

Session 2: Mobilizing Private Sector Investment and Institutional Investors

Issuance of Sovereign and Private Sector Green and Sustainability Bonds: Lessons from ASEAN



19 May 2025
Ulaanbaatar, Mongolia

Why we need the sustainable bond market

“Southeast Asia needs USD210 billion per year in adaptation and mitigation investments, which represents 5.7% of the region’s gross domestic product (GDP).”

- ADB

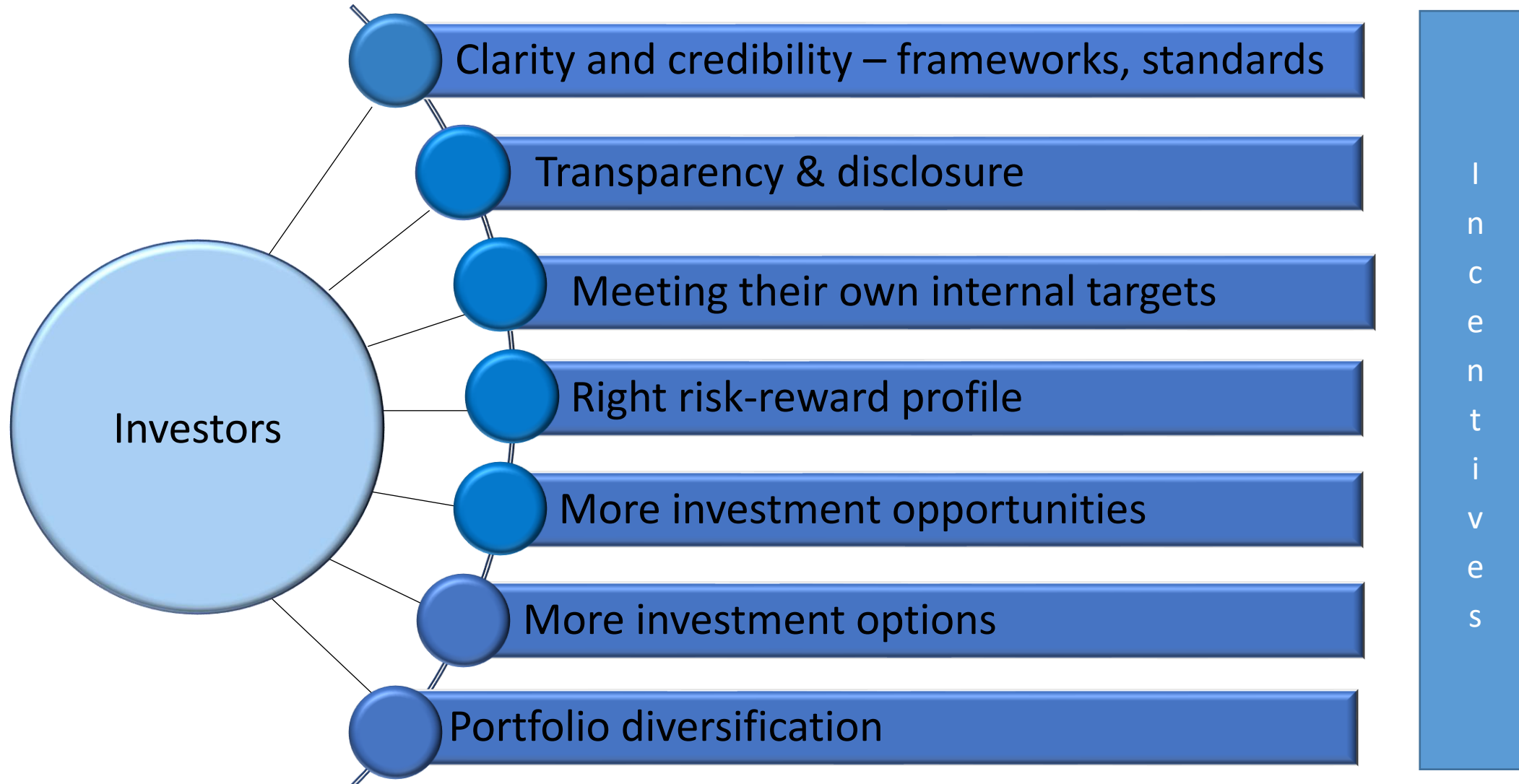
“Asia’s emerging market and developing economies need investment of at least USD1.1 trillion annually to meet mitigation and adaptation needs. But they’re only getting USD333 billion, mostly from sustainable debt instruments like green bonds, and public sources contribute more than half. Such a shortfall leaves these economies with a funding gap of at least USD815 billion.”

- IMF Blog

The gap to reach the SDGs in developing countries increased to \$4 trillion annually after 2020—up from \$2.5 trillion pre-pandemic.

- UNCTAD

What are investors looking for?



Investor net zero goals

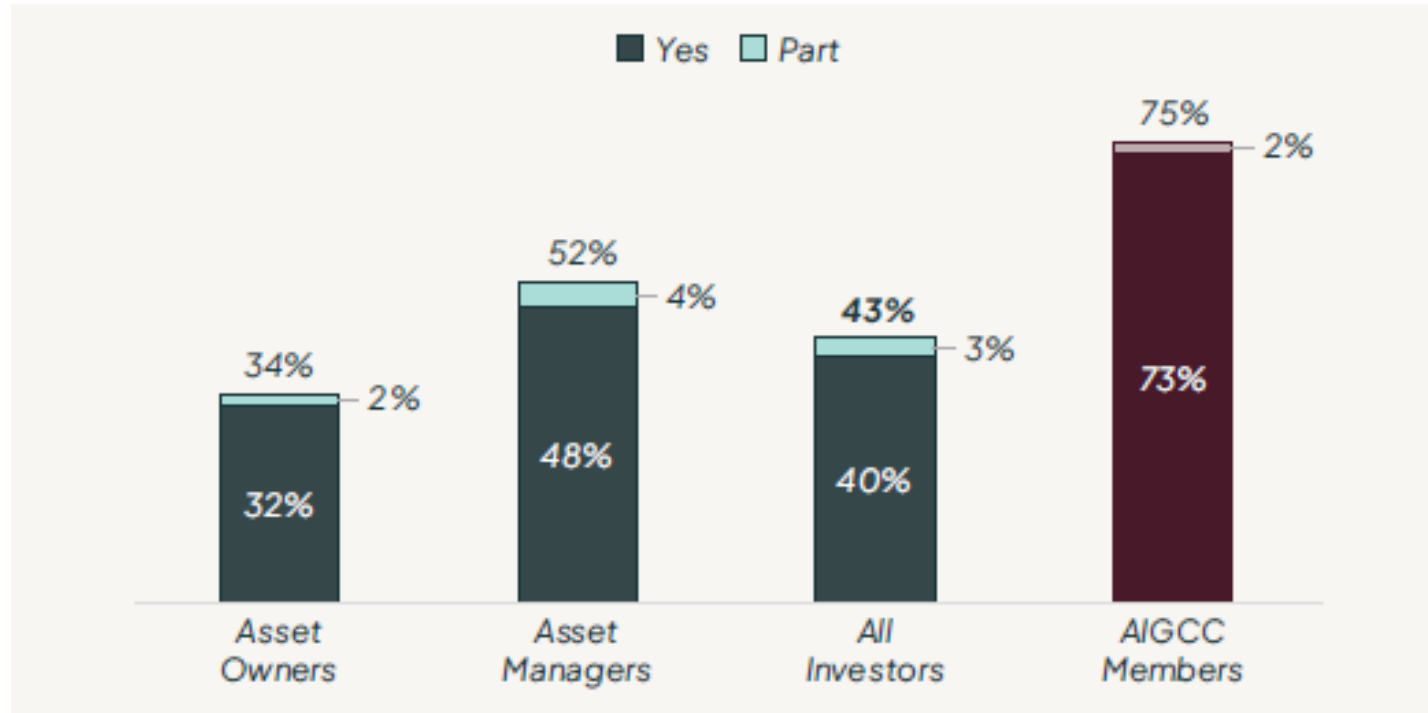


Figure: Investors committed to achieving net zero portfolio emissions (%)

Note: Investors reviewed N = 230 (113 Asset Owners, 117 Asset Managers, of which 62 AIGCC Members).

Source: Asia Investor Group on Climate Change, State of Investor Climate Transition in Asia 2025 Asian Institutional Investor Climate Progress

What targets have Asian investors set?

Table: Interim targets set

	Number of Investors Responded	Decarbonisation Target	Climate Solutions Target	Asset Alignment Target	Engagement Target	Other Target Type(s)	No Formal Target, But Working Towards Net Zero	No Material Progress Yet
Whole Portfolio	52 investors (40% with at least one target)	25%	10%	10%	15%	4%	31%	29%
Specific Mandates Only	52 investors (38% with at least one target)	19%	8%	12%	19%	6%	21%	40%
Listed Equities and/or Corp Fixed Income	47 investors (77% with one target)	53%	11%	15%	38%	4%	15%	9%
Corp Fixed Income	41 investors (71% with a target)	49%	10%	20%	37%	5%	20%	10%
Infrastructure	25 investors (24% with one target)	16%	8%	8%	4%	8%	48%	28%
Private Equity	33 investors (24% with one target)	15%	6%	6%	6%	6%	36%	39%
Private Debt	29 investors (14% with one target)	7%	3%	3%	7%	7%	45%	41%
Real Estate	28 investors (39% with one target)	32%	14%	11%	11%	4%	39%	21%
Sovereign Bonds	39 investors (15% with one target)	5%	3%	0%	5%	8%	44%	41%
Derivatives and Hedge Funds	23 investors (0% with one target)	0%	0%	0%	0%	0%	52%	48%

Note: Investor survey responses N = 52 (9 Asset Owners, 43 Asset Managers).
Focus Area 2: Investment
30

Investor targets

Example: Permodalan Nasional Berhad



Exhibit 1: PNB's Ten (10) ESG Commitments



Source: PNB Sustainability Policy

Consistent approaches in frameworks for sustainable bonds

- Across banks, consistent design and features, **reflecting capital market's expectation for consistency**
- All 17 sample frameworks are aligned with ICMA principles. 10 frameworks reference ASEAN GSS bond standards.
- Taxonomies are referenced in 1 framework. No framework here references any transition guidelines yet

Organisation	Framework	Primary purpose of the framework	ICMA GSS bond principles	ACMF GSS bond standards	LMA GSS+ loan principles	Taxonomies
DBS	Green Bond Framework	Issuing bonds	✓			
OCBC	Sustainability Bond Framework		✓	✓		
UOB	Sustainable Bond Framework		✓	✓		
CIMB	SDG Bond and Sukuk Framework		✓	✓		
BRI	Sustainability Bond Framework		✓	✓		
Mandiri	Sustainability Bond Framework		✓	✓		
Kasikornbank	Sustainability Bond Framework		✓	✓		
BDO Unibank	Sustainable Finance Framework		✓	✓	✓	
BNI	Green Bond Framework		✓	✓		
BIDV	Green Bond Framework		✓			
RHB Bank	Sustainability Sukuk and Bond Framework		✓	✓		
Hong Leong Bank	Green Bond Framework		✓	✓		
MUFG	Green, Social, and Sustainability Bond Framework 2020		✓			
Mizuho	Green Bond Framework		✓			
MUFG	MUFG Green Finance Framework 2024	Issuing bonds and borrowing through loans	✓		✓	
Krung Thai Bank	Green Financing Framework	Issuing bonds, and originating loans	✓		✓	✓
Vietinbank	Sustainable Finance Framework		✓		✓	

Specific approaches for sustainable finance product frameworks

- Approaches reflect jurisdictional and institutional circumstances, and clients' financing needs.
- 8 frameworks are aligned with LMA/APLMA GSS loan principles.
- 6 frameworks reference regional (ASEAN, EU) and jurisdictional (Singapore, Thailand, Indonesia) and market (CBI) **taxonomies** for granular UOP criteria. Some frameworks reference internal taxonomies.
- 3 frameworks reference **transition guidelines** and incorporate transition features on UOP and entity-level transition plans.

Organisation	Framework	Primary purpose of the framework	ICMA GSS bond principles	ACMF GSS bond standards	LMA GSS+ loan principles	Taxonomies	Transition guidelines
Krung Thai Bank	Green Financing Framework	Originating loans, and issuing bonds	✓		✓	✓	
Vietinbank	Sustainable Finance Framework		✓		✓		
Maybank	Transition Finance Framework 2023	Originating loans				✓	✓ (ATFG, CTFH, TFG)
Maybank	Sustainable Product Framework 2023		✓	✓	✓	✓	
Mandiri	Sustainable Finance Framework v1.0		✓	✓	✓	✓	
BIDV	Sustainable Loan Framework				✓		
SMBC	Transition Finance Playbook 2.0				✓	✓	✓ (CTFH, TFG, ATFS)
DBS	Sustainable & Transition Finance Framework & Taxonomy 2022	Originating loans, underwriting clients' bond issuance	✓		✓	✓	
CIMB	Sustainable Finance Framework 2023		✓		✓		✓ (CTFH)

ATFG: ASEAN Transition Finance Guidance

CTFH: ICMA Climate Transition Finance Handbook

TFG: NZBA Transition Finance Guide

ATFS: Asia Transition Finance Study Group, Asia Transition Finance Guidelines

Maybank Transition Finance Framework 2023



Transition Finance Framework 2023

8



MAYBANK GROUP TRANSITION FINANCE FRAMEWORK

Design

The Framework aims to align with the following principles, standards², and guidelines among others:

The ASEAN Taxonomy for Sustainable Finance (2021,2023)	Climate Bonds Taxonomy (2021) administered by the CBI
EU Taxonomy for Sustainable Activities (2022)	Climate Bonds Initiative (2020) Financing Credible Transition
Singapore's Green Finance Industry Taskforce ("GFIT") Taxonomy (2023)	Climate Bonds Initiative (2021) Transition Finance for Transforming Companies
Glasgow Financial Alliance for Net Zero ("GFANZ"), Financing the Managed Phaseout of Coal-Fired Power Plants ("CFPP") in Asia Pacific (2023)	ICMA Climate Transition Finance Handbook (2023)
GFANZ, Financial Institution Net-zero Transition Plans (2022)	Net-Zero Banking Alliance, NZBA Transition Finance Guide (2022)
Climate Bonds Standard (2023) administered by the Climate Bonds Initiative ("CBI")	Rocky Mountain Institute ("RMI"), How to Retire Early – Making Accelerated Coal Phaseout Feasible and Just (2022)
ASEAN Capital Markets Forum ("ACMF") ASEAN Transition Finance Guidance Version 1 (2023)	UK Transition Plan Taskforce ("TPT") Disclosure Framework (2023)

Playbook – Governance

The Playbook has been reviewed by the Group’s Sustainability Committee, an internal committee of the Board and approved by the Group Chief Sustainability Officer (“CSuO”) who is responsible for the planning and management of sustainability-related measures.

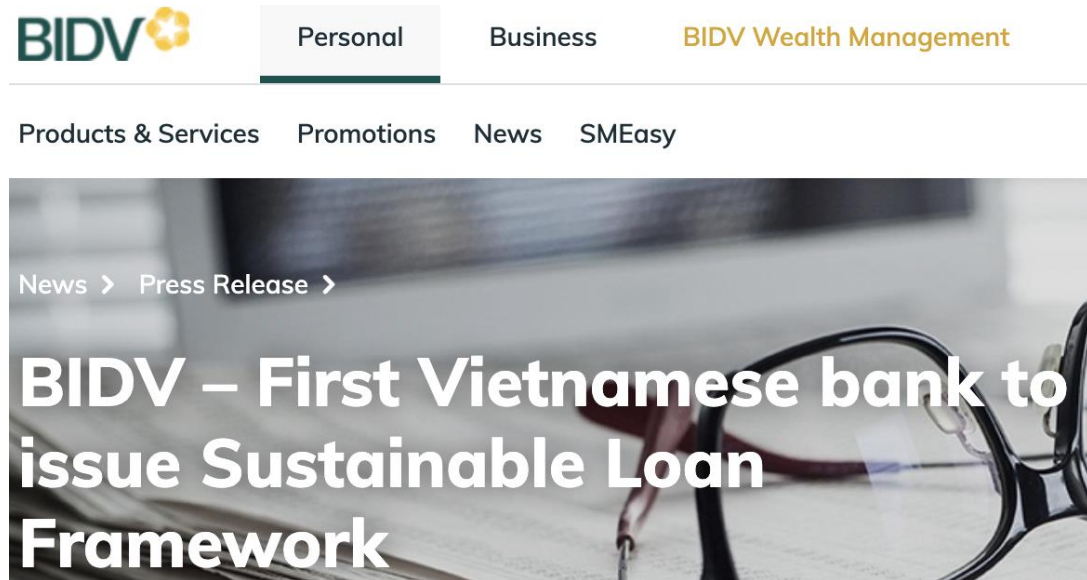
The Playbook refers to international guidelines, and received a Second Party Opinion (“SPO”) from DNV Business Assurance Japan Co., Ltd.

The Playbook is to be revised and updated at least once a year, taking into account changes in regulations, guidance and guidelines. The evolution of technologies used for transition will also be assessed.

We will request SPOs on a yearly basis. SMBC Group will report sustainable finance transactions including transition finance annually in our annual reporting such as TCFD Report.

International guidelines	• Climate Transition Finance Handbook (International Capital Market Association, 2020) • Basic Guidelines on Climate Transition Finance (Japan Financial Services Agency, Ministry of Economy, Trade and Industry, and Ministry of the Environment Japan, 2021) • NZBA Transition Finance Guide (United Nations Environment Programme Finance Initiative, 2022) • White Paper on Financing credible transitions (Climate Bonds Initiative, 2020) • Green Loan Principles (Loan Market Association and others, 2021) • Green Loan Guidelines (Ministry of Environment, Japan, 2022) • Asia Transition Finance Guidelines (Asia Transition Finance Study Group, 2022)
SPO	• DNV Business Assurance Japan Co., Ltd. Link:https://webmagazine.dnv.co.jp/assets/images/sus_list/data/sus_finance_list/_pdfreport_e/94.%20Sumitomo%20Mitsui%20Banking%20Corporation_SPO.pdf

First Vietnamese bank to establish a **Sustainable Loan Framework** in Feb 2023, supported by the Carbon Trust



BIDV's Framework has been developed with advice from the Carbon Trust, in accordance with the following Principles jointly produced by the Loan Market Association (LMA), the Loan Syndications and Trading Association (LSTA), and the Asia Pacific Loan Market Association (APLMA): (i) Green Loan Principles (GLP); (ii) Social Loan Principles (SLP); and (iii) Sustainability Linked Loan Principles (SLLP).

Green Bond Framework aligned with ICMA Green Bond Principles

Khung trái phiếu xanh của BIDV quy định cách mà BIDV sử dụng các nguồn lực và quản lý các nguồn vốn thu được từ mỗi một giao dịch phát hành trái phiếu xanh và tuân thủ tự nguyện khuyến nghị theo Nguyên tắc trái phiếu xanh của Hiệp hội thị trường vốn quốc tế (ICMA), cung cấp các hướng dẫn theo 04 trụ cột sau: (1) Sử dụng nguồn vốn thu được từ phát hành trái phiếu, (2) Quy trình đánh giá và lựa chọn dự án, (3) Quản lý nguồn vốn thu được từ phát hành trái phiếu và (4) Báo cáo.

This BIDV's Green Bond Framework sets out how BIDV uses resources and manages proceeds from each green bond transaction and will voluntarily comply with recommendations of the International Capital Market Association (ICMA) Green Bond Principles which provide guidelines in the following four key pillars: (1) Use of proceeds, (2) Process for project evaluation and selection, (3) Management of proceeds and (4) Reporting.

Risk-return considerations and structuring green and sustainability bonds to attract capital

- Green and sustainable bonds are still bonds
- Credit and yields are still key - never lose sight of bond issuance basics
- Greeniums might not be there – consider instead the benefit of investor base enhancement
- Understand your investors – be as specific as you can thematically, fit within their criteria
- Consider de-risking – from technical assistance to credit enhancement. MDBs can provide meaningful support
- Use a relevant, credible framework/standard
- Obtain an external review
- As an organisation, provide good sustainability disclosures to demonstrate organisational credibility

Role of banks, asset managers, and institutional investors in expanding green and sustainable bond markets



Be clear on commitments to sustainable finance – approach, target

Have a clear and transparent sustainable finance framework

Create awareness for investees / borrowers

Provide transaction support

Banks can act as conduits

Adequately factor in risk reduction in pricing

Develop more products and solutions

Support transition

Bonds issued by banks in ASEAN (Green)

Year	Issuer	Total Issuance Amount (in USD million)
2018	Kasikornbank Public Company Limited	100.00
2019	Rizal Commercial Banking Corporation	286.50
	Bank of the Philippine Islands	401.36
	Oversea-Chinese Banking Corporation Limited	340.86
2020	Bank for Agriculture and Agricultural Cooperatives	191.76
2022	Hong Leong Bank Berhad	206.32
	Bank Negara Indonesia, PT, Tbk	350.00
	Export-Import Bank of Thailand	138.80
2023	Bank Mandiri, PT, Tbk	332.90
	Export-Import Bank of Thailand	100.59
2024	Hong Leong Investment Bank Berhad	21.24
	Export-Import Bank of Thailand	81.45
	Hong Leong Bank Berhad	121.25
Total		2, 673.03

Bonds issued by banks in ASEAN (Social)

Year	Issuer	Total Issuance Amount (in USD million)
2019	Bank of Ayudhya Public Company Limited	220.00
2020	Bank of the Philippine Islands	437.96
2021	Union Bank of the Philippines	150.00
2022	Government Savings Bank	282.20
2023	Bank of the Philippine Islands	371.49
	Government Housing Bank	112.48
2024	City Savings Bank, Inc.	100.00
Total		1,674.13

Bonds issued by banks in ASEAN (Sustainability) - 1/3

Year	Issuer	Total Issuance Amount (in USD million)
2019	Rizal Commercial Banking Corporation	454.32
	Bank Rakyat Indonesia, PT, Tbk	500.00
	CIMB Bank Berhad	680.00
	Development Bank of the Philippines	356.39
2020	Land Bank of the Philippines	103.65
2021	Rizal Commercial Banking Corporation	368.35
	UOB	1,500.00
	Bank Mandiri, PT, Tbk	300.00
	Kasikornbank Public Company Limited	182.20
	Bank Pembangunan Malaysia Berhad	108.29
	CIMB Group Holdings Berhad	24.00
	CIMB Bank Berhad	24.00
	Small Medium Enterprise Development Bank Malaysia Berhad	118.15

Bonds issued by banks in ASEAN (Sustainability) - 2/3

Year	Issuer	Total Issuance Amount (in USD million)
2022	CIMB Bank Berhad	727.92
	BDO Unibank, Inc.	1,031.34
	Rizal Commercial Banking Corporation	287.01
	MBSB Bank Berhad	70.29
	Small Medium Enterprise Development Bank Malaysia Berhad	112.16
	CIMB Group Holdings Berhad	227.92
	Government Housing Bank	245.48
	Kasikornbank Public Company Limited	140.75
2023	CIMB Group Holdings Berhad	361.14
	CIMB Bank Berhad	361.14
	Small Medium Enterprise Development Bank Malaysia Berhad	217.30
	Bank Pembangunan Malaysia Berhad	214.00

Bonds issued by banks in ASEAN (Sustainability) - 3/3



Year	Issuer	Total Issuance Amount (in USD million)
2024	BDO Unibank, Inc.	2,073.74
	Government Housing Bank	280.72
	Bank of the Philippine Islands	588.74
	Philippine National Bank	300.00
Total		11,959.00

BDO Unibank, Inc. -2022 ASEAN Sustainability Bond 2024 Impact Report



As part of its ₱365 billion Bond Programme, BDO Unibank, Inc. issued its ASEAN Sustainability Bond in 2022 and successfully raised ₱52.7 billion in Peso-denominated Fixed-Rate with a tenor of two years and a fixed rate of 2.90% per annum.

Sub-Category	SDG Addressed	Count of Projects	Amount (in millions Php)	% Allocation	Impact Metrics*
Renewable Energy	     	14	24,712	46.9%	- Renewable energy capacity added - Annual GHG emissions reduced/avoided
Clean Transport	 	1	7,803	14.8%	- Additional kilometers of new/improved train lines - Increased passenger peak-hour capacity

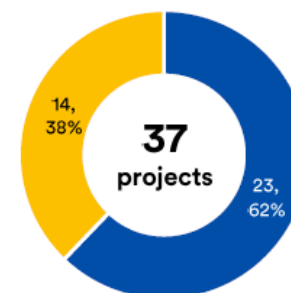
Sub-Category	SDG Addressed	Count of Projects	Amount (in millions Php)	% Allocation	Impact Metrics*
Green Building	    	4	5,307	10.1%	- Gross building area - Energy use reduction - Carbon reductions per sqm per annum - Water efficiency per sqm - Annual water savings - Waste minimized, reused, recycled
Sustainable Water and Wastewater Management	 	3	476	0.9%	- Annual absolute (gross) water savings - Increased no. of people with access to clean drinking water - Additional volume of clean drinking water
Resource Efficiency and Pollution Prevention and Control	 	1	66	0.1%	- Waste prevented, minimized, reused or recycled - Annual GHG emissions reduced
Total		23	38,364	72.8%	

* Impact metrics were based on ICMA's Harmonized Framework for Impact Reporting

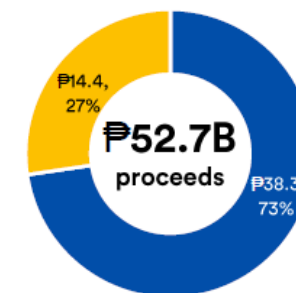
Sub-Category	SDG Addressed	Count of Projects	Amount (in millions Php)	% Allocation	Impact Metrics*
Employment Generation		6	8,802	16.7%	- Jobs created, supported, and/or retained - Number of microfinance/SME loans
Food Security	 	8	5,621	10.6%	- Increased production of Fair-Trade certified products - Access to affordable, safe, nutritious, and sufficient food - People benefiting from agricultural projects and/or using improved farming/fishing technology - Hectares of land/water cultivated/developed which increased production
Total		14	14,423	27.3%	

■ Environmental ■ Social

Share in number of projects per category



Share in allocation per category (in billions Php)



Thank You