

India Sovereign Green Bond: Financing Climate Action and Resilient Growth

The World Bank provided technical assistance to the Government of India to establish its sovereign green bond program and mobilize private capital to fund its ambitious plans for sustainable and resilient growth.

Background

As a large, populous, developing economy, India faces enormous challenges in dealing with the consequences of climate change while promoting economic growth in a low-carbon pathway. The country is the seventh most impacted by weather-related loss events.¹

In its updated [Nationally Determined Contribution](#) (NDC) under the Paris Agreement, the Government of India stated the intention to reach net-zero emissions in 2070, reduce the emission intensity of its economy by 45 percent by 2030 over 2005 levels, achieve 50 percent cumulative electric power installed capacity, and create additional carbon sink of 2.5 to 3 billion tons of CO₂ equivalent through additional forest and tree cover by 2030, among others.

Implementing its climate commitments and sustainable and resilient development will require mobilizing funds from diverse sources. In 2022, the Government of India announced plans to issue sovereign green bonds to raise resources for green infrastructure. It was decided that the proceeds would be deployed in public sector projects that help in reducing the carbon intensity of the economy.

Financial Solution

Green bonds are debt instruments that support expenditures and projects with environmental benefits. They have been one of the innovative financial tools used by many agents – from sovereigns to corporates and multilaterals – to finance climate action. Green bond global cumulative issuance reached \$4 trillion, as of February 2023. Twenty-nine sovereigns have tapped the



Photo credit Adobe Stock, By Ashish_wassup6730

green bond market and issued the equivalent of \$290 billion.²

To attract investors interested in sustainable investments, green bonds are expected to align with the Green Bond Principles published by the International Capital Market Association. India followed the Principles for its Sovereign Green Bond framework, as outlined below.

Use of proceeds

In its [Framework for Sovereign Green Bonds](#), the Government of India defined nine eligible categories of projects that could be financed using sovereign green bond proceeds – renewable energy, energy efficiency, clean transportation, climate change adaptation, sustainable water and waste management, pollution prevention and control, sustainable management of living natural resources and land use, green buildings, and terrestrial and aquatic biodiversity conservation. Eligible expenditures are limited to government expenditure and best efforts would be made to allocate all the proceeds within 24 months following the issuance.

Process for project evaluation and selection

The Government of India established a two-tier governance process for the evaluation and selection of projects that might use proceeds from green bond

¹ Global Climate Risk Index 2021: <https://www.germanwatch.org/en/19777>.

² World Bank calculations with data from Bloomberg terminal and BloombergNEF as of February 28, 2023.

issuances. The initial selection of projects is the responsibility of the ministry or department in charge of implementing the project or program. A Green Finance Working Committee has been established to oversee and validate key decisions regarding green bond issuances and selects, reviews, and approves projects submitted by the ministries or departments for financing with green bond proceeds. This Committee is chaired by the Chief Economic Adviser and includes members from implementing departments, the Ministry of Environment, Forests and Climate Change, the [Niti Aayog \(India's premier public policy thinktank\)](#), and the Ministry of Finance (MoF).

Management of proceeds

Sovereign green bond proceeds will be deposited into the Consolidated Fund of India³ and managed by the MoF's Public Debt Management Cell. The Ministry of Finance will dedicate an information system to maintain, track, and disclose details of green bond issuance, allocation of proceeds and information about the eligible projects.

Reporting

The Government of India has committed to providing investors with transparent reporting on allocation of green bond proceeds as well as on the environmental impact of the funded projects. MoF will coordinate the preparation of the post-allocation reports under the supervision of the Green Finance Working Committee.

Allocation and utilization of Green Bonds will be audited by the Comptroller and Auditor General (CAG) of India.

Outcomes

Following the announcement of the [issuance calendar](#), on January 25, 2023, the government of India issued the first tranche of its first sovereign green bond for a total amount of INR 80 billion (equivalent to \$980 million). The offering was done in the local market comprising two maturities, 5-year and 10-year, for INR40 billion each. The 5-year bond, oversubscribed by 2.4 times with a total of 96 bids, was allocated amongst 32 bidders with a 7.1% annual coupon/yield. The 10-year bond was oversubscribed by 3.8 times and was allocated amongst 57 bidders with a 7.29% annual coupon/yield.

On February 9, 2023, the Indian government announced the issuance of an additional INR 80 billion (\$968 million) in sovereign green bonds, with maturities of 5 and 10 years, worth INR 40 billion (equivalent to \$ 484 million) each. In the second tranche of issuance, the 5-year bond was oversubscribed by 1.7 times comprising 62 bids. The 10-year bond was oversubscribed by 2 times with a total of 91 bids. Both reopenings were allocated to 24 bidders.

World Bank's Role

The World Bank's [Sustainable Finance and ESG Advisory Services](#) provided technical assistance to the Government of India to facilitate the transaction.

	1 st issuance		Reopening	
	January 25, 2023		February 9, 2023	
Issue date	January 25, 2023		February 9, 2023	
Amount	INR 40 billion (\$490 million)	INR 40 billion (\$490 million)	INR 40 billion (\$484 million)	INR 40 billion (\$484 million)
Tenor	5 years	10 years	5 years	10 years
Coupon/Yield	7.10%/7.10%	7.29%/7.29%	7.10%/7.23%	7.29%/7.30%
Oversubscription ⁴	2.4x	3.8x	1.7x	2x

Contact: **Miguel Navarro-Martin**, Manager, Financial Products & Client Solutions, The World Bank Treasury
 ✉ mnavarromartin@worldbank.org ☎ +1 (202) 458 4722 1225 Connecticut Avenue NW, Washington, D.C., 20433, U.S.A.

³ Constituted under Article 266(1) of the Indian Constitution.

⁴ Reserve Bank of India Press Releases:
<https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/PR1609D41>

[A394A9C7C46088DDCFD284D5A8BE9.PDF](#) and
https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=55190.