MINISTRY OF FINANCE
REPUBLIC OF INDONESIA

Green Sukuk Allocation and Impact Report 2025

Table of Contents

Foreword by the Minister of Finance

Purbaya Yudhi Sadewa

The Minister of Finance of the Republic of Indonesia

It is with great honour that I, on behalf of the Government of Indonesia, present the Green Sukuks Allocation and Impact Report 2025, documenting the allocation of proceeds and measurable environmental and social impacts from the Sovereign Green Sukuks issuance in 2024. This milestone marks the seventh issuance of Green Sukuks by the Republic of Indonesia in both global and domestic markets. It reflects our resolve to implement innovative fiscal policies that accelerate development, reduce inequality, and promote inclusive and sustainable growth.

I would like to highlight that in 2024 Indonesia underwent a presidential administration transition. Despite this transition, the Government of Indonesia has reaffirmed and strengthened its commitment through the National Medium-Term Development Plan (RPJMN) 2025–2029, which continues to prioritize climate change and sustainability as core development pillars. The SDGs and climate change agenda has been fully mainstreamed into this national plan.

In October 2025, the Government of Indonesia submitted the Second Nationally Determined Contributions (SNDC) which reinforce Indonesia's climate action commitment, harmonized with the targets of national economic growth and development. Earlier in April 2025, the Sustainable Government Securities Framework 2025 was updated to align with the latest market standards and evolving investor preferences, both domestically and globally. However, as the Green Sukuks covered in this report were issued in 2024, the allocation and impact reporting are still guided by the SDGs Government Securities Framework 2021.

On behalf of the Government of Indonesia, I would like to extend my sincere appreciation to investors, joint lead managers, and stakeholders, both global and domestic, for their continued trust and collaboration. I also wish to thank the Ministry of Public Works, the Ministry of Housing and Residential Area, the Ministry of Transportation, the Meteorology Climatology and Geophysics Agency, the Ministry of Energy and Mineral Resources, the Ministry of Housing and Residential Areas, acting as Project Owners, the Ministry of National Development Planning and the United Nations Development Programmes for ensuring the effective project implementation their valuable support in completing the report.

The issuance of government securities, including Green Sukuks, will continue to serve as one of the key innovative financing instruments to bridge the financing gap in achieving the SDGs and climate change objectives. This report serves a testament to what can be achieved when finance, policy, and sustainability converge. We remain committed to this path and look forward to continuing our collaboration for a more prosperous and sustainable future.

Executive Summary

The Government of Indonesia, through the Ministry of Finance, advanced its green and Sharia-compliant financing agenda with the seventh issuance of Green Sukuk in 2024, targeting both international and domestic investors. The proceeds finance and refinance environmentally sustainable projects aligned with Sharia principles, while supporting national GHG emission reduction and SDG targets. This section outlines the proceeds raised, their allocation, and the projected environmental and social impacts. Projected impacts reflect the aggregate environmental and social benefits, where data are available. Relevant methodologies are presented in the Annex.

In Fiscal Year 2024, the Republic of Indonesia successfully raised:

USD 600 million
through the Global Sovereign Green Sukuk
(ISIN: USY68613AC56)
100% of proceeds were allocated to the financing of eligible FY2024 projects

IDR 9.92 trillion
through the domestic retail ST Green Sukuk
(ST 012T4 ISIN: IDJ000030903, & ST 013T4 ISIN: IDJ000033709)
ST012T4 proceeds were fully allocated to the refinancing of eligible FY2023 projects. ST013T4 proceeds were allocated 80% to refinancing eligible FY2023 projects and 20% to financing eligible FY2024 projects

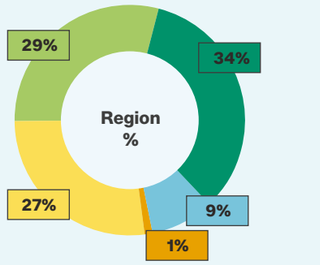
IDR 8.95 trillion
through the domestic wholesale PBSG Green Sukuk
(ISIN: IDP000005308)
100% allocated to refinancing eligible FY2023 projects

Global Sovereign Green Sukuk – SNI 0754 (ISIN: USY68613AC56)

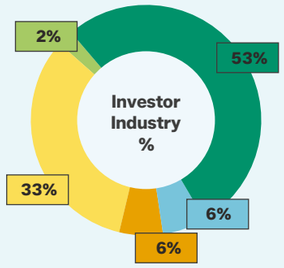
a. Transaction Summary

Amount **USD 600 million** | Tenor **30 years** | Coupon **5.50%** | Issuance Date **2 July 2024**

Investors by Geography



Investor Distribution by Industry



b. Proceeds Allocation

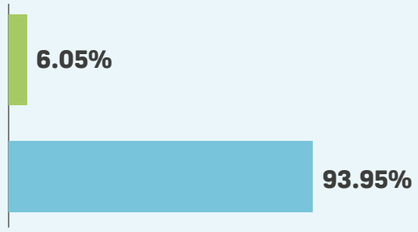
SNI 0754

100% of proceeds were allocated to financing new FY2024 projects.
Full details are provided in Table 1 of Chapter III.

Breakdown by Sector

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Total (IDR) **544,799,351,809** | Total (USD) **36,319,957**

Sustainable Water and Wastewater Management
Total (IDR) **8,455,204,364,466** | Total (USD) **563,680,291**



Breakdown by Project Owner (Ministry)

Ministry of Public Works and Housing
Total (IDR) **9,000,003,716,275** | Total (USD) **600,000,248**

c. Projected Environmental and Social Impacts

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction

The projects are expected to reduce flood-prone areas by approximately **360.19 hectares** through the development of **five river flood-control structures.**

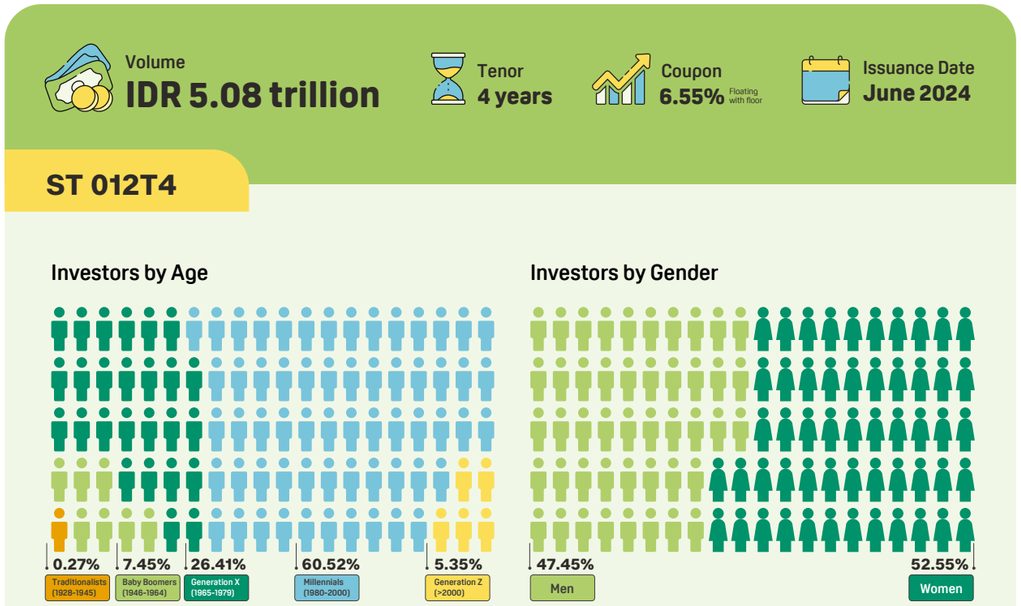
Raw water service capacity has been improved through the rehabilitation of **10.07 km** of raw water networks and the development of two production units and two groundwater intake points.

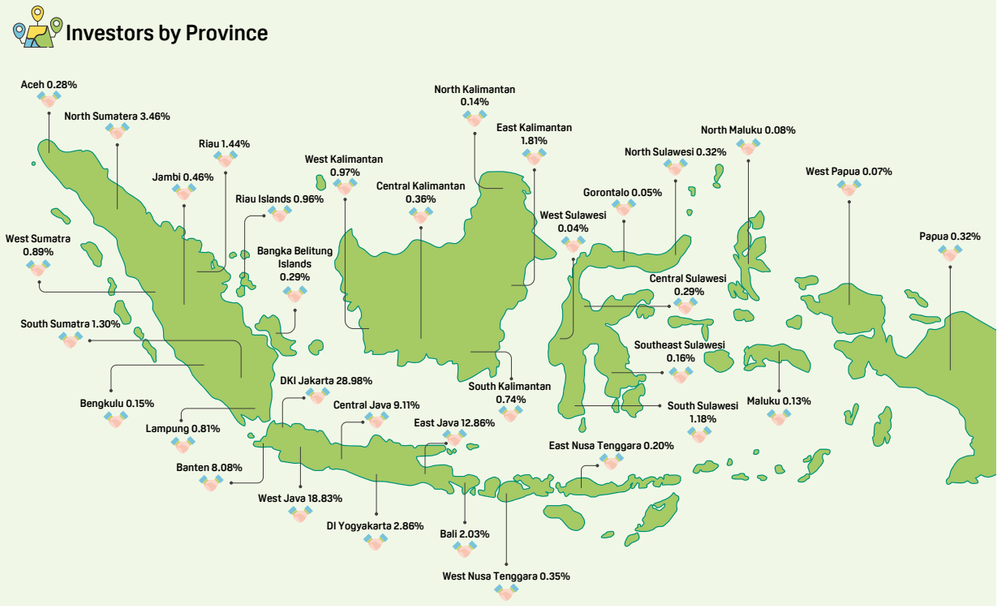
Sustainable Water and Wastewater Management

The projects increase water-storage capacity by an estimated **249.46 million m³** through the construction and revitalization of **11 dams and one lake**, supporting water-resource conservation, agricultural irrigation, flood control, and raw water supply in line with national water and food security programs.

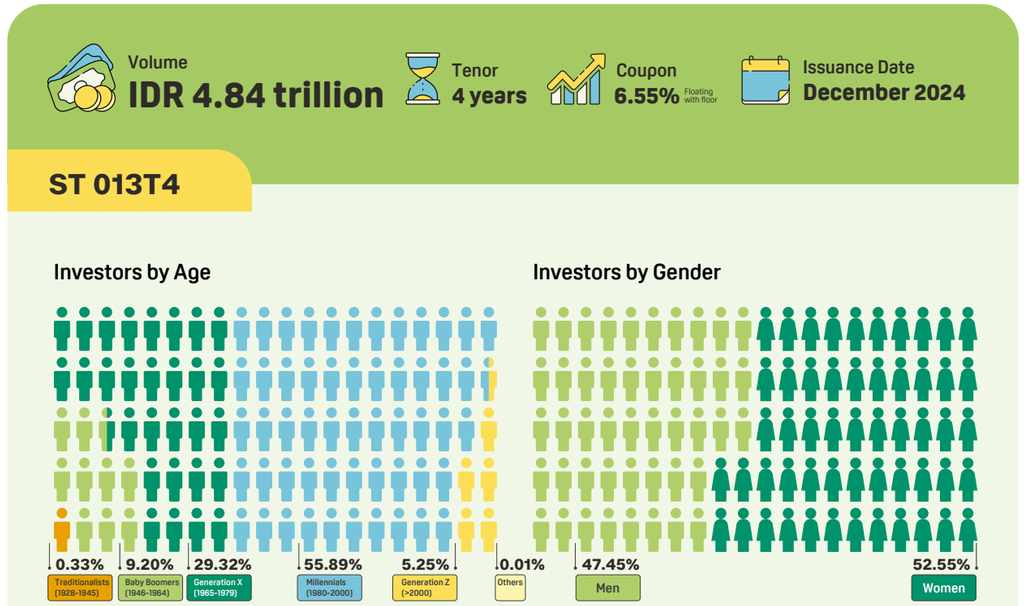
Domestic Retail Green Sukuk – ST Series

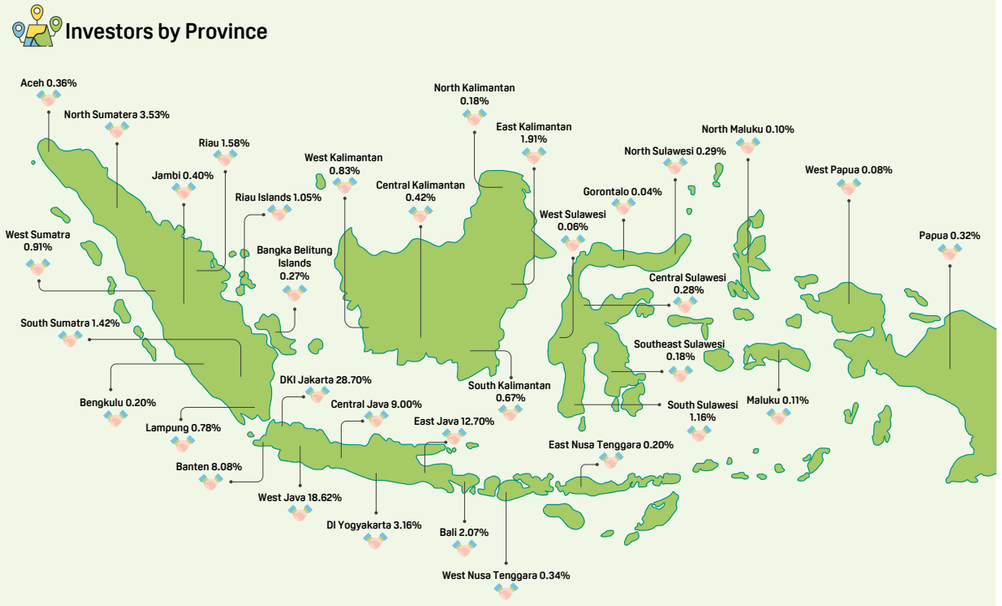
a. Transaction Summary ST 012T4 (ISIN: IDJ000030903)





Transaction Summary of ST 013T4 (ISIN: IDJ000033709)





b. Proceeds Allocation

ST 012T4

100% of proceeds were allocated to refinancing FY2023 projects. Full details are provided in Table 2 of Chapter III.

Breakdown by Sector

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Total (IDR) **1,287,234,401,339** | Total (USD) **85,815,626.8** — **25.36%**

Sustainable Transport
Total (IDR) **457,589,650,361** | Total (USD) **30,505,976.7** — **9.01%**

Sustainable Water and Wastewater Management
Total (IDR) **3,331,950,582,720** | Total (USD) **222,130,038.8** — **65.63%**

Breakdown by Project Owner (Ministry)

Ministry of Transportation
Total (IDR) **457,589,650,361** | Total (USD) **30,505,976.7** — **9.01%**

Ministry of Public Works and Housing
Total (IDR) **4,619,184,984,059** | Total (USD) **307,945,665.6** — **90.99%**

ST 013T4

20.31% of proceeds were allocated to financing new FY2024 projects and **79.69%** to refinancing FY2023 projects. Full details are provided in Table 3 & 4 of Chapter III.

Breakdown by Sector

Renewable Energy
Total (IDR) **6,998,470,922** | Total (USD) **466,565** — **0.14%**

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Total (IDR) **1,943,023,254,708** | Total (USD) **129,534,884** — **40.14%**

Sustainable Transport
Total (IDR) **483,879,715,225** | Total (USD) **32,258,648** — **10.00%**

Green Buildings
Total (IDR) **1,053,767,000** | Total (USD) **70,251** — **0.02%**

Sustainable Water and Wastewater Management
Total (IDR) **2,406,013,687,030** | Total (USD) **160,400,912** — **49.70%**

Breakdown by Project Owner (Ministry)

Ministry of Energy and Mineral Resources
Total (IDR) **6,998,470,922** | Total (USD) **466,565** — **0.14%**

Ministry of Transportation
Total (IDR) **483,879,715,225** | Total (USD) **32,258,648** — **10.00%**

Ministry of Public Works and Housing
Total (IDR) **4,342,547,564,303** | Total (USD) **289,503,171** — **89.70%**

Meteorology Climatology & Geophysics Agency
Total (IDR) **7,543,144,435** | Total (USD) **502,876** — **0.16%**

c. Projected Environmental and Social Impacts

ST 012T4

Sustainable Transportation

The project contributes to an estimated actual GHG emission reduction of **1,464 tCO_2e** per year from the Medan–Binjai airport railway.

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction

Potential flood-prone areas have been reduced by an estimated **1,784 hectares** through the development of four flood-control and coastal-protection structures, with a combined length of **51 km**.

Sustainable Water and Wastewater Management

The project enhances water resource storage capacity by **105.57** million m^3 through the construction of six dams, and three kilometres of irrigation networks.

ST 013T4

Renewable Energy

An actual GHG emission reduction of **276 tonnes CO_2e** per year has been achieved through the installation of solar PV systems, which generate approximately **325 MWh of electricity annually**.

Sustainable Transportation

Collectively, the projects contribute to an estimated **1,634,786 tonnes CO_2e of actual** and **2,091,219 tonnes CO_2e of expected** annual GHG emission reductions. **Actual reductions** are attributable to the operation of the Jakarta Metropolitan Electric Rail (**510,064 t CO_2e**), the Sumatra passenger single-track line (**90,864 tCO_2e**), the Sumatra freight railway (**1,033,087 tCO_2e**), and the Makassar–Parepare line (**771 tCO_2e**). Expected reductions are associated with the Regional East Java and surrounding railway network (**42,035 tCO_2e**), the Java passenger double-track line (**1,016,097 tCO_2e**), and the Java freight railway (**1,033,087 tCO_2e**).

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction

The projects have strengthened flood control and water management systems by **reducing potential flood-prone areas by 404.8 hectares** through the development of **25.34 km of river flood control** structures, including one coastal protection structure, and by enhancing raw water service capacity to **4.0246 m^3/s** through the construction and rehabilitation of **68.8 km** of raw water networks and **57 wells and intake facilities**.

The projects have strengthened Indonesia's climate resilience policy decision-making by improving observation infrastructure and analytical capacity through expanded weather stations, upgraded radar, and enhanced computing systems. These improvements, integrated into BMKG's Climate Early Warning System, enable more accurate forecasting and stronger disaster preparedness to support agriculture, food security, and public health.

Sustainable Water and Wastewater Management

The projects collectively enhanced Indonesia's water management capacity by increasing water resource storage by **2.7059 million m^3** through the development and revitalization of **14 dams**, lakes, reservoirs, and ponds, including the construction of a dam regulation gate, and by rehabilitating **40,141 hectares** of irrigation areas through the improvement of **252.6 km** of irrigation networks and the construction or rehabilitation of four weirs. These efforts strengthen national water security and support agricultural productivity.

Domestic Wholesale Green Sukuk – PBSG001 Series (ISIN: IDP000005308)

a. Transaction Summary

Volume **IDR 8.95 trillion**

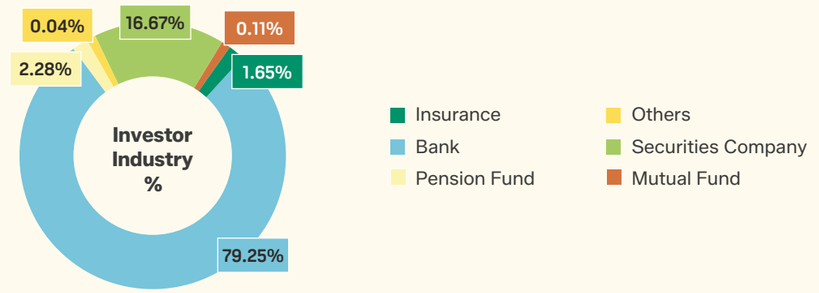
Tenor **4 years**

Coupon **6.55%** Floating with floor

Issuance Date **June 2024**

PBSG

Investor Distribution by Industry



b. Proceeds Allocation

PBSG001

100% of proceeds were allocated to refinancing FY2023 projects. Full details are provided in Table 5 of Chapter III.

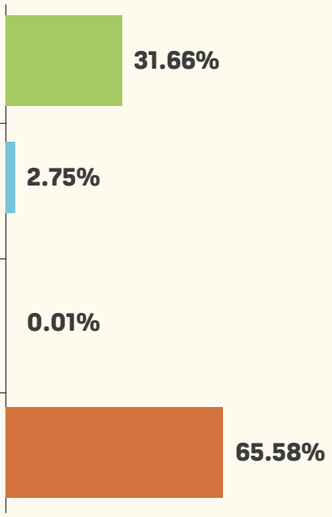
Breakdown by Sector

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Total (IDR) **2,833,755,412,467** | Total (USD) **188,917,027.5**

Sustainable Transport
Total (IDR) **245,771,653,631** | Total (USD) **16,384,776.9**

Green Buildings
Total (IDR) **1,068,784,054** | Total (USD) **71,252.3**

Sustainable Water and Wastewater Management
Total (IDR) **5,869,465,008,107** | Total (USD) **391,297,667.2**



Breakdown by Project Owner (Ministry)

Ministry of Public Works and Housing

Total (IDR) **8,704,289,204,628** | Total (USD) **580,285,947**

97.25%

Ministry of Transportation

Total (IDR) **245,771,653,631** | Total (USD) **16,384,777**

2.75%

c. Projected Environmental and Social Impacts

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Potential flood-prone areas have been reduced by **2,697 hectares** through the development of nine flood control structures, including a pump station, with **a total length of 15,802 km**.
	The capacity of groundwater and raw water services has been enhanced by **1.351 m³/s** through the construction and rehabilitation of **68.77 km of raw water networks** and **34 units of wells and raw water intake** infrastructure.
Sustainable Transportation	Contribute to the actual GHG emission reduction of Makassar-Pare-pare Line at **771.26 tonnes CO2e** (to be verified by Ministry of Environment)
Sustainable Water and Wastewater Management	The project enhances sustainable water management by increasing water-storage capacity by an estimated **193.03 million m³** through the construction of **15 dams**.
	The project enhances water supply and management for non-paddy agricultural areas, with **1,487 hectares of irrigation land improved** through the rehabilitation of **one weir and 5.3 km of irrigation networks**.
	The system is designed to supply clean drinking water to approximately **1.9 million people**, or around **380,000 household connections**, across the Jakarta Metropolitan Area. The **Cilincing reservoir (20,000 m³)** will enable **15,310 new household connections** in seven villages, while the **Pondok Kopi reservoir (5,000 m³)** will provide **2,000 additional household connections** in two sub-districts.
Green Buildings	The calculation of potential GHG emissions is pending by the Ministry of Public Works and Housing

Republic of Indonesia's Green Sukuk Milestone

This section provides an overview of Indonesia's Green Sukuk issuances, from the inaugural issuance in 2018 to the most recent in 2024. It highlights the total proceeds raised, the cumulative allocation of proceeds across eligible sectors, and notable recognitions received from leading global finance and capital market institutions and publications.

Summary of All Green Sukuk Issuances (2018–2024)

USD 6.60 billion
Cumulative Value of Global Sovereign Green Sukuk (SNI Series)

IDR 40.60 trillion ~ USD 2.78 billion
Cumulative Value of Domestic Retail Green Sukuk (ST Series)

IDR 31.17 trillion ~ USD 2.11 billion
Cumulative Value of Domestic Wholesale Green Sukuk (PBSG001 Series)

2018

USD 1.25 Bio
5 years | 3.75%

2019

USD 750 Mio
5.5 years | 3.9%

IDR 1.46 trillion
2 years | 6.75%

2020

USD 750 Mio
5 years | 2.3%

IDR 5.42 trillion
2 years | 5.5%

2021

USD 750 Mio
30 years | 3.55%

IDR 5.00 trillion
2 years | 4.8%

2022

USD 1.50 Bio
10 years | 4.7%

IDR 10.00 trillion
2 years | 6.15%

IDR 6.73 trillion
7 years | 6.625%

2023

USD 1 Bio
10 years | 5.6%

May 2023
IDR 3.30 trillion
4 years | 6.4%

November 2023
IDR 5.50 trillion
4 years | 6.5%

IDR 15.49 trillion
6 years | 6.625%

2024

USD 600 Mio
30 years | 5.50%

Jun (ST012T4) & Dec (ST013T4)
IDR 9.92 trillion
4 years | 6.55%

IDR 8.95 trillion
5 years | 6.625%

Cumulative Value of Global Sovereign Green Sukuk (SNI Series)
Cumulative Value of Domestic Retail Green Sukuk (ST Series)
Cumulative Value of Domestic Wholesale Green Sukuk (PBSG001 Series)

Cumulative Proceeds Allocation (2018 – 2024)

Breakdown by Sector

Renewable Energy
Total (IDR) 5,963,932,111,693 | Total (USD) 414,319,614
3.59%

Energy Efficiency
Total (IDR) 4,643,134,415,114 | Total (USD) 317,186,796
2.75%

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Total (IDR) 44,330,998,899,945 | Total (USD) 2,993,835,074
25.96%

Sustainable Transport
Total (IDR) 35,974,990,319,258 | Total (USD) 2,492,794,454
21.61%

Sustainable Management of Natural Resources on Land
Total (IDR) 176,187,735,229 | Total (USD) 11,917,935
0.10%

Green Buildings
Total (IDR) 274,731,928,787 | Total (USD) 18,869,058
0.16%

Sustainable Water and Wastewater Management
Total (IDR) 72,940,980,711,919 | Total (USD) 4,986,718,191
43.25%

Waste to Energy and Waste Management
Total (IDR) 4,393,163,979,363 | Total (USD) 297,877,427
2.58%

Breakdown by Project Owner (Ministry)

Ministry of Energy and Mineral Resources
Total (IDR) 3,433,936,835,827 | Total (USD) 242,305,780
2.10%

Ministry of Public Works and Housing
Total (IDR) 127,265,149,693,838 | Total (USD) 8,698,672,504
75.42%

Ministry of Transportation
Total (IDR) 35,785,997,181,536 | Total (USD) 2,439,272,961
21.15%

Ministry of Environment and Forestry
Total (IDR) 176,281,851,229 | Total (USD) 11,924,295
0.10%

Ministry of Agriculture
Total (IDR) 1,988,012,375,603 | Total (USD) 138,056,415
1.20%

Meteorology Climatology and Geophysics Agency
Total (IDR) 48,742,163,275 | Total (USD) 3,286,594
0.03%

Awards

2018

- Asia Pacific Green/ SRI Bond Deal of the Year — GlobalCapital, Euromoney
- SRI Bond, Islamic Issue — IFR Asia

2019

- Green Bond Pioneer Award — Climate Bond Initiative
- Indonesia Deal of the Year; Sovereign Deal of the Year; Sovereign Green Bond of the Year — Islamic Finance News
- Best Islamic Finance Deal Award — Finance Asia
- Sovereign Sukuk / Best Green Sukuk — The Asset Triple A
- Sovereign Green Bond of the Year — Environmental Finance

2020

- 3G Best Green Initiative & Policy Award 2020 — Cambridge IFA
- International Islamic Finance Awards 2020 — The Asset Triple A

2021

- Largest Green Sukuk in 2020 — Climate Bond Initiative
- Best Green Bond — The Asset Triple A

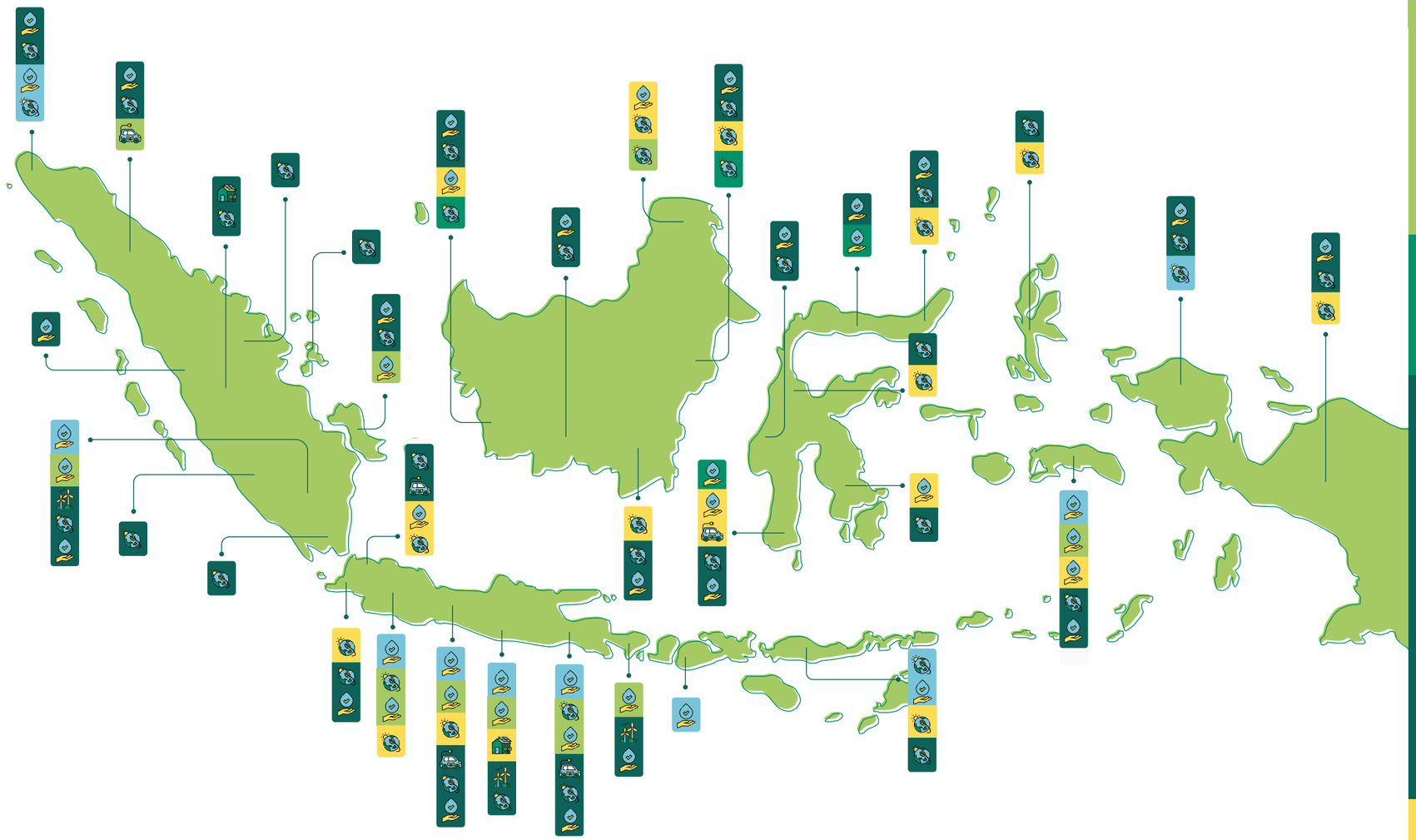
2022

- Largest Green Sukuk in 2021 — Climate Bond Initiative
- Best Islamic Finance Deal — Finance Asia
- Best Sovereign Bond & Best Green Sukuk of The Year 2022 — Alpha Southeast Asia

2023

- Largest Green Sukuk in 2022 — Climate Bond Initiative
- Best Sovereign Green Sukuk of the Year — Alpha Southeast Asia

Distribution of Geographic Locations



Global Green Sukuk (Financing 2024)

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Aceh, East Kalimantan, East Nusa Tenggara, West Papua

Sustainable Water and Wastewater Management
Aceh, South Sumatra, West Java, Central Java, Special Region of Yogyakarta, East Java, Maluku, West Nusa Tenggara, East Nusa Tenggara

Domestic Retail Green Sukuk – ST 012T4 (Refinancing 2023)

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
West Java, East Java, North Kalimantan

Sustainable Transportation
North Sumatra

Sustainable Water and Wastewater Management
Kepulauan Bangka Belitung, South Sumatra, West Java, Central Java, Special Region of Yogyakarta, East Java, Bali, Maluku, East Nusa Tenggara

Domestic Retail Green Sukuk – ST 013T4 (Financing 2024)

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
West Kalimantan

Sustainable Water and Wastewater Management
Gorontalo, South Sulawesi

Domestic Retail Green Sukuk – ST 013T4 (Refinancing 2023)

Renewable Energy
South Sumatra, Special Region of Yogyakarta, Bali, North Sulawesi, East Nusa Tenggara

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Aceh, North Sumatra, West Sumatra, Kepulauan Riau, Riau Islands, Jambi, South Sumatra, Kepulauan Bangka Belitung, Bengkulu, Lampung, Banten, DKI Jakarta, West Java, Central Java, DI Yogyakarta, East Java, Bali, West Nusa Tenggara, East Nusa Tenggara, West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, North Sulawesi, Gorontalo, Central Sulawesi, West Sulawesi, South Sulawesi, Southeast Sulawesi, Maluku, North Maluku, West Papua, Papua

Sustainable Transportation
South Sumatra, Special Region of Yogyakarta, Bali, North Sulawesi, East Nusa Tenggara

Sustainable Water and Wastewater Management
Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction

Green Buildings
Jambi

Domestic Wholesale Green Sukuk – PBSG (Refinancing 2023)

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction
Banten, DKI Jakarta, West Java, Central Java, DI Yogyakarta, East Nusa Tenggara, North Kalimantan, South Kalimantan, East Kalimantan, North Sulawesi, Central Sulawesi, South Sulawesi, North Maluku, Papua

Sustainable Transportation
North Sumatra

Sustainable Water and Wastewater Management
South Sulawesi

Green Buildings
DI Yogyakarta

I. Introduction

The Republic of Indonesia's Green Sukuk Allocation and Impact Report 2025, issued by the Ministry of Finance, presents a comprehensive and transparent account of the use and impact of proceeds from Green Sukuk issued in Fiscal Year 2024. The report encompasses the Global Sovereign Green Sukuk (SNI Series) issued in the international capital market, as well as the Retail and Wholesale Green Sukuk - comprising the ST 012T4, ST 013T4, and PBSG001 Series, issued in the domestic market. Together, these instruments reflect Indonesia's sustained leadership in mobilizing Sharia-compliant green financing to support climate mitigation and adaptation initiatives.

The institutional landscape associated with Indonesia's Green Sukuk underwent significant changes following the presidential transition in late 2024, including the restructuring of key ministries and the adoption of the **2025–2029 National Medium-Term Development Plan (RPJMN)**. In line with evolving global and domestic market standards, the Government of Indonesia has updated its sustainable financing guidelines through the **Sustainable Government Securities Framework 2025**. However, as the 2024 Green Sukuk issuance preceded these changes, this report remains aligned with the previous institutional arrangements, the **2019–2024 RPJMN**, and the **SDGs Government Securities Framework 2021** that were in effect at the time of issuance. Nonetheless, the reporting methodology aligned with the *ICMA Handbook on Harmonised Framework for Impact Reporting* (June 2024 edition).

This report is structured around two key accountability pillars: (i) **Allocation Reporting**, which provides a detailed breakdown of proceeds and their distribution across eligible climate mitigation, adaptation, and sustainability projects; and (ii) **Impact Reporting**, which presents both qualitative and quantitative assessments of the environmental and social outcomes achieved, as much as possible. Chapter II summarizes the evolution of Indonesia's Sustainable Government Securities Framework, followed by sections featuring milestone achievements, geographic distribution, and detailed allocations under each Green Sukuk series. Chapter IV highlights selected flagship projects, while Chapter V interprets the reported results. The report concludes with the Annex, which outlines the methodologies used for data collection and impact assessment, and includes the summary of 2024 Sovereign Green Sukuk transactions and the independent assurance statement.

Through this report, the Government of Indonesia reaffirms its commitment to transparency, accountability, and innovation in sustainable finance. Green Sukuk continues to serve not only as a financing tool but also as a policy signal of Indonesia's determination to advance climate action and sustainable development, while offering investors a credible pathway to support a resilient and inclusive future.

II. Summary of the Republic of Indonesia Thematic Bonds and Sukuk Framework

The Framework is subject to periodic review by the Republic of Indonesia to ensure continued alignment with prevailing international and national market standards, as well as evolving investor preferences. **The current assessment related to the 2024 Green Sukuk issuance follows the SDGs Government Securities Framework 2021.** Each issuance follows the following four key components of Green Bond Principles to ensure transparency and integrity.

2018

- First sovereign framework for issuing Green Sukuk and Green Bonds
- 100% proceeds allocated to eligible green expenditures (climate mitigation, adaptation, biodiversity).
- Refinancing allowed within 3 fiscal years.
- SPO: CICERO (23 January 2018).
- Category of Pillars: "Medium Green" for the overall shading assessment, with possible dark, medium, light green project types.
- Alignment: ICMA's Green Bond Principles 2017, ACMF's ASEAN Green Bond Standards 2018

2021

- Broadened scope to include Green and Blue Bonds/Sukuk and Social & Sustainability
- Bonds/Sukuk (SDGs Securities).
- Projects aligned with Indonesia's SDGs
- Roadmap 2023-2030.
- Refinancing period shortened to 2 fiscal years.
- SPO: CICERO & IISD (1 September 2021).
- Category: "Medium Green" shade rating and "Good" for the overall governance structure.
- Alignment: ICMA's Green Bond Principles 2021, Social Bond Principles 2021, Sustainability Bond Guidelines 2021, and ACMF's ASEAN Green Bond Standards 2018, ASEAN Social Bond Standards 2018, ASEAN Sustainability Bond Standards 2018.

2025

- Further advances integration of environmental and social objectives, consistent with international Sustainability Bond Guidelines and Sharia-compliant principles.
- Expands eligible categories to include green, blue, sustainable, SDG, gender, and other thematic bonds/sukuk.
- Refinancing allowed within 3 fiscal years.
- SPO: Sustainable Fitch (30 April 2025).
- Category: "Excellent" for Evaluation and Selection and Reporting and Transparency; "Good" for Proceeds Allocation and Management of Proceeds.
- Alignment: ICMA's Green Bond Principles 2021, Social Bond Principles 2023, Sustainability Bond Guidelines 2021, and ACMF's ASEAN Green Bond Standards 2018, ASEAN Social Bond Standards 2018, ASEAN Sustainability Bond Standards 2018.

Pillar 1:
Proceeds Allocation

The proceeds are dedicated exclusively to financing or refinancing projects that deliver measurable environmental and social benefits aligned with Indonesia's SDGs Roadmap 2030 and Nationally Determined Contributions (NDCs).

The Eligible Green & Blue Sector include categories below.

- Renewable Energy
- Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction
- Energy Efficiency
- Sustainable Transport
- Waste to Energy & Waste Management
- Sustainable Management of Natural Resources on Land
- Sustainable Management of Natural Resources on Ocean
- Green Tourism
- Green Buildings
- Sustainable Water and Wastewater Management

Pillar 2:
Process for Project Evaluation and Selection

Project selection is embedded within the KRISNA system (Collaboration of Planning and Budget Performance Information), ensuring integration with national development priorities.

The Budget Tagging Process identifies eligible expenditures using: a) Climate Budget Tagging (CBT) for Green/Blue projects, and b) Dynamic Tagging for Social projects.

Governance and validation:

1. Line ministries identify and propose eligible projects.
2. BAPPENAS (Ministry/ Agency for National Development Planning) coordinates the process and validates SDG alignment.
3. The Ministry of Environment confirms consistency with Indonesia's NDCs.
4. The Ministry of Finance (MoF) endorses and finalizes the project list based on eligibility and tenor criteria.
5. The selected and reported projects will be registered in the National Registry System on Climate Change Control (SRN-PPI), serving as a platform for data and information management on mitigation and adaptation actions.

Reported data for FY2023 refinancing projects are based on expenditures audited by the Audit Board of the Republic of Indonesia (*Badan Pemeriksa Keuangan*) as of 21 May 2024, while FY2024 financing data are audited as of 19 May 2025.

Pillar 3:
Management of Proceeds

The Ministry of Finance manages proceeds through the government's general account, applying sound treasury management principles. A dedicated Allocation Register records all transactions, including project details, allocated amounts, expected impacts, and unallocated balances.

Proceeds may be used for both financing and refinancing, with a look-back period of up to two years before issuance. Unallocated funds are temporarily held in Bank of Indonesia accounts until they are deployed to eligible projects. Line ministries are responsible for monitoring and reporting project implementation to the Ministry of Finance, ensuring proper use and accountability.

Pillar 4:
Reporting

The Ministry of Finance prepares and discloses annual reports within one year of issuance, which presents mainly the Allocation Reporting including project lists, expenditure categories, and amounts allocated, and the Impact Reporting including environmental and social outcomes using measurable indicators. All reports are publicly available on the Ministry of Finance website, specifically through the newly launched **Dashboard for Thematic Bond Allocation and Impact**.

III. List of Projects: Allocation and Impact

Table 1. List of FY2024 Projects Financed with Proceeds from the 2024 Global Sovereign Green Sukuk – SNI 0754 (ISIN: USY68613AC56)

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
1	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Flood mitigation	Flood and lava control, major urban drainage management, and coastal protection	This project focuses on the development of flood control infrastructure for the new national capital, Ibu Kota Nusantara (IKN) at core and surrounding areas from flooding. The activities include: (i) Continued construction of flood control infrastructure for Sanggai 1A watershed, which serves as the core government area of IKN. (ii) Flood control and management for the Pamaluan River, located in North Penajam Paser Regency, within the IKN region.	East Kalimantan	443,543,485,409	29,569,566	4.93%	10-20 years	Adaptation/resillience	Potential flood-prone areas have been reduced by 360.19 hectares in Sanggai Riverbasin and Pamaluan River, respectively through the development of five river flood-control infrastructures.	3, 9, 13, 14	Ministry of Public Works and Housing
2	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Drought management	Groundwater and raw water network development	This project focuses on the development and rehabilitation of groundwater and raw water infrastructure in (i) Aceh Province - Aceh Besar Regency: Rehabilitation of Karet Krueng Aceh Weir. (ii) East Nusa Tenggara - Sumba and Timor Islands, and for East Flores & Central Flores: Rehabilitation of groundwater and raw water facilities, and upgrading the irrigation network's broncaptering (spring capture) system in Kupang. (iii) West Papua - Sorong City & Regency: Rehabilitation of groundwater facilities to provide raw water, specifically addressing drought conditions in the Moyo and Klasari villages.	Aceh, East Nusa Tenggara, West Papua	101,255,866,400	6,750,391	1.13%	10-20 years	Adaptation/resillience	The capacity of raw water services has been enhanced through the rehabilitation of 10.073 km of raw water networks, along with two units and two points of groundwater intake infrastructure.	3, 9, 13, 14	Ministry of Public Works and Housing
3	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of dams, lakes, and other water storage structures	The project activities include construction and supervision of water storage infrastructure in Tiga Dihaji Dam (South Sumatera), Keureuto and Rukoh Dams (Aceh), Cibeet and Cijurey Dams (West Java), Bener, Jragung, Jlantah and Cabean Dams (Central Java); Bagong Dam (East Java), Karangnongko Dam (Central & East Java), Mbay Dam (East Nusa Tenggara), Meninting Dam (West Nusa Tenggara), Way Apu Dam (Maluku), and the revitalization of Rawa Pening Lake (Central Java).	Aceh, South Sumatra, West Java, Central Java, Special Region of Yogyakarta, East Java, Maluku, West Nusa Tenggara, East Nusa Tenggara	8,455,204,364,466	563,680,291	93.95%	10-20 years	Adaptation/resillience	The project enhance water resource storage capacity at least 249.46 million m3 through the construction and revitalisation of 11 dams and one lake. The project provides benefits for water resource conservation, agricultural irrigation, flood control, and raw water supply supporting the national water and food security programmes.	6, 11, 13	Ministry of Public Works and Housing

Remarks:

a. The type of projects refers to eligible sectors under the Republic of Indonesia SDGs Government Securities Framework 2021
b. The projects may be implemented in multiple spots on each provincial location mentioned.
c. The currency exchange rate is based on the State Budget Assumption for 2024 budget year of IDR 15,000 per USD.
d. Based on durability of the output or financial life of project.
e. Methodology and assumptions are disclosed in Annex.
f. Additional indicators of the direct impact of the green projects.
g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.

Table 2. List of FY2023 Projects Refinanced with Proceeds from the 2024 Domestic Green Sukuk Retail (ST 012T4 - ISIN: IDJ000033709) Issuance

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results *f	SDGs*g	
1	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Flood mitigation	Development of infrastructure for flood and volcanic mudflow control, management of main urban drainage, and coastal protection.	The project includes the development of infrastructures for urban flood control and coastal protection in (i) West Java Province: construction of groundsill at Cipamingkis River. (ii) Central Java: Flood and tidal control at Loji–Banger River. (iii) North Kalimantan: Continuation of Breakwater Construction at Tanjung Aru Beach, Sebatik Islands; Coastal Protection at Padaidi Village and Sei Taiwan, Tanjung Karang Village, Sebatik Island.	West Java, Central Java, North Kalimantan	1,287,234,401,339	85,815,627	25.36%	10-20 years	Adaptation/resillience	Potential flood-prone areas have been reduced by 1,783.5 hectares through the development of four flood control and coastal protection structures, which extend 51.106 km in total.	3, 9, 13, 14	Ministry of Public Works and Housing
2	Sustainable Transportation	Developing and upgrading zero or low carbon transportation networks and systems	Development of railway connectivity infrastructure	The project consists of the construction of a 20.9 km railway line between Medan and Binjai. This segment extends the existing Medan–Kualanamu International Airport line to improve public access to Kualanamu Airport.	North Sumatra	457,589,650,361	30,505,977	9.01%	30-50 years	Contribute to the actual GHG emission reduction of Medan-Binjai railways at 1,463.68 tonnes CO2e/year.	The project is expected to reduce congestion along the Medan–Binjai corridor, particularly at level crossings in Medan City, while improving accessibility and mobility for surrounding communities. The estimated train frequency is 56 trips per day.	9, 11, 13	Ministry of Transportation
3	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of dams, lakes, and other water storage structures	The project includes the development of dams in (i) South Sumatra: construction of Tiga Dihaji Dam (South Ogan Komering Ulu Regency). (ii) West Java: continued construction of Leuwikeris Dam (Ciamis and Tasikmalaya) Regencies. (iii) Central Java: construction of Jlantah Dam (Karanganyar Regency) and Karangnongko Dam (Blora and Bojonegoro). (iv) East Java: Bagong Dam (Trenggalek Regency). (v) Bali: Sidan Dam (Badung, Gianyar, and Bangli).	South Sumatra, West Java, Central Java, Special Region of Yogyakarta, East Java, Bali, Maluku, East Nusa Tenggara	3,319,865,682,720	221,324,379	65.39%	10-20 years	Adaptation/resillience	The project enhances water resource storage capacity by 105.57 million m^3 through the construction of six dams.	6, 11, 13	Ministry of Public Works and Housing
4	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of surface water, swamp, and non-rice irrigation networks	The project focuses on the rehabilitation of water resource infrastructure irrigation networks for Rias irrigation areas.	Bangka Belitung Islands	12,084,900,000	805,660	0.24%	10-20 years	Adaptation/resillience	Three kilometers of irrigation networks have been rehabilitated.	6, 11, 13	Ministry of Public Works and Housing

Remarks:

a. The type of projects refers to eligible sectors under the Republic of Indonesia SDGs Government Securities Framework 2021
b. The projects may be implemented in multiple spots on each provincial location mentioned.
c. The currency exchange rate is based on the State Budget Assumption for 2024 budget year of IDR 15,000 per USD.
d. Based on durability of the output or financial life of project.
e. Methodology and assumptions are disclosed in Annex.
f. Additional indicators of the direct impact of the green projects.
g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.

Table 3. List of FY2024 Projects Financed with Proceeds from the 2024 Domestic Green Sukuk Retail (ST 013T4 - ISIN: IDJ000033709) Issuance

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results *f	SDGs*g	
1	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Drought management	Groundwater and raw water network development	The project covers the development of shallow groundwater wells in Sungai Ambawang, Sungai Kakap, and Sungai Raya sub-districts in Kubu Raya Regency, and rehabilitation of water intake and raw water distribution networks for supporting the drinking water supply system (SPAM) in sub-district capital areas of Sambas, Teluk Keramat, and Galing in Sambas Regency.	West Kalimantan	1,783,918,000	118,928	0.18%	10-20 years	Adaptation/resillience	The capacity for raw water services has increased through the construction of nine wells.	3, 9, 13, 14	Ministry of Public Works & Housing
2	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of dams, lakes, and other water storage structures	The project involves the development of artificial water storage infrastructure through the construction of the Bulango Ulu Dam	Gorontalo	911,119,992,847	60,741,333	92.84%	10-20 years	Adaptation/resillience	The capacity of water resource storage has been enhanced at 84 million m3 through the construction of one dam.	6, 11, 13	Ministry of Public Works & Housing
3	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of surface water, swamp, and non-rice irrigation networks	The project involves the rehabilitation and revitalization of the Saddang Irrigation Area, Jampue Sub-unit, Pinrang District.	South Sulawesi	70,273,968,289	4,684,931	7.16%	10-20 years	Adaptation/resillience	Rehabilitation covered a total of 4,871 hectares of irrigation land and 24.2 km of irrigation networks.	6, 11, 13	Ministry of Public Works & Housing

Remarks:

a. The type of projects refers to eligible sectors under the Republic of Indonesia SDGs Government Securities Framework 2021
b. The projects may be implemented in multiple spots on each provincial location mentioned.
c. The currency exchange rate is based on the State Budget Assumption for 2024 budget year of IDR 15,000 per USD.
d. Based on durability of the output or financial life of project.
e. Methodology and assumptions are disclosed in Annex.
f. Additional indicators of the direct impact of the green projects.
g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.

Table 4. List of FY2023 Projects Refinanced with Proceeds from the 2024 Domestic Green Sukuk Retail (ST 013T4 - ISIN: IDJ000030903) Issuance

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
1	Renewable Energy	Generation and transmission of energy from renewable energy sources	Planning, Development and Supervision of New and Renewable Energy and Energy Conservation Infrastructure	The project includes (i) Rooftop solar PV installations at the Presidential Palaces in Yogyakarta and Tampaksiring, Bali (100 kWp each), to support national energy mix targets and reduce GHG emissions. (ii) Rooftop solar PV installations at Volcano Observation Posts in Mt. Lewotolo (East Nusa Tenggara), Mt. Karangetang (North Sulawesi), and Mt. Dempo (South Sumatra) (6 kWp each). (iii) Support the establishment of a Conversion Workshop for converting combustible motorcycles into electric vehicles through the procurement of testing equipment, establishing it as a certified Grade A workshop. The workshop, located in DKI Jakarta, has converted 495 combustible motorcycles to electric vehicles in FY2023.	South Sumatra, Special Region of Yogyakarta, Bali, North Sulawesi, East Nusa Tenggara	6,998,470,922	466,565	0.18%	20-30 years	An actual GHG emission reduction of 276 tonnes CO2e/year from the installation of solar PV systems; the conversion workshop, classified as an indirect mitigation action, was not quantified.	The rooftop solar PV installations on public buildings and volcano observation stations generate 325 MWh of annual electricity, thereby enhancing energy resilience and disaster risk reduction, promoting public awareness, and directly contributing to Indonesia's 2029 target of 1.5 GW rooftop solar and its NDC/NZE goals. The MEMR conversion workshop provide training to and overseeing certified private EV conversion workshops, accelerating EV adoption, stimulate green jobs, reducing urban emissions, and strengthening the local battery supply chain.	7, 13, 14	Ministry of Energy and Mineral Resources
2	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Flood mitigation	Flood and lava control, major urban drainage management, and coastal protection	This project involves the development and rehabilitation of coastal protection and flood control infrastructure. Key coastal protection activities include constructing seawalls, revetments, and abrasion controls to mitigate erosion, with example projects in Cirebon, West Java; Buleleng, Bali; and Sumakuyu Beach, West Sulawesi, alongside protections for outer islands like Natuna, Riau. For flood control, efforts focus on river normalization, rubber weirs, and riverbank reinforcement to reduce inundation risks. Major initiatives encompass the Sekanak River, Palembang; the Juana River rubber weir, Pati; the Ciujung River estuary, Banten; the Lamong River, Gresik; and watershed management in new Nusantara capital city, East Kalimantan.	Aceh, South Sumatra, Riau, Riau Islands, Bangka Belitung Islands, Bengkulu, Lampung, Banten, Special Capital of Jakarta, West Java, Central Java, Special Region of Yogyakarta, East Java, Bali, West Kalimantan, East Kalimantan, South Kalimantan, North Sulawesi, Gorontalo, West Sulawesi,Southeast Sulawesi, South Sulawesi, East Nusa Tenggara, Papua, West Papua	1,422,945,061,403	94,863,004	36.88%	10-20 years	Adaptation/resillience	Potential flood-prone areas have been reduced by 404.8 hectares through the development of river flood control structures, which extend 25.34 km, including one coastal protection structure.	3, 9, 13, 14	Ministry of Public Works and Housing
3	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Drought management	Groundwater and raw water network development	The project develops a groundwater utilization system to extract and treat groundwater into raw water. It includes constructing/rehabilitating/supervision of water intake structures (boreholes, wells, spring intakes wells, spring intakes/ broncaptering), Managed Aquifer Recharge (MAR) facilities, and weirs, along with establishing raw water distribution pipelines to enhance water availability and sustainable resource management. These activities are implemented to support several strategic areas, including drought-affected regions (such as East Nusa Tenggara and West Nusa Tenggara), communal, city, or regional-scale water supply systems (SPAM) such as in Riau and Bengkulu, groundwater irrigation networks (JIAT) such as in West Sumatra, and national tourism strategic areas such as Borobudur– Prambanan (Yogyakarta) and Bromo–Tengger–Semeru (East Java).	North Sumatra, West Sumatra, South Sumatra, Bengkulu, Jambi, Riau, Lampung, East Kalimantan, Central Java, Special Region of Yogyakarta, East Java, Bali, Central Kalimantan, South Kalimantan, North Sulawesi, West Nusa Tenggara, East Nusa Tenggara, Maluku, North Maluku, Papua, West Papua	510,751,130,870	34,050,075	13.24%	10-20 years	Adaptation/resillience	The capacity of raw water services has been enhanced at 4.0246 m3/s through the construction and rehabilitation of 68.8 km raw water networks and 57 unit wells and raw water intake infrastructure.	3, 9, 13, 14	Ministry of Public Works and Housing

Table 4 Continued

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
4	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Research leading to technology innovation with sustainability benefits	Management of climate change information and management of applied climate information services	The project comprises the procurement and installation of advanced atmospheric monitoring instruments at Global Atmosphere Watch (GAW) stations, including: (i) Surface Ozone and Black Carbon Monitoring Equipment installation at GAW Bariri Palu, and SO_2 and NOx analyzers at GAW Bukit Tinggi; (ii) Operation and maintenance of 30 particulate matter monitoring units ($PM_{2.5}$ and PM_{10}) and the addition of three new units at strategic sites, including Nusantara Capital City (IKN); (iii) Upgrading infrastructure for climate and GHG observation offices in Yogyakarta, Jambi, Bengkulu, and West Kalimantan.	Bengkulu, Special Capital of Jakarta, Special Region of Yogyakarta, West Kalimantan, West Nusa Tenggara	7,543,144,435	502,876	0.20%	5 years for the air pollution monitoring unit	Adaptation/resillience	The project enables more advanced observation networks and analytical capabilities, supporting evidence-based policymaking; integration of these improved data streams into BMKG's Climate Early Warning System (CEWS) enhances forecasting precision and disaster preparedness; and supports agricultural planning, safeguards food security, and protects public health through early air quality advisories in 5 provinces.	3, 9, 13, 14	Meteorology, Climatology, and Geophysics Agency (BMKG)
5	Sustainable Transportation	Developing and upgrading zero or low carbon transportation networks and systems	Development of railway connectivity infrastructure	The project enhances Jakarta Metropolitan's urban electric railway (KRL) facilities along the Manggarai–Jatinegara corridor. (i) Package A Phase II covers the construction of the Manggarai Station East Wing for commuter services of floors 1–3 (structure, architecture, and MEP), the right-side wing building (structure, architecture, and MEP, Platforms 1 and 2, at-grade tracks 1–4 for the Bekasi Line, and partial works of superstructure and substructure for the elevated intercity railway bridge. (ii) Package A Phase III includes civil works for the mainline (superstructure, substructure, and elevated platforms), construction of the East Wing for long-distance services (structure, architecture, and MEP), track development at elevated, stabling, and at-grade sections, and upgrades to electrification and signalling–telecommunication systems along the corridor.	DKI Jakarta	249,138,954,240	16,609,264	6.46%	30-50 years	Contributes to actual GHG emission reduction from Jakarta Metropolitan Electric Rail (KRL) operations by an estimated 510,063.8 tons of CO_2.	This strategic double-track railway development enhances network capacity, efficiency, and reliability, facilitating a modal shift from road to rail. This transition reduces fuel consumption and greenhouse gas emissions, supporting broader climate and sustainability objectives.	9, 11, 13	Ministry of Transportation
6	Sustainable Transportation	Developing and upgrading zero or low carbon transportation networks and systems	Development of railway connectivity infrastructure	The project consists of the preparation for enhancing railway lines in Central and East Java. (i) In Central Java, The project consists of the development of the Environmental Management and Monitoring Plans (RKL/RPL) for the Semarang Tawang–Tanjung Emas Port Double Track (Phase II) to mitigate environmental impacts and ensure project sustainability. The segment connects the Semarang city center with the Tanjung Emas port, with construction completed but the operations yet to commence. (ii) In East Java, the project consists of strengthening the railway electrification of the Surabaya Regional Railway Line (Phase I), which is not yet operational, and the preparation of the RKL/RPL for the Sepanjang–Mojokerto Double Track. The project aims to enhance urban connectivity across the Gerbangkertosusila metropolitan area (Surabaya, Sidoarjo, Gresik, Mojokerto, and Lamongan).	Central Java, East Java	1,900,610,180	126,707	0.05%	30-50 years	The Sepanjang - Mojokerto Double Track contributes to expected GHG emission reductions of 1,016,096.85 tonnes CO_2e from passenger train operations across Java and 1,033,087.04 tonnes CO_2e from national freight train operations. The Surabaya Regional Railway Line (SRRL) has not yet been constructed.	The enhancement of the electrified Surabaya Regional Railway Line (SRRL), and Sepanjang–Mojokerto double tracks will promote cleaner transport and reducing fuel dependency. SRRL connects key cities within the Gerbangkertosusila metropolitan area—Surabaya, Sidoarjo, Gresik, Mojokerto, and Lamongan—helping reduce congestion and improve mobility. The Semarang Tawang–Tanjung Emas double tracks connect city centers with ports, expected to reduce road-based logistics traffic, enhance transport efficiency, and lower logistics costs.	9, 11, 13	Ministry of Transportation

Table 4 Continued

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
7	Sustainable Transportation	Developing and upgrading zero or low carbon transportation networks and systems	Development of railway connectivity infrastructure	This project supports (i) the development of railway connectivity between North Sumatra and Aceh through construction, supervision, and land acquisition. In Aceh, ongoing activities covers the construction and supervision of the Lhokseumawe–Bireuen line, particularly 8-km Kreung Geukeuh–Paloh segment. In North Sumatra, the focus is on land acquisition for National Strategic Projects segments, notably Rantau Prapat–Kota Pinang and Tebing Tinggi–Kuala Tanjung, and for two new stations on the Medan–Binjai and Besitang and Langsa segments. Supplementary land acquisition costs (BOBP) include certification processes for the Bandar Tinggi–Kuala Tanjung, Rantau Prapat–Kota Pinang, and Bahlias–Tanjung Gading shortcut segments. Financing for land acquisition and procurement is provided by the State Asset Management Agency (LMAN), while the Directorate General of Railways (DJKA) has allocated Green Sukuk proceeds to support the construction and BOBP. (ii) The project allocated the procurement of 1 Railways Crane unit for South Sumatra Line.	North Sumatra, South Sumatra	231,135,707,855	15,409,047	5.99%	30-50 years	Contributes to actual GHG emission reductions of 90,864.16 tonnes CO_2e from passenger rail operations across Sumatra and 1,033,087.04 tonnes CO_2e from national freight operations.	The National Strategic Projects (PSN) enhances welfare and equitable development nationwide, drives growth around railways, boosts land value, supports new urban stations in Medan, and extends Aceh commuter rail services.	9, 11, 13	Ministry of Transportation
8	Sustainable Transportation	Developing and upgrading zero or low carbon transportation networks and systems	Development of railway connectivity infrastructure	The project supports railway operations across Makassar-Pare pare Line, particularly at Maros Station, through the construction of street lightings for station access roads and improvement of depot infrastructure facilities, including landscaping development at the Maros Train Depot.	South Sulawesi	1,704,442,950	113,630	0.04%	30-50 years	Contribute to actual GHG emission reduction of 771.26 tonnes CO_2e from the Makassar–Parepare line.	The increased utilization of integrated public transportation infrastructure facilitates the shift from private to public transport.	9, 11, 13	Ministry of Transportation
9	Green Buildings	Development, renovation, maintenance of green buildings that meet regional, national or internationally recognised standards	Provision of access to decent housing	This project involves the procurement of supporting facilities specifically furnitures for the development and maintenance of residential building for civil servant of of the Jambi High Prosecutor's Office in Jambi City in compliance with green buildings principles and government standards. The building consists of a three-story tower with 44 units with with a building area of 60 m2.	Jambi	1,053,767,000	70,251	0.03%	10 years	The GHG emission reduction has not yet been calculated	The initiative's primary goal is to reduce negative environmental impacts by promoting the efficient use of energy and natural resources. Ultimately, this approach aims to improve the quality of life for residents and contribute to long-term sustainable development.	9, 11, 13	Ministry of Public Works and Housing
10	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of dams, lakes, and other water storage structures	The project include construction and revitalization of natural and artificial water storages. This project involves constructing new reservoirs/small dams, such as the Budong-Budong Dam in Central Mamuju, and finalizing ongoing ones, including the Cipanas Dam in Sumedang. A key focus is revitalizing existing water bodies, exemplified by the restoration of Lake Bakuok and Lake Gunung Sari in Riau, and Lake Ayamaru in Maybrat. Critical safety upgrades are underway, featuring slope reinforcement at Sei Gong Dam in Batam and grouting work at Kuwil Kawangkoan Dam in North Minahasa. The initiative also includes building a regulation gate at Tapin Dam, developing a repurposed mining pit in East Belitung (Bangka Belitung) into a conservation water reservoir, and conducting preparatory activities for the Karian Dam in Lebak.	Riau, Riau Islands, Bengkulu, Bangka Belitung Islands, Banten, West Java, Central Java, East Kalimantan, South Kalimantan , North Sulawesi, West Sulawesi, South Sulawesi, West Nusa Tenggara, West Papua	509,923,390,942	33,994,893	13.22%	10-20 years	Adaptation/resillience	The project enhances water resource storage capacity by 2.71 million m^3 through the development and revitalization of 14 dams, lakes, reservoirs, and ponds, including the construction of a dam regulation gate.	6, 11, 13	Ministry of Public Works and Housing

Table 4 Continued

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
11	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of surface water, swamp, and non-rice irrigation networks	The activities primarily cover the improvement and rehabilitation of existing irrigation networks, and the construction and completion of new weirs and their components. Network improvements include, among others, those in the Rawa Teluk Bayur Irrigation Area in Kubu Raya and the Rawa Tanjung Buka Reclamation Network in Bulungan, both in West and East Kalimantan, respectively. Network rehabilitation efforts, such as the work on the Batang Anai I and Anai II Irrigation Networks in Padang Pariaman, West Sumatra. On weir construction, key projects include the building of the Cimoyan Weir in Pandeglang, the rehabilitation of the Karet Krueng Aceh Weir in Aceh Besar, and embankment reinforcement for the Sei Wampu Weir in Langkat.	Aceh, North Sumatra, West Sumatra, South Sumatra, Bengkulu, Banten, West Java, Central Java, East Java, Central Kalimantan, South Kalimantan, West Sulawesi, West Nusa Tenggara, Maluku, Papua	912,823,704,952	60,854,914	23.66%	10-20 years	Adaptation/resillience	The total area of rehablitated irrigation areas increased by 40,141 hectares through the improvement/ rehabilitation of irrigation networks at 252.6 km in length, and construction/rehabilitation of 4 weirs. This project focuses on the strategic enhancement of irrigation infrastructure to strengthen water security and support agricultural productivity.	6, 11, 13	Ministry of Public Works and Housing
12	Sustainable Water and Wastewater Management	Construction and improvement of public water distribution and treatment facilities	Provision of decent drinking water system	The project consists of (i) procurement of dew harvesting and purification technology to provide a potable water facility at the Public Work Polytechnic Campus in Semarang, Central Java. This project is a proof-of-concept initiative designed for easy replication in other areas. It offers a permanent and portable clean water solution that is eco-friendly and avoids groundwater exploitation, and (ii) construction and supervision of drinking water supply system (SPAM) for the apartment compound in Jayapura Regency to meet the drinking water needs.	Central Java, Papua	1,872,630,000	124,842	0.05%	10-20 years	Adaptation/resillience	In Central Java the water production capacity reaches 300–350 liters per 24 hours, according to the Manual Book of the Drinking Water from Dew Machine Model HMAT6 (Trailer). In Papua, the capacity of ready-to-drink water is provided for 42 units of type-36 room.	6, 11, 13	Ministry of Public Works and Housing

Remarks:

a. The type of projects refers to eligible sectors under the Republic of Indonesia SDGs Government Securities Framework 2021
b. The projects may be implemented in multiple spots on each provincial location mentioned.
c. The currency exchange rate is based on the State Budget Assumption for 2024 budget year of IDR 15,000 per USD.
d. Based on durability of the output or financial life of project.
e. Methodology and assumptions are disclosed in Annex.
f. Additional indicators of the direct impact of the green projects.
g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.

Table 5. List of FY2023 Projects Refinanced with Proceeds from the 2024 Domestic Project-Based Green Sukuk (PBSG) Issuance

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
1	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Flood mitigation and coastal protection	Development of infrastructure for flood and volcanic mudflow control, management of main urban drainage, and coastal protection.	The projects includes (A) Coastal protection: Construction of infrastructure along the shorelines of the Tanjung Lesung Special Economic Zone, Pandeglang Regency, and Jakarta Bay. (B) Flood control (i) DKI Jakarta: Construction of Ancol Sentiong Pump Station, a diversion channel from Ciliwung River to the East Flood Canal, and flood control infrastructure for the Bekasi and Ciliwung rivers. (ii) Yogyakarta International Airport (National Strategic Area): Construction of western and eastern embankments at the mouth of the Bogowonto River, Serang River Basin and along the Bogowonto River and its tributaries. (iii) South Kalimantan Province : Construction of flood control infrastructure at Barabai River in Hulu Sungai Tengah Regency. (iv) East Nusa Tenggara: Construction of flood control for the Waemese River in Labuan Bajo, West Manggarai Regency, and the Noelmina River in Batu Putih, Kupang Regency.	Banten, Special Capital of Jakarta, Special Region of Yogyakarta, South Kalimantan, East Nusa Tenggara	2,419,472,697,798	161,298,180	27.03%	10-20 years	Adaptation/resilience	Potential flood-prone areas have been reduced by 2,697.2 hectares in total through the development of nine flood control structures, including a pump station, with a total length of 15.8 km in total.	3, 9, 13, 14	Ministry of Public Works & Housing
2	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Drought management	Groundwater and raw water network development	This project focuses on the development and rehabilitation of groundwater and raw water infrastructure in (i) Central Java Province: Construction of intake and raw water transmission pipeline for Pidekso Dam (Wonogiri Regency). (ii) East Java: Construction of intakes and raw water transmission pipelines for Bendo Dam (Ponorogo), and Gongseng Dam (Bojonegoro). (iii) East Nusa Tenggara: Rehabilitation of groundwater's bore wells (Flores & Sumba). Construction of Eltari Bore Well and additional bore wells for drought-affected areas (Belu). Upgrading raw water facilities of Oyang Barang spring for the Seroja Oyang Barang permanent residential units (East Flores). (iv) North Kalimantan: Construction of intake and transmission pipeline for raw water in the Merancang Village (Berau). (v) South Sulawesi: Reinforcement and construction of intake and raw water network for Parodo (Tana Toraja). (vi) Central Sulawesi: Construction of groundwater wells for raw water supply in Sigi Biromaru District (Sigi). (vii) North Sulawesi: Rehabilitation and improvement of Werot raw water supply (Minahasa). (viii) South Papua: Procurement of raw water booster pump with the capacities at 415 kVA & 520 kVA of Maro River (Merauke). Procurement and installation of solar-powered pumps for drought-affected areas.	West Java, Central Java, North Kalimantan, East Kalimantan, North Sulawesi, Central Sulawesi, South Sulawesi, East Nusa Tenggara, North Maluku, Papua	414,282,714,669	27,618,848	4.63%	10-20 years	Adaptation/resilience	The project aims to enhance water supply from groundwater and raw ater, particularly in areas prone to drought and for residential settlements. The capacity of raw water services has been enhanced by 1.351 m^3/s through the construction and rehabilitation of 68.771 km of raw water networks and 34 units of wells and raw water intake infrastructure.	3, 9, 13, 14	Ministry of Public Works & Housing
3	Sustainable Transportation	Developing and upgrading zero or low carbon transportation networks and systems	Development of railway connectivity infrastructure	This project involves constructing of dedicated access road and installation of street lightings that link the national road networks to Barru Station, improving access of passenger, logistics and freight transports. Financing for land acquisition and procurement is provided by the State Asset Management Agency (LMAN), while the Directorate General of Railways (DJKA) allocated the Green Sukuk budget for operational and supporting activity costs (BOBP). This construction supports the Barru-Garongkong railway segment, as part of Makassar-Parepare Line. The Barru - Garongkong railway segment has been operational since 2023/2024.	South Sulawesi	245,771,653,631	16,384,777	2.75%	30-50 years	Contribute to the actual GHG emission reduction of Makassar-Pare-pare Line at 771.26 tonnes CO2e.	This integration aims to reduce road congestion, lower logistics costs, and enhance economic connectivity for commodities like cement and plantation products. The line is part of the broader Trans-Sulawesi railway project, which aims to improve regional connectivity and support economic growth.	9, 11, 13	Ministry of Transportation
4	Green Buildings	Development, renovation, maintenance of green buildings that meet regional, national or internationally recognised standards	Provision of access to decent housing	This project involves the procurement of supporting facilities for the development and maintenance of residential building for civil servants of Gadjah Mada University in compliance with green buildings principles and government standards. The residential building features six floors with a total of 88 residential units with building area of 36 m2. It is equipped with solar panels, bicycle parking areas, green spaces, jogging tracks, shower facilities for cyclists, photo-sensor lighting for exterior areas, and a dedicated waste management area.	Special Region of Yogyakarta	1,068,784,054	71,252	0.01%	10 years	GHG emission reduction figures are currently pending calculation.	The project aims to improve the quality of life for residents and contribute to long-term sustainable development.	9, 11, 13	Ministry of Public Works & Housing

Table 5 Continued

No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	% Allocation of Net Proceeds	Average Project Lifetime*d	Impacts*e			Project Owners
										Mitigation (GHG Emission Reduced/ Avoided p.a. in CO2e)	Other results *f	SDGs*g	
5	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of dams, lakes, and other water storage structures	The project activities include construction, rehabilitation and supervision of water storage infrastructure in (i) Aceh Province: Construction of Rukoh Dam and its diversion building (Pidie Regency); Completion of Keureuto Dam (North Aceh). (ii) North Sumatra: Construction of Lau Simeme Dam and its facility buildings, along with supporting surveys and studies (Deli Serdang). (iii) Banten: Operation & maintenance of Karian Dam, including procuring operational facilities, planning access roads, and relocating the Sajira potable water supply system (SPAM) intake to support dam construction (Lebak). (iv) West Java: Improvement of the Sadawarna Dam's relocation road (Sumedang). (v) Central Java: Construction of Cabean and Jragung Dams; Revitalization of Lake Rawa Pening. (vi) West Nusa Tenggara: Construction of Meninting and Tiu Suntuk Dams (West Sumbawa). (vii) East Nusa Tenggara: Construction of Manikin Dam (Kupang), and Temef Dam (South Central Timor). (viii) Gorontalo: Construction of Bulango Ulu Dam (Phase I) (Bone Bolango), and revitalization of Lake Limboto. (ix) Southeast Sulawesi: Construction of Ameroro Dam (Konawe), with additional works for sediment control, landslide handling, and the installation of supporting facilities and instrumentation.	Aceh, North Sumatra, Banten, West Java, Central Java, West Nusa Tenggara, Gorontalo, Southeast Sulawesi, West Nusa Tenggara, East Nusa Tenggara	5,086,117,905,851	339,074,527	56.83%	10-20 years	Adaptation/resilience	The project aims to improve sustainable water management and support local development by enhancing capacity of water resource storage. The storage capacities have been enhanced by 193.03 million m^3 through the construction of 15 dams.	6, 11, 13	Ministry of Public Works & Housing
6	Sustainable Water and Wastewater Management	Development of agricultural infrastructure for efficient water management	Development of surface water, swamp, and non-rice irrigation networks	This project involves the improvement and rehabilitation of irrigation systems for surface water, swamp areas, and non-paddy agricultural lands in (i) North Kalimantan Province: Upgrading the irrigation reclamation network in Tanjung Buka swamp area (SP.6B -Bulungan Regency). (ii) West Kalimantan: Enhancing Teluk Bayur swamp irrigation area (Kubu Raya). (iii) Southeast Sulawesi: Rehabilitation of Wawotobi irrigation area (Konawe). (iv) Maluku: Rehabilitation of Way Apu irrigation area's weir, esp. Way Pamali sub-area.	North Kalimantan, West Kalimantan, Southeast Sulawesi, Maluku	301,348,102,256	20,089,873	3.37%	10-20 years	Adaptation/resilience	The project aims at enhancing water supply and management for non-paddy agricultural areas. The total area of rehabilitated irrigation land increased by 1,487 hectares through the rehabilitation and enhancement of one weir and 5.3 km of irrigation networks.	6, 11, 13	Ministry of Public Works & Housing
7	Sustainable Water and Wastewater Management	Construction and improvement of public water distribution and treatment facilities	Provision of decent drinking water system	This project involves the expansion of the Jatiluhur I Regional Water Supply System (SPAM), an initiative to improve water infrastructure across the Jakarta Metropolitan Area. The main activity is the provision of a regional raw water supply, with a capacity of 4,750 liters per second, channeled from the East Center Offtake. A significant portion of this supply, specifically 4,000 liters per second, is directed to DKI Jakarta area. The project includes the construction and utilization of two main distribution reservoirs, located at the Cilincing and Pondok Kopi Distribution Centers.	Special Capital of Jakarta	481,999,000,000	32,133,267	5.39%	15-20 years	Adaptation/resilience	The system is designed to distribute clean drinking water to approximately 1.9 million people, or about 380,000 household connections, across Jakarta Metropolitan Area. The Cilincing reservoir, with its 20,000 m^3 capacity, will provide 15,310 new household connections to residents in seven villages. Meanwhile, the Pondok Kopi reservoir, with a capacity of 5,000 m^3, will serve an additional 2,000 new household connections in two sub-districts, collectively ensuring a more robust and reliable water supply for the metropolitan region.	6, 11, 13	Ministry of Public Works & Housing

Remarks:

a. The type of projects refers to eligible sectors under the Republic of Indonesia SDGs Government Securities Framework 2021
b. The projects may be implemented in multiple spots on each provincial location mentioned.
c. The currency exchange rate is based on the State Budget Assumption for 2024 budget year of IDR 15,000 per USD.
d. Based on durability of the output or financial life of project.
e. Methodology and assumptions are disclosed in Annex.
f. Additional indicators of the direct impact of the green projects.
g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.

IV. Featured Projects

Development of Flood Control Infrastructure in New Capital City of Nusantara

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction

The new Capital City of Indonesia, Nusantara (IKN), and its surrounding buffer zones face rising hydrological pressures driven by high rainfall intensity, land-use conversion, and extensive construction within the Central Government Core Area (KIPP). The Master Plan for the Drainage and Flood Control System identifies the Sanggai and Pamaluan River Basins in Penajam Paser Utara Regency as priority areas with high vulnerability to flooding, erosion, and watershed degradation.

The Flood Control Infrastructure Development projects in the Sanggai River Basin 1A (KIPP) and the Pamaluan River were **partially financed through the 2024 Global Sovereign Green Sukuk, representing approximately 5 percent of total raised proceeds.** The Sanggai River Basin 1A Project includes the development of key flood-control assets, such as main drainage channels, retention basins, flood embankments, and integrated stormwater-management infrastructure. The Pamaluan River Project focuses on river normalization, embankment construction, and drainage rehabilitation to reduce flood risks in residential zones and IKN's ecological buffer areas. Both initiatives are implemented by the Directorate General of Water Resources, Ministry of Public Works and Housing, as part of a multi-year program (FY 2024–2026).

To ensure environmentally and socially responsible delivery, key risk-management practices are applied, including integrated water-resources planning, climate-resilient engineering design, nature-based solutions, and strengthened coordination with regional technical units. These measures help mitigate ecosystem disturbance, sedimentation, land-use impacts, and community flood-risk exposure throughout project implementation.

The projects are expected to generate significant environmental, economic, and social benefits in support of IKN's long-term vision as a sustainable, inclusive, and climate-resilient city. Environmentally, the works are designed to reduce flood risks, stabilize river corridors, sustain upstream and downstream watershed ecosystems, and increase water-retention capacity across **approximately 360.19 hectares in the Sanggai River Basin within KIPP and 39.19 hectares along the Pamaluan River.** These interventions are estimated **to benefit around 30,000–40,000 residents,** while safeguarding high-value public assets, minimizing economic losses from flood-related disruptions, and reinforcing local economic resilience. Overall, the projects contribute to national priorities on flood and coastal protection under the National Water Resources Resilience Program, a strategic focus of RPJMN 2019–2024 and 2024–2029, and align with the Ministry of Public Works and Housing Strategic Plan 2020–2024.

Credit: Ministry of Public Works ans Housing

Sanggai River Basin 1A (KIPP) Project comprises the construction and supervision of main drainage channels, retention basins, and flood embankments.

Credit: Ministry of Public Works ans Housing

Pamaluan River Flood Control Project comprises river normalization, embankment construction, and drainage rehabilitation.

Installation of Rooftop and Ground-mounted Solar PV Systems

Renewable and Clean Energy

The Ministry of Energy and Mineral Resources (MEMR) has prioritized the development of rooftop solar photovoltaic (PV) systems as part of Indonesia's effort to achieve its ambitious target of a 23% new and renewable energy mix by 2030, as well as the NDC target. The solar PV adoption forms part of a broader national strategy to strengthen energy security, promote energy efficiency, and advance sustainable development, as well as increasing public participation for both households and businesses.

Proceeds from the Retail Green Sukuk ST 013T4 issuance amounting 0.2% of the total proceeds were allocated to refinance the installation of rooftop and ground-mounted solar PV systems at both symbolic government buildings and critical national resilience facilities. The initiatives were a part of the Fiscal Year 2023 project of planning, development and supervision of new and renewable energy and energy conservation infrastructure under the Directorate General of New and Renewable Energy and Energy Conservation, MEMR.

The project included the installation of **20 kWp and 80 kWp installed capacities** of on-grid rooftop solar PV systems on Yogyakarta Presidential Palace, and **20 kWp, 30 kWp, and 50 kWp** on a 3-Phase Sloping Roof on Tampaksiring Bali Presidential Palace. Whilst, each **6 kWp off-grid system** was installed at three Volcano Observation Stations located at Mt. Lewotolo (East Flores Regency, East Nusa Tenggara), Mt. Karangetang (Sitaro Islands, North Sulawesi), and Mt. Dempo (Pagar Alam, South Sumatra). Collectively, these systems **generate approximately 325 megawatt-hours (MWh) of clean electricity annually,** contributing to an actual GHG emission reduction of **276 tonnes of CO_2 equivalent** per year.

The outcomes encompass multiple dimensions: environmentally, the installations reduce dependence on fossil-fuel-based power and lower greenhouse gas emissions; socially, they serve as high-profile showcases promoting public awareness of clean energy technologies and supporting educational green tourism; and institutionally, they enhance the resilience of Indonesia's disaster risk reduction infrastructure by ensuring continuous electricity supply for volcano monitoring and early warning systems.

Credit: Ministry of Energy and Mineral Resources

100 kWp rooftop solar PV installation at Tampaksiring Presidential Palace, Bali.

Credit: Ministry of Energy and Mineral Resources

100 kWp rooftop solar PV installation at Yogyakarta Presidential Palace.

Credit: Ministry of Energy and Mineral Resources

6 kWp solar PV installation at Volcano Observation Post Karangetang, North Sulawesi.

Credit: Ministry of Energy and Mineral Resources

6 kWp solar PV installation at Volcano Observation Post Lewotobi, East Nusa Tenggara.

Strengthening Climate Observation through Equipment and Infrastructure Enhancement at BMKG

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction

Climate-Resilient Development is a priority programme under the Midterm National Development Plan 2024–2029, implemented through cross-sectoral measures across water resources, agriculture, coastal areas, and health. One of its key targets is to improve the availability of climate-related information that supports climate-resilience enhancement. To support this, the Meteorology, Climatology, and Geophysics Agency (BMKG) is strengthening its climate-observation infrastructure to enhance more accurate monitoring, forecasting, and early-warning capabilities across Indonesia.

In FY2023, projects refinanced through the Green Sukuk ST013T – representing 0.2% of total proceeds, supported the enhancement of national atmospheric and climate-monitoring capacity. The projects include (i) the installation of Surface Ozone and Black Carbon Monitoring Equipment at Global Atmosphere Watch (GAW) Bariri in Palu of South Sulawesi Province, and SO_2 and NOx analyzers at GAW Bukit Tinggi in West Sumatra; (ii) Operation and maintenance of 30 particulate matter monitoring units ($PM_{2.5}$ and PM_{10}) and the addition of three new units at strategic sites, including Nusantara Capital City (IKN); (iii) Upgrading infrastructure for climate and GHG observation offices in Yogyakarta, Jambi, Bengkulu, and West Kalimantan. All equipment complies with standards of the World Meteorological Organization (WMO) and the World Health Organization (WHO), ensuring that Indonesia's data is globally comparable and credible.

The outcomes of the project have significantly strengthened Indonesia's climate resilience policies and actions by **enhancing observation infrastructure and analytical capacity through expanded Automatic Weather Stations, upgraded weather radar, and improved high-performance computing. These advancements enable more accurate forecasting and support evidence-based policymaking.** The integration of these improved data streams into BMKG's Climate Early Warning System (CEWS) enhances and better disaster preparedness to support agriculture, food security, and public health.

Credit: BMKG

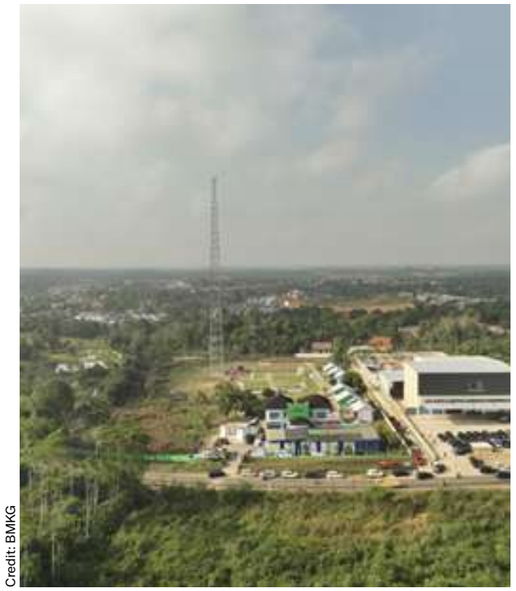
Building and facilities at Yogyakarta Climatology Station.

Credit: BMKG

Building and facilities at West Kalimantan Climatology Station.

Credit: BMKG

Operations Room of Bengkulu Climatology Station.



Credit: BMKG

100-meter Greenhouse Gas Monitoring Tower at Muaro Jambi Climatology Station.

Application of Dew-Harvesting Technology to Enhance Drinking Water Access

Sustainable Water and Wastewater Management

The Government of Indonesia is committed to achieving SDG Target 6.1 of safe and affordable drinking water for all and the national targets of 100% access to safe drinking water, including 30.45% access through piped drinking water networks. Significant challenges in achieving these goals include the limited availability of raw water sources; over-reliance on groundwater, which risks land subsidence; and high non-revenue water losses in piped systems.

The Ministry of Public Works and Housing implemented an innovative dew harvesting and purification technology at the State Public Works Polytechnic Semarang campus as part of a decent drinking water system project. The campus is a government facility that has implemented green buildings concepts and was awarded the 2023 ASEAN Energy Award. The project utilized proceeds from Retail Green Sukuk ST 013T4, amounting to 0.05% of the total issuance. The system has a production capacity of approximately 300–350 litres of potable water per day under conditions of 70% Relative Humidity and an air temperature of 31° Celsius, supported by a 500-liter storage tank.

Water is collected from atmospheric moisture and treated using a systemized dew process that includes the Micro Particle Separator System and UV and ozone sterilization. The drinking water quality has been laboratory-tested to ensure compliance with Indonesian National Standards (SNI 7812:2013). Outcomes of the initiative include reduced dependency on groundwater and improved operational efficiency, with potential savings of up to 30–40 percent compared to conventional supply systems. Serving as a proof of concept for tropical dew-harvesting, this project also tested a mobile system at Nusantara Capital City (IKN). The collected metrics are crucial for evaluating its efficiency and potential for replicability and large-scale application in water-scarce areas.

Credit: Ministry of Public Works and Housing

Commissioning test of the dew-water treatment technology prior to operational deployment.

V. Interpreting Reported Results

The 2025 Republic of Indonesia Green Sukuk Allocation and Impact Report is developed as a form of transparency and accountability of the issuer, and allows investors to access the details of Allocation and Impact reporting in accordance with the ROI's Sustainable Government Securities Framework 2021. Several key result indicators have been selected and quantified where possible, but it is important to take into account the inherent limitations of the data reported. The main considerations applied to adequately interpret the results are as follows:

a. Scope of Results: Reporting is based on "ex-ante" estimates of climate and environmental impacts at the time of project appraisal and mostly for direct project effects.

b. Uncertainty: In general, consideration in estimating impact indicators and projecting results is based on assumptions which are reasonable due to information available at the time for the actual environmental impact of the projects. Behavioral changes and/ or shifts in baseline conditions can cause deviations from projections.

c. Comparability: Caution should be taken in comparing projects, sectors, or whole portfolios because baselines (and base years) and calculation methods may be varied.

d. Partial Project Eligibility: In cases where the project is only partially eligible for Green Sukuk, the committed amount reported reflects the output level from the Climate Budget Tagging mechanism presented by project owners (line ministries).

e. Omissions: It is worth to note that projects may display benefits across a much wider range of indicators than the ones captured in the impact assessment provided in the report. Therefore, putting exclusive focus on the reported indicators will omit other important development impacts. Where quantitative data is unavailable, qualitative indicators have been included to illustrate other benefits.

f. Source of Data: All reported results are derived from the Government of Indonesia's internal data as well as publicly available sources

Annex

Impact Measurement Methodology and Indicators

This annex outlines the methodologies and indicators used to measure and report the environmental and social impacts of projects financed or refinanced by the Green Sukuk. The Ministry of Finance leverages the ROI's established framework on Impact Measurement Methodology and Indicators, while aligning reporting practices with the ICMA's *Harmonised Framework for Impact Reporting*, as much as possible.

As one of the Parties to the UNFCCC, the ROI has established a policy and institutional framework for Measurement, Reporting, and Verification (MRV) system of mitigation and adaptation actions, embedded in the National Registry System on Climate Change (SRN-PPI). This framework is regulated under Presidential Regulation No. 98/2021 and MOEF Regulation No. 12/2024, which adopts the *UNFCCC Clean Development Mechanism (CDM)* methodologies, and the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The system engages the line ministry's custodians for the NDCs' implementation coordinated by the Ministry of Environment - formerly Ministry of Environment and Forestry (MOEF), as the national focal point to the UNFCCC.

With regard to the SDG alignment, Indonesia's commitment to sustainable development is embedded in a rigorous Monitoring, Evaluation, and Reporting (MER) Framework. This system tightly integrates the SDGs Roadmap 2023–2030 with the 2025–2029 Medium-Term National Development Plan (RPJMN). Its foundation relies on the SDG Indicators Metadata Edition II (2023), which provides essential details including standardized definitions, calculation methods, and required disaggregation for all indicators.

Subsector Methodologies and Key Indicators

- **Renewable Energy:** GHG reductions are estimated by comparing renewable electricity generation from the installed on grid PV systems with baseline grid emission factors derived from conventional fossil-based power generation.

  Indicators: electricity generated (MWh/year), GHG emission reductions (tCO_2e/year).

Location	Installed capacity (KWp)	Electricity generated (MWh/year)	Emission Factor	Emission reduction (ton CO2e)
Yogyakarta Palace Rooftop Solar Power Plant	100	166	0.85	141
Bali Palace Rooftop Solar Power Plant	100	159	0.85	135
Mt. Lewotobi VOS III – East Nusa Tenggara	6	11	0.72	8
Mt. Karangetang VOS – North Sulawesi	6	9	0.8	7
Mt. Dempo VOS – South Sumatera	6	8	0.81	6
Total	**218**	**353**		**297**

* VOS: Volcano observation station

- **Sustainable Transport:** The railway connectivity infrastructure projects are implemented by the Directorate General of Railways, Ministry of Transportation, aiming to strengthen sustainable, energy-efficient, and low-carbon transport networks. Projects that were refinanced through 2024 Green Sukuk proceeds are listed in Section IV: List of Projects. The table below presents a summary of the refinanced projects and their potential and realized GHG emission reduction.

  The estimated GHG emission reduction figures presented here are not calculated on a per-project basis, but rather derived from the overall operationalization of each railway line that generates mitigation actions. For example, the project to enhance the Jakarta Metropolitan's urban electric railway facilities along the Manggarai Central Station – Jatinegara corridor contributes to the operationalization of the Jakarta Metropolitan Electric Commuter Line, which results in a measurable mitigation action. Therefore, it is stated that a project financed by the 2024 Green Sukuk issuance contributes to the GHG emission reduction of the respective railway line.

Project Name	Assumption for GHG emission reduction estimate	Green Sukuk Proceeds Allocation	Potential Annual GHG Emission reduction
Regional/Urban Commuter Line – Power source: Electric traction (grid-supplied)			
The project enhances Jakarta Metropolitan's urban electric railway (KRL) facilities along the Manggarai Central Station–Jatinegara corridor.	The project supports passenger railway operations of the Jakarta Metropolitan's Electric Commuter Line.	ST 013T4 Refinancing FY2023	510,064 ton/CO2e (actual)
The project consists of strengthening railway electrification Surabaya Regional Railway Line (Phase I) – which has not been operational.	The project supports railway operations of the Regional East Java and surrounding areas Railway Line.	ST 013T4 Refinancing FY2023	42,035 ton/CO2e (expected)
Java Passenger and Freight Rail Line – Fuel type: Diesel			
The project consists of the development of the Environmental Management and Monitoring Plans (RKL/RPL) for the Semarang Tawang–Tanjung Emas Port Double Track railway segment. (Phase II) – which has not been operational.	The project supports railway operations of: (i) Java passenger Double-track Line; (ii) Java freight railway.	ST 013T4 Refinancing FY2023	(i) 1,016,097 ton/CO2e * (ii) 1,033,087 ton/CO2e * (expected)
The project consists of the development of the RKL/RPL for the Sepanjang–Mojokerto Double-track railway segment – which has not been operational.			
Sumatra Passenger and Freight Rail Line – Fuel type: Diesel			
Development of the railway line between the Medan-Binjai section as an extension of the Medan – Kualanamu Airport Railway Line.	The project supports railway operations of the airport railway in Sumatra Line.	ST 012T4 Refinancing FY2023	1,464 ton/CO2e (actual)

Project Name	Assumption for GHG emission reduction estimate	Green Sukuk Proceeds Allocation	Potential Annual GHG Emission reduction
This project consists of construction, supervision, and land acquisition to support the development of railway connectivity between North Sumatra and Aceh.	The project supports railway operations of: (i) Sumatra passenger single-track Line; (ii) Sumatra freight railway.	ST 013T4 Refinancing FY2023	(i) 90,864 ton/CO2e; (ii) 1,033,087 ton/CO2e * (actual)
The project consists of 1 railway crane unit procurement for South Sumatra Corridor.			
Sulawesi Passenger Rail Line – Fuel type: Diesel			
The construction of a dedicated access road and installation of street lightings that link the national road networks to Barru Station.	The project supports railway operations across Makassar-Pare pare Line in South Sulawesi.	PBSG Refinancing FY2023	771 ton/CO2e (actual)
The construction of street lighting for station access roads and improvement of depot infrastructure facilities, including landscaping development at the Maros Train Depot.		ST 013T4 Refinancing FY2023	
TOTAL			3,727,469

* Based on the available aggregate fuel consumption data from freight train operations in Sumatra and Java.

Based on the above projects, the potential or realized GHG emission reduction is calculated from three key mitigation pathways:

1. The operation of electric-powered urban, and regional railways,
2. The operation of diesel-fuelled passenger railways, and
3. The modal shift of freight transport from diesel-fuelled trucks to diesel-fuelled trains.

The calculation framework follows the general equation:

$$RE_y = BE_y - EAM_y$$

where: RE_y represents the estimated GHG emission reduction in year y, derived as the difference between baseline emissions (BE_y) and mitigation action emissions (EAM_y).

The calculation uses national emission factor data (Tier 2) issued by the Ministry of Energy and Mineral Resources (ESDM).

Fuel Type	Emission Factor	
	kg CO_2/litre	kg CO_2/TJ
Diesel	2.65	73,700
Gasoline	2.31	70,900

Methodology 1: Electric-Powered Urban, Regional, and Airport Railways

This method applies to all electric-powered urban, regional, and airport rail services, encompassing Commuter Line, Airport Rail, Mass Rapid Transit, Light Rail Transit, the WHOOSH High-Speed Rail, and other urban rail services. The calculated emission reduction arises from the avoided use of fossil fuels by various ground transport modes (bus, car, taxi, motorcycle) when passengers shift to the electric-powered urban, regional, and airport rail services. This methodology is developed by the Ministry of Transportation's Centre for Sustainable Transport Management, which adapts the CDM ACM0016 Ver05. It was developed in March 2024 and is currently pending validation from the Ministry of Environment.

a. Baseline Emission Calculation

1. Estimation of Shifted Vehicles:

$$Vehicles_{shift,i,y} = \frac{Total_{pass,AM,k,y} \times Mode_{shift,i,y}}{Occupancy_{mode,i,y}}$$

Where:

- $Vehicles_{shift,i,y}$ = Number of vehicles shifted from land transport mode i to electric-based rail type k in year y (units)
- $Total_{pass,AM,k,y}$ = Total passengers of urban, regional, and airport railways of type k in year y (persons)
- $Mode_{shift,i,y}$ = Percentage of passengers shifting from land transport mode i in year y (%)
- $Occupancy_{mode,i,y}$ = Average passenger occupancy per vehicle of mode i (persons)
- i = Type of land transport mode (e.g., private car, motorcycle, bus);
- k = Type of railway (urban, regional, or airport);
- y = Mitigation year

2. Fuel Consumption by Land Transport Mode:

$$FuelCons_{i,y} = Vehicles_{shift,i,y} \times Operation_y \times TripLength_{pass} \times SCE_{mode,i,y} \times 10^{-3}$$

Where:

- $FuelCons_{i,y}$ = Fuel consumption of land transport mode i in year y (kL);
- $Vehicles_{shift,i,y}$ = Number of shifted vehicles (units);
- $Operation_y$ = Average operating days per year;
- $TripLength_{pass}$ = Average trip length per passenger (km/passenger);
- $SCE_{mode,i,y}$ = Specific energy consumption of mode i (litre/km);
- 10^{-3} = Conversion factor from litre to kilolitre.

3. Baseline Emission:

$$EB_y = FuelCons_{i,y} \times NCV_{j,y} \times p_{j,y} \times EF_{j,y} \times 10^{-6}$$

Where:

- BE_y = Baseline emission in year y (ton CO_2);
- $FuelCons_{i,y}$ = Fuel consumption by mode i (kL);
- $NCV_{j,y}$ = Net calorific value of fuel type j (TJ/Gg);
- $p_{j,y}$ = Fuel density (kg/m^3);
- $EF_{j,y}$ = Fuel emission factor (ton CO_2/TJ);
- 10^{-6} = Conversion factor from kg to Gg;
- **j** = Fuel type (e.g., gasoline, diesel, biodiesel)

b. Mitigation Action Emission Calculation

Emission from electric-based urban, regional, and airport railway operation:

$$EAM_y = \frac{(ElectricCons_{grid,i,y} \times EF_{avg\text{-}OM,grid,i,y})}{(1 - LTD_{grid,i,y})}$$

Where:

- EAM_y = Emission from mitigation action in year y (ton CO_2)
- $ElectricCons_{grid,i,y}$ = Electricity consumption by electric-based railways in year y (MWh)
- $EF_{avg\text{-}OM,grid,i,y}$ = Average Operating Margin emission factor of grid i (ton CO_2/MWh)
- $LTD_{grid,i,y}$ = Transmission and distribution losses of grid i (fraction)

Methodology 2: Diesel-Fuelled Passenger Railways

The methodology estimates potential GHG emission reductions from shifting passenger transport from road-based modes (cars, buses, motorcycles) to diesel-powered railway systems.

1. Baseline Emission:

Baseline emissions represent GHG emissions from passenger transport that would occur in the absence of the railway project. They are estimated based on fuel consumption from equivalent passenger travel using conventional road vehicles:

$$EB_y = \sum_i (FuelCons_{i,y} \times NCV_{j,y} \times p_{j,y} \times EF_{j,y} \times 10^{-6})$$

Where:

- $FuelCons_{i,y}$ = Fuel consumption of vehicle type in year y (kL)
- $NCV_{j,y}$= Net calorific value of fuel i (TJ/Gg)
- $p_{j,y}$ = Fuel density (kg/m^3)
- $EF_{j,y}$= CO_2 emission factor (ton CO_2/TJ)

2. Mitigation Action Emission:

Emissions from railway operations are calculated based on actual diesel fuel consumption for train services:

$$EAM_y = FC_{rail,y} \times NCV_{diesel,y} \times p_{diesel,y} \times EF_{diesel,y} \times 10^{-6}$$

Where:

- $FC_{rail,y}$ = Fuel consumption of diesel railway operations in year y (kL)
- $NCV_{j,y}$ = Net calorific value of fuel i (TJ/Gg)
- $p_{j,y}$ = Fuel density (kg/m^3)
- $EF_{j,y}$ = CO_2 emission factor (ton CO_2/TJ)

Methodology 3: Freight to Railway

This mitigation emission calculation is conducted to estimate the potential reduction of GHG emissions resulting from the modal shift of freight transportation from diesel-fuelled trucks to diesel-fuelled trains. This approach is conducted at an aggregated regional level (Sumatra and Java) due to the limited availability of detailed activity data per project or route. Therefore, the results represent an overall estimation of potential emission reductions derived from improved connectivity and efficiency in diesel freight railway transport.

1. Baseline Emission Calculation

1. Estimation of freight moved to rail (tonne-kilometres shifted):

$$TKM_{shift,k,y} = Volume_{shift,k,y} \times Distance_k$$

Where:

- $TKM_{shift,k,y}$ = tonne·km shifted (tonne·km)
- $Volume_{shift,k,y}$ = mass shifted to rail for commodity/type k in year y (tonnes)
- $Distance_k$ = average trip distance for commodity/type k (km)

2. Fuel Consumption by Road trucks (diesel):

$$FuelRoad_{j,k,y} = TKM_{shift,k,y} \times EI_{road,j,k,y} \times 10^{-3}$$

Where:

- $FuelRoad_{j,k,y}$ = fuel consumed by road trucks using fuel j for commodity k in year y (kL)
- EI_{road} = energy/fuel intensity of road freight (L fuel / tonne·km),
- 10^{-3} = converts from L → kL.

3. Baseline Emission:

$$EB_y = \sum (FuelRoad_{j,k,y} \times NCV_{j,y} \times p_{j,y} \times EF_{j,y} \times 10^{-6})$$

Where:

- $FuelRoad_{j,k,y}$ = fuel consumed by road trucks using fuel j for commodity k in year y (kL)
- $NCV_{j,y}$ = Net calorific value of fuel type j (TJ/Gg);
- $p_{j,y}$ = Fuel density (kg/m^3);
- $FE_{j,y}$ = Fuel emission factor (ton CO_2/TJ);
- 10^{-6} = Conversion factor from kg to Gg.

2. Mitigation Action Emission Calculation

Emissions from diesel freight rail (Tonne-km × rail fuel intensity):

$$Fuelrail_{j,k,y} = TKM_{shift,k,y} \times EI_{rail,j,k,y} \times 10^{-3}$$

Where:

- $Fuelrail_{j,k,y}$ = fuel consumed by rail freight using fuel j for commodity k in year y (kL)
- $TKM_{shift,k,y}$ = tonne·km shifted (tonne·km)
- $EI_{rail,j,k,y}$ = energy/fuel intensity of rail freight (L fuel / tonne·km)
- 10^{-3} = converts from L → kL

Emissions from diesel freight railway operation:

$$EAM_y = \sum_{j,k} (Fuelrail_{j,k,y} \times NCV_{j,y} \times p_{j,y} \times EF_{j,y} \times 10^{-6})$$

Where:

- $Fuelrail_{j,k,y}$ = fuel consumed by rail freight using fuel j for commodity k in year y (kL)
- $NCV_{j,y}$ = Net calorific value of fuel type *j* (TJ/Gg);
- $p_{j,y}$ = Fuel density (kg/m^3);
- $FE_{j,y}$ = Fuel emission factor (ton CO_2/TJ);
- 10^{-6} = Conversion factor from kg to Gg.

- **Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction:** The projects improve resilience outcomes and reduce climate risks. The quantification follows Indonesia's National MRV Framework for Adaptation established under Presidential Regulation No. 98/2021 and Minister of Environment and Forestry Regulation No. 12/2024. ROI has established:

  - SIDIK (Vulnerability Index Data Information System) is a platform developed by the Ministry of Environment and Forestry to assess and map climate vulnerability – such as floods, droughts, and forest fires, by integrating biophysical and socioeconomic indicators to guide adaptation planning.
  - InaRisk (Indonesia's Disaster Risk Portal) is a risk assessment platform managed by the National Disaster Management Agency (BNPB) that visualizes hazard maps, population exposure, potential physical and economic losses, and supports disaster risk reduction planning and monitoring.

  Indicators: area reduced/avoided from climate risks (ha), number of beneficiaries, resilience index improvement.

- **Sustainable Water and Wastewater Management:** The projects aim at (i) enhancing universal access to safe drinking water to ensure that all households have connections to piped clean water supply systems, (ii) developing and scaling up regional water supply systems (SPAM), constructing water treatment plants (WTP), building transmission and distribution networks to reach more communities, and (iii) managing water resources to support broader sustainable development goals in communities and agricultural areas.

  Indicators: Number of people benefiting from improved water availability or reduced flood risk; Total area with improved water retention or irrigation efficiency (hectares); Volume of water conserved or stored annually (m^3/year); Number of water management infrastructures constructed or rehabilitated (dams, canals, retention basins, drainage systems); Reduction in frequency or impact of flood/drought events in project areas

Transaction Summary of 2024 Sovereign Green Sukuk

Transaction Summary

ISIN	USY68613AC56
Obligor	The Government of the Republic of Indonesia, represented by the Ministry of Finance
Issuer	Perusahaan Penerbit SBSN Indonesia III ("PPSI III")
Issue Format	144A / Reg S, Senior, Unsecured, Wakala US$ Trust Certificate ("Sukuk")
Issuer Ratings	Baa2 Stb (Moody's) / BBB Stb (S&P) / BBB Stb (Fitch)
Issuer Rating	Baa2 (Moody's) / BBB (S&P) / BBB (Fitch)
Pricing Date/ Issuance Date	25 June 2024/ 2 July 2024
Tenor	USD 30Y Green Sukuk
Maturity Date	2 July 2054
Tranche Size	600 million
Profit Rate	5.50% Fixed, Semi-annual 30/360
Re-Offer Price	100.00%
Structure	Issued under Wakalah structure with sharia opinions from: • the National Sharia Board of the Indonesian Ulama Council (DSN MUI), • the Shari'a Advisory Board of Citi Islamic Investment Bank E.C., • the Internal Sharia Supervisory Committee (ISSC) of Dubai Islamic Bank PJSC, • the HSBC Global Shariah Supervisory Committee, • the Sharia Advisor of PT Mandiri Sekuritas, and • the Shariah Committee of MUFG Bank (Malaysia) Berhad.
Listing	SGX-ST and Nasdaq Dubai (dual listing)
Joint Bookrunners	Citigroup, Dubai Islamic Bank, HSBC, Mandiri Securities, MUFG Securities (also Joint Green Structuring Advisors: HSBC & MUFG)
Co-Managers	PT BRI Danareksa Sekuritas, PT Trimegah Sekuritas Indonesia Tbk

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Contact us:
Directorate General of Budget Financing and Risk Management
(62 - 21) 3516296
www.djppr.kemenkeu.go.id
webmaster.djppr@kemenkeu.go.id

The Ministry of Finance of the Republic of Indonesia

Independent Limited Assurance Statement in relation to the Subject Matter included in the 2025 Green Sukuk - Allocation and Impact Report of the Ministry of Finance of the Republic of Indonesia

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KUNCARA BUDI SANTOSA & REKAN

CCS Beyond Numbers

Independent Limited Assurance Statement in relation to the Subject Matter included in the 2025 Green Sukuk - Allocation and Impact Report of the Ministry of Finance of the Republic of Indonesia

Report No. KBS-JKT/004-AE/XII/2025

To the Director General of Budget Financing and Risk Management, the Ministry of Finance of the Republic of Indonesia (the "Ministry")

Scope

We have been engaged by the Ministry to perform a 'limited assurance engagement,' as defined by Standards on Assurance Engagement (SAE) 3000 (Assurance Engagements Other than Audits or Reviews of Historical Financial Information) established by the Indonesian Institute of Certified Public Accountants (IICPA), here after referred to as the engagement, to report on the subject matters detailed below ("Subject Matter") as presented in the Ministry's 2025 Green Sukuk - Allocation and Impact Report (the "Green Sukuk Report") for the period from 23 January 2024 to 31 December 2024. The Subject Matter for our limited assurance engagement was limited to the information as follows:

- The process for project evaluation and selection based on the Republic of Indonesia SDGs Government Securities Framework (the "Framework") and
- The allocation of proceeds to eligible SDG projects with green focus disclosed in the Green Sukuk Report.

The allocation of proceeds is disclosed as amount committed to eligible SDG Projects with green focus in IDR and in USD in Table 1 and 3 - Financing Projects of 2024, Table 2, 4, and 5 - Refinancing Projects of 2023. The amount committed in Table 1 and 3 has been reported based on audited amounts by Badan Pemeriksa Keuangan Republik Indonesia (Supreme Audit Agency) on 19 May 2025, the amount committed in Table 2, 4, and 5 has been reported based on audited amounts by Badan Pemeriksa Keuangan Republik Indonesia (Supreme Audit Agency) on 21 May 2024.

The Subject Matter did not include:

- Data sets, statements, information, systems or approaches other than the selected indicators/disclosures;
- Any other elements included in the Green Sukuk Report and any other green sukuk information published elsewhere in the Ministry's reports, website and other publications; and
- Information prior to 23 January 2024 and subsequent to 31 December 2024.

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

Report No. KBS-JKT/004-AE/XII/2025 (continued)

Criteria

In preparing the Subject Matter, the Ministry has applied the International Capital Market Association's Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines and ASEAN Capital Markets Forum's Green Bond Standards, Social Bond Standards, and Sustainable Bond Standards on the Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds and Reporting as set out in the Republic of Indonesia SDGs Government Securities Framework (the "Framework") for the selected Subject Matter in the Green Sukuk Report.

The Ministry's responsibility

The Ministry is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matter, such that it is free from material misstatement, whether due to fraud or error.

Our responsibility

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the SAE 3000 (Assurance Engagements Other Than Audits or Reviews of Historical Financial Information) established by the IICPA, and the terms of reference for this engagement as agreed with the Ministry. Those standards require that we plan and perform our engagement to express a conclusion on whether anything has come to our attention that causes us to believe that the Subject Matter has not been reported and presented fairly, in all material respects, in accordance with the Criteria. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

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Report No. KBS-JKT/004-AE/XII/2025 (continued)

Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Public Accountants established by the Indonesian Institute of Certified Public Accountants, and have the required competencies and experience to conduct this assurance engagement.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

Our limited assurance procedures included:

- Conducting interviews with key personnel to understand the design and implementation of the process for project evaluation and selection based on the Framework;
- Performing observation in the implementation of Republic of Indonesia's procedures on collecting, collating and reporting the allocation of procees to eligible SDG projects with green focus;
- Comparing the amount of the green sukuk proceeds allocated to the eligible SDG projects with green focus to corresponding information in the relevant underlying sources, on a sample basis, to check the validity of the data; and
- Consider the disclosure of the Subject Matter in the Green Sukuk Report.

Report No. KBS-JKT/004-AE/XII/2025 (continued)

Limitations on our scope of work

Our limited assurance procedures have not covered the following:

- Verification of the operating effectiveness of the project evaluation and selection process;
- Verification of the use of proceeds to eligible SDG projects with green focus nominated by each of the Line Ministries as the project owner;
- Verification of the tracking, monitoring, and reporting of the impacts of the eligible SDG projects with green focus from the Line Ministries to the Ministry; and
- Verification of the average project lifetime and impact of the implementation of the eligible SDG projects with green focus disclosed in the Green Sukuk Report.

Conclusion

Based on the limited assurance procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the Subject Matter set out in Green Sukuk Report for the period from 23 January 2024 to 31 December 2024 has not been reported and presented fairly, in all material respects, in accordance with the Criteria.

Use of Our Limited Assurance Statement

We disclaim any assumption of responsibility for any reliance on this limited assurance statement, or on the Subject Matter to which it relates, to any persons other than the Ministry or for any purpose other than that for which it was prepared.

KAP Kuncara Budi Santosa dan Rekan

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M. Kuncara B. S., SE., Ak., MM., CA., CPA., ASEAN CPA., BKP., CLI., CRA., CFI.
Public Accountant Registration No. AP.1052

12 December 2025