

WEBINAR INVITATION

Green Social Sustainable Bonds Series 3: Role of Financial Institutions in Supporting Sustainable Development

Monday, 24 May 2021 1:00pm to 3:30pm (Manila time)





OPENING REMARKS

Ms. Chuchi G. Fonacier

Deputy Governor Bangko Sentral ng Pilipinas





KEYNOTE SPEECH:

Development of ASEAN Taxonomy for Sustainable Finance and its Implication for Financial Institutions

Mr. Eugene Wong Chief Executive Officer Sustainable Finance Institute Asia





INTEGRATING ESG IN FINANCIAL INSTITUTIONS OPERATIONS:

Sustainable Finance Framework

Ms. Lyn Javier Assistant Governor BSP



Green, Social, Sustainable Bonds Series 3: Role of Financial Institutions in Supporting Sustainable Development

Integrating ESG in Financial Institutions' Operations: Sustainable Finance Framework



OUTLINE

- I. Is the banking industry ready for the issuance of the Sustainable Finance (SF) Framework?
- II. What are the key expectations under the SF Framework?
- III. How to operationalize the SF Principles?
- IV. What are the BSP initiatives to enhance adoption of SF and ESRMS in the banking industry?
- V. What is the Sustainable Central Banking Program?

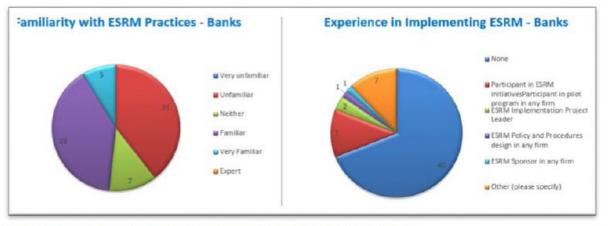
Is the banking industry ready for the Sustainable Finance (SF) FRAMEWORK?

Awareness campaign

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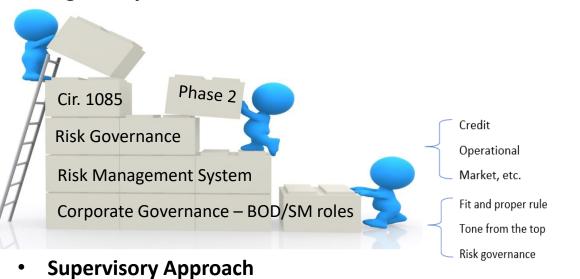


BSP-IFC Sustainable Finance and ESRM baseline survey



Source: Environmental and Social Risk Management Survey of Philippine FIs, May-June 2014, Manila.

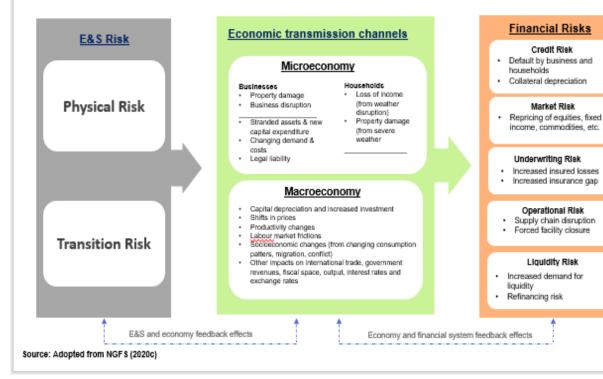
• Regulatory Framework





What are the key expectations under the SF Framework?

Climate and E&S Risks Translate to Financial Risks



3-year Transitory Period

Banks to develop a Transition Plan to integrate sustainability principles

Phased Issuance of SF Regulations

Phase 1: SF Framework Phase 2: granular expectations Phase 3: potential incentives

Role of Board and Senior Management



Adoption of Environmental and Social Risk Management System







- Level of E&S risk appetite
- Guidance on assessing E&S risks
- Tools to identify, measure and monitor E&S risks
- Measures to be taken in cases of breaches of E&S limits or thresholds and noncompliance
- Integration of E&S risks in stress testing exercises



How to operationalize the SF Principles?

BANGKO SENTRAL NG PILIPINAS OFFICE OF THE GOVERNOR CIRCULAR NO. Series of 2021 Subject: Environmental and Social Risk Management Framework The Monetary Board, in its Resolution No. ated approved the guidelines that shall govern the integrativ of climate change and other environmental and social (E&S) risks in the nterprise-wide risk management frameworks of banks that shall the provisions of Section 153 of the Manual of Regulations for Ban. (MORB) on the Sustainable Finance Framework. Section 1. Section 153 of the MORB of the Duties and Monsibilities of Board of Directors and Senior Manage. 17 e hereby amended as follows: Board of Directors. Consist the concrete the ctations set out under teres of the bank and ensure Sec. 132 to promote the long-term anc that it has beneficial influence on t ec/ the board of directors (or equivalent management ca., of foreign bank branches) mittee shall a. Institutionali the apption sustainability principles, including area in the bank, by incorporating the those coverin F&S revernance and risk management same in the I as . the bank's strategic objectives and frame account the bank's risk appetite and ability ODE ing anage i. It sr Ensure tegration of sustainability principles in management system particularly in the e ri isk strategy, risk appetite, and risk k's nt policies and procedures; ategic ESS objectives covering short, medium, and ong term horizons related to the management of specific risk areas; iii) Approve the risk appetite on specific risk areas informed by the level of risk exposures that the bank is willing and capable to manage, results of stress testing exercises, and assessment of the timing and channels through which ESS risks may materialize; and

Proposed Guidelines on the Integration of E&S Risks in Credit Risk and Operational Risk Management Frameworks

Governance:

Enhance the duties and responsibilities of the Board and Senior Management in institutionalizing sustainability principles and ESRMS

Credit Risk Management:

Embed E&S risk in the risk management system concerning the credit-risk taking activities of banks

• Operational Risk Management:

Embed E&S risk in managing the operational risks inherent in all the activities, products and services of banks.

2-year transitory period



What are the BSP's initiatives to enhance adoption of SF and ESRMS IN THE BANKING INDUSTRY?

Continuous Capacity Building with Industry and Development Partners





ASFAN

nd's approach to climate ces and stress testing imate Hub







GREEN BANKING: Physical Risk Assessent for Rural and Community Banks

Climate Stress-Testing Exercise

Pilot Testing of Analytical Framework to Integrate Climate Risks into Bank's Internal Risk Models

A Collaboration of:

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 Mail
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- BSP
- WWF Philippines
- World Bank
- Philippine Banking Industry (volunteer banks)

What is the Sustainable Central Banking Program?

Existing Green Initiatives:

Monetary Policy: Climate and disasterrelated data in policy analysis, forecasting, monitoring and risk assessment

<u>Financial Stability</u>: Regulations on Corporate and risk governance, regulatory reliefs to banks; Sustainable Finance Framework for BSFIs

<u>Reserve Management</u>: Participation in Green Bond Fund launched by the BIS

- Building Management: BERDE Certification
- <u>Operations</u>: No to Single-Use Plastic Policy, MB Paperlite Facility; iHRIS
- BSP Membership in the Central Bank and Supervisors Network for Greening the Financial System

Source: access-information.com

Sustainable Central Banking Strategic Program:

- **Phase 1:** Awareness-Building for Top and Mid-Level BSP Officers
- <u>Phase 2:</u>
 - A. Climate and Environmental Risk
 Vulnerability Assessment of BSP
 Offices/Branches
 - B. Self-Assessment Exercise (gap analysis)
 - Phase 3: Development of the BSP
 Sustainable Central Banking Roadmap



How should FI's support the sustainable DEVELOPMENT AGENDA?



Thank You!





INTEGRATING ESG IN FINANCIAL INSTITUTIONS OPERATIONS:

Putting Regulatory Expectations into Practice

Ms. Marita Socorro D. Gayares Senior Vice President and Chief Risk Officer Bank of the Philippine Islands







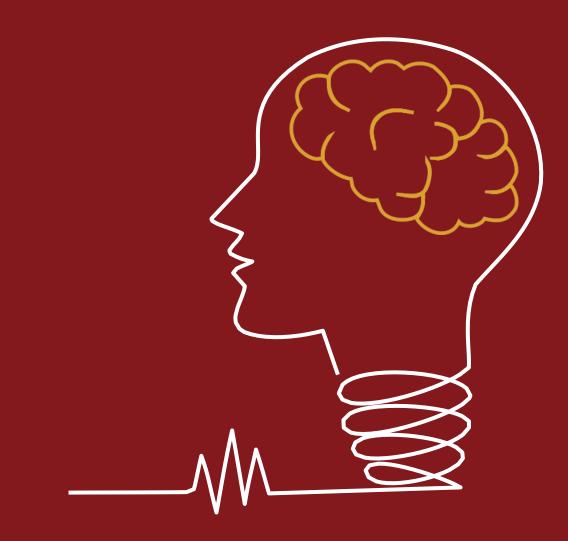
Integrating ESG in Financial Institutions' Operations: Putting Regulatory Expectations into Practice

Marita Socorro Gayares, BPI Chief Risk Officer | 24 May 2021

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Integrating ESG in Financial Institutions' Operations: Putting Regulatory Expectations into Practice

- □ The Case for Sustainability
- Sustainability Opportunities and Value Creation
- BPI's Sustainability Journey Map
- Updating our Sustainability Agenda
- □ Responsible Banking
- Responsible Operations
- □ Sustainability Highlights
- □ Looking Ahead



GLOBAL TRENDS ON SUSTAINABILITY

Environmental, Social, and Governance (ESG) trends are driving global organizations, including the banking sector, to prioritize sustainability.

> - 2020 Risk Outlook, World Economic Forum



The Case for Sustainability

Climate Change Risk

 Companies increasingly recognize the risks and opportunities linked to proactively addressing climate risks

Emerging Customer Demands

- Growing demands of customers for ESG-aligned products and services and ESG accountability from companies
- ESG ratings and disclosures beginning to take more importance for investors in their portfolio management

Regulatory Pressure

 Increasing number of countries incorporating ESG requirements into their regulations

Media Attention

 Widening media attention, from traditional to social media, on sustainability performance among banks

Employee Engagement

Increased focus on purpose among bank employees
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Sustainability Opportunities and Value Creation

OPPORTUNITIES

- New business opportunities and diversified financing options arise from a new understanding of the market
- Stronger, more resilient bank through improved understanding and management of sustainability issues
- Bank more highly rated and valued
- Improved reputation, credibility, and recognition of the brand
- Increased motivation and retention as employees will react positively to the opportunity to weave environmental and social dimensions into their work
- Preparedness for regulatory and policy adjustments
- Operational efficiencies and cost reduction through-inhouse application of sustainability projects



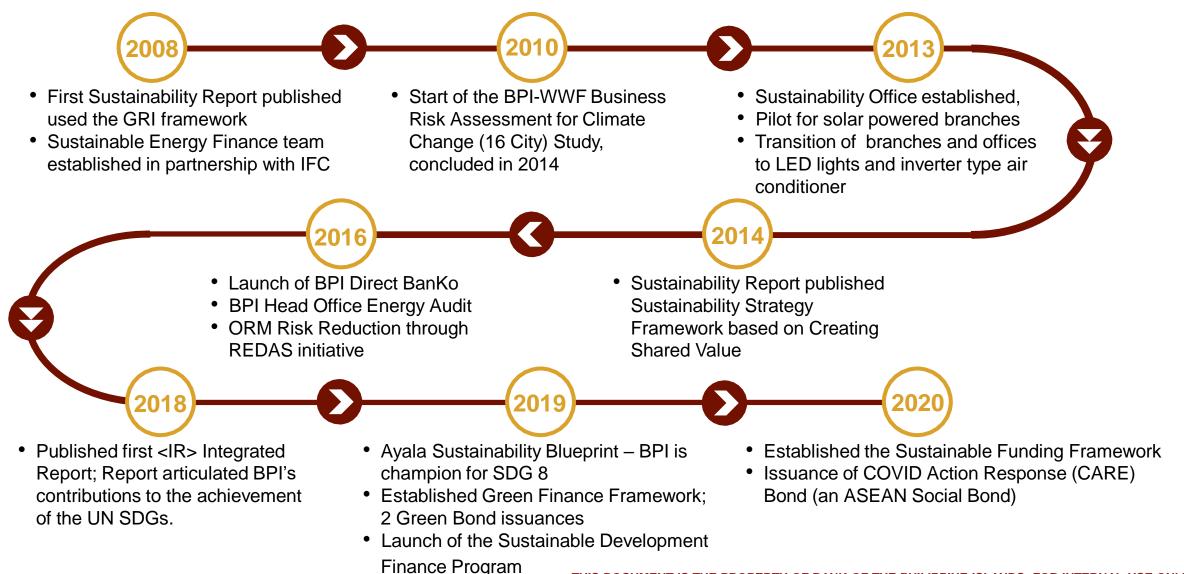
Adapted from Sheila Bonini and Stephan Gorner,

The business of sustainability: McKinsey Global Survey results, Oct 2011, mckinsey.com

References: Guide to Banking Sustainability, UNEP Finance Initiative (2016)



BPI's Sustainability Journey





BPI Sustainability Agenda

In 2020, the Board approved the **BPI Sustainability Agenda** on the integration of sustainability principles in the corporate governance and risk management frameworks, as well as in the strategic objectives and operations.

ESG Policy Statement

We are committed to Responsible Banking. This means incorporating Environment, Social, and Governance (ESG) principles into how we conduct our business – how we resource, the products and services we offer, the customers we serve, and how we add value to our various stakeholders.

Our governance is focused on the allocation of resources in a manner that promotes financial inclusion, the preservation of the environment, sustainability, and social good.

Sustainability Strategy





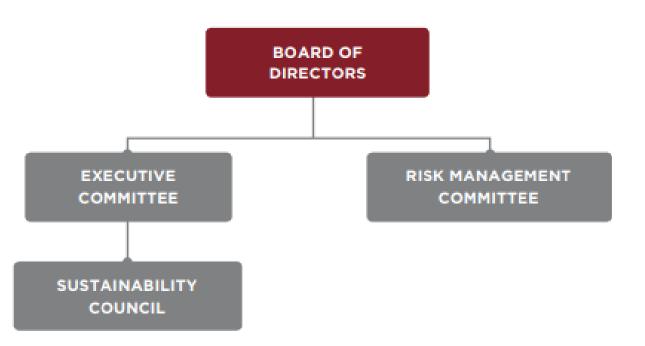
BPI Sustainability Agenda

The Executive Committee of the Board of Directors has overall responsibility for sustainability-related issues, policies, targets, including the integration of sustainability principles, environmental and social risks (such as climate change and human rights) in the strategic direction of the Bank.

The Risk Management Committee of the Board has overall responsibility of the Bank's Environmental & Social Risk Management within the ERM framework.

The Sustainability Council, chaired by the Chief Sustainability Officer, is the senior management-level committee in charge of implementing the Sustainability Agenda of the Bank and reports to the Executive Committee.

Sustainability Governance



BPI Sustainability Agenda: Responsible Banking



Financial Inclusion

BPI ensures that Filipinos have access to financial products and services.

We have expanded financial access to Filipinos, especially the underbanked through credit, savings, insurance, financial education, and growing our digital touchpoints. We are continuously working to reach out to underserved segments, ensuring their access to useful and affordable financial products and services that are delivered in a sustainable way.

Banking the underbanked

Protecting assets through microinsurance

Access to financial services

Increasing purchasing power

Financial education and management

expanded access to 25% of the underbanked population of the Philippines

98,000+ InsuranceKo Accident and Calamity Assist (non-life insurance for BPI BanKo clients)

2.68 million unique BPI Online and BPI Mobile App users

3.04 million BPI Prepaid Card transactions

11,000 BPI AMTC Spotify podcast series, Investment Insights listeners with 43,365 plays

BPI Sustainability Agenda: Responsible Banking





ELIGIBLE GREEN PROJECTS	ELIGIBLE SOCIAL PROJECTS
Renewable Energy Energy Banagement	K
Energy Efficiency Pollution Prevention & Control	Micro, Small, and Medium Enterprise (MSME) Lending
Green Buildings	

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BPI Sustainability Agenda: Responsible Banking



Financial Inclusion

Financing Sustainable Development

2019

- established the Green Finance Framework aimed at funding environmental projects. This is certified by leading independent ESG firm Sustainalytics as "robust, transparent and in alignment with market practices," Green Bond Principles 2018, Green Loan Principles, and the ASEAN Green Bond Standards.
- issued two green bonds including the first CHF-denominated, negative-yielding green bond and is the first to be issued out of the Philippines, and the first rated USD Philippine green bond in the international markets.

2020

- launched its Sustainable Funding Framework expanding its Green Finance Framework. The updated scope highlights the inclusion of projects which address social issues, in addition to initiatives with clear environmental benefits, as aligned with the SDGs.
- Issued the COVID Action Response (CARE) Bonds, the country's first peso-denominated social bonds issued as a direct response to the COVID-19 pandemic aimed to raise funds to support the recovery of micro, small and medium enterprises (MSMEs). As of 2020, 100% of the net proceeds of the CARE Bonds have been fully allocated to 3,225 eligible MSMEs with 9,175 loan accounts.

BPI Sustainability Agenda: Responsible Banking



BPI continues to operate even under the most difficult of circumstances, mobilizing funds towards productive uses to ensure that the economy continues to function.

Financial Inclusion

Financing Sustainable Development

Serving overseas Filipinos

Protection against uncertainties

Scaling up enterprises

Robust support systems

Maximizing capital resources

Supporting Nation Building

Over 37,000 Pamana Padala accounts and 4,800 Pamana Moneyger accounts in 2020

P239 billion total sum assured across under BPI-Philam

disbursed up to Php 58.37 billion to more than 111,000 SME clients of Business Banking in 2020.

68.6 million transactions of over 20,000 unique users amounting to over Php 4 trillion via BizLink

Php 1.42 trillion total capitalization loaned from BPI to date



BPI Sustainability Agenda: Responsible Operations



Environmental Sustainability

We keep track of our environmental impacts in all places of business and encourage our clients, suppliers, and partners to do the same, with the aim of reducing negative environmental impact of our activities and to become more cost-effective.

Part of our monitoring includes gathering data on energy and water consumption, and calculating the equivalent carbon emissions of branches, head offices, and business centers nationwide, consolidated per geographical business area. BPI continually explores technological innovations that could reduce resource consumption and improve our environmental tracking systems.

ENVIRONMENTAL FOOTPRINT						
	2018	2019	2020			
Electricity Consumption ¹ (gigajoules)	180,278	167,080	119,291			
Scope 2 GHG Emissions ² (tonnes CO ₂ e)	35,860	33,234	23,760			
Water Consumption (cubic meters)	381,443	380,734	252,975			

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BPI Sustainability Agenda: Responsible Operations

In light of the COVID-19 pandemic, the Bank implemented the following measures:

- Updated working guidelines (skeletal staffing, work from home arrangements, split operations, transportation services, and special allowances)
- Deployed additional work tools for employees who work from home
- Strict health and safety measures (thermal screening, face masks, physical distancing, workplace disinfection, COVID-19 testing)

The Bank, through its social development arm BPI Foundation, is committed to enable underserved communities with financial knowledge and access to spur responsible, and sustainable growth and progress for Filipinos through programs that are aligned with its key advocacies: **Financial Wellness**; **Sustainable Positive Change**; and **Bayanihan**.



Empowering everyday heroes through financial wellness



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FINANCIAL WELLNESS PROGRAMS BENEFICIARIES

7,376,570¹ FinEd Unboxed for Migrant Domestic Workers and their families, Uniformed personnel, DepEd teaching and non-teaching personnel, Young adults

2,649 BPI Sinag, Technical Vocation Program, Show Me Teach Me

SUSTAINABLE POSITIVE CHANGE PROGRAMS BENEFICIARIES

13,175 Farm to Table Program, Hineliban Rainforestation

BAYANIHAN PROGRAMS BENEFICIARIES

378,340 COVID-19 and disaster response initiatives

Non-unique. Due to the nature of the platform used, a unique participant count is not available





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ROLES OF FINANCIAL INSTITUTIONS IN FINANCING GREEN INFRASTRUCTURE IN THE PHILIPPINES

Mr. Cedric Rimaud, ASEAN Program Manager Ms. Nabilla Gunawan, ASEAN Program Analyst

Climate Bonds Initiative (CBI)





Green Infrastructure Investment Opportunities PHILIPPINES

Green Infrastructure Projects Case Studies

May 24th, 2021



Philippines: 3rd Largest Green Bond Issuer in the ASEAN

Philippines green bond issuance

Issuer	Amount	Issue date	Issuer type	Use of proceeds
Manila Water Company Inc.	USD500m	Jul-20	Non-Financial Corporate	Water
Ayala Corporation (AC Energy Finance International Ltd.)	USD60m	Jun-20	Non-Financial Corporate	Energy
Arthaland	PHP3bn (USD61.8m)	Feb-20	Non-Financial Corporate	Buildings



 Issued the very first green bond in ASEAN

 First CHFdenominated, offshore green bond, negative yield

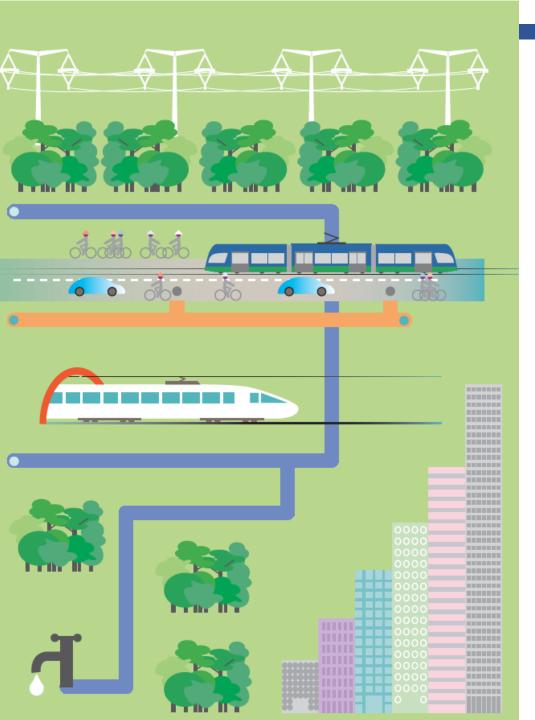
 Issuers are dominated by financial (banks), and non-financial corporates

Climate Bonds

Green Infrastructure presents a huge investment and growth opportunities globally







Methodology











Renewable Energy

SOLAR

Eligible projects and assets

Solar electricity generation facilities

Wholly dedicated transmission infrastructure and other supporting infrastructure for solar electricity generation facilities including inverters, transformers, energy storage systems and control systems

Solar thermal facilities such as solar hot water systems

If there is fossil fuel back-up generation, then the back-up must account for less than 15% of the total energy produced by the facilities



Eligible projects and assets

The development, construction and operation of wind farms

Operational production or manufacturing facilities wholly dedicated to wind energy development

Wholly dedicated transmission infrastructure for wind farms

Climate Bonds Training



Eligible projects and assets

New and existing geothermal projects with direct emissions of less than 100gCO2/kWh

Geothermal projects with mitigation technologies that will render the noncondensable gas releases to the atmosphere negligible

Geothermal projects that have been reviewed and registered under the Clean Development Mechanism

Geothermal plant funded by a green bond: Tiwi-MakBan geothermal complex expansion²²⁸

Proponent: AP Renewables Corporation

Location: Province of Albay

Status: Under construction. Most of the plant is complete and operational; however, there is an expansion under construction.

Classification: Generation facility, geothermal, energy

Description: The Tiwi-MakBan Geothermal Complex is one of the biggest geothermal facilities in the country and the region. Currently, the complex has a total capacity of 458 MW at the MakBan geothermal site in the provinces of Batangas and Laguna, and 289 MW at the Tiwi geothermal site in Albay, in the Bicol Region.

The expansion seeks to drill 12 new production wells over a six-year period to increase steam availability for the power plant facilities by about 20%.²²²

Output: The geothermal plants reduce the Philippines' dependency from fossil fuel energy, such as oil, and improve the Philippines energy security.



Over the period of 1979-2003, it is estimated that power generated from existing geothermal plants displaced 152.6 million barrels of oil, saving the country an estimated USD3.21bn in terms of foreign exchange.²²³

Cost: PHP10.7bn (USD220.4m)

Financial structure: Green bond (USD225m green bond, in 2018, supported by the ADB)²²⁴





Other Renewable Energy Projects

Climate Bonds Training

Wind farm in the archipelagic province of Aklan: Nabas 2 wind project²²⁹

Proponent: PetroWind Energy, subsidiary or Petro Energy Resources Corporation (PERC)

Location: Nabas, Aklan Province

Status: Planned

Classification: Generation facility, wind, energy

Description: The project would expand the 36-MW wind facility by 14 MW. The expansion of the 14-MW Nabas 2 will involve seven turbines. Nabas 2 is targeted to be ready for connection to the grid by early 2021.

PERC owned 32 MW Mait Maibarara G operated by I solar project Proponent: GIGASOL3, Inc.

Location: Palauig, Zambales

Status: Under construction (to be completed on Q1 2021)

Classification: Generation Facility, Solar Energy

Description: GIGASOL3 Solar Power Plant is a greenfield project developed by AC Energy located in the Municipality of Palauig, Province of Zambales. Covering a 58-hectare Comprehensive Agrarian Reform Program (CARP)-exempted land in an industrial zone, the project will be connected to the Luzon Grid through the existing 69kV Botolan-Candelaria Transmission Line maintained by the National Grid Corporation of the Philippines.

Output: With 63MW DC Capacity, the project intends to export 50MW AC of its generated capacity to the Luzon Grid. Potentially,



Output: An increased capacity for a reliable renewable energy power supply. The wind farm will supply energy to the Negros-Panay-Cebu grid project by the National Grid Corporation of the



the project can power more than 30,000 houses and can reduce annual carbon emission by approximately 56,000 MT CO2. **Cost:** PHP2.5bn (USD51.5m) **Financial structure:** All-Equity Financing

Hydropower

	Bakun A/B and C Hydroelectric Power Plant	USD 83 million	Operational	Potentially green
	Benguet Province Mini Hydroelectric Power Plant	USD 22 million	Completed	Potentially green
1	Binga Hydroelectric Plant	USD 143 million	Completed	Potentially green

- Star Energy Corporation from Indonesia, issued 3x
- Most geothermal projects would qualify as green.



Eligibility	Criteria			
Private light-duty and heavy goods vehicles	 Per p-km or per t-km emissions of the vehicles lower than appropriate threshold Full electric and hybrid vehicles automatically qualify 			
Public passenger transport	 All infrastructure, infrastructure upgrades, rolling stock and vehicles for <i>electrified</i> public transport automatically qualify, including electrified rail, and trams For fossil fuel or hybrid vehicles or rolling stock, the project qualify if per p-km emissions are below appropriate threshold (depends on load factor) 			
Dedicated freight railway lines	 All infrastructure, infrastructure upgrades and rolling stock for electrified freight rail lines automatically qualify Non-electrified projects, products or supporting infrastructure qualify if per t-km emissions are below appropriate threshold Dedicated freight lines for fossil fuel transport excluded 			
Supporting Infrastructure	• All supporting infrastructure qualifies if it contributes to achieving the emissions threshold			

Major Metro upgrade in Manila: MRT-11 Project²⁶⁷

Proponent: Department of Transportation

Location: National Capital Region (NCR)

Status: Planned

Classification: Railway, low-carbon transportation

Description: The project involves the construction of an approximately 18 km Metro Railway Transit System (MRTS) of elevated structure starting from Epifanio Delos Santos Avenue (EDSA), Balintawak in Quezon City traversing along Quirino Highway, Novaliches and Zabarte Road in North Caloocan City up to Barangay Gaya-gaya in San Jose del Monte, Bulacan.

A passenger transfer facility shall also be provided proximate to the EDSA-Balintawak station of LRT Line 1 and the MRT 11 Balintawak station.

Output: Reduced traffic congestion from usage of private vehicles, reduced air pollution, and overall increased efficiency of travelling.²⁶¹



Cost: PHP71.1bn (USD1.45bn)

Financial structure: Potentially funded by Official Development Assistance (ODA) and Public-Private Partnerships (PPPs)²⁶²





Other Low Carbon Transport Projects

Light rail extension in Manila: Manila LRT Line 1 Cavite Extension and Maintenance

Proponent: Light Rail Manila Corporation

Location: National Capital Region, Metro Manila Region

Status: Planned (construction begins 2021)

Classification: Railway, low-carbon transportation

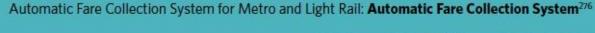
Description: The LRT Line 1 was the first metro line of the Manila LRT system. The project will connect the existing 20.7 km line serving Metro Manila in the Philippines by approximately 11.7 km. The proposed project will extend the existing line from Baclaran to Bacoor city in Cavite Province.

A passenger transfer facility shall also be provided proximate to the EDSA-Balintawak station of LRT Line 1 and the MRT 11 Balintawak station.

Output: Ease the traffic congestion in the Paranaque-Las Pinas-Cavite corridor, improving commuting efficiency, and carry more than 1 million passengers per-day.

Cost: PHP64.9bn (USD1.34bn).272





Location: National Capital Region Financial structure: PPP (Consortium of

Metro Pacific Light Rail Corporation, and Status: Completed Holdings), 32-year concession and Offic Assistance by the Japan International Co

Classification: Railway, low-carbon transportation

Proponent: Department of Transportation (DOTr)

Description: The project involved the decommissioning of the previous magnetic-based ticketing system and replacing the same with contactless-based smart card technology called the Beep Card[™] on LRT Line 1 and 2 and MRT Line 3, with the introduction of a centralized back office that will perform apportionment of revenues. The private sector operates and maintains the fare collection system. 273

Output: Increase the convenience, efficiency, and accessibility of these public transport modes to people.

Cost: PHP1.72bn (USD35.43m)



Financial structure: PPP, Build-Transfer-Operate (BTO), and Build-Own-Operate (BOO)



NATER

Eligible project & assets

Built water infrastructure projects and assets

Mitigation Component

- Water is strongly linked to carbon emissions
- Water moved long distances or from deep underground, which is energy intensive
- Water treatment is especially 'thirsty' for energy

Climate mitigation: eligible if either:

- a. No emissions impact is expected
- Emissions impact is expected, and the issuer has estimated the GHG mitigation impacts that will be delivered over the operational lifetime of the project or asset. This impact should be defined in terms of the decreased emissions or increased sequestration relative to a business-as-usual baseline.

Climate Bonds Training

Adaptation & Resilience Component

- Climate change presents significant challenges for water management
- Water quality, quantity, and availability will be changing for decades to come and there is much uncertainty about these changes



Climate resilience

Issuers must have carried out a sufficient vulnerability assessment, and if necessary, prepared an appropriate management response plan to any climate risks identified therein. The Water Criteria contain a scorecard to check this.

Water supply in Central Luzon: Bulacan Bulk Water Supply Project³⁰²

Proponent: San Miguel Holdings Corp. and Korea Water Resources Corporation

Location: Central Luzon

Status: Completed (April 2019)

Classification: Water treatment and distribution

Description: The project included the construction of various components, such as a water treatment plant - complete with support buildings and structures, treated water reservoir, including Sludge Treatment Facility and, raw and Treated Water conveyance facilities complete with necessary appurtenances.

The private partner will undertake the financing, detailed design and construction, and maintenance of conveyance facilities, treatment facilities and water source.

Output: This project provides millions of residents from 24 localities in Bulacan fresh, and potable surface water, to meet the needs from growing population, industry, agriculture, and environment in the area.



Cost: PHP24.41bn (USD502.8m) Financial structure: PPP (Build-Operate-Transfer)





Project Proponent: K-Water has issued a Green Bond

Korea Water Resources CorpDate: 11-NIssue date: 15-May-2018 Maturity date: 15-May-2023 Tenor: 5					
Issuer Name	K-Water	Amount Issued	USD300m		
Country of risk	South Korea	CBI Database	Included		
Issuer Type ¹	Government-Backed Entity	Bond Type	Green Bond		
Green Bond Framework	Link to Framework	Second party opinion	<u>Sustainalytics</u>	1	\sim
Certification Standard	Not certified	Assurance report	N/A	K water Green Bond Framework Green and Water Bor	
Certification Verifier	N/A	Green bond rating	N/A		

issuances

March 15th, 2018



2 2 3

Sustainable Waste Management

Energy from Waste (outside the EU only)

Assets covered	Eligibility
Facilities which	For EfW fac
produce power	 Plant effi
and/ or heat/	 Bottom a
cooling by the	 >= 90%
thermal processing	 Average
of residual waste,	and/ or
including rejects	waste m
from recycling/	 The capa
composting/ AD	the calcu
	in the pla

Eligibility Criteria

For EfW facilities outside the EU only:

- Plant efficiency >= 25%; AND
- Bottom ash recovery; AND
- >= 90% recovery of metal from ash; AND
- Average carbon intensity of electricity and/ or heat over the life of the plant <= waste management allowance; AND
- The capacity of the plant does not exceed the calculated residual waste at any time in the plant's life.

EfW facilities within the EU are not eligible for certification.

Landfill Gas Recovery

Projects to

from closed

capture biogas

landfill facilities

Assets covered Eligibility Criteria

- - Gas capture >= 75%; AND
- Gas used to generate electricity and input to the natural gas grid or used as vehicle fuel; AND
- The landfill is not accepting further waste (with the exception of restoration materials)



Waste-to-energy: Quezon City Integrated Solid Waste Management Facility³³⁹

Proponent: Quezon City Government

Location: Quezon City, National Capital Region (NCR)

Status: Planned

Classification: Facilities for collection, sorting and material recovery, preparation, waste and pollution control

Description: The project involves the design, financing, construction, operation, and maintenance of a biodegradable source separated waste treatment and residual combustible waste treatment facility. It has a WtE component.

Output: The facility is capable of processing up to 3,000 metric tons of municipal solid waste per day and generate 36 MW per day.

Cost: PHP22bn (USD453.2m)



Financial structure: PPP (Joint venture) - Consortium composed of Metro Pacific Investments Corporation, Covanta Energy LLC, and Macquarie Capital Limited







SUSTAINABLE FINANCE:

What It Means For Savings and Rural Banks?

Mr. Rob Fowler Sustainable Finance Expert Asian Development Bank



SUSTAINABLE FINANCE DEFINED: OPPORTUNITIES FOR SAVINGS AND RURAL BANKS

Green Social Sustainable Bonds (GSSB) Technical Assistance 24 May 2021

Rob Fowler

Sustainable Finance Consultant Asian Development Bank Email: rfowler.consultant@adb.org



AsianBondsOnline Green Bond

ESG AND SUSTAINABLE FINANCE: TWO SIDES OF THE SAME COIN

Environment-Social-Governance

- Risk focus
- Looks at how ESG aspects flow through to financial risk
- Used to screen out investments with high ESG risks



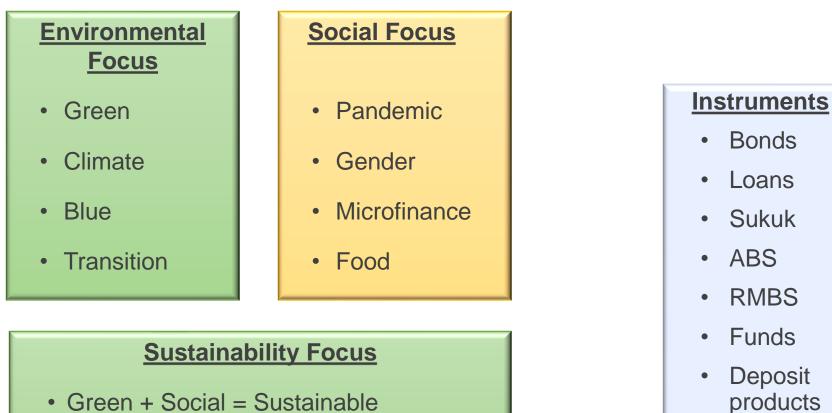
Sustainable Finance

- Impact focus
- Looks at the positive impacts / credentials of investments in terms of sustainability
- Used to identify investments which are ready for the future





THE MANY FLAVORS OF SUSTAINABLE FINANCE: GREEN, SOCIAL, SUSTAINABLE, BLUE, GENDER, PANDEMIC, TRANSITION...



• Green + Social = Sustainable

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• Sustainable Development Goals (SDGs)



OPPORTUNITIES FOR SAVINGS AND RURAL BANKS

Sustainable finance opportunities for Rural & Savings Banks include:

- Create deposit products which are Green, Social or Sustainable
- Issue corporate securities which are Green, Social or Sustainable
- Provide **business loans** to enterprises with green, social or sustainable impacts
- Provide home loans for green buildings or social impact situations
- Participate in **central funding facilities** targeted to green, social or sustainable sectors or priorities

Tagging of the loan portfolio is a critical first step to understand what is possible

- This involves identifying which loans are funding projects, assets or activities which have green, social or sustainable impacts
- Given the definitions available and the small scale of individual loans, this can be a **very long list!**
- We can assist with this process and help to build the internal capabilities which are so valuable
- A focus on social definitions and impacts should help to create a solid portfolio of eligible loans

GLOBALLY, SOCIAL BOND REQUIREMENTS ARE DRIVEN BY ICMA'S SOCIAL BOND PRINCIPLES

Voluntary guidelines that promote integrity in the Social Bond market through guidelines that recommend transparency, disclosure and reporting

High level categories for eligible Social Projects in recognition of the diversity of current views and of the ongoing development in the understanding of social and sustainable issues

Many principles recommended but not required







Social Bond Principles

Voluntary Process Guidelines for Issuing Social Bonds June 2020



ASEAN ALSO HAS A SET OF SOCIAL BOND STANDARDS

- Developed by the ASEAN Capital Markets Forum (ACMF), based on the International Capital Market Association (ICMA) Social Bond Principles
- Issuers must have a geographical or economic connection to ASEAN region
- Specific exclusions of certain projects:
 - Projects which involve activities that pose a negative soci impact related to alcohol, gambling, tobacco and weapon
- External reviewer must have the relevant expertise and experience in the area, which they are reviewing. The external reviewer's credentials and scope of review must also be publicly disclosed









SOCIAL PROJECTS ARE LOOSLY DEFINED WHICH ALLOWS FLEXIBILITY

"Social Project categories include, but are not limited to, providing and/or promoting:

- Affordable **basic infrastructure** (e.g. clean drinking water, sewers, sanitation, transport, energy)
- Access to **essential services** (e.g. health, education and vocational training, healthcare, financing and financial services)
- Affordable housing
- Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance
- **Food** security and sustainable food systems (e.g. physical, social, and economic access to safe, nutritious, and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale producers)
- Socioeconomic advancement and empowerment (e.g. equitable access to and control over assets, services, resources, and opportunities; equitable participation and integration into the market and society, including reduction of income inequality)"



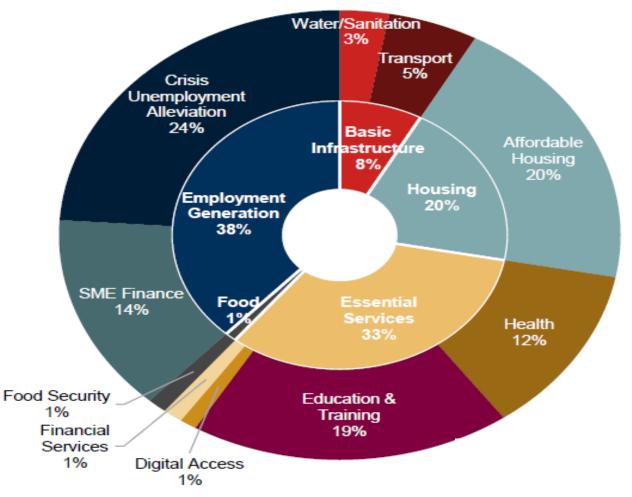
SOCIAL PROJECTS ASSOCIATED WITH EXISTING SOCIAL BONDS GENERALLY FALL INTO FIVE CATEGORIES

The types of projects is expanding all the time

- There has been a recent focus on Employment Generation in response to the pandemic
- Education & Training is a significant proportion of the existing social bonds in the market
- All categories are expected to grow strongly in coming years

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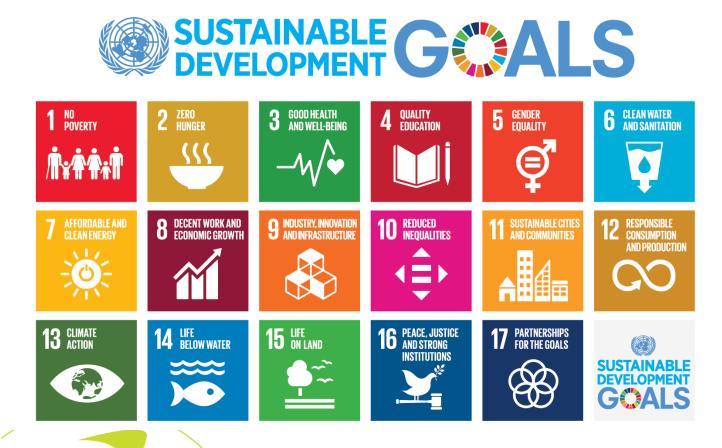
Global Social Bond Market, By ICMA Project Allocation

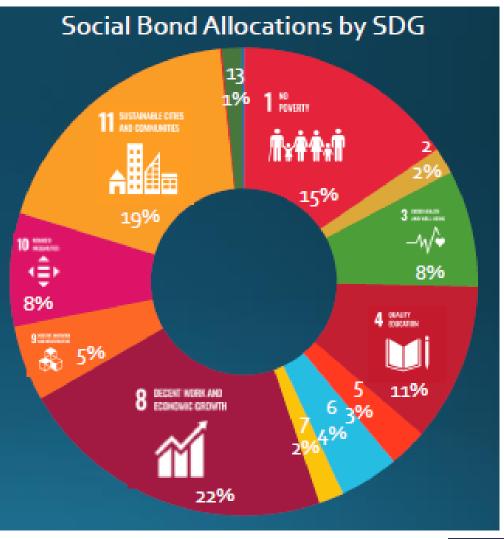


ICMA = International Capital Market Association, SBP = Social Bond Principles, USD = United States dollar. Sources: Authors' calculations based on review of Bloomberg data, issuer social bond frameworks, and reviewer second opinions.



INVESTORS EXPECT A LINKAGE BETWEEN THE SOCIAL BOND PROJECTS AND THE UN SUSTAINABLE DEVELOPMENT GOALS







THANK YOU

FOR FURTHER INFORMATION:

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asianbondsonline.adb.org

ADB



RESOURCES FOR COMMERCIAL BANKS AND UNDERWRITERS FOR ISSUING THEMATIC BONDS IN THE PHILIPPINES

Mr. Kosintr Puongsophol Financial Sector Specialist Asian Development Bank



REGIONAL TECHNICAL ASSISTANCE PROGRAM ON GREEN, SOCIAL AND SUSTAINABILITY BOND MARKET DEVELOPMENT

ASEAN+3 Asian Bond Markets Initiative

Green Social Sustainable Bonds Series 3: Role of Financial Institutions in Supporting Sustainable Development

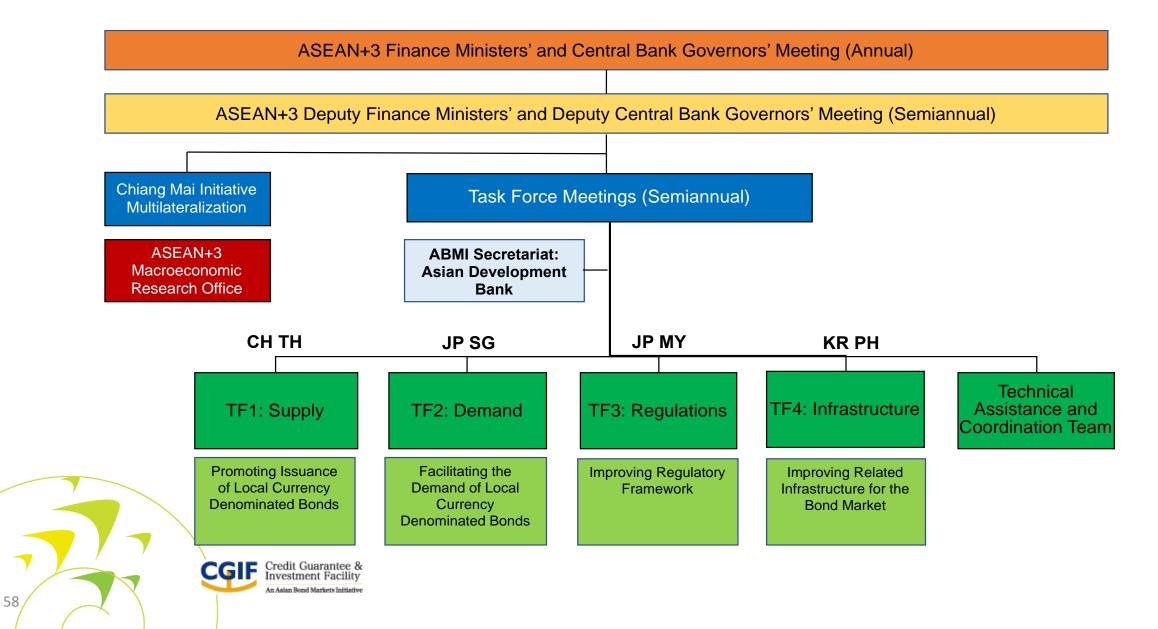
Kosintr Puongsophol

Financial Sector Specialist Asian Development Bank Email: kpuongsophol@adb.org





ASIAN BOND MARKETS INITIATIVE (ABMI)



TECHNICAL ASSISTANCE: CREATING ECOSYSTEMS FOR GREEN LOCAL CURRENCY BONDS FOR INFRASTRUCTURE DEVELOPMENT IN ASEAN+3

For more TA info, please visit: <u>https://www.adb.org/projects/53300-001/main</u>

2.



SUPPLY

Guide issuers and underwriters through the process of sustainable bonds issuances, post-issuance reporting requirements.

Develop sustainable bond framework based on international and regional standards and taxonomies

Address other constraints that are market-specific e.g. language, lack of awareness etc



DEMAND

Partner with the AsianBondsOnline (ABO) to create a regional green bond information section on the ABO

Organize regional knowledge events to create greater demand for local currency thematic bonds

MARKET PRACTICES

Make Asian voices heard

Document and publish case studies to guide sustainable bond issuers, and to develop good practices in issuing bonds

Leverage on other initiatives under the Asian Bond Markets Initiative

ASEAN+3 BOND MARKET GUIDE 2017 PHILIPPINES

ASIAN DEVELOPMENT BANK



For more information, please visit:

- 1. ASEAN+3 Bond Market Guide https://www.adb.org/publications/series/bond-market-guides
 - AsianBondsOnline <u>https://asianbondsonline.adb.org/</u>





TECHNICAL ASSISTANCE TO SUPPORT POTENTIAL SUSTAINABLE BOND ISSUERS

PRE-CONDITIONS:

- 1. Given ABMI's mandate is to support local currency bond market development, sustainable bonds must be issued in <u>local currency of ASEAN+3 markets</u>
- 2. The bond should at least align with the ASEN Green, Social or Sustainability Bond Standards developed by the ASEAN Capital Markets Forum (ACMF), plus other international standards such as Climate Bond Standards and/or ICMA's sustainable bond principles
- 3. Issuers should demonstrate willingness to issue sustainable bonds on a regular basis
- 4. Issuers must be willing to share experience in issuing sustainable bond with ADB so that a case study can be published

SCOPE OF TA SUPPORT:

- 1. Support issuers in identifying eligible projects/assets that are aligned with international/regional standards and principles
- 2. Confirm internal process and controls
- 3. Review draft sustainable bond framework --> create good storyline
- 4. Engage, facilitate, and seek external review processes with external reviewer and/or approved verifier*
- 5. Participate in roadshow to educate investors, media and press release

FOR CONSULTATION:

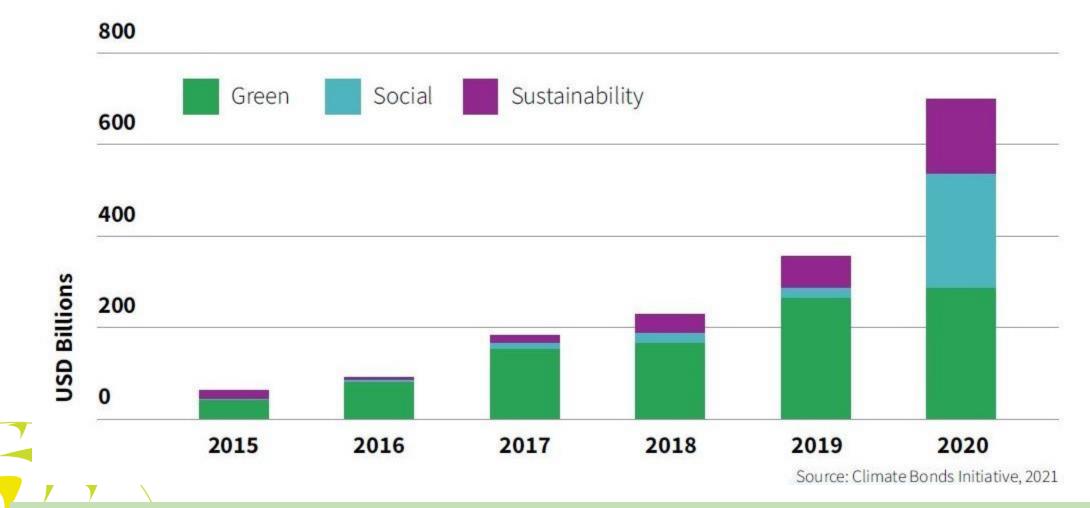
- 1. Get in touch with ADB (<u>kpuongsophol@adb.org</u>) and (<u>rsupangan@adb.org</u>) for further discussion
 - * Subsidy can be provided on a case-by-case basis

SUPPORT TO DEVELOP OVERALL ECOSYSTEM: The TA can support development of necessary ecosystem e.g., strengthen capacity of local service providers to become an approved green bond verifier.



Sustainable Debt Global State of the Market 2020 report

Green, social, and sustainability bond issuance doubled in 2020



For more information, please visit:

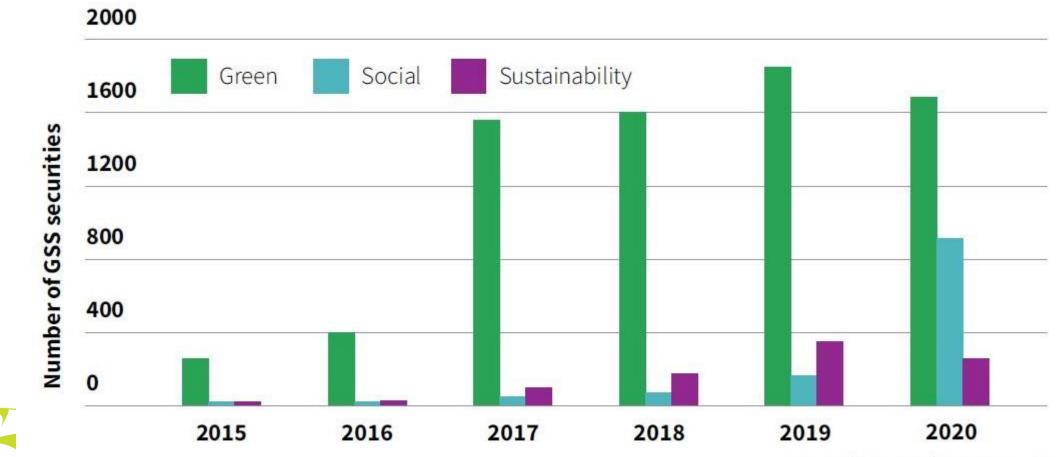
61

Climate Bonds Initiative (CBI) - https://www.climatebonds.net/resources/reports/sustainable-debt-global-state-market-2020



Sustainable Debt Global State of the Market 2020 report

Social bonds increased sharply in response to COVID-19



Source: Climate Bonds Initiative, 2021



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ASEAN Sustainable Finance State of the Market 2020

Source: Climate Bonds Initiative



For more information, please visit:

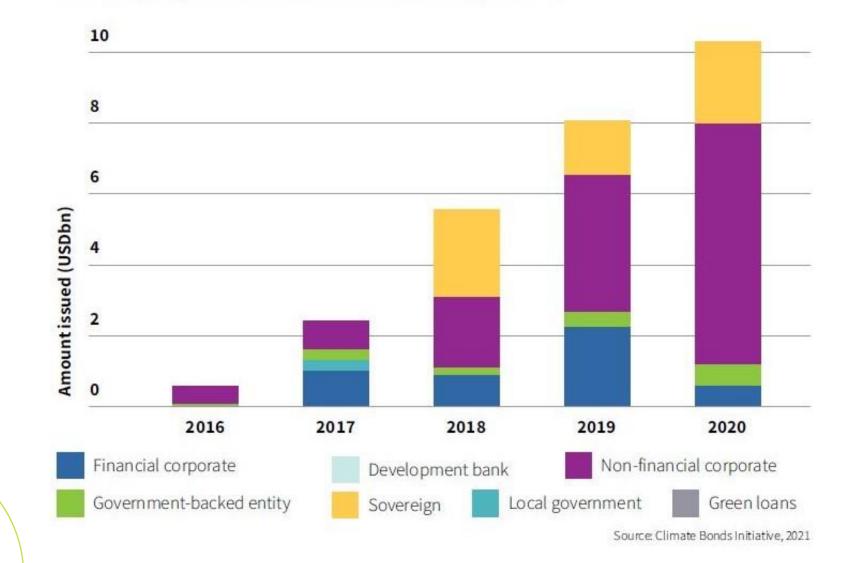
63 Climate Bonds Initiative (CBI) - https://www.climatebonds.net/resources/reports/asean-sustainable-finance-state-market-2020



ASEAN Sustainable Finance State of the Market 2020

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ONE STOP INFORMATION PORTAL FOR ISSUERS AND MARKET PARTICIPANTS

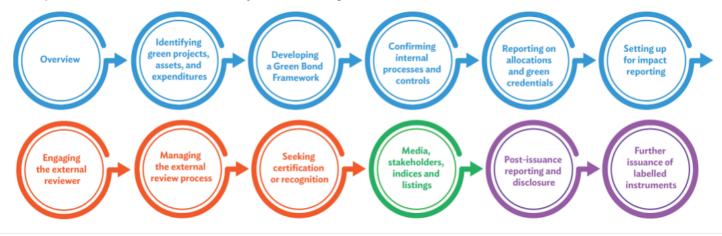
Detailed Guidance for Issuing Green Bonds

View Factsheets

This detailed guidance has been created to assist bond issuers and their advisors to understand the process and key considerations for a successful green bond issuance.

Demand for green bonds and other sustainable finance products is increasing rapidly. Issuers are seeing an opportunity to be part of the green bond market, but are often not sure about how it works, what they need to do, and the key decisions to be made along the way.

The section covers all of the steps required to follow best practices in labeling bonds (Figure 1). They include relevant examples, links to further details, and key resources for green bond issuers and their deal teams. More details



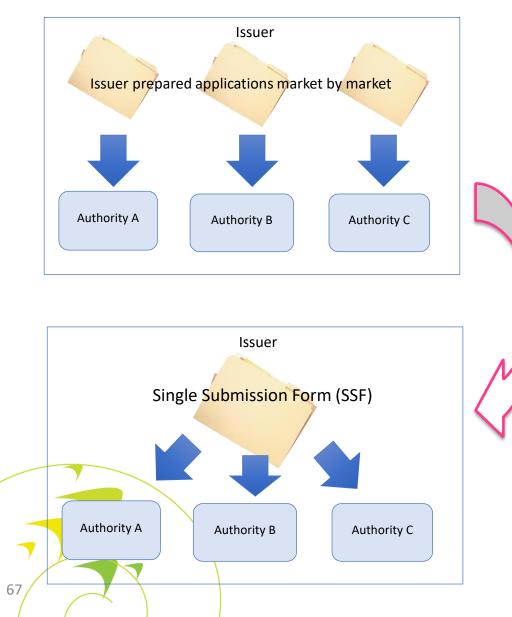
Detailed Guidance

for Issuing Green Bonds repared by Asian Development Bank forb display bits display display

Detailed Guidance for Issuing Green Bonds (adb.org)



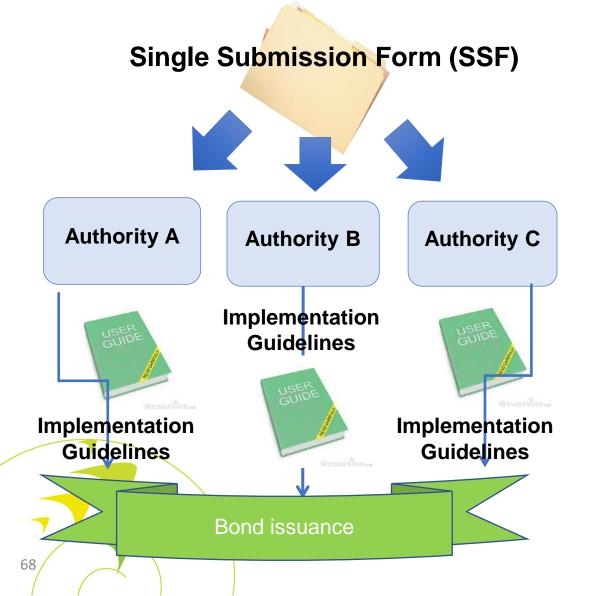
INTRODUCTION TO THE ASEAN+3 MULTI-CURRENCY BOND ISSUANCE FRAMEWORK



- The Single Submission Form (SSF) is aimed to facilitate an AMBIF bonds/notes issuance application to regulatory, listing and registration authorities in each participating market.
- SSF is prepared for the benefit of issuers aiming to issue bonds/notes to Professional Investors in ASEAN+3.
- SFF should be looked at together with the AMBIF Implementation Guidelines, which explain specific issuance processes in respective markets.



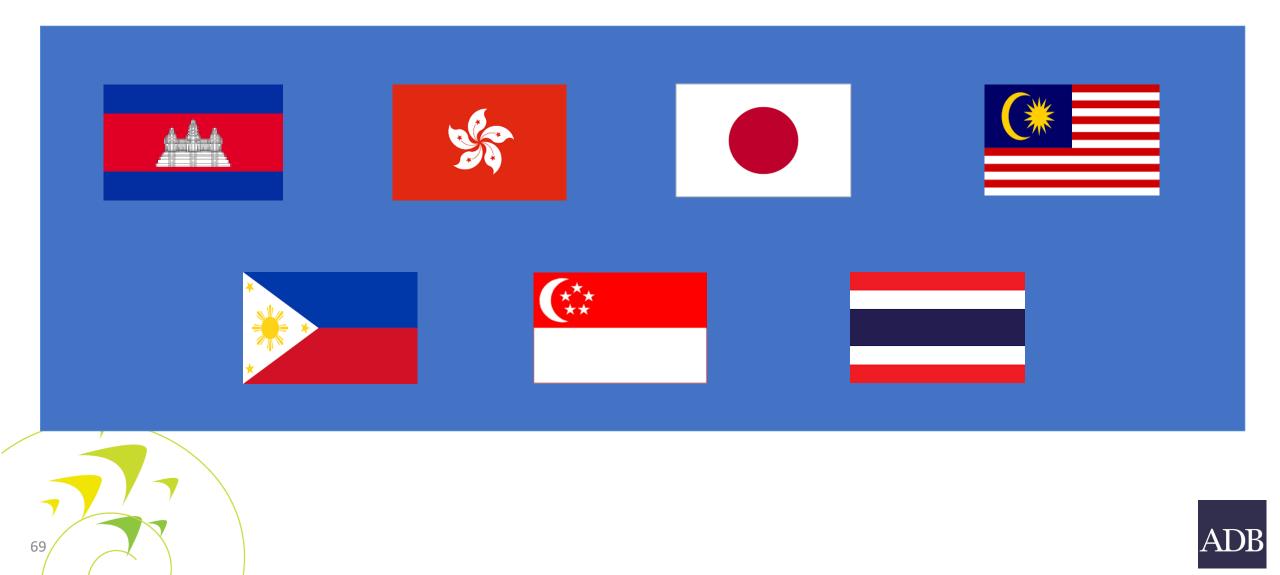
INTRODUCTION TO THE ASEAN+3 MULTI-CURRENCY BOND ISSUANCE FRAMEWORK



- SFF should be referenced to the AMBIF Implementation Guidelines, which explain specific issuance processes in each market.
- The Implementation Guidelines increase market transparency.
- The Implementation Guidelines should minimize or reduce legal uncertainty.
- Where a market does not, or no longer, requires the physical submission of documentation, the SSF can serve as a checklist or a guiding template while the Implementation Guidelines should always be able to support issuance application in any form.



AMBIF-PARTICIPATING MARKETS



THANK YOU

FOR FURTHER INFORMATION:

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Richard Supangan Senior Economics Officer rsupangan@adb.org **Rob Fowler** Sustainable Finance Consultant rfowler.consultant@adb.org

Alita Lestor ADB Consultant alestor.consultant@adb.org





SUSTAINABLE ENERGY FINANCE PROGRAM:

IFC's Initiative to Support Financial Intermediary Lending to Clean and Resource-Efficient Projects

Aileen Ruiz-Zarate Senior Investment Officer Financial Institutions Group International Finance Corporation



Scaling Climate Finance through Financial Institutions

FINANCIAL INSTITUTIONS GROUP



Creating Markets, Creating Opportunities

May 2021

East Asia and Pacific US\$ 16,046 Billion

Latin America and the Caribbean US\$ 2,640 Billion



South Asia US\$ 2,234 Billion

Europe and Central Asia US\$ 665 Billion

Sub-Saharan Africa US\$ 783 Billion

Middle East and North Africa US\$ 265 Billion

US\$ 23 TRILLION

Is the investment opportunity for climate in emerging markets to be financed by 2030 Buildings US\$ 16,334 Billion

Transport US\$ 3,699 Billion

Renewables US\$ 1,765 Billion

Electric transmission and distribution US\$ 413 Billion

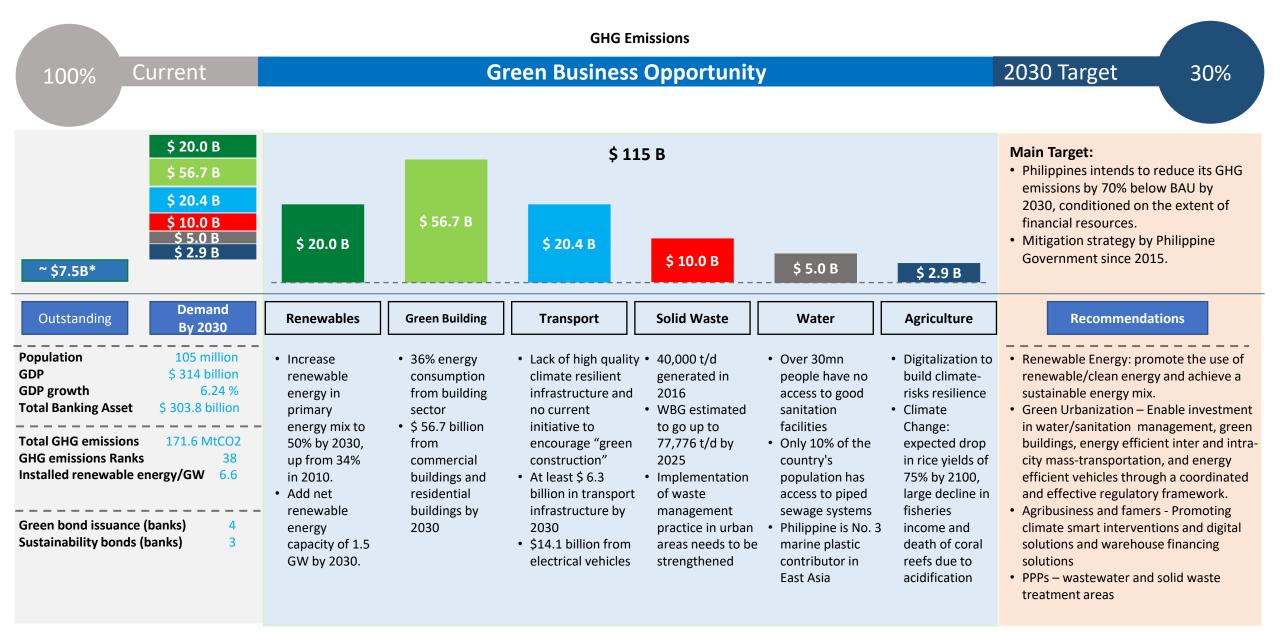
Industrial Energy Efficiency US\$ 307 Billion

Waste US\$ 115 Billion





Top Priority Country – Philippine's Green Business Opportunities





CLIMATE FINANCE IN THE PHILIPPINES

IFC has invested approx. half a billion USD in climate related projects in the Philippines since 2009 and have provided various capacity building programs to train banks and its clients to tap into green finance.

Development Impact 541 Thousand tons CO2 p.a. emission reduction as of Dec 2017

90 Gigawatthours p.a. energy savings as of Dec 2017.

2 Green bonds issued by FIs

Recognition BPI G20 SME Challenge Winner (2010)

PSEF – UNFCCC Momentum for Change Award (2013)

CREATING MARKETS FOR CLIMATE FINANCE

- Work with central bank: BSP became a member of Sustainable Banking Network (GSBN) (2013); BSP-IFC Research on Environmental and Social Risk Management: A Roadmap for Philippine Financial Institutions (2014-2016); IFC-IBRD Forum on Sustainable Finance: "Environmental and Social Interventions in Financial Institutions (FI's) Operations" (2016)
- Green Buildings: Advisory to the Department of Public Works and Highways for the development and implementation of the Philippine Green Building Code, and to Mandaluyong City for the its Green Building Ordinance; Local development and implementation of EDGE
- Scale up climate finance through "30x30 zero program". The name refers to the dual target to increase FI cli-mate lending to 30% of their portfolio (on average) by 2030. The project aims to support FIs to reduce their coal exposure to close to zero, also to support them mitigate their climate risks.
- Capital market initiatives: supporting capital markets development through thematic bonds.



CLIMATE INVESTMENTS IN THE PHILIPPINES

- BPI through RSF (\$40M), RSF II (\$116M) and RSF III (\$73M) supported by funding from Global Environment Fund (GEF) and Clean Tech Fund (CTF).
- \$150M BDO Green Bond: 1st FI issuance in PH and 1st IFC green bond investment in EAP
- US\$150M China Bank Green Bond.
- \$75 million in AC Energy's Green Bond for RE projects
- \$90 million IFC Mabuhay Bond for Energy Development Corporation for Geothermal projects



PHILIPPINES SUSTAINABLE ENERGY FINANCE (SEF) PROGRAM

- In 2008, the Philippine Sustainable Energy Finance (PSEF) Program was launched. IFC Advisory team conducted market scoping studies, seminars to stakeholders (FIs, companies, govt) to build capacity and confidence to lend towards Energy Efficiency (EE) & Renewable Energy Projects (RE). IFC worked 4 advisory client banks to build capacity, generate pipeline, and monitor impact.
- During the life of the program, the banks disbursed US\$880M in loans. Value of energy savings: USD486M.
 GHG emissions avoided 2.1 million tons CO2 / year



Working with Financial Institutions



Creating Markets, Creating Opportunities

INVESTMENT

Financial products tailored to client needs

- Loans
- Equity
- Trade and Commodity Finance
- Derivatives and Structured Finance
- Blended Finance

\$19.1 billion committed in FY19\$58.9 billion committed portfolio

ADVICE

Innovative solutions combining IFC's expertise and tools

- Help Create New Markets
- Unlock Investment Opportunities
- Strengthen Clients' Performance and Impact
- Improve Environmental, Social, and Corporate Governance Standards

\$295.1 million program in FY19

MOBILIZATION

Mobilizing and managing capital for investment

- Syndications
- IFC Asset Management Company

\$28 billion syndicated in last five years

\$10.1 billion under management at IFC AMC

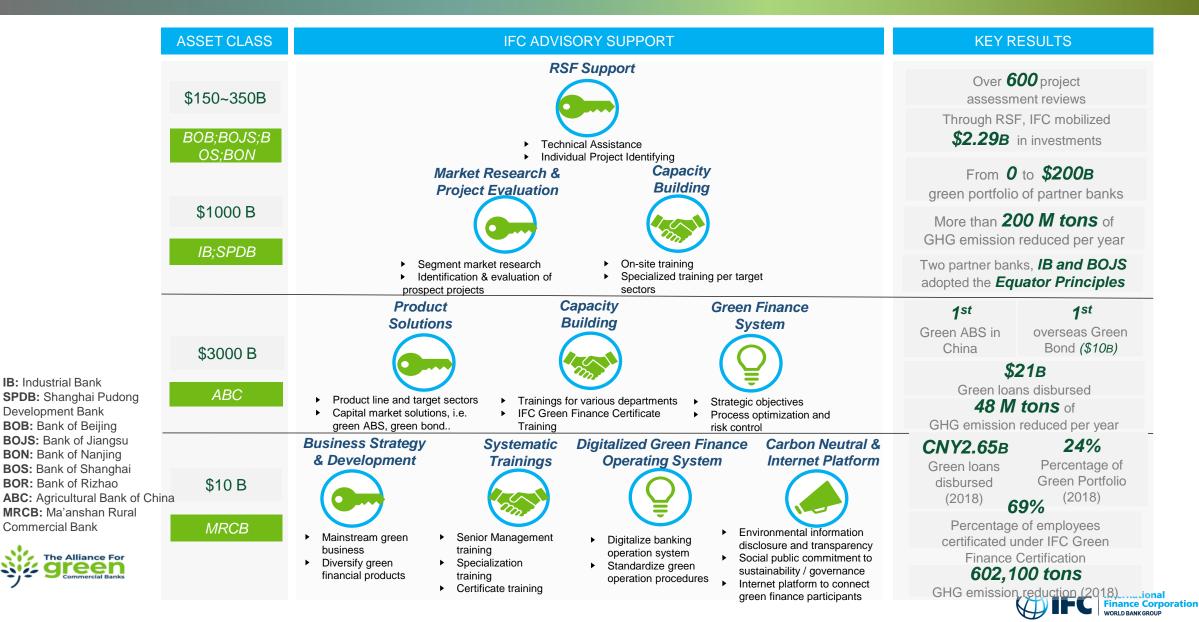


CASE STUDIES IN OTHER EMERGING MARKETS



Creating Markets, Creating Opportunities

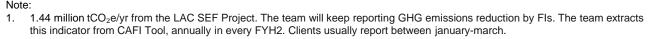
IFC Asia Sustainability and Climate Finance: China Climate Program



Creating Markets, Creating Opportunities

FY17 - FY21





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Financing Energy Access in Asia Lighting Asia Program (India, Pakistan, Afghanistan, Myanmar and PNG)

- IFC's Lighting Asia program is aimed at increasing access to clean, affordable energy by promoting modern off-grid lighting products, and systems in geographies with no or unreliable grid
- The Program builds long term and sustainable partnership between Financial Institutions and Solar Off Gird Companies to build and grow the modern off-grid solar energy markets

Asia Country Programs in Asia work closely with IFC's Lighting Global – WBG's platform to support sustainable growth of the international off-grid solar market

IFC's investment in energy access

IFC has invested in the Access to Clean Power Fund extends debt financing to companies providing renewable energy and energy efficiency solutions in the retail and off-grid Pay-As-You-Go (PAYGO) sector, and in the commercial and industrial sector, both part of the Distributed Generation ("DG") market

IFC investment \$45 mn in Phase II \$150 million Fund (2019)

Globally, 770 million people live without any access to electricity of which 155 mn are in Asia

Decentralized solutions are the least-cost way to provide power to more than half of the population gaining access by 2030

As of the end of 2019, globally the sector had attracted more than US\$ 1.5 billion in investment, with growth in the early years primarily driven by equity, and debt becoming more common recently.

IFC has invested in the ResponsAbility Energy Access Fund (Phase I and II)

Through this project, IFC has reached 120 million people across Asia with quality assured solar energy products since 2016 and GHG emissions avoided 331334 TCO2

The program has a strong focus on women entrepreneurship and to date has helped companies build a cadre of more than 15,000 village level entrepreneurs in rural geographies.

Lighting Global has been instrumental in kickstarting the off-grid lighting sector. We have had the opportunity to work with the Lighting Global team for the last ten years, starting when the industry was in its infancy, and they have always been willing to listen, provide support and take action. Ned Tozun, CEO dlight



Image Courtesy: Frontier Markets, India

Blue Finance in Asia

IFC's First-ever Blue Loan

- IFC provided \$150 million senior loan, along with \$150 million parallel loans from ADB and DEG, to Indorama Ventures Global Services Limited (IVGS), a subsidiary of Indorama Ventures Public Company Limited (IVL), a leading global manufacturer and recycler of PET resin.
- The funding will help the IVL increase its recycling capacity in Thailand, Indonesia, Philippines, India, and Brazil—countries which are grappling with mismanaged waste and serious plastic waste in the environment and invest in renewable energy and resource efficiency projects.
- This marks IFC's first blue loan exclusively focused on addressing marine plastic pollution. A Blue Loan is an innovative instrument whereby the funds raised are certified and tracked exclusively for projects that support a Blue Economy – i.e. sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.

Discovering Blue Finance

- A series of World Bank Group studies were launched to examine the untapped economic opportunities to promote plastic circularity and address marine debris in Malaysia, the Philippines and Thailand.
- Using a plastic value chain approach, the studies evaluate the plastics recycling industry and its role in supporting a circular economy and scaling up recycling efforts via targeted public and private sector interventions.















CLOSING REMARKS

Mr. Satoru Yamadera

Principal Financial Sector Specialist Asian Development Bank





THANK YOU FOR

YOUR PARTICIPATION

