Impact reporting shall be carried out at project category level, across all green bond issuances. The impact indicators will cover both environmental and social benefits.
- In addition, there are certain metrics provided to assess the impact of the project. (Refer Exhibit 2)

## Exhibit 2: Metrics to assess the impact of projects

Green Bond Category	Examples of potential metrics
<b>Renewable Energy</b>	<ul style="list-style-type: none"> <li>• Installed renewable energy capacity (in MW).</li> <li>• Annual renewable energy generation (in MWh).</li> <li>• Annual GHG emissions avoided in tons of CO<sub>2</sub>e</li> <li>• Social co-benefits (wherever possible to quantify):</li> <li>• Number of households benefitted</li> <li>• Number of under-privileged households benefitted</li> <li>• Number of jobs created</li> </ul>
<b>Energy Efficiency</b>	<ul style="list-style-type: none"> <li>• Number of energy efficiency equipment and appliances installed.</li> <li>• Annual energy savings (in MWh).</li> <li>• Annual GHG emissions avoided in tons of CO<sub>2</sub> emission.</li> </ul>
<b>Sustainable management of natural resources, land use and marine</b>	<ul style="list-style-type: none"> <li>• Area of land or ocean conserved/recovered (km<sup>2</sup>).</li> <li>• Area (km<sup>2</sup>) of marine/forest reserves under active monitoring</li> </ul>
<b>Clean transportation</b>	<ul style="list-style-type: none"> <li>• Number of people who use new ecological public transport.</li> <li>• Number of km of new electric train/road lines created/maintained.</li> <li>• Annual GHG emissions avoided in tons of CO<sub>2</sub> emission.</li> <li>• Air quality improvement (PPM)</li> </ul>
<b>Sustainable Water and Waste Management</b>	<ul style="list-style-type: none"> <li>• Volume of water collected and/or treated (m<sup>3</sup>).</li> <li>• Increased water efficiency of systems (% reduction in water consumption loss).</li> <li>• Number of households that have access to new potable water supply</li> </ul>
<b>Green Building</b>	<ul style="list-style-type: none"> <li>• Level of certification by property</li> <li>• Annual energy savings (in MWh).</li> <li>• Annual GHG emissions avoided in tons of CO<sub>2</sub>e.</li> </ul>

Source: Framework for Sovereign Green Bonds



# 03

## IIAS' MAPPING OF THE SEBI REGULATORY GUIDELINES ON GREEN DEBT SECURITIES WITH GBP 2021

In this section, IIAS assesses alignment of the framework for Sovereign Green Bonds with SEBI regulatory guidelines on debt securities.

As per Regulation 2(1)(q) of the Securities and Exchange Board of India (Issue and Listing of Non-Convertible Securities) Regulations (NCS Regulations) 'green debt security' includes renewable and sustainable energy, green transportation, sustainable water management, climate change adaptation, energy efficiency, sustainable waste management and biodiversity conservation as eligible projects for issuance of green debt securities. The broad framework for the Sovereign Green Bonds aligns with SEBI's definition.

### IIAS has reviewed requirements for disclosures mapping them to the framework for Sovereign Green Bonds:

SEBI Disclosure Requirement	Mapping with Framework for Sovereign Green Bond	Analysis
1.1 Statement on Environmental objectives of the issue of green debt securities	Use of proceeds	The proceeds shall be used for defined purposes under the following headings: <ul style="list-style-type: none"> <li>• Renewable Energy</li> <li>• Energy Efficiency</li> <li>• Clean transportation</li> <li>• Climate Change Adaptation</li> <li>• Sustainable Water &amp; Waste Management</li> <li>• Pollution Prevention and Control</li> <li>• Green Buildings</li> <li>• Terrestrial and Aquatic Biodiversity Conservation</li> <li>• Sustainable Management of Living Natural Resources and Land Use</li> </ul>
1.2 Details of decision-making process for project eligibility	Selection process	The framework provides the eligible category of green projects as well as the projects that would be excluded.
1.3 Issuer shall provide the details of the system/procedures to be employed for tracking the deployment of proceeds of the issue	Management of Proceeds	The proceeds will be deposited to the Consolidated Fund of India (CFI) Public Debt Management Cell (PDMC) will keep a track of proceeds and monitor the allocation of funds. The issuer will endeavor to allocate all proceeds within a span of two years from the date of issuance. Unallocated proceeds, if any, will be carried forward to successive years for investment in eligible green projects



<b>SEBI Disclosure Requirement</b>	<b>Mapping with Framework for Sovereign Green Bond</b>	<b>Analysis</b>
1.4 Details of projects/assets where the issuer proposes to utilize the proceeds	Reporting	The issuer will provide investors with transparent reporting on the allocation of proceeds of Sovereign Green Bonds as well as on the environmental impact of projects funded by the proceeds. The allocation report will be updated annually until full allocation of proceeds of outstanding Green Bonds and also in case of any material changes.
1.5 The Issuer may appoint an independent third-party reviewer/certifier for certifying processes including project evaluation and selection criteria, project category eligible for financing of green debt securities	Reporting	Allocation and utilization of the funds shall be reviewed by the Controller and Auditor General (CAG) of India.  The issuer intends to engage a third-party external reviewer to provide an annual assessment on the alignment of the allocation with the framework's criteria.  The external review will be conducted to: <ul style="list-style-type: none"> <li>• verify that utilization of proceeds is in accordance with stated objectives of use of proceeds as mentioned in the Framework</li> <li>• assess the management of proceeds and of unallocated proceeds, if any</li> </ul>
2.1 Disclosures on utilization of proceeds as per tracking done by the issuer using internal processes. Utilization proceeds to be verified by external auditor	Reporting	<ul style="list-style-type: none"> <li>• verify that utilization of proceeds is in accordance with stated objectives of use of proceeds as mentioned in the Framework</li> <li>• assess the management of proceeds and of unallocated proceeds, if any</li> </ul>
2.2 Details of Unutilized proceeds	Management of Proceeds	A list of examples for potential impact metrics has been provided.
2.3 Disclosures on list of projects/ assets to which green debt securities have been allocated with amounts disbursed  - Qualitative and quantitative performance indicators; methods and key underlying assumptions for KPIs	Potential impact metrics	A list of examples for potential impact metrics has been provided.
2.4 Issuer or appointed agent needs to ensure compliance with global standards for issuance of green debt securities	Selection	Any eligible green expenditure will be mapped to the relevant project category of the framework and to the UN Sustainable Development Goals and must be in line with the framework "both in letter and in spirit". However, it is not explicitly stated the same will align with Green Bond Principles.



# 04

## IIAS ASSESSMENT OF ELIGIBLE GREEN PROJECT CATEGORIES UNDER THE SOVEREIGN GREEN BOND FRAMEWORK

The framework lists the eligible projects in which the funds may be invested. IIAS has mapped the eligibility criteria of projects with the ongoing/proposed initiatives of the government and has provided an analysis of the probable focus areas.

### Category: Renewable Energy

<b>Eligibility Criteria</b>	<ul style="list-style-type: none"> <li>Investments in solar/wind/biomass /hydropower energy projects that integrate energy generation and storage.</li> <li>Incentivizing adoption of renewable energy</li> </ul>
<b>Environmental Objective</b>	<ul style="list-style-type: none"> <li>Climate change mitigation</li> <li>Net Zero objectives</li> </ul>
<b>Status</b>	<ul style="list-style-type: none"> <li>India targets to meet 50% of its energy requirements from renewable energy by 2030. At COP-21 in Paris in 2015, India committed to 40% of power generation from non-fossil fuel sources. The country has achieved this target in November 2021.<sup>1</sup></li> <li>During April 2022 to November 2022 renewable energy generated was 27.77% of the total energy generated in India (residual non-fossil power energy has been generated from large hydro projects and nuclear power).<sup>3</sup></li> <li>At COP26 the government has committed to achieving 500 GW of installed energy capacity from non-fossil fuel sources by 2030. As on 31 October 2022 the total installed electricity capacity from non-fossil energy sources stands at 172.72 GW.<sup>2</sup></li> </ul>
<b>Analysis</b>	<ul style="list-style-type: none"> <li>The primary focus will remain on solar, wind, biomass and small-scale hydropower energy projects (&lt;25 MW).</li> <li>The shift to renewable energy and its expansion by 2050, will aid India in reducing its overall carbon emissions.</li> <li>However, we note that inherent environmental risks are associated with the shift to renewable energy. These projects may involve setting up large scale infrastructures which may pose risks such as negative impact on biodiversity, water shortage, deforestation, large scale land acquisition.</li> </ul>

Source: Framework for Sovereign Green Bonds

<sup>1</sup> <https://pib.gov.in/PressReleasePage.aspx?PRID=1777364>

<sup>2</sup> <https://pib.gov.in/PressReleasePage.aspx?PRID=1883928#:~:text=So%20far%2C%20a%20total%20of.6.78%20GW%20Nuclear%20Power%20capacity>

<sup>3</sup> [Renewable Generation Report](#)

### Category: Energy Efficiency

<b>Eligibility Criteria</b>	<ul style="list-style-type: none"> <li>Design and construction of energy-efficient and energy saving systems and installations in government buildings &amp; properties</li> <li>Supporting public lighting improvements (e.g. replacement with LEDs)</li> <li>Supporting construction of new low-carbon buildings as well as energy-efficiency retrofits to existing buildings</li> <li>Projects to reduce electricity grid losses</li> </ul>
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**Category: Energy Efficiency**

**Environmental Objective** Climate change mitigation

**Status**

- In May 2017 the government of India launched the Energy Efficient Buildings Programme. Under the programme the government aims to retrofit about 10.0 mn LED lights, 1.5 mn energy efficient ceiling fans and 0.2 mn energy efficient ACs in large government/private buildings.<sup>1</sup>
- The Energy Conservation (Amendment) Bill, 2022, mandates the Energy Conservation Building Code-Residential or Eco-Niwas Sahmita (ENS) to be adopted nationally and will require all States and Municipalities in India to adopt and implement the code. The bill represents a commitment to reduce emissions intensity of India's GDP by 45% compared to 2005 levels and increase cumulative non-fossil fuel electricity supply to 50% of national installed capacity.<sup>2</sup>

**Analysis**

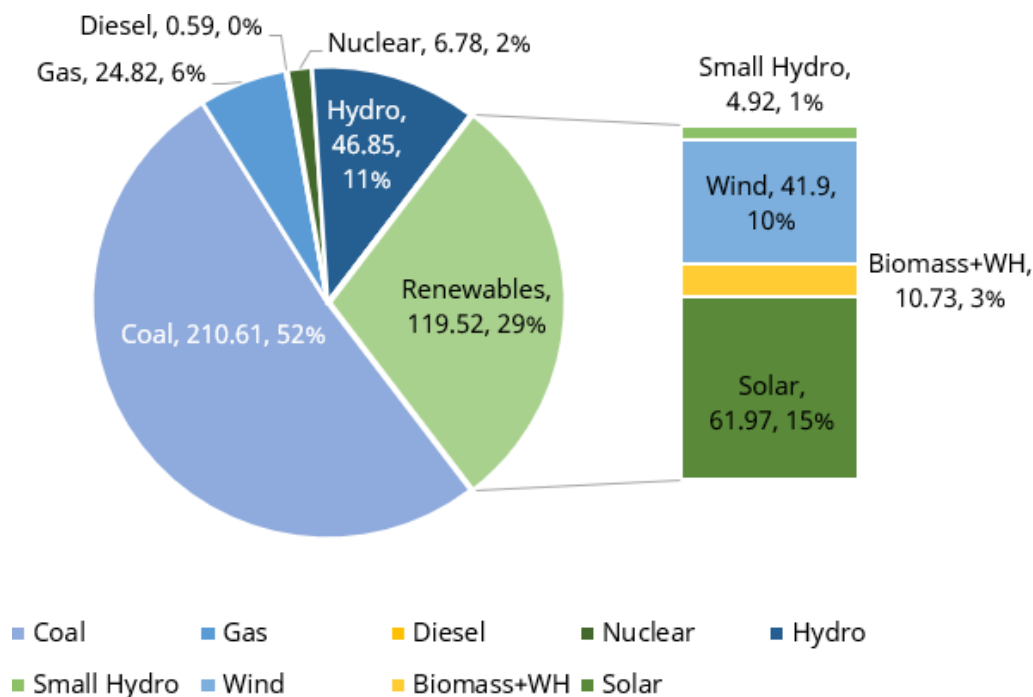
- Investing in creating efficient energies and/or improving existing energies, will aid India's overall growth and especially sectors such as infrastructure and heavy industries.
- The primary focus appears to be to adopt energy saving systems. There is ambiguity on whether the proceeds may be used to improve existing energy systems.
- We note that currently the Indian economy is heavily reliant on fossil fuels for energy. Therefore, there is an inherent risk that investment in improving existing energy systems may be utilized to provide support for fossil fuels. As a result, the proceeds may be counter-productive and may increase the level of impact on the environment.

Source: Framework for Sovereign Green Bonds

<sup>1</sup> <https://fikki.in/pressrelease/2771/fikki-press-release-may20-energy.pdf>

<sup>2</sup> <https://www.gbfn.org/india-on-track-for-energy-efficient-housing/>

**Exhibit 3: All India installed capacity as on 30 November 2022 (values in GW)**



Source: [Renewable Generation Report](#)




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**Category: Sustainable management of living natural resources and land use**

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- Eligibility Criteria**
- Environmentally sustainable management of agriculture, animal husbandry, fishery and aquaculture.
  - Sustainable forestry management including afforestation/ reforestation.
  - Support to certified organic farming.
  - Research on living resources and biodiversity protection.

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**Environmental Objective** Natural resource conservation

- Status**
- The benefits of natural farming include restoration of soil fertility and environmental health and reducing greenhouse gas emissions. We expect the issuer to manage the carbon emissions if any resulting from rearing of livestock.<sup>2</sup>
  - Sustainable agriculture practices help in protection of topsoil, conserve water and reduce the biodiversity loss. Since agriculture is directly affected by climate variation sustainable practices should be tailored to fit the area and geography in which such practices are carried out.
  - Biodiversity preservation and conservation of endangered species is necessary given the close linkage between each specie and the ecosystem. However, we expect that any such preservation or conservation measures would be carried out keeping in mind the local communities who have been a part of those ecosystems for years and that such measures are extended to all species and not only the big species.<sup>4</sup>

- Analysis**
- The government plans to promote chemical-free natural farming in Union Budget 2022-23. Natural Farming includes chemical-free and livestock-based farming.
  - National Afforestation Programme (NAP) was implemented in the year 2022 for afforestation in identified degraded forest areas. National Mission for a Green India was introduced in 2015-16. In order to achieve the targeted objectives of national afforestation programmes, the Ministry has approved merger of NAP into Green India Mission. The budget allocation for the merged scheme has increased from Rs. 16.0 mn in the year 2020-21 to Rs. 22.0 mn during the year 2021-22. These funds are used mainly for forest and wildlife management related activities including compensatory afforestation.<sup>1</sup>
  - The current President of India has highlighted the importance of sustainable management of forest resources. She has stated that it is the responsibility of the Indian Forest Service to make the tribal communities aware of their rights and duties towards preservation of biodiversity.<sup>3</sup>

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Source: Framework for Sovereign Green Bonds

<sup>1</sup> <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1795073>

<sup>2</sup> <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/mar/doc202231124401.pdf>

<sup>3</sup> <https://www.thehindubusinessline.com/economy/agri-business/centre-targets-bringing-more-area-under-organic-farming-tomar/article65685642.ece>




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## Category: Clean Transportation

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### Eligibility Criteria

- Promote public transportation including its electrification and transport safety.
- Subsidies to adopt clean fuels like electric vehicles including building charging infrastructure

### Environmental Objective

Climate change mitigation

### Status

- India has committed to the EV30@30 initiative to reach 30% sales for EVs by 2030. This has led to an increase in budget allocation and corporate investment in EVs.<sup>1</sup>
- Indian Railways plan on electrification of its complete broad-gauge network by 2023-24 and also plan to gradually shift towards green energy usage for traction and non-traction purpose, which would enable the country to be Net Zero Carbon emitter by the year 2030.<sup>5</sup>The electrification of railways is currently ongoing and about ~83% of the railway network has been electrified by December 2022.
- The government has announced an ethanol blending target of 20% of petrol by 2025-26. By June 2022 Public Sector Oil Marketing Companies had attained an average of 10% ethanol blending in petrol.<sup>2</sup>

### Analysis

- The transport sector in India is the largest user of oil and second largest source of CO2 emissions worldwide.<sup>3</sup> A large part of India's population is dependent on public transport. Hence, electrification of the public transportation in India is crucial for the reduction of carbon emissions.
- While projects related to extraction/production/distribution of fossil fuels are excluded from the list of eligible projects for the bonds, any investments related to compressed natural gas (CNG) will be allowed when used in public transportation only. While CNG is a fossil fuel, it is considered one of the cleanest form of alternative fuels.
- Currently the government provides subsidies on production of electric vehicles under the Faster Adoption and Manufacturing of Hybrid & Electric Vehicles (FAME). However, as per the framework, subsidies on CNG (when used in public transportation only) may be allowed in the future.
- Biofuel is a fuel derived from the breakdown of organic material. While biofuels reduce emissions the lifecycle benefits are dependent on the biofuel pathway adopted. Clearing of land for biofuel production, use of chemical fertilizers and energy used for transportation of feedstock may result in a net carbon debt.<sup>4</sup>
- The issue proceeds may be utilized, amongst other things, for:
  1. The ongoing electrification of railways
  2. The various ongoing metro projects in the country
  3. The ongoing electrification of public buses in the country
  4. Provision of subsidies under the Faster Adoption and Manufacturing of Hybrid & Electric Vehicles (FAME).
  5. Research on sustainable biofuels

Source: Framework for Sovereign Green Bonds

<sup>1</sup> [Banking on Electric Vehicles in India](#)

<sup>2</sup> <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1831289>

<sup>3</sup> [https://www.niti.gov.in/sites/default/files/202104/FullReport\\_Status\\_quo\\_analysis\\_of\\_various\\_segments\\_of\\_electric\\_mobility-compressed.pdf](https://www.niti.gov.in/sites/default/files/202104/FullReport_Status_quo_analysis_of_various_segments_of_electric_mobility-compressed.pdf)

<sup>4</sup> <https://www.orfonline.org/research/the-implications-of-indias-revised-roadmap-for-biofuels/>

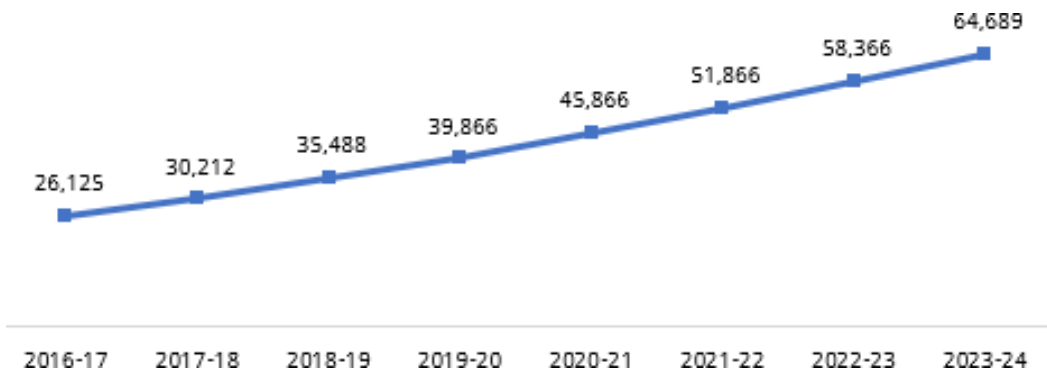
<sup>5</sup> [Mission 100% Electrification – Indian Railway](#)



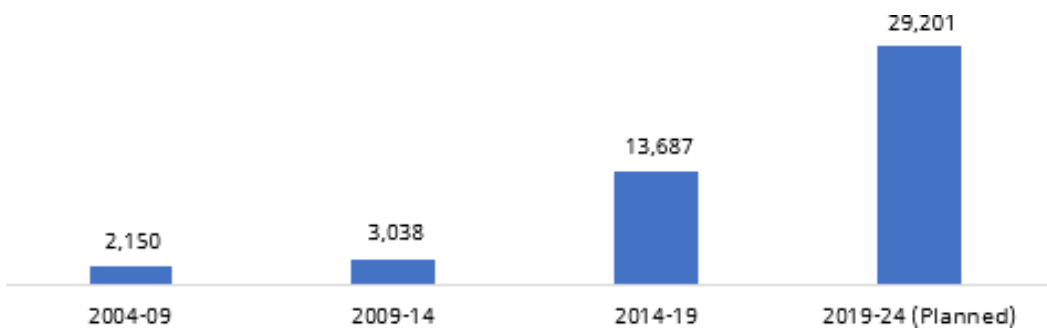


**Exhibit 4: Expected growth in railway electrification**

**Railway Electrification (RKM)**



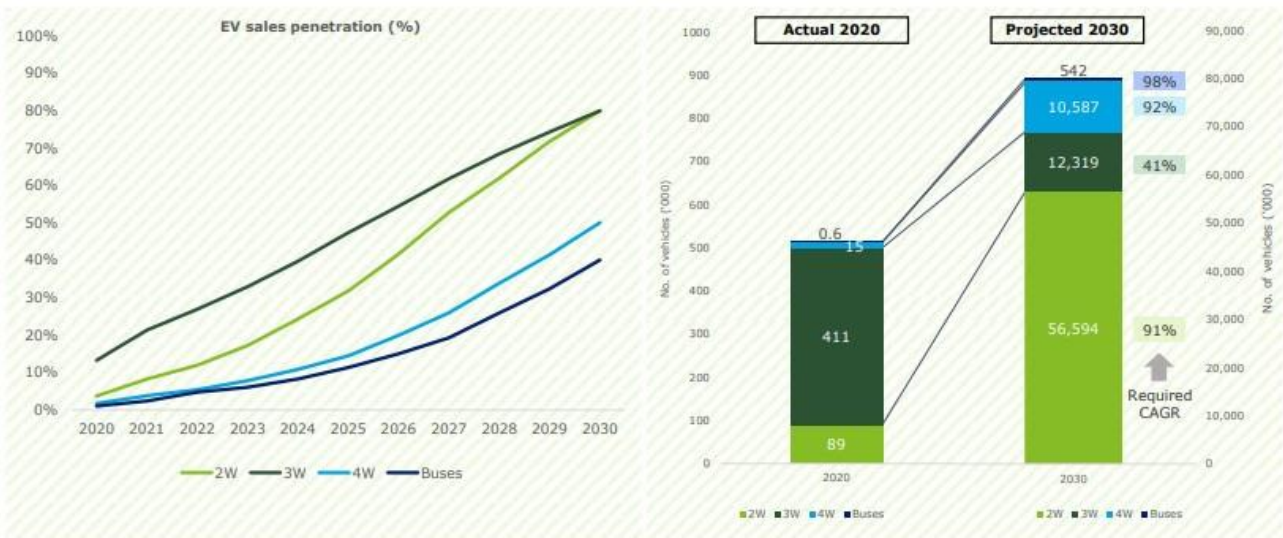
**Growth of Railway Electrification (RKM)**



Source: [Mission 100% Electrification – Indian Railway](#)

**Exhibit 5: NITI Aayog projections of EV sales penetration and EV sales**

Figure 28 EV Sales penetration projected by NITI Aayog by 2030 | Figure 29 Actual and projected EV sales by 2030 as per NITI Aayog projections



Source: [Status quo analysis of various segments of electric mobility and low carbon passenger road transport in India](#)




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**Category: Sustainable Water and Waste Management**

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<b>Eligibility Criteria</b>	<ul style="list-style-type: none"> <li>• Promoting water efficient irrigation systems</li> <li>• Installation/upgradation of wastewater infrastructure including transport, treatment and disposal systems.</li> <li>• Water resources conservation</li> <li>• Flood defence systems</li> </ul>
<b>Environmental Objective</b>	Climate change mitigation
<b>Status</b>	<ul style="list-style-type: none"> <li>• The government has introduced several schemes to promote water use efficiency in irrigation. The main objective of the Command Area Development and Water Management (CADWM) Programme is to enhance utilization of irrigation potential and improve agriculture production on a sustainable basis.<sup>1</sup></li> <li>• National Water Mission targets provision of 26.8 mn tap connections with a total indicative outlay for AMRUT 2.0 is Rs. 2,770.0 bn including central share of Rs. 767.60 bn for five years from FY22 to FY26. It will develop a framework to optimize water use by increasing water use efficiency by 20% through regulatory mechanisms with differential entitlements and pricing<sup>3</sup></li> <li>• Department of Agriculture &amp; Farmers Welfare is implementing 'Per Drop More Crop scheme' which is operational from 2015-16 in the country. The Per Drop More Crop scheme mainly focuses on water use efficiency at farm level through Micro Irrigation (Drip and Sprinkler Irrigation System).<sup>1</sup></li> </ul>
<b>Analysis</b>	<ul style="list-style-type: none"> <li>• Given that India is the most populous country in the world, measures for water conservation and efficiency will result in curbing water usage and will help in ensuring sustainable water supplies for everyone.</li> <li>• India has 18% of the world's population, but only 4% of its water resources, making it among the most water-stressed in the world. Many Indians face high to extreme water stress, according to NITI Aayog. Hence there is a critical need for sustainable management of water resources.<sup>2</sup></li> <li>• Steps for conservation and efficient management of water resources are primarily undertaken by the state governments. The central government provides technical and financial assistance to the state governments through various schemes.<sup>1</sup></li> <li>• Similarly, the projects for flood management and control are undertaken by state governments. The central government provides financial assistance to state governments for implementing some projects in critical areas.</li> <li>• Installation/upgradation of water infrastructure is important to ensure that water reaches the households of all the citizens of the country and to ensure adequate water supply for agriculture.</li> <li>• Water management processes as well as water installation/upgradation of water infrastructure may result in release of carbon emissions.</li> </ul>

Source: Framework for Sovereign Green Bonds

1 <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1847103>

2 <https://www.worldbank.org/en/country/india/brief/world-water-day-2022-how-india-is-addressing-its-needs#:~:text=The%20country%20has%2018%20percent,think%20tank%2C%20the%20NITI%20Aayog.>

3 <http://nwm.gov.in/objective-national-water-mission>

[water-](#)



### Category: Green buildings

<b>Eligibility Criteria</b>	Projects related to buildings that meet regional, national or internationally recognized standards or certifications for environmental performance.
<b>Environmental Objective</b>	Climate change mitigation
<b>Status</b>	The Indian government's initiative, Green Rating for Integrated Habitat Assessment (GRIHA), restricts the use of resources by 30 percent as the ultimate goal. Government has mandated for all central government and PSU buildings to get at least 3-star ratings under GRIHA. Some state governments also offer <a href="#">subsidies/incentives</a> on green building projects. <sup>2</sup>
<b>Analysis</b>	<ul style="list-style-type: none"> <li>• Green buildings are buildings that are energy and water efficient, generate less waste, conserve natural resources and can enhance occupant health, productivity and well-being.<sup>1</sup></li> <li>• In order to reduce the carbon emissions sustainable practices/materials should be used across the lifecycle of building construction from planning and investment, materials to be used and energy used during construction.<sup>3</sup></li> <li>• The issuer has stated that the green buildings will be evaluated based on the annual energy savings and annual GHG emissions emitted. While level of certification will be one of the metrics considered, there is no clear criteria stated regarding the level of environmental performance required.</li> </ul>

Source: Framework for Sovereign Green Bonds

<sup>1</sup> [https://igbc.in/igbc/html\\_pdfs/abridged/IGBC%20Green%20New%20Buildings%20Rating%20System%20\(Version%203.0\).pdf](https://igbc.in/igbc/html_pdfs/abridged/IGBC%20Green%20New%20Buildings%20Rating%20System%20(Version%203.0).pdf)

<sup>2</sup> <https://www.orfonline.org/expert-speak/case-green-buildings-india/>

<sup>3</sup> <https://timesofindia.indiatimes.com/blogs/voices/green-buildings-the-foyer-to-an-environmentally-sustainable-future/>

### Category: Terrestrial and Aquatic Biodiversity Conservation

<b>Eligibility Criteria</b>	<ul style="list-style-type: none"> <li>• Projects relating to coastal and marine environments.</li> <li>• Projects related to biodiversity preservation, including conservation of endangered species, habitats and ecosystems.</li> </ul>
<b>Environmental Objective</b>	Biodiversity conservation
<b>Status</b>	<ul style="list-style-type: none"> <li>• The Ministry of Earth Sciences (MoES) had allocated Rs.840 mn to its Centre for Marine Living Resources and Ecology (CMLRE) for the implementation of a national R&amp;D programme on Marine Living Resources (MLR) between 2017 and 2020.</li> <li>• Under Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme of the Department of Fisheries, there are provisions for encouraging sustainable marine fisheries activities, development of fisheries management plans, development of integrated modern coastal fishing villages, installation of bio-toilets in fishing vessels, communication and tracking devices, livelihood support during fish ban period to fisher families, etc. for conservation of fisheries resources.</li> <li>• 31 major marine protected areas in India include coastal areas are identified under the Wildlife Protection Act, 1972</li> </ul>



<b>Analysis</b>	<ul style="list-style-type: none"> <li>• India is home to an array of aquatic ecosystems, such as mangrove swamps, sea grass beds, river lands and coral reefs. Overexploitation constitutes a threat to the vast number of organisms and plants native to these ecosystems</li> <li>• The ocean bed itself is rich in carbon deposits and fossil fuels. We assume that these projects will exclude the extraction of carbon deposits and fossil fuels from aquatic ecosystems.</li> <li>• The framework has not specifically defined the eligibility criteria for these projects.</li> <li>• There is an inherent risk that projects eligible under this criterion may include development of new ports, ocean floor mining, shipping and fishing activities which in turn will negatively impact the marine biodiversity.</li> <li>• SEBI is encouraging issuance of Blue Bonds for financing such projects</li> </ul>
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Source: Framework for Sovereign Green Bonds

<https://vigyanprasar.gov.in/isw/Initiatives-to-conserve-marine-resources.html>

<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1796916>

### Category: Pollution Prevention and Control

<b>Eligibility Criteria</b>	Projects targeting reduction of air emissions, greenhouse gas control, soil remediation, waste management, waste prevention, waste recycling, waste reduction and energy/emission-efficient waste-to- energy
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<b>Environmental Objective</b>	Climate change mitigation, Environment protection
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<b>Status</b>	<ul style="list-style-type: none"> <li>• Central Pollution Control Board lays down Acts, Rules and Notifications for the country.</li> <li>• The Swachh Bharat Mission and other ancillary policies have been implemented since 2014.</li> <li>• Around 250 WTE plants, 819 Biomass Power plants, and 5.1 mn small biogas plants have been set up in the country to generate power/ Biogas/ BioCNG.</li> <li>• In 2016, the Swachh Bharat Mission was started by the Ministry of Housing and Urban Affairs (MoHUA) to increase cleanliness in cities. In 2020, the mission added two major components of air pollution to the mix: dust from roads and construction sites and emissions from municipal solid waste management. In May 2022, the Ministry of Environment, Forest and Climate Change (MoEFCC) started the 'Swachh Vayu Survekshan,' a survey that includes all major sources of air pollution that were not represented in the Swachh Bharat Mission such as emissions from industries, household cooking, transportation, brick kilns, etc.</li> <li>• The Central Pollution Control Board reported that about 70% of solid waste currently ends up in landfills, many of which are illegal, unregulated and causing local ground and water pollution, while also causing CO2 and methane emissions.</li> </ul>
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<b>Analysis</b>	This criteria includes improved waste management and generation of energy from waste; and attempts to curtail pollution including non-GHG emissions
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Source: Framework for Sovereign Green Bonds

<https://www.cpcb.in/articles/the-failed-ideas-of-waste-to-energy-plants-in-india>

<https://newsonair.com/2022/03/31/249-waste-to-energy-plants-set-up-in-the-country-informs-union-minister-r-k-singh/>

<https://timesofindia.indiatimes.com/city/gurgaon/why-waste-to-energy-plants-arent-the-ideal-solution-for-managing-our-trash/articleshow/85726274.cms>

<https://cpcb.nic.in/7thEditionPollutionControlLawSeries2021.pdf>




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**Category: Climate Change Adaptation**

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**Eligibility Criteria** Projects aimed at making infrastructure more resilient to impacts of climate change, as well as investments in information support systems, such as climate observation and early warning systems.

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**Environmental Objective** Climate change adaptation

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**Status** National Adaptation Fund on Climate Change (NAFCC) was launched in 2015. It was introduced to meet the objectives of the National Action Plan on Climate Change (NAPCC) and meet the cost of adaptation to climate change incurred by state governments under the State Action Plans on Climate Change (SAPCC) and implementing adaptation projects. However, grants released under NAFCC fell from Rs 11.54 mn in 2017-18 to Rs 4.29 mn in 2020-21.<sup>2</sup>

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**Analysis**

- Climate change has an impact on natural resources, infrastructure, socio-economic activities, agriculture and public safety and health. The impact is stronger in places where agriculture/natural resources are the sources of livelihood for people.
- India is increasingly facing extreme weather conditions with summer temperatures reaching new highs every year. This results in the increase in demand for power leading to power shortages. Many states have developed heat action plans such as providing early warnings of extreme heat, installing cool roofs painted with solar reflective paint.<sup>1</sup>
- Some measures for addressing risks arising from climate change include sustainable funding, increasing knowledge about climate adaptation techniques and including climate change adaptation and risk assessment as a part of state policy

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Source: Framework for Sovereign Green Bonds

<sup>1</sup> <https://www.nrdc.org/sites/default/files/india-heat-resilience-20220406.pdf>

<sup>2</sup> <https://indianexpress.com/article/explained/budget-climate-government-grants-7764151/>



# 05

## OVERALL ASSESSMENT

**Alignment with ICMA GBP 2021 and SEBI disclosure norms:** Government of India has introduced a Framework for governing issuance of sovereign green bonds as a step towards fulfilling its commitments towards climate change.

This issue proceeds will go towards financing eligible projects in renewable energy, water and waste management, increasing energy efficiency, clean transportation, pollution control, green buildings and sustainable use of land and natural resources. IIAS expects these eligible projects to have a positive impact on environment.

The framework for Sovereign Green Bonds details use of proceeds of the green bonds, selection and evaluation process for eligible green projects, management of issuance proceeds, treatment of unutilized funds and clearly states the funds will not be utilized for any fossil-fuel based projects. An annual report will be published in accordance with the requirement of GBP 2021. The framework for Sovereign green bonds hence aligns with Green Bond Principles 2021.

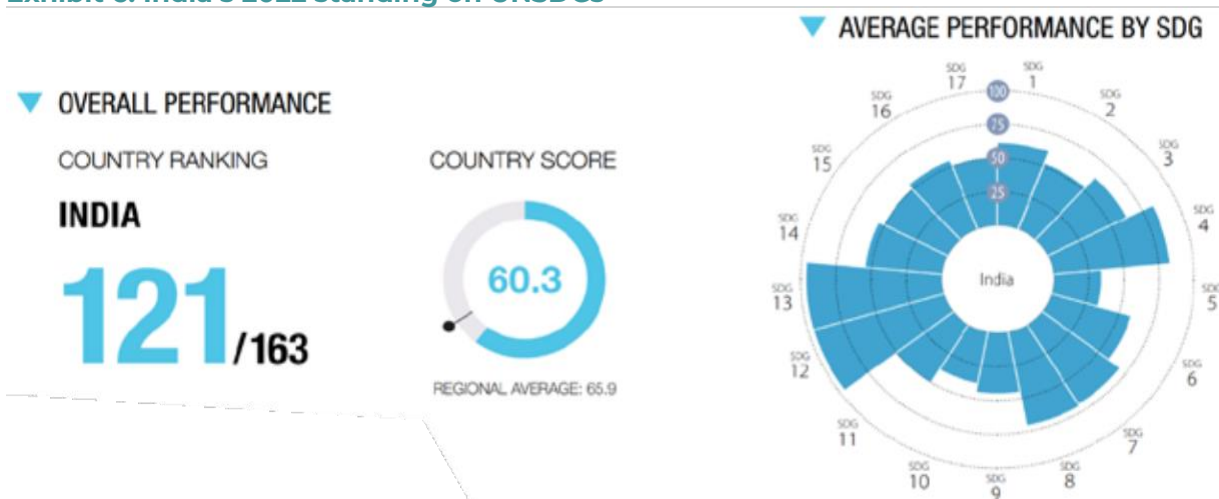
India launched **National Action Plan on Climate Change (NAPCC)** in 2008 that has eight core missions and aligns itself with any updated climate goals that Indian makes a commitment on. The eight core missions are:

- National Solar Mission
- National Mission for Enhanced Energy Efficiency
- National Mission on Sustainable Habitat
- National Water Mission
- National Mission for Sustaining the Himalayan Ecosystem
- National Mission for a Green India
- National Mission for Sustainable Agriculture
- National Mission on Strategic Knowledge for Climate Change

**India’s Framework for Sovereign Green Bond aligns with these missions that are of national importance with nationally significant targets that the country will strive to achieve.** Hence eligible projects areas as defined in the Sovereign Green Bond framework are in alignment with India’s national goals on climate change

**Issuer’s commitment and alignment with UN Sustainable Development Goals:** While the pandemic has decelerated the progress towards achievement of UNSDGs, India has been committed to progress on achieving the 17 UNSDGs. 2022 standing on UNSDGs is as highlighted below.

### Exhibit 6: India’s 2022 standing on UNSDGs













SDG DASHBOARDS AND TRENDS



Source: <https://dashboards.sdindex.org/static/profiles/pdfs/SDR-2022-india.pdf>

Given the emphasis on climate change, Indian Sovereign Green Bond Framework has prioritized achievement & alignment with the following SDGs:

SDG	Green Project Category	SDG	Green Project Category
	Sustainable Water and Waste Management		<ul style="list-style-type: none"> <li>Renewable energy</li> <li>Energy efficiency</li> </ul>
	Clean Transportation		<ul style="list-style-type: none"> <li>Green building</li> <li>Clean transportation</li> </ul>
	Pollution prevention and control		<ul style="list-style-type: none"> <li>Renewable energy</li> <li>Energy efficiency</li> <li>Clean transportation</li> <li>Climate adaptation</li> <li>Pollution prevention</li> <li>Sustainable use of land and natural resources</li> </ul>
	<ul style="list-style-type: none"> <li>Sustainable management of living natural resources and land use</li> <li>Terrestrial and aquatic biodiversity conservation</li> </ul>		<ul style="list-style-type: none"> <li>Sustainable management of living natural resources and land use</li> <li>Terrestrial and aquatic biodiversity conservation</li> </ul>

**liAS believes India’s framework for Sovereign Green Bonds defines eligible projects that align with GBP 2021 and with SEBI’s list of projects that have been identified as green projects.** The framework provides transparency as required by GBP 2021, is aligned with the issuer’s environmental and UN SDG goals. However, liAS advises a higher level of transparency on the following parameters:

- Project details with implementation timelines.
- Social and environmental risk assessment of selected eligible project to be included in project selection and evaluation methodology.
- GBP 2021 recommends a third party/external auditor conduct an audit for management of proceeds. It will be advisable to appoint a external auditor with an oversight by CAG for utilization of green bond proceeds.
- Impact reporting metrics and parameters need to be clarified on each project that the issuer will report annually. Tangible targets for environmental and social benefits that the projects will yield long term will help understand impact of projects.



# GREEN BOND / GREEN BOND PROGRAMME

## INDEPENDENT EXTERNAL REVIEW FORM

### Section 1

#### Basic Information

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**Issuer name:** Government of India

**Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:** [specify as appropriate]

**Independent External Review provider's name:** Institutional Investor Advisory Services

**Completion date of this form:** 24 Jan 2023

**Publication date of review publication:** [where appropriate, specify if it is an update and add reference to earlier relevant review]

### Section 2

#### Review overview

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##### SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review. The review assessed the following elements and confirmed their alignment with the GBPs:

- |   |   |
|---|---|
| <input type="checkbox"/> Use of Proceeds        | <input type="checkbox"/> Process for Project Evaluation and Selection |
| <input type="checkbox"/> Management of Proceeds | <input type="checkbox"/> Reporting                                    |

##### ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER

- |   |  |                                       |
|---|--|---------------------------------------|
| <input type="checkbox"/> Second Party Opinion | <input type="checkbox"/> Certification           | <input type="checkbox"/> Verification |
| <input type="checkbox"/> Scoring/Rating       | <input type="checkbox"/> Other (please specify): |                                       |

**Note:** In case of multiple reviews / different providers, please provide separate forms for each review.





## EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

IIAS is of the opinion that Framework for Sovereign Green Bonds to be issued by the Government of India aligns with ICMA's Green Bond Principles 2021 and SEBI regulations which include Renewable Energy and Sustainable Energy as eligible projects for issuance of Green debt security. The Framework and eligible projects also show alignment with India's Climate goals and align with achievement of UN SDGs by 2030. Eligible projects are therefore expected to have a positive environmental and social impact.

### Section 3

## Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

### 1. USE OF PROCEEDS

#### Overall comment on section (if applicable):

IIAS is of the opinion that use of proceeds under the Framework for Sovereign Green Bonds aligns with the Green Bond Principles 2021. However, the issuer should provide project related details.

#### Use of proceeds categories as per GBP:

- |  |  |
|--|--|
| <input type="checkbox"/> Renewable energy  | <input type="checkbox"/> Energy efficiency   |
| <input type="checkbox"/> Pollution prevention and control  | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation   | <input type="checkbox"/> Clean transportation  |
| <input type="checkbox"/> Sustainable water and wastewater management   | <input type="checkbox"/> Climate change adaptation   |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes                             | <input type="checkbox"/> Green buildings   |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (please specify):   |

If applicable please specify the environmental taxonomy, if other than GBPs:



## 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

### Overall comment on section (if applicable):

The projects to be financed and/or refinanced using the proceeds from the Green Financing Instruments will be evaluated and selected based on (i) The issuer's ESG framework, (ii) qualification of the project as an Eligible Green Project, and (iii) feasibility analysis (including off-taker profile, location of project, capacity, timelines, and other technical and commercial conditions).

### Evaluation and selection

- |  |  |
|--|--|
| <input type="checkbox"/> Credentials on the issuer's environmental sustainability objectives                 | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories    |
| <input type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds      | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify):   |

### Information on Responsibilities and Accountability

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Evaluation/Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify):   |   |

## 3. MANAGEMENT OF PROCEEDS

### Overall comment on section (if applicable):

The management of proceeds under the Framework for Sovereign Green Bonds are aligned with the Green Bond Principles 2021. The framework will be audited by the Comptroller and Auditor General of India (CAG). As a good governance practice, a external auditor must also conduct a review of internal tracking and allocation of funds.

### Tracking of proceeds:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner | <input type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify):   |  |



**Additional disclosure:**

- |  |  |
|--|--|
| <input type="checkbox"/> Allocations to future investments only                  | <input type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements                  | <input type="checkbox"/> Allocation to a portfolio of disbursements          |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (please specify):                             |

**4. REPORTING**

**Overall comment on section** (if applicable):

The Framework for Sovereign Green Bonds states that an annual report will be published and disclosed on the Ministry of Finance’s website. We expect the report to quantify and report precise metrics and environmental and social impact on a project wise basis as recommended by Green Bond Principles 2021

**Use of proceeds reporting:**

- |  |  |
|--|--|
| <input type="checkbox"/> Project-by-project            | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify):                 |

**Information reported:**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> Green Bond financed share of total investment |
| <input type="checkbox"/> Other (please specify):      |  |

**Information reported:**

- |  |                                      |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual       | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): |                                      |

**Impact reporting:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify):                 |



**Frequency:**

Annual  Semi-annual

Other (please specify):

**Information reported (expected or ex-post):**

GHG Emissions / Savings  Energy Savings

Decrease in water use  Other ESG indicators (please specify):

**Means of Disclosure**

Information published in financial report  Information published in ad hoc documents

Energy Savings  Other (please specify):

Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

**USEFUL LINKS** (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

<https://dea.gov.in/sites/default/files/Framework%20for%20Sovereign%20Green%20Bonds.pdf>

**Information reported (expected or ex-post):**

Second Party Opinion  Certification  Verification

Scoring/Rating  Other (please specify):

**Review provider(s):**

Institutional Investor Advisory  
Services India Limited (IIAS),

**Date of publication:**

24 January 2023



## ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

1. **Second Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
2. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
3. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

**Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.



## DISCLAIMER

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Institutional Investor Advisory Services India Limited (IIAS) is an advisory firm, dedicated to providing participants in the Indian market with independent opinion, research and data on corporate governance and ESG issues and currently provides voting recommendations on shareholder meetings for over 950 companies.

IIAS provides bespoke research and assists institutions in their engagement with company managements and their boards. It runs two cloud-based platforms, SMART to help investors with reporting on their stewardship activities and ADRIAN, a repository of resolutions and institutional voting pattern.

IIAS with the International Finance Corporation (IFC) and BSE Limited, has developed a Corporate Governance Scorecard for India to evaluate company's governance practices and market benchmarks. More recently, IIAS has extended its analysis to ESG. IIAS is now a signatory to UN supported PRI and an empanelled ESG Rating Provider with AMFI.

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