



Sovereign Green Bonds Allocation Report FY 2023-24

**Infrastructure Finance Secretariat
Department of Economic Affairs, Ministry of Finance
Government of India**

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List of Abbreviation

CCTS	Carbon Credit Trading Scheme
CDRI	Coalition for Disaster Resilient Infrastructure
CFI	Consolidated Fund of India
DISCOMs	Distribution Company
FAME	Faster Adoption and Manufacturing of Electric Vehicles
FAR	Fully Accessible Route
GFWC	Green Finance Working Committee
GGI-OSOWOG	Green Grids Initiative – One Sun One World One Grid
IRIS	Infrastructure for Resilient Island States
ICMA	International Capital Market Association
ISA	International Solar Alliance
LeadIT	Leadership Group for Industry Transition
LiFE	Lifestyle for Environment
NAPCC	National Action Plan on Climate Change
NITI	National Institute for Transforming India
NDC	Nationally Determined Contributions
OEMs	Original Equipment Manufacturer
PAT	Perform, Achieve, and Trade
PM KUSUM	Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan
PMUY	Pradhan Mantri Ujjala Yogna

PLI	Production-linked incentive
PDMC	Public Debt Management Cell
RRTS	Regional Rapid Transit System
RESCO	Renewal Energy Service Company
REPO	Repurchase Transactions
SGrBs	Sovereign Green Bonds
SLR	Statutory Liquidity Ratio
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

In FY 2023-24, Government of India strengthened its commitment to combating climate change and fostering sustainable growth by issuing Sovereign Green Bonds (SGrBs) worth ₹20,000 crore. This initiative builds upon the success of the inaugural issuance of ₹16,000 crore in FY 2022-23 and aligns with India's Nationally Determined Contributions (NDCs) under the Paris Agreement, supporting the transition to a low-carbon economy.

The Sovereign Green Bond Framework continues to guide the identification, evaluation, and allocation of proceeds, ensuring transparency and alignment with the ICMA's green bonds principles. Proceeds from the FY 2023-24 issuance were allocated to three key sectors:

1. **Clean Transportation:** A significant allocation of ₹16,087.99 crore supported projects promoting sustainable urban mobility, including metro rail projects across major cities and the production of energy-efficient electric locomotives. These projects are expected to contribute significantly to reducing greenhouse gas emissions in urban and intercity transit systems.
2. **Renewable Energy:** To further advance India's clean energy transition, investments of ₹ 4,578.47 crore have been made in the renewable energy sector. Key initiatives include solar

energy projects under the PM KUSUM scheme, wind energy projects under the GBI scheme, grid-connected renewable energy installations, and the National Green Hydrogen Mission, furthering India's non-fossil fuel capacity targets.

3. **Sustainable Management of Living Natural Resources and Land Use:** ₹ 119.14 crore was allocated to the National Mission for a Green India to enhance forest cover quality and ecosystem services, contributing to biodiversity conservation and climate resilience.

Notably, FY 2023-24 marked the maiden issuance of SGrBs with a tenor of up to 30 years, highlighting the Government's commitment to financing green infrastructure projects. All sovereign green bonds issued during the year were also designated as specified securities under the Fully Accessible Route (FAR), expanding their appeal to foreign investors and enhancing their liquidity.

Further, any expenditures under eligible projects exceeding the ₹20,000 crore raised through SGrBs will be funded through the Government Budgetary Support.

This report provides a detailed account of the allocation and utilization of proceeds from SGrBs issued in FY 2023-24, along with the implementation status of funded projects.

Introduction

Environmental challenges like pollution, deforestation, and climate change have far-reaching economic and social consequences. These challenges threaten biodiversity, ecosystems, public health, disrupt economic activities, and exacerbate social inequities. Addressing these issues, especially climate change, requires coordinated efforts from all stakeholders.

India has taken a leading role in advancing sustainable development, setting an ambitious goal to achieve the goal of Viksit Bharat by 2047 and net-zero emissions by 2070. The Climate Change Performance Index (CPI) 2024 highlights India's rapid progress in energy transition initiatives, ranking it 7th globally, up from 8th in 2023 and 10th in 2022.

Under the Paris Agreement, India submitted its Nationally Determined Contributions (NDCs) in 2015. These include reducing the emission intensity of GDP by 33–35% by 2030 (compared to 2005 levels), achieving 40% of cumulative electric power capacity from non-fossil fuel sources by 2030, and creating an additional carbon sink of 2.5–3 billion tonnes of CO₂ equivalent through expanded forest and tree cover by 2030.

India updated its NDCs in August 2022, setting new targets for 2030: a 45% reduction in GDP emission intensity from 2005 levels, achieving 50% of cumulative electric power capacity from non-fossil

sources, and promoting a sustainable lifestyle through the LiFE (Lifestyle for Environment) initiative to reflect stronger climate action commitments.

India has already achieved notable milestones. By November 2024, non-fossil fuel-installed electricity capacity reached 46.8%, while emission intensity reduced by 36% by 2020 (from 2005 levels). Additionally, an extra carbon sink of 2.29 billion tonnes of CO₂ equivalent was created by 2023. These achievements were enabled by significant growth in non-fossil fuel capacity, which more than doubled over the past nine years, reaching 213.70 GW in November 2024. Mission LiFE aims to drive a global movement for sustainable resource use, replacing wasteful consumption with mindful choices. India is also at the forefront of several global initiatives, such as the International Solar Alliance (ISA), Coalition for Disaster Resilient Infrastructure (CDRI), Leadership Group for Industry Transition (LeadIT Group), Infrastructure for Resilient Island States (IRIS), and the Green Grids Initiative – One Sun One World One Grid (GGI-OSOWOG).

In May 2024, the Government of India released the first Sovereign Green Bond Allocation Report for FY 2022–23. This report provided a detailed account of the allocation of proceeds from Sovereign Green Bonds (SGRBs) issued in FY 2022–23, highlighting eligible projects

financed, their implementation status, and unallocated proceeds. It also included methodological case studies illustrating the environmental impacts and social co-benefits of funded schemes and projects. The report underscored India's commitment to meeting its NDCs and emphasized the significant role of green finance in fostering sustainable growth. A substantial portion (78%) of the proceeds in FY 2022–23 was allocated to clean urban transportation projects, primarily metro and Regional Rapid Transit System (RRTS) projects.

This document represents the second Sovereign Green Bond Allocation Report, corresponding to FY 2023–24. It continues to highlight the policies and projects aligned with India's NDC commitments and emphasizes the vast potential for sustainable growth in India.

India's commitment to climate adaptation and ecological sustainability started with the launch of the National Action Plan on Climate Change (NAPCC). This strategy, supported by nine National Missions,

addresses critical areas like solar energy, water, energy efficiency, forests, sustainable habitats, agriculture, the Himalayan ecosystem, and health.

In addition, the government has implemented various initiatives to lower emission intensity, including the Perform, Achieve, and Trade (PAT) scheme, the development of solar parks and rooftop solar systems, the Green Energy Corridor, and production-linked incentive (PLI) schemes for solar PV modules and advanced battery storage. Programs like FAME (Faster Adoption and Manufacturing of Electric Vehicles), PM-KUSUM (solar pumps for farmers), UJALA (LED distribution), and PMUY (LPG distribution) further support this shift toward energy efficiency.

Building on the PAT scheme, the Energy Conservation Act was amended in 2022 to introduce a domestic carbon market through the Carbon Credit Trading Scheme (CCTS), further incentivizing energy savings and emissions reduction.

Overview of the Sovereign Green Bonds Framework

India's Sovereign Green Bonds Framework is a comprehensive and structured mechanism developed by the Government of India to facilitate green financing and mobilize resources for public sector projects that align with the country's ambitious climate and sustainability goals. Launched in 2022, the framework is rooted in India's commitment to sustainable development, as outlined in its Nationally Determined Contributions (NDCs) to the Paris Agreement. It also aligns with India's national environmental and policy objectives, including National Action Plan on Climate Change (NAPCC) and various sectoral initiatives such as Mission LiFE and International Solar Alliance.

The framework has been designed in accordance with International Capital Market Association (ICMA) Green Bond Principles (2021), ensuring alignment with global standards in green finance. This alignment reinforces India's intent to promote transparent and responsible use of proceeds, rigorous project evaluation, and effective governance and accountability mechanisms.

Core Components of the Sovereign Green Bond Framework

The framework is structured around four core components, as recommended by ICMA:

- ◆ Use of Proceeds
- ◆ Process for Project Evaluation and Selection
- ◆ Management of Proceeds
- ◆ Reporting

These components ensure that the proceeds are allocated to projects with tangible environmental and social impacts, while maintaining transparency and accountability to investors.

3.1. Use of Proceeds

The Use of Proceeds component defines the eligible green project categories that can be financed under this framework. Each category is selected based on its potential to contribute to India's environmental objectives, including climate change mitigation, resource conservation, and biodiversity protection. The proceeds are dedicated exclusively to green projects, excluding sectors such as fossil fuels, nuclear energy, and direct waste incineration, which are deemed incompatible with the framework's sustainability goals.

The framework identifies nine eligible categories of projects:

- i. Renewable Energy: Investments in solar, wind, biomass, and

- small-scale hydropower projects, focusing on renewable energy generation and storage to support India's non-fossil fuel capacity targets.
- ii. Energy Efficiency: Initiatives such as energy-saving systems in government buildings, improved public lighting (e.g., LED replacements), and infrastructure upgrades that enhance overall energy efficiency.
- iii. Clean Transportation: Projects aimed at promoting sustainable public transportation, including the development of metro rail systems and electrification of transport infrastructure.
- iv. Climate Change Adaptation: Investments that enhance the resilience of infrastructure to climate impacts, such as early warning systems and climate-resilient urban infrastructure.
- v. Sustainable Water and Waste Management: Projects that conserve water resources, improve waste management systems, and support efficient irrigation.
- vi. Pollution Prevention and Control: Initiatives that address air pollution, greenhouse gas control, waste recycling, and emission-efficient waste-to-energy projects.
- vii. Green Buildings: Development and retrofitting of buildings that meet recognized environmental performance standards.

- viii. Sustainable Management of Living Natural Resources and Land Use: Sustainable forestry management, organic farming, and biodiversity conservation, supporting ecosystems through afforestation and reforestation.
- ix. Terrestrial and Aquatic Biodiversity Conservation: Conservation projects related to coastal and marine biodiversity, habitat preservation, and ecosystem restoration.

Eligible expenditures include public sector investments, subsidies, grants, and operational costs directly linked to green initiatives. The Ministry of Finance endeavours to allocate the funds to projects within 24 months of issuance, and any unallocated proceeds are carried forward to successive years for future green investments.

3.2. Process for Project Evaluation and Selection

The Green Finance Working Committee (GFWC) is responsible for overseeing the evaluation, selection, and approval of eligible green projects. This committee is chaired by the Chief Economic Adviser and comprises representatives from key ministries, including the Ministry of Finance, Ministry of Environment, and NITI Aayog. GFWC meets at least biannually to review potential projects, ensuring they align with the framework's environmental and social objectives.

Evaluation Process:

Relevant line ministries conduct an initial assessment of green projects based on eligibility criteria and environmental impact metrics. GFWC reviews projects for compliance with the framework and verifies alignment with ICMA Green Bond Principles and India's green objectives.

To ensure adaptability, a surplus of eligible projects is maintained, allowing for easy substitution, if any project faces delays or cancellation. GFWC ensures that selected projects adhere to India's national policies, such as the National Conservation Strategy and Policy on Environment and Development (1992), and uphold social safeguards under Indian law, like the Right to Fair Compensation and Transparency in Land Acquisition.

3.3. Management of Proceeds

The Management of Proceeds component is designed to ensure that funds raised through Sovereign Green Bonds are allocated transparently and exclusively to eligible green projects. The proceeds from bond issuances are deposited in the Consolidated Fund of India (CFI) and subsequently allocated to green projects through a dedicated account maintained by the Ministry of Finance.

Public Debt Management Cell (PDMC) is responsible for tracking of proceeds within the existing guidelines regarding debt management and monitoring the allocation of funds

towards designated projects. Any unallocated funds remain earmarked for future green investments until the issuance proceeds are fully utilized.

3.4. Reporting

The Reporting component mandates comprehensive and transparent updates on the allocation and impact of the proceeds. This includes:

Allocation Reports: Issued under GFWC supervision, 1st allocation report corresponding to FY 2022-23 was brought out in 2024, and provided information on the status of funded projects, amounts allocated, and any remaining unallocated proceeds. The reports also align expenditures with the framework's stated environmental objectives.

Impact Reports: While 1st allocation report was brought in 2024, first impact report for FY 2022-23 expected in **2026**. The impact report will outline the quantifiable environmental and social benefits of funded projects, such as reductions in carbon emissions, energy savings, and improvements in public health.

Para 2.2 of the Framework for Sovereign Green Bonds states that:

“Impact of projects in respect of reduction in carbon intensity and environmental benefits will also be assessed and reported separately by GFWC.”

While Paragraph 2.4 of the Framework states that

“The annual report is expected to consist of the following:

g) Expected impact of the project in quantitative indicators (to the extent possible (see Figure 2)) indicating reduction in carbon intensity, other

environmental benefits and, where possible, social co-benefits.”

The impact reporting metrics presented in the Framework are as follows:

Table 1: Impact Reporting Metrics across Sectors

Green Bond Category	Examples of potential metrics
Renewable Energy	<ul style="list-style-type: none"> • Installed renewable energy capacity (in MW) • Annual renewable energy generation (in MWh) • Annual GHG emissions avoided in tons of CO₂e • Social Co-Benefits (wherever possible to quantify) • Number of households benefitted • Number of under-privileged households benefitted • Number of jobs created
Energy Efficiency	<ul style="list-style-type: none"> • Number of energy efficiency equipment and appliances installed • Annual energy savings (in MWh) • Annual GHG emissions avoided in tons of CO₂ emission
Sustainable management of natural resources	<ul style="list-style-type: none"> • Area of land or ocean conserved/recovered (km²) • Area (km²) of marine/forest reserves under active monitoring
Clean transportation	<ul style="list-style-type: none"> • Number of people who use new ecological public transport • Number of km of new electric train/road lines created/maintained • Annual GHG emissions avoided in tons of CO₂ emission • Air Quality improvement (PPM) • Employment generated – number of jobs created/supported • Number of MSMEs supported • Number of people with access to sustainable public transport systems

Green Bond Category	Examples of potential metrics
Sustainable Water	<ul style="list-style-type: none"> • Volume of water collected and/or treated (m3) • Increased water efficiency of systems (% reduction in water consumption/loss) • Number of households that have access to new potable water supply
Green Building	<ul style="list-style-type: none"> • Level of certification by property • Annual energy savings (in MWh) • Annual GHG emissions avoided in tons of CO₂e

3.5. External Review

An external review process enhances the credibility and robustness of the Sovereign Green Bond Framework. The framework has received a Second Party Opinion from CICERO, which rated it as “Medium Green” with a “Good” governance score. Additionally, post-issuance verification by an independent external reviewer provides annual assessments of the fund allocation’s compliance with the framework criteria.

Overview of the Issuances (FY 2023-24)

To further support India's transition to a low-carbon economy and strengthen the domestic green bonds market, the Government of India issued sovereign green bonds (SGrBs) in FY 2023-24. The proceeds from these issuances were earmarked for green infrastructure projects in the public sector to achieve the country's emission intensity reduction goals.

During the second half of FY 2023-24, the Government of India, through auctions conducted by the Reserve Bank of India (RBI), issued SGrBs worth ₹20,000 crore in four tranches of ₹5,000 crore each. The issuance included bonds of ₹5,000 crore each with 5-year and 10-year tenors, along with the maiden issuance of SGrBs with a 30-year tenor amounting to ₹10,000 crore (Table 2).

Table 2: Details of Sovereign Green Bond Issuances (FY 2023-24)

Issuance Timeline	1 st Tranche - Nov 2023 ¹	2 nd Tranche - Dec 2023 ²	3 rd Tranche - Jan 2024 ³	4 th Tranche - Feb 2024 ⁴
Bond Tenor	5-Year	10-Year	30-Year	30-Year
Maturity Date	13th Nov 28	11th Dec 33	23rd Jan 54	23rd Jan 54
Notified Amount (₹ crore)	5000	5000	5000	5000
Competitive Bids Received	83	80	96	86
Competitive Bids Accepted	43	44	22	31
Cut-off Yield	7.25%	7.24%	7.37%	7.14%
Weighted Average Price	100.00	100.00	100.06	103.12
Weighted Average Yield	7.25%	7.24%	7.37%	7.12%
Listing	Sovereign Green Bond Indices National Stock Exchange (NSE), India			

1. Sovereign Green Bonds Full Auction Results – 10th Nov 2023, RBI

2. Sovereign Green Bonds Full Auction Results – 08th Dec 2023, RBI

3. Sovereign Green Bonds Full Auction Results – 19th Jan 2024, RBI

4. Sovereign Green Bonds Full Auction Results – 02nd Feb 2024, RBI

The auctions for the sale of SGrBs were governed by government-specific notifications on the sale of SGrBs and general notifications on the sale of Government of India Securities⁵. SGrBs of 5-year⁶ and 10-year⁷ were issued through the Uniform Price Auction method, while SGrBs of 30-year were issued through Multiple Price Auction method⁸, with 5% of the notified amount reserved for retail investors.⁹

The SGrBs are eligible for Repurchase Transactions (Repo)¹⁰ and are reckoned as eligible investments for maintaining

the Statutory Liquidity Ratio (SLR). These bonds are also eligible for secondary market trading and were designated as specified securities under the 'Fully Accessible Route' (FAR) for investment in Government Securities by non-residents. Additionally, the list of specified securities under the FAR was expanded to include all sovereign green bonds issued by the Government of India in 2023-24¹¹. These measures aim to enhance their liquidity and appeal to both domestic and foreign investors.

⁵. General Notification No. F.4(2)-W&M/2018 dated March 27, 2018

⁶. Press Communique, Department of Economic Affairs, Ministry of Finance dated November 06, 2023

⁷. Press Communique, Department of Economic Affairs, Ministry of Finance dated December 04, 2023

⁸. Press Communique, Department of Economic Affairs, Ministry of Finance dated January 15, 2024 and January 29, 2024

⁹. According to the 'Scheme for Non-competitive Bidding Facility in the Auctions of Government of India Dated Securities and Treasury Bills'.

¹⁰. As per the terms and conditions mentioned in Repurchase Transactions (Repo) (Reserve Bank) Directions, 2018

¹¹. RBI Annual Report 2023-24

Allocation of Proceeds (FY 2023-24)

The proceeds from Sovereign Green Bonds (SGrBs) issued in FY 2023-24, totalling ₹20,000 crore, were allocated to projects in line with the Sovereign Green Bond Framework. These funds were directed towards key sectors such as Clean Transportation, Renewable Energy, and Sustainable Management of Living Natural Resources and Land Use, supporting the government’s goals of climate change mitigation and natural resource conservation. Any additional expenditure under eligible schemes beyond ₹20,000 crore will be financed through the budgetary support from the Government.

portion of the funds (₹16087.99 crore) was utilized for projects aimed at promoting sustainable urban mobility and cleaner transportation systems. This included equity investments in metro rail projects across major cities such as Delhi, Kolkata, Bangalore, Patna, and Ahmedabad, as well as the production of energy-efficient electric locomotives. These initiatives are expected to significantly reduce the emission intensity in urban and intercity transit.

Renewable Energy: Investments amounting to ₹4,578.47 crore were directed towards advancing India’s renewable energy capabilities. Key initiatives included solar energy projects under the PM - KUSUM scheme, grid-connected solar and wind power projects, and the National Green Hydrogen Mission. These projects aim to accelerate India’s transition to clean energy sources and enhance energy security.

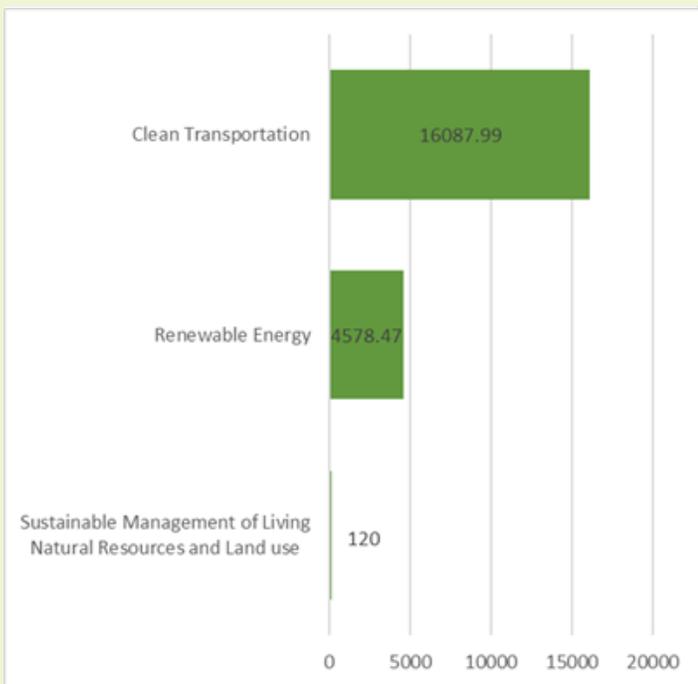


Figure 1: Allocation of Proceeds by value (in ₹ crore)

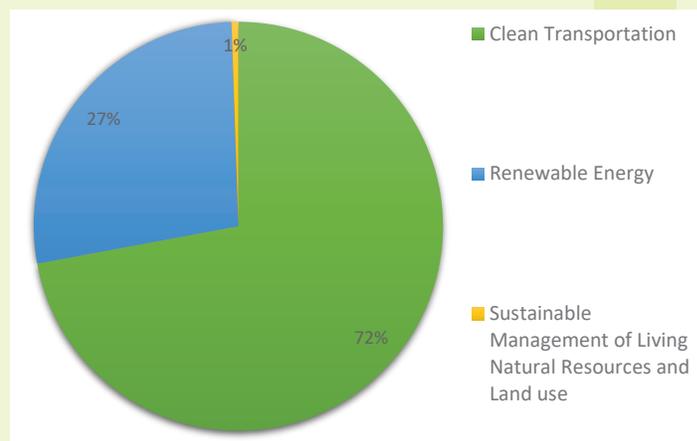


Figure 2: Allocation of Proceeds (in % share)

Clean Transportation: A substantial

Sustainable Management of Living Natural Resources and Land Use:

₹119.14 crore was allocated to the National Mission for a Green India to improve forest cover quality and enhance ecosystem services, contributing to biodiversity conservation and climate resilience.

Table 3 below presents project-wise fund allocation details based on funds

transferred by concerned Ministries/ Departments during FY 2023-24. In FY 2023-24, Government raised ₹20,000 crore through SGrBs. Amount transferred to the schemes eligible for financing through SGrBs is ₹20,785.60 crore. Fund transfer of ₹785.60 crore over and above ₹20,000 crore was incurred from general revenue of the Government.

Table 3: Project wise fund allocation details (₹ crore)

SN	Scheme/ Programme	Project Name/ Description	Funds Allocated	Type of Expenditure	Project Implementation Status
1	Clean Transportation				
i.	MRTS and Metro Projects	Delhi Metro Rail Project Phase-IV (3 Priority Corridors)	378.73	Equity	Under Implementation
ii.		Patna Metro Rail Project	692.50	Equity	Under Implementation
iii.		Bangalore Metro Rail Project Phase - 2A &2B	842.16	Equity	Under Implementation
iv.		Ahmedabad Metro Rail Project Phase-1 & 2	149.00	Equity	Under Implementation
v.		Surat Metro Rail Project	324.00	Equity	Under Implementation
vi.		Bhopal Metro Rail Project	253.00	Equity	Under Implementation
vii.		Indore Metro Rail Project	339.61	Equity	Under Implementation
viii.		Kanpur Metro Rail Project	362.00	Equity	Under Implementation
ix.		Agra Metro Rail Project	268.00	Equity	Under Implementation

SN	Scheme/ Programme	Project Name/ Description	Funds Allocated	Type of Expenditure	Project Implementation Status
x.		Joka-Binoy Badal Dinesh Bagh via Majerhat – Construction of Metro Railway (16.72 Km) including material modification for extension from Joka-Diamond Park (Phase-I)	850.00	Capex	Under Implementation
xi.		Dum Dum Airport (Jai Hind) - New Garia (Kavi Subhas) via Rajerhat – Construction of Metro Railway (32 Km)	1700	Capex	Under Implementation
xii.		Production of energy efficient three phase electric locos	9,928.99	Capex	Under Implementation
Sub-total			16,087.99		
2.	Renewable Energy				
i.	Solar Energy (Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM))	<ul style="list-style-type: none"> • 10,000 MW of decentralized ground mounted grid connected solar power plant • Installation of 14 lakh standalone Solar Powered Agriculture Pumps • Solarization of 35 lakh Grid-connected Agriculture Pumps 	1,000.58	Grant-in-Aid	Under Implementation

SN	Scheme/ Programme	Project Name/ Description	Funds Allocated	Type of Expenditure	Project Implementation Status
ii.	National Green Hydrogen Mission		0.11	Grant-in-Aid	Under Implementation
iii.	Solar Energy (Solar Power (Grid))	Phase-II of Grid connected Rooftop Solar (RTS) programme	2,661.48	Grant-in-Aid	Under Implementation
iv.	Wind Energy (Wind Power (Grid))	Wind Energy Projects	916.30	Subsidy	Under Implementation
Sub-total			4,578.47		
3	Sustainable Management of Living Natural Resources and Land use				
i.	National Mission for a Green India	Enhancing quality of forest cover and improving ecosystem services	119.14	Grant in- Aid	Under Implementation
Sub-total			119.14		
Grad Total			20,785.60		

Case Studies

6.1 Renewable Energy

6.1.1 PRADHAN MANTRI KISAN URJA SURAKSHA EVAM UTTHAAN MAHABHIYAN (PM-KUSUM)

The PM-KUSUM Scheme was launched by the Government in March, 2019 to provide financial support to the farmers for installation of standalone solar pumps and solarization of existing grid-connected agriculture pumps, and to provide the farmers an opportunity to become solar entrepreneurs by installing solar power plants on their barren/fallow/ agriculture land. The Scheme consists of three components:

- Component-A: 10,000 MW of Decentralized Ground Mounted Grid Connected Solar Power Plants.
- Component-B: Installation of 14 lakh standalone Solar Powered Agriculture Pumps.
- Component-C: Solarisation of 35 Lakh Grid-connected Agriculture Pumps.

All three components combined; the scheme aims to add a solar capacity of 34.8 GW with total central financial of ₹ 34,422 crore. The timeline for implementation of the Scheme has been extended till 31.3.2026.

To ease the implementation, the Ministry has amended the scheme guidelines and issued the Comprehensive guidelines during January 2024. Component B and Component C (Individual Pump Solarisation) of PM KUSUM scheme are also amended and can be implemented without State share of 30%. The Central Financial Assistance will continue to remain 30% and rest 70% will be borne by the farmer.

Under Component-C, apart from solarizing individual agriculture pumps, solarisation of complete agriculture feeder is also allowed for which there is no mandatory requirement of state/farmer's share. This will help the Discoms to reduce losses on account of agriculture subsidy and provide farmers a reliable day time power to irrigate their fields at very low tariff prices or even free.

The capacities sanctioned and achievements under the three components of the Scheme as on 31.12.2024 are as given below:

Component-A (MW)		Component-B (Nos)		Component-C (Nos)		
Sanctioned	Installed	Sanctioned	Installed	Sanctioned Individual Pump Solarisation (IPS)	Sanctioned Feeder Level Solarisation (FLS)	Installed
9,961.50	396.98	12,32,327	6,16,210	1,31,640	34,35,874	1,12,456

6.1.2 PM - SURYA GHAR: MUFT BIJLI YOJANA

The Union Cabinet has approved PM - Surya Ghar: Muft Bijli Yojana with a total outlay of ₹ 75,021 crore for installing rooftop solar and providing free electricity up to 300 units every month for One Crore households. The scheme was launched on 13th February 2024.

Objectives:

- Achieve 1 crore rooftop solar system installations in residential sectors.
- Help provide free or low-cost electricity to 1 crore households (up to 300 units/month) via rooftop solar installations.
- Generate 1,000 billion units of renewable electricity, reducing 720 million tons of CO₂eq emissions over 25 years.
- Develop necessary ecosystem for rooftop solar projects, including regulatory support, manufacturing facilities, supply chain, vendor network, and maintenance facilities, etc.
- Boost local manufacturing, create jobs, and enhance energy security.
- Contribute to India's NDCs (Nationally Determined Contributions) at UNFCCC by installing 30 GW of residential rooftop solar and 40-45 GW of overall capacity addition by 2026-27.

Key scheme highlights:

1. Central Financial Assistance

(CFA) for Residential Rooftop Solar: Provides a CFA of 60% of benchmark system cost for 2 kW systems and 40% of the benchmark system cost for systems between 2 to 3 kW, capped at 3 kW. This translates to subsidies of Rs 30,000 for 1 kW, Rs 60,000 for 2 kW, and Rs 78,000 for 3 kW or higher systems.

2. Subsidy Application: Households apply through the National Portal, choosing from approved vendors. The Portal aids decision-making with information on system sizes, benefits, and vendor ratings.
3. Eligibility: Grid-connected RTS systems on roofs, terraces, balconies, or elevated structures. CFA will be based on the rated DC capacity of the module system, irrespective of the inverter capacity.
4. Low-Interest Loans: Access to collateral-free, low-interest loans around 7% for residential RTS systems up to 3 kW.

Additional Features of the Scheme:

- i. Model Solar Village in each district to promote rooftop solar in rural areas.
- ii. Incentives for Urban Local Bodies and Panchayati Raj Institutions to promote RTS installations.
- iii. Payment security mechanism for RESCO-based models and funding for innovative RTS projects.

Strategy:

- National portal: One-stop for RTS application to access CFA benefits.
- Vendors register on the portal: E-token issued upon registration for CFA redemption.
- Rates decided mutually, no State DISCOM tendering. DISCOMs validate RTS installations.
- Scheme specifies technical specifications and OEMs for modules and inverters. CFA released through e-token to beneficiary's bank or loan account.

6.2 Sustainable Management of Living Natural Resources and Land Use

6.2.1 GREEN INDIA MISSION

National Mission for a Green India (GIM) is one of the eight Missions outlined under the National Action Plan on Climate Change. It aims to protect, restore, and enhance India's forest cover and respond to climate change by undertaking plantation activities in forest and non-forest areas. It recognizes the vital impact of forestry on ecological sustainability, biodiversity conservation, food, water, and livelihood security, and it aims to safeguard biological resources and associated livelihoods against the

threat of adverse climate change. Landscapes/Intervention areas under the Mission are selected based on their vulnerabilities, and accordingly, eco-restoration activities for their restoration are undertaken. The mission was initially launched in 2014 and has been extended to 2021-22 to 2029-30. This project strives to enhance carbon sinks in sustainably managed forests and other ecosystems and enable adaptation of vulnerable species/ecosystems to the changing climate. This is being done by increasing forest/tree cover with improved quality of forests on forest/non-forest lands, improving ecosystem services like biodiversity, carbon sequestration and hydrological services along with provisioning services like fuel, fodder, and timber and non-timber forest produces. The project also promotes adaptation of forest-dependent communities by stimulating increase in forest-based livelihood income of households living in and around the forests. GIM activities were started in the FY 2015-16. So far, a sum of ₹ 962.87 crore have been released to seventeen States and one union territory for creation of plantation and undertaking eco-restoration interventions over an area of 155130 ha.

Certificate in respect of Sovereign Green Bonds Allocation Report

During FY 2023-24, Government of India raised an amount of ₹20,000 crore by issuing Sovereign Green Bonds (SGrBs) that has been shown as internal debt of the Union Government in the Union Government Finance Accounts for FY 2023-24 (Statement 14).

It is certified that the information given in Table 3 (Project wise fund allocation details) under Chapter 5 (Allocation of Proceeds FY 2023-24) of the Sovereign Green Bonds Allocation Report for FY 2023-24, namely Scheme/Programme, Project Name/Description and Funds allocated, is consistent with that appearing in the accounts of the concerned Ministry/Department. The gap between the funds allocated to the green projects (₹20,785.60 crore) and the funds raised by issuance of SGrBs (₹20,000 crore) has been met from the general revenues of the Government.

This certificate is addressed to Department of Economic Affairs, Ministry of Finance for inclusion in the Sovereign Green Bonds Allocation Report for FY 2023-24. This certificate is in line with paragraph 2.4 of the Framework for Sovereign Green Bonds.

Dated: 09/01/2026


Director General of Audit
(Finance & Communication)