Closing the SDG Financing Gap in ASEAN

A Sustainable Finance Guide for Corporates







In contribution with:





International Capital Market Association

ABOUT

UN Global Compact Network Singapore (GCNS)

Global Compact Network Singapore (GCNS) is the local chapter of the UN Global Compact. As the leading voice on corporate sustainability, GCNS drives multi-stakeholder action to forge a more sustainable future, founded on the Ten Principles of the United Nations Global Compact and the Sustainable Development Goals.

This report, "Closing the SDG Financing Gap in ASEAN - A Sustainable Finance Guide for Corporates" is part of the broad agenda of the UN Global Compact to secure private capital for the SDGs. One key objective is to mobilise companies in ASEAN countries to direct financing to contribute to the SDGs. The report is aligned with the UN Global Compact CFO Taskforce principles, which are the result of a global alliance of Chief Financial Officers (CFOs) committed to bring their sustainable finance business to the next level.

Ernst and Young (EY)

Ernst & Young (EY) is a global leader in assurance, tax, strategy, transaction and consulting services. The insights and quality services EY delivers help build trust and confidence in the capital markets and in economies around the world. EY develops outstanding leaders who team up to deliver on their promises to all of their stakeholders. In doing so, EY plays a critical role in building a better working world for their people, for clients, and for their communities.

The ASEAN Low Carbon Energy Programme (LCEP) is a £15 million, 3-year programme of the UK Government's Prosperity Fund that aims to facilitate green finance flows and improve the regulatory, policy and practical conditions for energy efficiency across ASEAN. EY is the delivery partner for the programme, teaming with the Carbon Trust and IMC Worldwide.

Southeast Asia has a population of more than 600 million people and has a combined GDP equivalent to the world's 7th largest economy. It is the 4th largest exporting region in the world, a major manufacturing hub and is important to global trade flows. While still comparatively strong, economic growth in the region has moderated in recent years and economic inequality is growing, with 87 million people still below national poverty lines. The region's continued economic growth will partly depend on whether it can meet its growing energy demand and the huge energy challenges it faces. The Prosperity Fund ASEAN Low Carbon and Energy programme has been designed to address these issues, in compliance with the International Development (Gender Equality) Act, where the UK can add the most value. The programme operates in the six largest South East Asian countries: Indonesia, Malaysia, Myanmar (Burma), the Philippines, Thailand and Vietnam. It covers 95% of South East Asia's total population, 95% of those in poverty and 86% of its GDP.

DISCLAIMER: The inclusion of company names and/or examples in this publication is intended strictly for learning purposes and does not constitute an endorsement of the individual companies by UN Global Compact Network Singapore.

ACKNOWLEDGEMENT

The authors for this report are Marika Stocker, GCNS and Russell Marsh, EY. GCNS would like to acknowledge the contributions of a number of parties that have provided valuable inputs on the report, in particular Arabesque, DBS Bank, ICMA, and UN Global Compact. Questions related to this report should be sent to info@unglobalcompact.sg and marika.stocker@unglobalcompact.sg. Questions related to the country sections of the report should be addressed to russell.marsh@ sg.ey.com.

SCOPE OF THE REPORT

The target audience for this report are senior managers, CFOs, and other C-suites in ASEAN companies who want their company to get started with sustainable finance or bring their sustainable finance journey to the next level. The report explains the case for sustainable finance and how it supports the triple-bottom line of people, planet and profit. The focus is on the mature markets in ASEAN and on sustainable bonds and loans financing. It also offers insights into local market players' perspectives on what is needed to support closing the SDG financing gap in the region.

The report only shares about private capital solutions coming from corporates as the issuer of sustainable finance products (bonds and loans). Public, and philanthropic investments including blended finance are outside of the scope of this report.

We recommend reading this report in an online version due to many embedded links which may help the reader in further research on the topic.



Abbreviations

ASEAN	Association of Southeast Asian Nations
ACMF	ASEAN Capital Markets Forum
BNM	Bank Negara Malaysia
CBI	Climate Bonds Initiative
CDL	City Developments Limited
CG	Corporate Governance
ESG	Environmental, Social and Governance
EY	Ernst & Young
GBP	Green Bond Principles
GBS	Green Bond Standards
GCNS	Global Compact Network Singapore
GRI	Global Reporting Initiative
GSS	Green, Social and Sustainability
ICMA	International Capital Market Association
KPI	Key Performance Indicator
LCEP	Low Carbon Energy Programme
LMA	Loan Market Association
MAS	Monetary Authority of Singapore
MOF	Ministry of Finance
OJK	Otoritas Jasa Keuangan (Financial Services Authority)
RCF	Revolving Credit Facility
R&D	Research & Development
SBG	Sustainability Bond Guidelines
SBP	Social Bond Principles
SBS	Social Bond Standards
SCM	Securities Commission Malaysia
SDGs	Sustainable Development Goals
SEC	Securities and Exchange Commission
SGX	Singapore Exchange Limited
SLB	Sustainability-linked Bonds
SLL	Sustainability-linked Loans
SME	Small and Medium-sized Enterprise
SPT	Sustainability Performance Targets
SRI	Socially Responsible Investment
SUS	Sustainability Bond Standards
TCFD	Task Force on Climate-Related Financial Disclosures
UN	United Nations
UNEP	United Nations Environment Programme

Table of Contents

Executive Summary	
1. Introduction and Context Setting	
1.1 The need for closing the SDG financing gap in ASEAN	
2. The Business Case for Implementing Sustainable Finance in Your Company	
3. A Roadmap for Companies to Sustainable Finance	
3.1 The Integrated Model for Corporate SDG Finance	
3.2 Step 1: Develop a Credible SDG Impact Theory	
3.2.1 Transition Financing	
3.2.2 Setting Benchmark Targets	
3.2.3 Aligning with National Sustainability Agenda	
3.3 Step 2: Measure and Monitor the Impact of SDG Investments	
3.3.1 Effort-based Methods (Input)	
3.3.2 Result-based Methods (Output and Outcome)	
3.4 Step 3: Integrate SDG Impact in Corporate Strategy & Governance	
3.5 Step 4: Structure Sustainable Finance Transactions & Equity	
3.5.1 Different Product Types	
3.5.2 Issuing Sustainable Finance Products	17
4. Unlocking Sustainable Finance for ASEAN Corporates	
4.1 Challenges and Opportunities - A Stakeholder's Perspective	
4.1.1 Investor Perspective - Arabesque	
4.1.2 Bank Perspective - DBS Bank	21
4.1.3 Independent Third Party Perspective - ICMA	
4.2 Country Perspectives	
4.2.1 ASEAN	
4.2.2 Brunei, Cambodia, Laos and Myanmar	
4.2.3 Indonesia	
4.2.4 Malaysia	
4.2.5 The Philippines	
4.2.6 Singapore	
4.2.7 Thailand	
4.2.8 Vietnam	
5. Outlook: Implications of COVID-19 on Sustainable Finance	
Appendix: Definitions	
References	

Executive Summary

The need for closing the Sustainable Development Goals (SDG) financing gap in the Association of South East Asian Nations (ASEAN) is given: The demand for sustainable investments exceeds the supply of available projects, and available finance is not channelled towards sustainable development at the scale and speed required to achieve the SDGs and the goals of the Paris Agreement. It is therefore vital that private capital markets and corporates play a greater role in financing the SDG funding gap.

While the adoption of sustainable financing is growing, there still exist concerns that incorporating sustainability would result in lower profitability. Academic evidence suggests that there are many benefits associated with sustainable business practices, which have a direct impact on companies' finances. Among others, these benefits include a reduction in financing cost, sustainable profiling, and diversification of investor base, and regardless of the size of the company. Both large companies and small and medium-sized enterprises (SMEs) can participate in the sustainable finance market.

This report provides a roadmap of how companies can realign their business model to provide sustainable projects and contribute to sustainable finance activities. The roadmap consists of four steps:

- 1) Develop a Credible SDG Impact Theory
- 2) Measure and Monitor the Impact of SDG Investments
- 3) Integrate SDG Impact in Corporate Strategy & Governance
- 4) Structure Sustainable Finance Transactions & Equity

A credible impact theory helps companies to issue sustainable finance products in the long term, and not only as a one-off transaction. It is developed at the business level, describing sustainable business models that are aligned with the SDGs and can deliver both impact and profit. It also helps companies which are affected by stranded assets to move their business model to new technologies and markets which are supporting the SDGs (Transition Financing). The fourth step explains the different types of sustainable finance products (sustainability-linked bonds and loans; green, social and sustainability bonds and loans; SDG bonds and loans and equity) and how to structure them. A sustainable finance instrument has two aspects: the financial component and the sustainability component. As a company intending to issue those products, it is necessary to understand both.

Three stakeholders (Arabesque, DBS Bank and ICMA) have provided their views on what is important for corporates (in particular SMEs) when issuing sustainable finance instruments. The ASEAN countries section may help issuers to identify available markets to them. The ASEAN sustainable finance market is at different maturity stages depending on the country. In Brunei, Cambodia, Laos and Myanmar, the sustainable finance market is at the very early stage. In Vietnam, the development of sustainable finance remains limited but shows signs of potential. In Indonesia, Malaysia, Philippines, Singapore and Thailand, a number of policies and initiatives have been introduced to support the development of sustainable finance and sustainable finance has been deployed to some extent.

Green integrity and transparency are even more important for investors if the green bonds are issued in emerging markets. Hence, the availability of environmental, social, governance (ESG) data and non-financial disclosures as well as reporting can become increasingly important for the sustainable finance market in ASEAN. Increased transparency can combat green washing and promote integrity of sustainable finance.

COVID-19 brings about a global crisis but provides an opportunity to build back better, greener and more sustainably. There is potential for a major repricing of the "S" in ESG ratings which addresses the current lack of standardisation in that space and may strengthen efforts on the coherence of sustainability information. As the world recovers from COVID-19, corporates and investors should seize this opportunity to walk a more sustainable recovery pathway, integrating ESG more deliberately and strongly into their consideration matrix.

1. Introduction and Context Setting

1.1 The need for closing the SDG financing gap in ASEAN

To meet the Sustainable Development Goals (SDGs), it is required to increase development financing from "billions" to "trillions". According to the United Nations Conference on Trade and Development's (UNCTAD) World Investment Report, USD 3.3 - 4.5 trillion needs to be mobilised annually to achieve the 2030 Agenda for Sustainable Development. At today's level, the funding gap for investment - public and private - in developing countries is USD 2.5 trillion¹ (see Exhibit 1).

There is evidence that investing in the SDGs makes economic sense as achieving these goals could open up USD 12 trillion of market opportunities, create 380 million new jobs and action on climate change would result in savings of about USD 26 trillion by 2030². To understand how to close the gap, it is important to look at both sides of the equation: the projects being put forward and the capital available to fund them³.

Capital to fund sustainable development is available. The global financial system, given its size, scale and level of sophistication, has a gross world product and global gross financial assets estimated at over USD 80 trillion and USD 200 trillion respectively⁴.

Over the last few years, there has been an increasing trend for global sustainable investments. From 2014 to 2018 the volume grew by 67% to USD 30.7 trillion⁵ (see Exhibit 1) with Europe being the world's biggest socially conscious investing market and Japan's assets holding 18% of the money managed⁶.

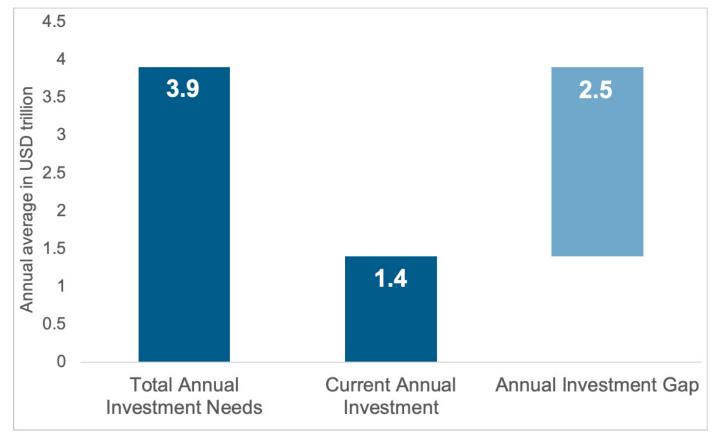


Exhibit 1: Annual Investment Gap in USD Trillions

Source: UN Global Compact

According to a report from the United Nations Environment Programme (UNEP) and DBS Bank, the sustainable investment needed for ASEAN is USD 3 trillion from 2016-2030 and is spread across four sectors: infrastructure (USD 1,800 billion), renewable energy (USD 400 billion), energy efficiency (USD 400 billion) and food/agriculture/land use (USD 400 billion)⁷. However, the project volume for the infrastructure sector in ASEAN which involves private capital has been shrinking since 2017 (see Exhibit 2).

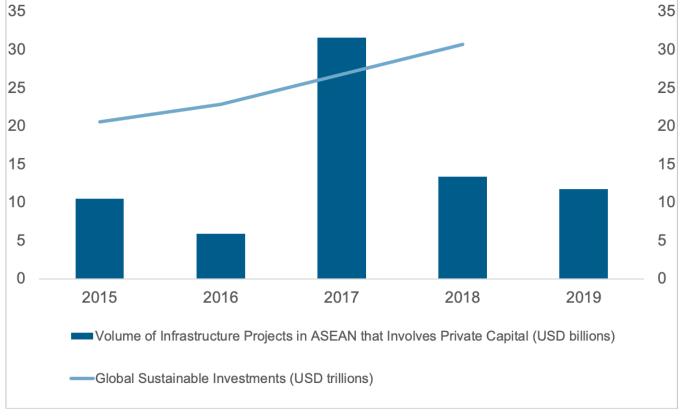


Exhibit 2: Sustainable Investments Increase but High Impact Projects Decline

Source: The World Bank's Annual PPI Database Global Reports from 2015-2019, https://ppi.worldbank.org/en/ppi and GSIA's Global Sustainable Investment Reviews from 2015-2019, http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf

66 Meeting the SDGs requires us to leverage the billions of dollars in official development assistance to trillions in investment of all kinds, whether public or private, national or global.

Jim Yong Kim, Former President, World Bank Group

In short, the demand for sustainable investments exceeds the supply of available projects in ASEAN.

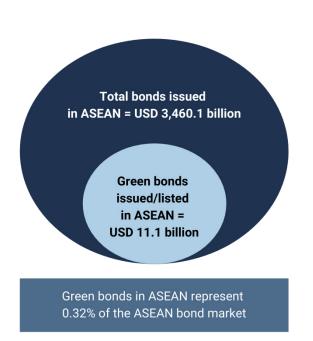
To meet the demand, capital allocation needs to be channelled towards sustainable activities while investments in environmentally damaging activities need to decrease⁸.

At this stage, available finance is not channelled towards sustainable development at the scale and speed required to achieve the SDGs and the goals of the Paris Agreement⁹.

The sustainable bond market for instance represents only a tiny share in the global and local bond market (see Exhibit 3).

It is therefore vital that private capital markets and corporates play a major role in financing the SDG funding gap. The next sections will outline why sustainable finance makes sense from a business perspective and how companies can get involved.

Exhibit 3: Overview of Bond Issuance Volumes in ASEAN and globally, accurate as of March 2020



Green bonds issued/listed in the world = USD 665.1 billion

Total bonds issued in the world = USD 162,545.3 billion

Green bonds across the world represent 0.41% of the global bond market

Source: EY

2. The Business Case for Implementing Sustainable Finance in Your Company

Academic evidence suggests that there are many benefits associated with sustainable business practices, which have a direct impact on companies' finances. A meta-study published in 2015 by the University of Oxford and Arabesque revealed that good Environmental, Social, and Corporate Governance (ESG) performance is linked to better stock price performance (80% of the studies), better operational performance (88% of the studies), and lower cost of capital (90% of the studies)¹⁰.

While the adoption of sustainable financing is growing, there still exist concerns that incorporating sustainability would result in lower profitability. It is an outdated belief that sustainable finance is viewed as a philanthropic investment approach. Corporates must start utilising sustainable financing as a smart business strategy to mobilise capital and tap into opportunities that would deliver sustainability outcomes.

An investment into sustainability is an investment into long-term planning. Sustainable financing should no longer be treated as a niche practice as it is likely to evolve into a more integrated, intentional approach. To catch up with the evolving market, investor demands as well as increasing market regulations, the integration of sustainable financing into corporate businesses is key¹¹. Regardless of the company size, both large companies and SMEs can participate in the sustainable finance market, getting their sustainable projects financed while enjoying the potential benefits of sustainable finance products. Possible benefits include, but are not limited to, reduced financing cost, sustainable profiling, and diversification of investor base¹².

Moreover, some governments (including Singapore, Malaysia and Thailand) promote grant schemes to allow issuers to offset parts of the initial cost for a green transaction (see more details in the country perspectives section).

During the COVID-19 pandemic, sustainable finance products have been outperforming the market on the debt and equity side. For instance, ESG stocks have proved to be more resilient in crisis times¹³ and green bonds are outperforming equivalent regular debt¹⁴.



3. A Roadmap for Companies to Sustainable Finance

In this chapter, it is explained how companies can use their financing to support the SDGs.

First, it is important to differentiate which type of company we are looking at. On the one hand there are green businesses, where their core business already supports sustainability. For example, companies which are producing renewable and clean energy. On the other hand, the majority of companies do not have a sustainability-related business model, such as companies from the manufacturing or construction sector. Of those, more and more identify sustainability as a business opportunity¹⁵.

It is also important to note that it is not only about finding sustainable criteria for the company's assets or projects but also putting a critical lens on the negative externalities, such as environmental and social risks and finding ways to eliminate those. For example, the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations can be a good starting point to analyse climate risks and the ESG disclosure guidelines of listing venues (stock exchanges) may give corporates a feeling on what environmental and social risk indicators are¹⁶.

3.1 The Integrated Model for Corporate SDG Finance

The following roadmap describes how companies can realign their business model to provide sustainable projects and to contribute to a credible impact investment market.

The roadmap describes an integrated business model which would provide guidance on how to raise funds through corporate finance tools for the SDGs. The model also supports moving companies from an isolated green finance activity to a sustainable finance approach on a corporate level. Moreover, corporates also learn how to transition from stranded assets. It is important to highlight that the integrated model for corporate SDG finance can be seen as the ultimate goal for a company transitioning towards a sustainable business model (see Exhibit 4 - Step 1 to 3). As this is a process, not all corporates can start immediately. Step 4 describes sustainable finance products every company can use regardless of their sustainability level.

This section is written in relation to the United Nations Global Compact Action Platform on Financial Innovation for the SDGs. For a detailed explanation about the Integrated Model for Corporate SDG Finance please see the UN Global Compact report <u>"A Roadmap</u> to Mainstream SDG Investments."

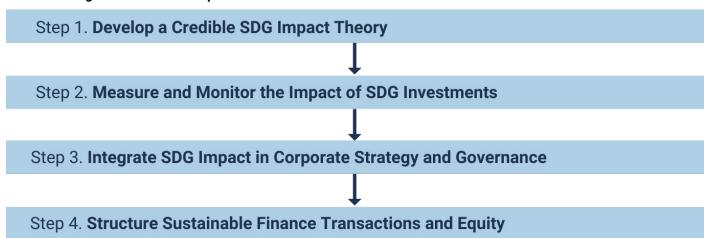


Exhibit 4: Integrated Model for Corporate SDG Finance

Source: UN Global Compact, "A Roadmap to Mainstream SDG Investments"

3.2 Step 1: Develop a Credible SDG Impact Theory

A credible impact theory helps companies to issue sustainable finance products in the long term and not only as a one-off transaction. A company can set its impact goals, targets and key performance indicators (KPIs) with it as well as develop effective impact measurement. A credible impact theory needs to be, among others, unique, intentional, and relevant. It is developed at the business level, describing sustainable business models that are aligned with the SDGs and can deliver both impact and profit (for example a circular economy business model).

3.2.1 Transition Financing

For those companies affected by stranded assets (mostly corporates from high-emitting industries), developing an impact theory is a great opportunity to move their business model to new technologies and markets which are supporting the SDGs. An example for stranded assets would be coal and gas power plants in the course of the low carbon transition. Companies can think about transition strategies such as repurposing older assets, retiring assets and retraining the workforce. Sustainalytics recently launched its Transition Bond Second Party Opinion Service which supports companies signalling to investors the credibility of their transition strategy and potentially enabling companies to receive funding via transition bonds. To explain, Sustainalytics defines transition as "the de-carbonisation of economic activities along pathways that are consistent with international goals of net-zero carbon emissions by 2050"17. Industries which are covered are natural gas and steel and will be extended, among others, to shipping, aviation, cement and aluminium.

DBS Bank also recently published a framework on Sustainable and Transition Finance Framework and Taxonomy which will help corporates to align their funding activities towards projects related to green transition or the UN SDGs.

3.2.2 Setting Benchmark Targets

Another helpful way to build an impact theory is to compare your company with industry peers and their positive and negative contributions to the SDGs. Moreover, an industry analysis to identify the most relevant SDGs for each sector can help companies prioritize and align their efforts. Here, the Principles for Responsible Investment published the Impact Investing Market Map which provides a link between the SDGs and real-world impact investment opportunities. The World Benchmarking Alliance provides free, publicly available corporate sustainability benchmarks based on sector level contribution to the SDGs. Other resources include SDG Sector Roadmaps from the World Business Council for Sustainable Development (WBCSD) and the UN Global Compact's-KPMG SDG Industry Matrix, which give guidance on most material SDGs based on industry.

3.2.3 Aligning with National Sustainability Agenda

For a credible impact theory, it is important to check for alignment with the sustainability targets of the country the company is operating in. This has several benefits including better financial returns as the activities are likely to receive direct or indirect government support in the form of incentives, subsidies or favourable policies and regulations. Moreover, a company's effort is more likely to scale and achieve higher impact as the SDG country plans can inspire collective effort by the private sector. For details on the country specific regulations in ASEAN, please see the section on country perspectives.

3.3 Step 2: Measure and Monitor the Impact of SDG Investments

This step provides guidance on how to measure and track the impact of SDG investments. At a broad level, there are two categories of measurement methods: Effort-based Methods (input) and Result-based Methods (output and outcome).

3.3.1 Effort-based Methods (Input)

Effort-based methods consist of tracking the resources and efforts (input) directed towards the SDGs. They are ideal when there is a high correlation between efforts and results. For example, an investment in a solar power plant and reduction in Greenhouse gas emissions.

The impact measurement can be done either via monitoring the investments (internal and external) or monitoring the strategic initiatives. Monitoring investments is the most straightforward form of impact measurement. For example, the company can do internal investments in research and development (R&D) or new production technology for clean energy or supply chain monitoring. External investments would include entering in a new market. Monitoring the strategic initiatives includes launching SDG-related products or services, improving energy efficiencies for the company, training employees to transition to new technologies and improving working conditions in supply chains. To allow for effective impact measuring, the company needs to set strategic goals and targets and use key performance indicators (KPIs).

3.3.2 Result-based Methods (Output and Outcome)

Result-based methods consist of direct output (firstdegree impact) or ultimate outcome (second-degree impact) of SDG investments or strategic initiatives. Direct output measures the quantity produced (e.g. when financing a solar power plant, the measured output would be the amount of solar-powered electricity produced) and outcome measures focus on the consequences of investments or strategic initiatives, beyond the direct output (e.g. reduction in total GHG emissions). Outcome-based indicators address the relevance of impact and are therefore considered the highest form of impact measurement but also the most challenging one.

Further resources can be found in a series of recent publications on corporate sustainability reporting by the UN Global Compact and Global Reporting Initiative (GRI). Also, companies can directly use many of the targets and indicators delineated in the SDGs to measure their contribution. The full list of targets and indicators of all 17 SDGs can be found <u>here</u>.

Resources: Corporate Reporting on the SDGs

These are joint publications from the UN Global Compact and Global Reporting Initiative (GRI)

Business Reporting on the SDGs: An Analysis of Goals and Targets

This publication contains a list of existing and established disclosures that businesses can use to report, and identifies gaps when disclosure is not available. It also lists illustrative actions that companies can take to make progress towards the SDG targets.

Integrating the SDGs into Corporate Reporting: A Practical Guide

This publication helps companies of all sizes prioritise SDG targets so they can set related business objectives, measure them, and report on progress.

In Focus: Addressing Investor Needs in Business Reporting on the SDGs This publication provides additional information about investor-relevant aspects of corporate SDG reporting.

3.4 Step 3: Integrate SDG Impact in Corporate Strategy & Governance

The model for corporate SDG finance is built upon the integration of the SDG impact theory into a company's core strategy, governance and financing. A key purpose of this integration is to evaluate impact in the context of a company's overall activities. That means assessing not only positive contribution to the SDG but also mitigating negative impacts. Here, the Ten Principles of the UN Global Compact can be used as a reference to meet the minimum fundamental responsibilities in the areas of human rights, labour, environment and anticorruption (see Exhibit 5).

The SDG strategy should also be translated into funding needs and specific investment plans such as R&D, capital expenditures, and other internal investments. Monitoring of the SDG strategy should be integrated into the company's existing corporate governance mechanisms and the financing should take place as part of the overall corporate finance program. Which types of financial instruments to use and how to structure them will be described in more detail in Step 4.

Exhibit 5: The Ten Principles of the UN Global Compact

The Ten Principles of the UN Global Compact

The Ten Principles of the United Nations Global Compact are derived from: the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

HUMAN RIGHTS

- Businesses should support and respect the protection of internationally proclaimed human rights; and
- 2 make sure that they are not complicit in human rights abuses.

+ LABOUR

- 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- 4 the elimination of all forms of forced and compulsory labour;
- 5 the effective abolition of child labour; and
- 6 the elimination of discrimination in respect of employment and occupation.



ENVIRONMENT

- **7** Businesses should support a precautionary approach to environmental challenges;
- 8 undertake initiatives to promote greater environmental responsibility; and
- 9 encourage the development and diffusion of environmentally friendly technologies.

ANTI-CORRUPTION

 Businesses should work against corruption in all its forms, including extortion and bribery.

Source: Global Compact Network Australia



3.5 Step 4: Structure Sustainable Finance Transactions & Equity

3.5.1 Different Product Types

The list of sustainable finance products is long and each of them caters to different demands in terms of structure and sustainability grade. The following list is not exhaustive but it provides an overview of the main products used in ASEAN and can help companies identify the right product for them. International frameworks and regulations that issuers can use, are discussed in the next section "Issuing Sustainable Finance Products."

Sustainability-linked Loans (SLL) and -Bonds (SLB) and Revolving Credit Facility (RCF)

These instruments can be issued regardless of the ESG performance of a company, including companies which do not have a sustainable business model yet. The interest rate of the SLL or RCF is linked to the sustainability performance (known as ESG performance) of the company. If the ESG performance improves, the interest rate decreases and vice versa. The ESG performance is measured through predefined KPIs and assessed against predefined Sustainability Performance Targets (SPTs). This product is most suitable for companies who want to take the first step in their sustainable finance journey and signal to investors the intention to improve the company's ESG performance¹⁸.

Green, Social, and Sustainability Loans

Green, Social, and Sustainability loans are similar to normal loans except that the funds received (so called use of proceeds) need to be committed to finance projects with a sustainable outcome in the green, social or sustainability area. The company receives the loan from the bank in contrast to a bond which is funded by investors via the capital markets.

More information on the type of projects eligible for green- social- and sustainability loans can be found in the <u>Green Loan Principles</u> from the Loan Market Association (LMA)¹⁹.

Different Types of Sustainable Bonds

There are several different types of sustainable bonds with the major ones called green-, social- and sustainability bonds. Similar to green- social- and sustainability loans, these bonds are not different to a normal bond except that the use of proceeds need to be used to fund sustainable projects. The International Capital Market Association (ICMA) has outlined the requirements for a bond to be considered green, social or sustainable in the <u>Green Bond Principles</u>, the <u>Social</u> <u>Bond Principles</u> and the <u>Sustainability Bond Guidelines</u>.

General-purpose SDG Bonds or Loans

The concept of general-purpose SDG bonds or loans transposes some of the best practices in the green, social and sustainability (GSS) bond market into a broader corporate context. Unlike a use of proceeds bond, investors cannot track the exact allocation of funds with general-purpose SDG bonds. The reason is that the funds are not intended for one specific project but to support the company's overall activities that contribute to the SDGs. For example a general-purpose SDG bond could be used to fund activities set by a credible SDG impact theory. More information on the concept of general purpose SDG bonds, can be found in the UN Global Compact report on <u>SDG Bonds</u>.

Beyond Debt - Towards Equity and Corporate Finance

Eventually, a company's sustainability impact theory can be communicated to a broader set of investors who typically invest in general bonds and equity, promoting the overall company as a sustainability or SDG investment. In this context, one can think of sustainable or SDG equity as common stock of companies that have adopted a corporate-level strategy to contribute to sustainable development.

CASE STUDY: Sindicatum Renewable Energy's Green Bonds

Sindicatum Renewable Energy Company, a Singapore headquartered renewable energy developer active in ASEAN and India, issued approximately USD 60 million of green bonds in 2018 and listed them on the London Stock Exchange.

In order to open access to the international capital markets, the green bonds were guaranteed by GuarantCo, a Private Infrastructure Development Group (PIDG) company.

The bonds were innovative in several respects:

By seeking, then receiving the GuarantCo guarantee for these bonds, Sindicatum was able to borrow at better interest rates than otherwise. Sindicatum was able to market bonds rated A1 by Moody's, an investment grade the company would not have achieved on its own.

In addition, the bonds were issued in three tranches: INR 951,100,000 due in 2023; INR 1,585,300,000 due in 2025; and PHP 1,060,200,000 due in 2028 to finance renewable energy projects in India and the Philippines. This allowed Sindicatum to hedge its exposure to the Indian and Filipino currencies over the medium-term because the bonds are repaid in line with the movement of the Indian and Filipino currencies against the US dollar.

Finally, the green bonds were issued in accordance with the ICMA Green Bond Principle and the ASEAN Green Bond Standards (GBS). Moreover, Sindicatum received a second-party opinion from Sustainalytics on their green bond framework which helped to enhance transparency towards investors. At the same time, Sindicatum was the first ever offshore private sector corporate entity to issue a 7-year INR Bond and the PHP- denominated Green Bond is the first to be listed on London Stock Exchange.

It is expected that as a result, over 100,000 people will benefit from clean, renewable energy by the projects in the Philippines and India.

3.5.2 Issuing Sustainable Finance Products

There are two aspects to look at when it comes to structuring sustainable finance products.

The first one is to get an understanding of how the product itself works, for instance a bond. The second one is to know the sustainability aspects which differentiate a "brown" bond from a sustainable one. This section provides an overview of the issuance process of a sustainable bond and highlights important points for corporates to consider.

The process of obtaining a loan is similar in nature to that of a bond, with the difference being the lender (banks for loans and the wider public for bonds), thus only a bond issuance process will be discussed in the following subsection.

Sustainable Bond Issuance Process

Corporates in countries whose capital markets are not developed can explore issuing sustainable bonds in other countries in the region whose capital markets are more developed such as Singapore. Notably, the categories of projects which are eligible for green/ sustainable financing are the same in all countries who have defined them explicitly (Indonesia, Malaysia, the Philippines and Thailand) as they align closely with the ASEAN Green Bond Standards (GBS), Social Bond Standards (SBS) and Sustainability Bond Standards (SUS). Moreover, the process to issue a sustainable bond in ASEAN countries does not differ greatly. A standard sustainable bond issuance process generally follow ten steps, see Exhibit 6 (detailed process might differ depending on individual underwriters).

Exhibit 6: Sustainable Bond Issuance Process

S/N	Step	Description	Entity
1	Define asset strategy	Define and adopt "green" criteria for sustainable bonds. Conduct environmental impact assessment for selected asset/project/portfolio (see step 1-3 in this section on how to develop a credible impact theory).	lssuer
2	Choose underwriter	Select which bank/financial institution to underwrite the sustainable bond.	lssuer
3	Develop green bond issuance framework	 Define the 4 components of the issuance framework based on the selected sustainable guideline/standard, which include: Use of proceeds Project evaluation and selection process Management of proceeds Reporting Common sustainable guidelines or standards are described at the end of the table. 	lssuer
4	Pre-issuance assurance	Verify if the planned bond fulfils the criteria of the adopted guideline/ standard.	External third party
5	Launch and road show	Announce the bond issue publicly and promote the transaction to prospective investors, inviting them to buy the bonds once they are issued.	lssuer together with Underwriters
6	Obtain credit rating	Seek a rating for the bonds, which indicates the rating agency's opinion on the likelihood of the issuer defaulting on repayment.	Issuer, Credit rating agency

7	Issue bond	Signing: Sign the subscription agreement, agreeing to subscribe to the bonds on closing. Closing: The fiscal agency agreement or trust deed are signed, and the bond instrument is created. The investors receive the bonds from the issuer in exchange for payment of the purchase price of the bonds.	lssuer, Underwriter
8	Manage proceeds	Allocate proceeds to the nominated projects and tracking the cost of project. Execute investment options for unallocated net proceeds.	lssuer
9	Conduct ongoing reporting	Disclose project information, use of proceeds and the unallocated proceeds, and environment/social impact.	lssuer
10	Post-issuance assurance	Verify alignment between intended and actual use of proceeds, as well as provide assurance of allocation and impact reporting.	External third party

Source: EY

The appropriate bond structure will depend on the type of company and its level of sustainability engagement (i.e. impact theory), the sophistication of the underlying capital market, and market conditions. After all, the most crucial thing perhaps is that structuring considerations will depend on investors' willingness to pay for it. Here are a few important points to consider:

• Align your sustainability activities with international frameworks and regulations

As outlined in Step 3 of the sustainable bond issuance process, when issuers develop their green bond issuance framework, it is important to align it with international frameworks and regulations. Here, ICMA serves as Secretariat to the <u>Green, Social and Sustainable Bond</u> <u>Standards</u>, including <u>Sustainability Linked Bond</u> <u>Principles</u> which have become the leading frameworks globally for issuance of bonds with sustainability features. ICMA also published a guide on <u>Mapping the SDGs to</u> <u>Green, Social and Sustainability Bonds</u> where companies can evaluate the financing objectives of a given Green, Social or Sustainability Bond/Bond Programme against the SDGs. More and more investors are setting targets for SDG-aligned investments and an investor survey by Morgan Stanley Capital Investment revealed that the SDGs are clearly becoming the dominant framework for impact investing²⁰.

Building on the ICMA principles, the Climate Bond Initiative (CBI) has developed the Climate Bond Standard, with a <u>sectoral taxonomy</u> based on the input of scientists to ensure that each project is aligned with the objectives of the Paris Agreement. The criteria allows investors to select "climate bonds" from various sectors, such as renewable energy (solar, hydro, wind, geothermal), green buildings (residential or commercial), low-carbon transport, water management, land use and forestry, or even shipping²¹. The ASEAN Capital Markets Forum (ACMF) developed green bond standards in collaboration with ICMA, using ICMA's green bond principles as the basis. <u>ASEAN</u> <u>Green Bond Standards</u> aim to provide more specific guidance on how the Green Bond Principles are to be applied across ASEAN. They also developed the <u>ASEAN</u> <u>Social Bond Standards</u> and <u>ASEAN Sustainability Bond</u> <u>Standards²²</u>. For loan products, there is the Loan Market Association's <u>Green Loan Principles</u> and <u>Sustainability</u> Linked Loan Principles.

• Conduct external reviewers to verify your planned sustainability bonds and loans

Issuers should conduct external reviewers to verify if the planned sustainability transaction fulfils the criteria of the adopted guidelines and standards. Although the frameworks and standards from ICMA, ACMF and LMA do not ask for verification on a compulsory basis, they recommend conducting one. External reviewers can come into play in different forms such as providing a second-party opinion, verification, certification and rating. The following <u>list</u> from ICMA shows external reviewers who have voluntarily committed to align with the guidelines consistent with any regulatory obligations.

For issuers to receive the certification mark from CBI, a prospective issuer must appoint an <u>approved verifier</u> and ensure that these climate bonds to be easily identifiable by global investors as part of the process. Moreover, external reviewers also provide their expertise to assist issuers in advising on environmental sustainability or other aspects of the issuance of a sustainability bond²³. Singapore, Thailand and Malaysia have a grant scheme in place where issuers get reimbursed for the costs of external reviewers (see more info in the country perspectives section).

$\boldsymbol{\cdot}$ Be transparent to investors by providing adequate disclosure and reporting

Through annual reports and other publications, corporates can help signal integration of sustainability into business strategy to allow easier identification for sustainable finance. With recent technological developments, transparency can be introduced into supply chains and companies can partake in more information-sharing platforms to allow stakeholders to effectively evaluate risks and benefits²⁴. Issuers of green, social and sustainability bonds have to provide allocation and impact reporting. Moreover for sustainability-linked bonds, issuers need to report the KPI performance against the sustainability performance targets and the related impact against the targets. Therefore, it is important that the company has relevant governance and systems in place, to allow for an effective internal reporting/data flow²⁵.



4. Unlocking Sustainable Finance for ASEAN Corporates

This section is divided into two main parts. The first provides the viewpoints from the following stakeholders in ASEAN on sustainable finance and how they can support companies (in particular SMEs) on that matter:

- *Investor side:* Arabesque, which is a group of financial technology companies offering sustainable investment advisory, and data services through advanced ESG and Artificial Intelligence capabilities.
- Banking sector: DBS Bank, a leading financial services group in Asia with its head quarter in Singapore.
- *Independent third party:* ICMA, is a not-for-profit membership association that serves the needs of its wide range of member firms in global capital markets.

The second part provides an overview of the current status of sustainable financing in ASEAN and shall help issuers identify available markets to them.

4.1 Challenges and Opportunities - A Stakeholder's Perspective *4.1.1 Investor Perspective - Arabesque*

QN: How can a green finance transaction from a corporate issuer get your attention? What is important for you as the investor?

ANS: Arabesque considers both financial and sustainability factors when analysing a company for investment. Arabesque only invests in companies that perform well on material ESG topics, and does not invest in companies that are in breach of the UN Global Compact core principles: human rights, anti-corruption, labour rights and environmental protection. A company that is actively involved in green finance transactions could have a strong environmental score, which may increase the chance of our fund investing in the company. This is especially true if environmental topics are material to the sector being analysed. As mentioned previously, we find that companies performing well on material ESG topics tend to outperform financially. As investors, this is important information.

For Arabesque it is important that issuers are transparent in their reporting on sustainability topics and that they have a willingness to engage with investors.

QN: Do you have a sector preference for your ESG investments?

ANS: Arabesque does not have a sector preference for ESG investments. The ESG analysis undertaken by Arabesque is sector-based and companies from different sectors are not compared against each other. Furthermore, the principle of financial materiality is applied at a sector level. This means only sustainability factors that can explain a company's financial performance are considered. Financial materiality is calculated differently for each sector.

QN: What is your view on the pricing of green finance transactions vs "brown" ones?

ANS: Investors should not have to pay up for ESG investments. Academic evidence suggests that integrating material ESG factors enhances the information environment for investors, and improves risk adjusted portfolio returns. ESG should therefore be considered in all investment decisions, and this analysis should not be paid for by investors. "Green finance" is a very broad term and can refer to many things, from thematic climate portfolios to private equity involvement in a farming project. Terms like "green" and "brown" can confuse corporates and investors if not properly described.

4.1.2 Bank Perspective - DBS Bank

QN: Which sectors are better positioned for financing sustainable projects? What can companies, not coming from a sustainable-related sector, do in terms of sustainable finance?

ANS: Different sectors possess different levels of risks and opportunities. Across sectors and projects, some sustainable projects undertaken have already been made commercially bankable, others are just starting out, while others may still have practical challenges to overcome. The World Wide Fund for Nature has recently published the <u>Bankable Nature</u> <u>Solutions</u> report that highlights how projects in climate-smart agriculture, environmental protection, forestry, water and sanitation, and renewable energy projects can leverage finance for nature-based solutions.

Sectors that have established means of measuring and managing sustainable performance and outcomes tend to be better positioned for bankable sustainable projects. For example, recognising the global standards such as the Leadership in Energy and Environmental Design (LEED), as well as Building Research Establishment Environmental Assessment Method (BREEAM), the real estate sector has hugely benefited from raising of bonds and sustainability-linked loans. Similarly, the soft commodities sector also has similar sustainability performance standards such as the Roundtable on Sustainable Palm Oil (RSPO), Forest Stewardship Council (FSC), Fairtrade International, and Rainforest Alliance certifications, among others. Companies in this sector looking to transition into more sustainable business models can utilise such performance metrics in applying for sustainability-related financial products.

Sustainable finance is also applicable across sectors, with varying sector-specific objectives and purposes. For instance, companies can participate by reviewing and improving their business operations and practices in accordance to selected ESG metrics for a lower interest rate on credit facilities. An example of this is Singapore's first SME sustainability-linked loan that <u>Chew's Agriculture</u> signed with DBS Bank, which allowed the SME to enjoy lower interest rates upon the condition that it meets the Humane Animal Farm Care Standards. Another example is City Developments Limited (CDL)'s <u>SDG innovation loan</u>, where CDL will be eligible for lower interest rates when it achieves its sustainability performance targets that were mutually agreed with DBS Bank for innovations that contribute to the SDGs.

QN: Which challenges can corporates face in their sustainable finance journey and how to overcome those?

ANS: Corporates and SMEs in ASEAN are widespread across markets with highly diverse economic attributes, culture, language and religion. Against this backdrop, finding the right balance between sustainability and survivability has been an ongoing challenge for all. Pressed with operational issues including cash flow and liquidity, employee productivity as well as supply chain and inventory disruptions, sustainability inevitably falls down the list of priorities. Therefore, it is not surprising that measuring and managing sustainability performance (e.g. calculating carbon footprint, sourcing for sustainable vendors) may be perceived as an additional cost. Furthermore, with absence of a regional currency, cross-border transactions to facilitate sustainable finance may become an unnecessary additional cost.

Fortunately, there is growing evidence that sustainability initiatives can improve bottom line performance as significant benefits and cost savings can be yielded from adopting sustainable business practices. The initial cost of integrating sustainability into core business may be more than offset by cost savings, reduced risk and positive brand association. More importantly, corporates will gain the competitive edge to meet growing demands from stakeholders for more sustainable products and services.

Quantifying impact and cost savings from sustainability practices, measurement and management of ESG metrics may be an area that corporates face difficulties in. Without such quantitative measures, it can be difficult to convince stakeholders of the companies' commitment to sustainable development and transition. To overcome this, corporates can refer to industry alliance standards and frameworks, as well as reputable ESG ratings and indices that list ESG metrics that the company can peg their performance to, where measurement criteria have been pre-defined by ratings and indices themselves.

QN: How can DBS Bank help corporates in sustainable finance?

ANS: DBS Bank stands by our customers who are motivated to make a positive impact. With the growing urgency and demand for more sustainable businesses and climate-resilient economies, we will continue to structure financing solutions to spearhead this transition. Some financing solutions that we have supported and participated in include:

- Sustainability-linked Loans, including transactions with a Singaporean SME Chew's Agriculture
- Green Loans, including transactions with GuocoLand, Evia Real Estate & Metro Holdings and others
- <u>Sustainable Bonds</u>, including Green Bonds with Vena Energy, and the Women's Livelihood Bond with Impact Investment Exchange
- Published the <u>Sustainable and Transition Finance Framework and Taxonomy</u> as a reference to guide clients to adapt and build resilience
- Partnered with Halcyon to set up <u>HeveaConnect</u>, a digital trading marketplace for sustainable rubber that facilitates sustainable financing between upstream and downstream sustainable rubber and financial players
- Published the <u>Green Finance Opportunities in ASEAN</u> report with UNEP, to help increase awareness and understanding of regional sustainable finance landscape and opportunities
- Published the <u>Sustainable Digital Finance in Asia</u> report with the Sustainable Digital Finance Alliance that highlights opportunities for innovative sustainable products by tapping into digital innovations

4.1.3 Independent Third Party Perspective - ICMA

QN: How can SMEs meaningfully contribute to sustainable finance activities?

ANS: In the ecosystem of sustainable finance where transparency is key, SMEs may be the supplier or customer of a large conglomerate which has committed to ESG reporting, or obtain concessionary financing from multilateral development banks or a sustainable featured loan from their banks. In either of these situations, the SMEs may be asked about their sustainable activities and shall be prepared for sustainability reporting and disclosure. The SMEs are an indispensable player in the sustainable finance market and should be informed of their importance for constructing a realm of sustainability-related data.

QN: Which actions from corporates would help you to support your work in sustainable finance?

ANS: ICMA encourages corporate issuers to join the Green and Social Bond Principles (GBP/SBP). Any issuer of a green or social bond aligned with the GBP/SBP is eligible to become a full member of the Principles. Membership in the GBP/SBP will allow corporate issuers to participate directly in the evolution and drafting of global market standards and get involved in the many technical working groups under the GBP/SBP umbrella. As the GBP/SBP membership is weighted towards the bank sector and towards Europe/Americas, ICMA would especially welcome ASEAN corporates to join the Principles to ensure that the corporate issuer perspectives and innovations from ASEAN are known and influential in the global conversation on sustainable finance.

More informally, ICMA benefits greatly from ongoing dialogue with corporates who are considering or in the process of GSS issuance. ICMA is keen to understand better the questions and concerns that corporates in the region may have about sustainable finance, as this helps to continually improve global standards and education.

QN: What is ICMA offering to help corporates in their sustainable finance journey?

ANS: ICMA maintains a <u>Resource Centre</u> for an easy-access overview of documentation from the sustainability standards and principles, and other important documentation for the green, social and sustainability sectors as well as research and learning resources. Corporates may find this knowledge centre useful.

4.2 Country Perspectives

The ASEAN region is highly vulnerable to ongoing climate change and related threats that disproportionately affect the poor and exacerbate poverty, such as reduction in crop productivity, destruction of assets, and depletion of natural resources. To address these issues, access to large-scale, dedicated green finance is required, but unfortunately, climate and sustainable finance remain limited especially in lower middle-income countries and least-developed countries of the region. The required scale and cost efficiencies make debt capital markets the natural financing choice for this challenge. Companies coming from underdeveloped local capital markets will need additional support for sustainable finance. Projects like <u>Earth Wake</u> aim to provide technical assistance and climate finance through international capital markets to enable vulnerable communities, entrepreneurs, SMEs and micro SMEs in developing Asia-Pacific countries to strengthen resilience and adapt to climate change. Through technical assistance and a well-diversified pooled regional portfolio structure, such projects aid market creation of inclusive green finance and prepare the financial ecosystem for tapping debt capital markets for climate investments²⁶.

4.2.1 ASEAN

In ASEAN, the sustainable finance market is at different stages of development depending on the country. In Brunei, Cambodia, Laos and Myanmar, the sustainable finance market is at the very early stage. In Vietnam, the development of sustainable finance remains limited but shows signs of potential. In Indonesia, Malaysia, Philippines, Singapore and Thailand, a number of policies and initiatives have been introduced to support the development of sustainable finance which has been deployed to some extent. Sustainable bonds have been issued in these countries.

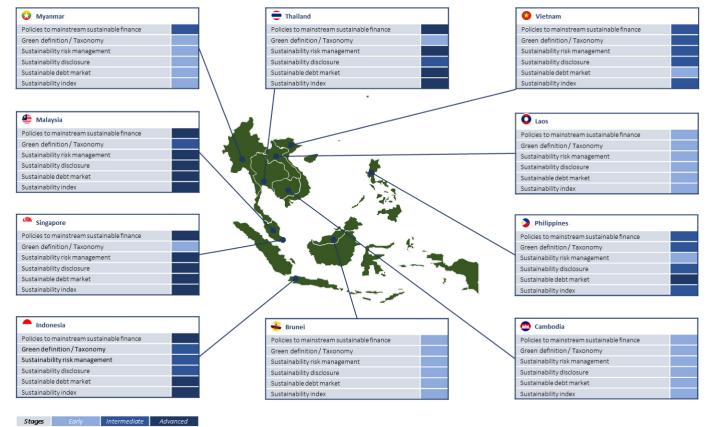
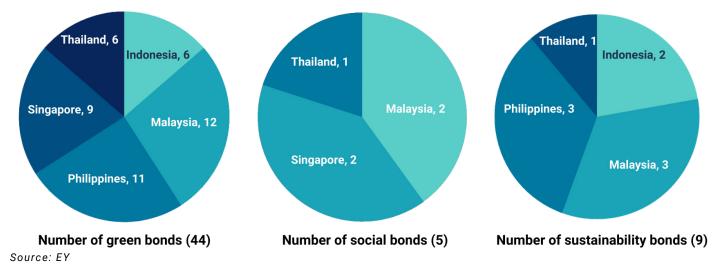


Exhibit 7: Overview of the ASEAN Sustainable Finance Market

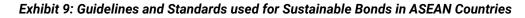
Source: EY

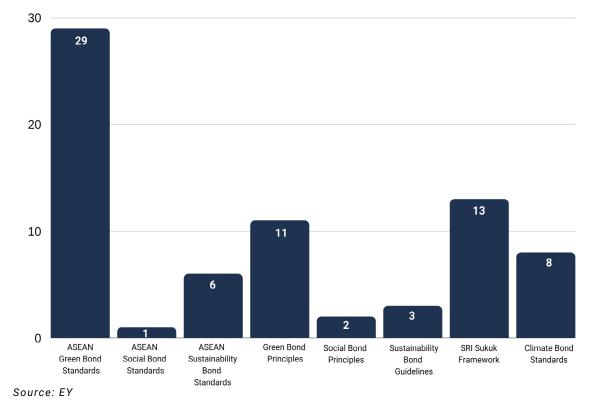
In terms of the sustainable bond market, 58 sustainable bonds (i.e. green bonds, social bonds and sustainability bonds) amounting to USD 13.8 billion have been listed/issued in ASEAN (as of March 2020). These 58 sustainable bonds consist of green, social and sustainability benchmark bonds which have been issued by all issuer types against certification standards. The world's first green sukuk was issued in Malaysia. Indonesia is among the first issuers of sovereign green bonds.

In addition to sustainable bonds, sustainable loans are another set of financial instruments corporates could explore to finance their sustainable projects or assets. However, as the volume of sustainable bonds are significantly larger than sustainable loans, and information on sustainable loans is not as available on public domain, the rest of the sections will focus on the sustainable bond market.









CASE STUDY: Olam's Sustainability-linked loans

In June 2020 leading food and global agri-business, Olam International Limited secured a revolving sustainabilitylinked credit facility aggregating US\$250 million that is linked to meeting key sustainability performance indicators. The interest margin on the Facility is linked to the achievement of sustainability KPI improvement targets and could be lower than comparable conventional loans, if those targets are met.

"This facility is the third sustainability-linked loan that Olam has executed in just the last two years with the support of our banking partners and goes to the heart of our purpose of Re-imagining Global Agriculture and Food Systems."

Under the Facility, Olam has identified specific KPIs that are aligned with the three purpose outcomes of the company's sustainability strategy:

- · Prosperous Farmers and Food Systems,
- · Thriving Communities, and
- · Regeneration of the Living World.

The KPIs will be tracked and reported by Olam's Corporate Responsibility & Sustainability team. Ernst & Young will perform procedures to independently assess the achievement of the KPIs.

This is the third such Facility secured by Olam. It announced a US\$525 million sustainability KPI-linked RCF last year and Asia's first sustainability-linked club loan of US\$500 million in 2018. Proceeds from all three facilities will be applied towards general corporate purposes of Olam and its subsidiaries.

4.2.2 Brunei, Cambodia, Laos and Myanmar

Overview of Sustainable Bonds Issued

No sustainable bond has been issued in Brunei, Cambodia, Laos and Myanmar.

Status of the Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

No policy or measure has been introduced by the governments to support the development of sustainable finance in Brunei, Cambodia, Laos and Myanmar.

It may be noted that the Prime Minister of **Laos** approved, in January 2019, the National Green Growth Strategy for 2030 which outlines a multi-sector agenda through 2030 that seeks to facilitate the shift to greener growth. Key priorities include forestry and rural development, the water/energy nexus, climate change mitigation and adaptation, pollution, environmental fiscal instruments, gender and opportunities for financing the strategy.

In **Myanmar**, the Ministry of Natural Resources and Environmental Conservation (MONREC) is developing Myanmar's Green Economy Framework. The framework will outline a green financing system for delivering green growth and will be structured around four objectives: stimulating green investments; managing brown investments; ensuring sustainable finance and developing human capital.

Green Definition / Taxonomy | Sustainability Disclosure

No taxonomy defining sustainable economic activities has been established, and no policy requiring sustainability disclosure from companies has been introduced in Brunei, Cambodia, Laos, and Myanmar.

Sustainable Debt Market

No green bond, social bond or sustainability bond has been issued in those markets. No policy or regulation has been introduced to support the deployment and use of sustainable debt in Brunei, Cambodia, Laos and Myanmar.

Brunei has a sukuk market which, historically, has mostly been consisting of sovereign sukuks. Since 2006, the government has been issuing sukuks continuously every year in order to develop a yield curve that may serve as a benchmark for corporate sukuks as well as provide domestic financial institutions with a liquid and safe investment instrument.

Cambodia has a bond market which currently has four listed bonds issued by three different companies. As of October 2019, the outstanding amount of bonds was about KHR 284.8 billion (approximately USD 70.3 million). While the government has not introduced any policy related to sustainable debt, there have been some efforts from ABC to promote sustainable finance in the banking sector through the launch of the Cambodia Sustainable Finance Principles, which form a voluntary framework that aims to help banks take into account sustainability considerations in their lending operations.

Laos has a bond market which currently has 15 listed bonds issued by the government. As of October 2019, the outstanding amount of bonds was about LAK 1,051.2 billion (approximately USD 118.8 million).

Myanmar has a bond market where the government has been issuing bonds since 1993. As of October 2019, the outstanding amount of government bonds was about MMK 11 trillion (approximately USD 7.2 billion).

Sustainability Index

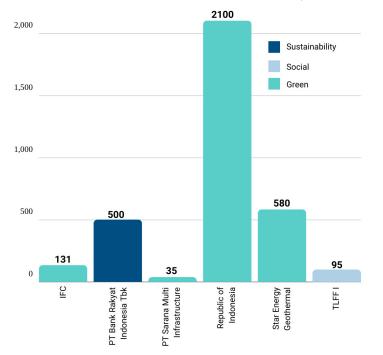
No sustainability index based on the value of underlying assets from **Brunei** is available. There is no stock exchange in Brunei. However, the government of Brunei is planning to establish a stock exchange and has earmarked BND 414.7 million (USD 306.3 million) for that purpose.

Cambodia has a stock exchange – the Cambodia Securities Exchange (CSX). Five companies are listed on CSX.
Laos has a stock exchange – the Laos Securities Exchange (LSX). Currently, 11 companies are listed on LSX.
Myanmar has a stock exchange – the Yangon Stock Exchange (YSX). Currently, five companies are listed on YSX.

4.2.3 Indonesia

Overview of Sustainable Bonds Issued (as of March 2020)

Exhibit 10: Sustainable bonds issued in Indonesia (value in USD million) by alphabetical order



Source: EY

Status of Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

In 2014, Otoritas Jasa Keuangan (OJK) – the Financial Services Authority in Indonesia – published the Sustainable Finance Roadmap in Indonesia, setting forth the measures that need to be adopted by 2024 to improve sustainable finance in Indonesia. OJK also issued POJK No. 60/2017 on guidance for green bond issuance in Indonesia.

Green Definition/Taxonomy

No taxonomy defining sustainable economic activities has been established in Indonesia. However, POJK No. 60/2017 defines a list of green activities (KUBL) which are eligible to green bond financing.

Sustainability Disclosure

POJK No. 51/2017 regulation requires Financial Service Institutions, issuers and publicly listed companies to prepare a Sustainability Report that describes their economic, financial, social and environmental performance in running sustainable business.

Sustainability Debt Market

As of March 2020, six green bonds/sukuks have been issued in Indonesia. In addition to green sukuks, two sustainability bonds have been issued in Indonesia. Issuances of green bonds and green sukuks from the government in Indonesia are guided by Indonesia's Green Bond and Green Sukuk Framework.

Sustainability Index

In June 2009, the SRI-KEHATI Index was launched by the Indonesia Stock Exchange in cooperation with Yayasan Keanekaragaman Hayati Indonesia. In addition, FTSE Russell launched in April 2016 the FTSE4Good ASEAN 5 Index.

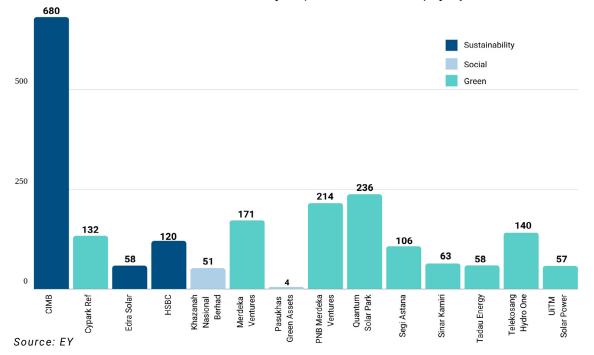
How to Issue Sustainable Bonds in Indonesia

The issuance of a sustainable bond in Indonesia generally follows a ten-step process, as described in the section sustainable bond issuance process, see Exhibit 6. In addition, OJK issued POJK No. 60/2017²⁷ on guidance for green bond issuance in Indonesia.

4.2.4 Malaysia

Overview of Sustainable Bonds Issued (as of March 2020)

Exhibit 11: Sustainable bonds issued in Malaysia (value in USD million) by alphabetical order



Status of the Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

In November 2019, Securities Commission Malaysia (SCM) issued the Sustainable and Responsible Investment Roadmap which seeks to create a supportive environment for SRI and outlines the role of the capital market in driving Malaysia's sustainable development. SCM also released an SRI Sukuk Framework to facilitate the issuance of SRI sukuks.

Green Definition/Taxonomy

In December 2019, Bank Negara Malaysia (BNM) launched a discussion paper on Climate Change and Principle-based Taxonomy. BNM is currently inviting feedback on the paper from market players²⁸.

Sustainability Disclosure

In Malaysia, the Sustainability Reporting took effect on a staggered basis over a period of three years, starting from 31 December 2016 to 31 December 2018. As of 2019, all companies listed on Bursa Malaysia under the Main Market and ACE Market are required to publish a Sustainability Statement in their annual reports.

Sustainability Debt Market

As of March 2020, a total of ten green SRI sukuks were issued in Malaysia, starting with the issuance of the world's first green sukuk in 2017 by Tadau Energy (MYR 250 million) to finance 50 MW of solar projects.

To encourage the use of green SRI sukuk as a mean to raise funding, a number of grants and incentives have been introduced:

- MYR 6 million Green SRI Sukuk Grant Scheme
- Tax exemption for the sukuk issuer on the grant received under the Green SRI Sukuk Grant Scheme until the year of assessment 2020
- Tax deduction on issuance costs of SRI sukuk approved or authorised by or lodged with the SCM until the year of assessment 2023

Sustainability Index

In 2014, Bursa Malaysia and FTSE Russell launched the FTSE4Good Bursa Malaysia Index which consists of Malaysian stocks selected from the top 200 companies in the FTSE Bursa Malaysia EMAS Index based on their ESG performance.

In addition, FTSE Russell launched in April 2016 the FTSE4Good ASEAN 5 Index whose constituents are companies with prime ESG practices listed on Bursa Malaysia, Indonesia Stock Exchange, the Philippine Exchange, Singapore Exchange and the Stock Exchange of Thailand.

How to Issue Sustainable Bonds in Malaysia

The issuance of a sustainable bond in Malaysia generally follows a ten-step process, as described in section sustainable bond issuance process, see Exhibit 6.

In addition, launched in 2014 by SCM, the SRI Sukuk Framework²⁹ is an extension of the existing sukuk framework and aims to facilitate the financing of sustainable and responsible investment initiatives. In November 2019, SCM revised the SRI Sukuk Framework, expanding the list of eligible SRI projects, enhancing disclosure and reporting requirements, and clarifying the role of the external reviewer.

4.2.5 The Philippines

Overview of Sustainable Bonds Issued (as of March 2020)

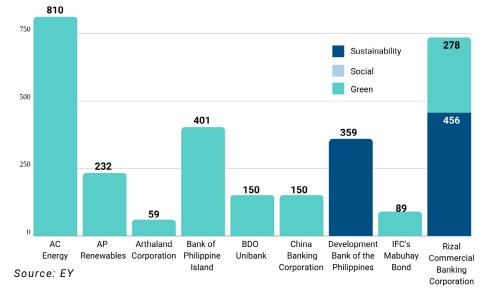


Exhibit 12: Sustainable bonds issued in The Philippines (value in USD million) by alphabetical order

Status of the Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

In April 2020, Bangko Sentral ng Pilipinas (BSP) issued Circular No. 1085³⁰ or the Sustainable Finance Framework ("Circular"), requiring banks to embed sustainability principles in their corporate governance framework, risk management systems, and strategic objectives.

Additionally, in order to coordinate efforts on green finance, the government plans to set up an inter-agency task force on green finance called the Green Force. The Securities and Exchange Commission has also issued guidelines to help issuers issue sustainable bonds under the ASEAN GBS, SBS and SUS.

Green Definition/Taxonomy

No taxonomy defining sustainable economic activities has been established in The Philippines. However, the Guidelines on the Issuance of Green Bonds under the ASEAN GBS defines categories of projects that can be financed using a green bond.

In addition, FTSE Russell launched in April 2016 the FTSE4Good ASEAN 5 Index which constituents are companies with prime ESG practices listed on Bursa Malaysia, Indonesia Stock Exchange, the Philippine Exchange, Singapore Exchange and the Stock Exchange of Thailand.

Sustainability Disclosure

In July/August 2020, the Securities and Exchange Commission (SEC) Philippines became a formal supporter of the Task Force on Climate-related Financial Disclosures (TCFD), and the Bangko Sentral ng Pilipinas (BSP) became member of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS).

In 2019, the SEC issued the Sustainability Reporting Guidelines for the Philippine Publicly-Listed Companies, which is based on the Global Reporting Initiative (GRI) Standards, the Sustainability Accounting Standards Board (SASB) Standards, the International Integrated Reporting Council (IIRC) Framework, the TCFD Recommendations, and the UN SDGs. The Sustainability Reporting requirement is currently on a "comply or explain" basis for the first three (3) years of implementation and mandatory, thereafter, for publicly-listed companies. The disclosures include climate-related financial disclosures recommended by the TCFD and required by GRI.

In April 2020, the BSP released a Sustainable Finance Framework in recognition of the climate-related financial risk that could impact banks' operations and financial interest. The Circular (No. 1085) outlines the new disclosure requirements that banks should include in their Annual Reports. The BSP provided a transitory provision of three (3) years from the effectivity of the Circular for the banks to fully comply with the provisions of the Circular.

Sustainability Debt Market

As of March 2020, ten green bonds have been issued in the Philippines. In November 2019, AC Energy issued the world's first US dollar denominated fixed-for-life green bond, with a fixed coupon of 5.65%. Moreover, three sustainability bonds have been issued.

Sustainability Index

In April 2016, FTSE Russell launched the FTSE4Good ASEAN 5 Index whose constituents are companies with prime ESG practices listed on Bursa Malaysia, Indonesia Stock Exchange, the Philippine Exchange, Singapore Exchange and the Stock Exchange of Thailand. The index methodology is publicly available on FTSE Russell's website.

How to Issue Sustainable Bonds in the Philippines

The issuance of a sustainable bond in the Philippines generally follows a ten-step process, as described in the section sustainable bond issuance process, see Exhibit 6.

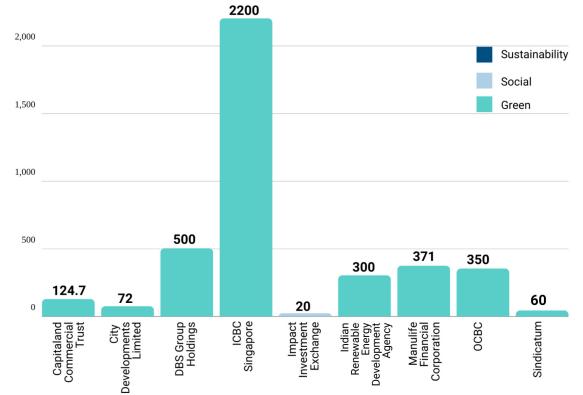
In addition, following the launch of the ASEAN GBS in November 2017, SEC in the Philippines issued and approved, in August 2018, the Guidelines on the Issuance of Green Bonds under the ASEAN GBS (SEC Memorandum Circular No. 12, Series of 2018)³¹ in order to assist issuers register and issue bonds that comply with the ASEAN GBS.

Similarly, for social and sustainability bonds, SEC issued, in April 2019, respectively the Guidelines on the Issuance of Social Bonds under the ASEAN SBS (SEC Memorandum Circular No. 9, Series of 2019)³² and the Guidelines on the Issuance of Sustainability Bonds under the ASEAN SUS (SEC Memorandum Circular No. 8, Series of 2019)³³. Those guidelines aim to help issuers issue bonds that are compliant with the ASEAN SBS and SUS.

4.2.6 Singapore

Overview of Sustainable Bonds Issued (as of March 2020)

Exhibit 13: Sustainable bonds issued in Singapore (value in USD million) by alphabetical order*



Source: EY

Status of the Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

In November 2019, the Monetary Authority of Singapore (MAS) unveiled a Green Finance Action Plan. MAS is putting in place initiatives in three areas: (i) building financial system resilience to environmental risks; (ii) developing Green Finance solutions and markets; and (iii) leveraging innovation and technology.

Green Definition/Taxonomy

No taxonomy defining sustainable economic activities has been established in Singapore.

Sustainability Disclosure

In 2016, the SGX introduced a sustainability reporting requirement for all listed companies which took effect for any financial year ending on or after 31 December 2017. Currently there are 27 companies and organisations that are supporting TCFD, including CapitaLand, CDL, DBS Bank, OCBC Bank, and SGX. As TCFD supporters, they all pledge support to climate-related disclosures.

MAS' proposed Guidelines on Environmental Risk Management also sets out MAS' supervisory expectations for banks, insurers and asset managers to make regular and meaningful disclosure of environmental risks, taking reference from international reporting frameworks to guide their disclosure, including the recommendations from TCFD.

Sustainability Debt Market

In Singapore, a sizable volume of sustainable debt finance has been deployed in the form of not only green bonds but also green loans and sustainability-linked loans. To promote issuance of green, social and sustainability bonds, the Sustainable Bond Grant scheme was launched by MAS in 2017. Sustainability-linked loans are also popular in Singapore as companies enjoy the flexibility in the use of loan proceeds.

*The following issuance have also filed a Return on Debts Securities (RODS) for issuance in Singapore: TLFF I (Indonesia), Star Energy Geothermal (Indonesia), and AC Energy (the Philippines) totalling USD 300m worth of green bonds.

The Sustainable Bond Grant Scheme covers costs of up to \$100,000 per transaction. Costs covered are in respect of the independent external review or rating done based on any internationally recognised green/social/sustainability bond principles or framework. The role of external reviewers is to ascertain the green, social and sustainability bond status of the transaction.

MAS is also developing a grant scheme incentives to encourage growth in green and sustainability-linked loans. Similar to the Sustainable Bond Grant Scheme, the grant scheme will support borrowers to tap on green and sustainability-linked loans by defraying the costs of external review and developing green and sustainable lending frameworks MAS will support issuers for developing sustainability frameworks and conducting external reviewers³⁴.

Sustainability Index

The SGX launched two ESG indices as a tool for capacity-building: iEdge SG ESG Transparency Index and iEdge SG ESG Leaders Index. In addition, FTSE Russell launched in April 2016 the FTSE4Good ASEAN 5 Index which constituents are companies with prime ESG practices listed on Bursa Malaysia, Indonesia Stock Exchange, the Philippine Exchange, Singapore Exchange and the Stock Exchange of Thailand. The index methodology is publicly available on FTSE Russell's website.

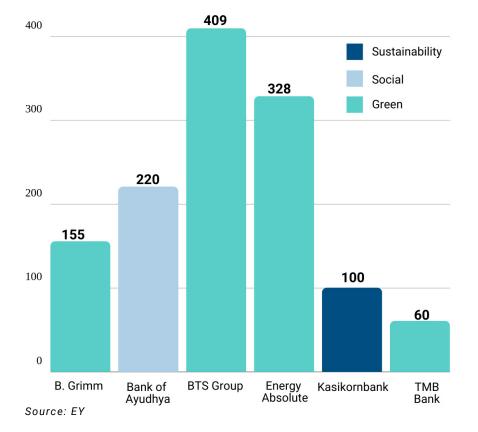
How to Issue Sustainable Bonds in Singapore

The issuance of a sustainable bond in Singapore generally follows a 10-step process, as described in section sustainable bond issuance process, see Exhibit 6. There are no additional regulations to issue sustainable bonds in Singapore, in other words, sustainable bonds are regulated in a similar manner to conventional bonds. General provisions for the issuance, listing, trading, clearing and settlement of debt securities are contained in the Securities and Futures Act.

4.2.7 Thailand

Overview of Sustainable Bonds Issued (as of March 2020)

Exhibit 14: Sustainable bonds issued in Thailand (value in USD million) by alphabetical order



Status of the Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

In 2014, the SEC issued the Sustainability Development Roadmap for Listed Companies. In 2019, SEC issued a new Sustainable Finance Roadmap to further enhance the capital market beyond good Corporate Governance (CG) and more towards sustainability in order to propel the country to achieve the SDGs.

Green Definition/Taxonomy

SEC introduced regulations and guidelines on green bonds in December 2018 and on social bonds and sustainability bonds in May 2019.

Sustainability Disclosure

Under the Sustainability Development Roadmap for Listed Companies, SEC mandates sustainability reporting for all publicly listed companies. SEC also offers training programmes for listed companies on how to prepare sustainability reports. SEC is revising the disclosure requirements for listed companies by issuing a new Annual Registration Statement (Form 56-1), so-called 'One Report'.

Sustainability Debt Market

As of March 2020, six green bonds have been issued in Thailand. In October 2018, a sustainability bond was issued by Kasikornbank (Kbank) which became the first bank in Thailand and in Southeast Asia to issue such types of bonds. Moreover, in October 2019, Bank of Ayudhya issued Women Entrepreneur Bonds which are social bonds that seek to boost lending to women-led small and medium-sized enterprises in Thailand.

To support the issuance of sustainable bonds, the Thai Bond Market Association (ThaiBMA), with the approval from SEC, has rolled out an incentive scheme for green, social and sustainability bond issuance in Thailand. This incentive scheme offers issuers a rebate on application fees incurred for the issuance of green, social, and sustainability bonds. The rebate is estimated to be no less than THB 50,000 per year.

In a bid to support companies' sustainable bond issuance and help reduce fund-raising costs, SEC has waived the approval fee and filing fee for green, social and sustainability bond issuances.

Sustainability Index

The Stock Exchange of Thailand (SET) established in 2015 the Thailand Sustainability Investment Index (THSI) which comprises Thai listed companies with prime ESG performance. The index methodology is publicly available on SET's website. As of December 2019, the index consists of 63 listed companies from different business sectors such as Food and Beverage, Transportation & Logistics, Banking, Property Development, Energy & Utilities and Information & Communication Technology.

In addition, FTSE Russell launched in April 2016 the FTSE4Good ASEAN 5 Index whose constituents are companies with prime ESG practices listed on Bursa Malaysia, Indonesia Stock Exchange, the Philippine Exchange, Singapore Exchange and the Stock Exchange of Thailand. The index methodology is publicly available on FTSE Russell's website.

How to Issue Sustainable Bonds in Thailand

The issuance of a sustainable bond in Thailand generally follows a ten-step process, as described in section sustainable bond issuance process, see Exhibit 6.

In addition, the SEC introduced regulations and guidelines on green bonds in December 2018 and on social bonds and sustainability bonds in May 2019³⁵.

4.2.8 Vietnam

Overview of Sustainable Bonds Issued

No sustainable bond has been issued in Vietnam.

Status of the Sustainable Finance Market

Policies and Measures to Mainstream Sustainable Finance

In Vietnam, the National Green Growth Strategy (Prime Minister's Decision No. 1393/QD-TTg), approved by the Prime Minister in 2012, sets out objectives towards a green economy, energy efficiency, GHG reduction and improvement of living standards. To implement the National Green Growth Strategy, the National Action Plan on Green Growth for 2014-2020 (Prime Minister's Decision No. 403/QD-TTg) was issued in 2014. In 2015, Vietnam Ministry of Finance (MOF) promulgated the Financial Sector Action Plan on the Implementation of the National Green Growth Strategy up to 2020 (MOF Decision No. 2183/QD-BTC). In 2017, the Prime Minister approved the Bond Market Development Roadmap during 2017-2020, with a Vision Towards 2030 (Prime Minister Decision No. 1191/QD-TTg).

Green Definition/Taxonomy

No taxonomy defining sustainable economic activities has been established in Vietnam. However, there have been some efforts to define projects eligible to green finance. State Bank of Vietnam (SBV) released the Green Project Catalogue 1 which identifies six categories of projects for green financing.

Sustainability Disclosure

Issued in October 2015, Circular No. 155/TT-BTC on disclosure of information on the securities market requires publicly listed companies to report on their environmental and social impact on an annual basis.

Sustainability Debt Market

While no green bond has been issued in Vietnam, the government of Vietnam has been looking to promote the issuances of green bonds. In 2016, Vietnam MOF implemented a trial programme with the pilot issuance of green bonds in order to prepare for future official issuances. Under the trial programme, Ho Chi Minh City and the province of Ba Ria - Vung Tau issued bonds, but those ended up not meeting all the criteria to qualify as green bonds.

Sustainability Index

Launched in July 2017, the Vietnam Sustainability Index (VNSI) tracks the performance of 20 companies listed on the Ho Chi Minh Stock Exchange (HOSE) with the highest sustainability ratings.

How to Issue Sustainable Bonds in Vietnam

The issuance of a sustainable bond in Vietnam generally follows a ten-step process, as described in section sustainable bond issuance process, see Exhibit 6.

In addition, a number of other policies have been issued to regulate green bond issuances:

- Decree No. 95/2018/ND-CP on regulating the issuance, registration, depository, listing and trading of Government debt instruments on securities market
- Decree No. 163/2018/ND-CP on regulating the issuance of corporate bonds (adjusted by Decree 81/20/ND-CP)

5. Outlook: Implications of COVID-19 on Sustainable Finance

As identified in the section "The Need for Closing the SDG Financing Gap", the problem with scaling up sustainable finance in ASEAN is not a lack of investor demand but a lack of investible projects. It is therefore important that the quality of green finance products is not washed down for the sake of fulfilling demand. A recent report from Carbon Care Asia and Oxfam analysed 249 green bonds in Asia and found out that only a minority of the bonds provided details about impact measuring or environmental and social risk management. Moreover, none of the bonds has identified any action to prevent negative impact on the SDGs. Green integrity and transparency are even more important for investors if the green bonds are issued in emerging markets³⁶.

Hence, the availability of ESG data and non-financial disclosures as well as reporting can become increasingly important for the sustainable finance market in ASEAN. Increased transparency can combat green washing and promote integrity of sustainable finance³⁷.

The UNEP report "Implications of the COVID-19 Pandemic for Global Sustainable Finance: An Initial Framework for Response Strategies" points out that an increased focus on social issues will drive ESG alpha, meaning ESG integration is a source of investment value. They see potential for a major repricing of the "S" in ESG ratings which addresses the current lack of standardisation in that space and may strengthen efforts on the coherence of sustainability information³⁸.

COVID-19 brings about a global crisis but provides an opportunity to build back better, greener and more sustainable. The pandemic gives us a glimpse into the adverse effect of climate change, presenting an enormous global challenge which requires unprecedented coordination, with many warnings gone unheeded until the impact is felt directly, requiring massive capital investment from both public and private sector³⁹. As the world recovers from COVID-19, corporates and investors should seize this opportunity to walk a more sustainable recovery pathway, integrating environmental, social, governance matters more deliberately and strongly into their consideration matrix.

66 History doesn't always provide us with a great guide into the future, but it's not the first time that ESG has emerged stronger out of crisis. There were a lot of critics calling for the demise of it during the global financial crisis. In fact, just the opposite happened, and that's what we seem to be experiencing here too.

Michael Jantzi, CEO of Sustainalytics

Appendix: Definitions

Products	Description
Green bonds	Bonds developed to fund projects that have positive environmental or climate benefits. Relevant framework: Green Bond Principles, ASEAN Green Bond Standards.
Social bonds	Use of proceeds bonds that raise funds for new and existing projects with positive social outcomes. Relevant framework: Social Bond Principles.
Sustainability bonds	Bonds where the proceeds will be exclusively applied to finance or re-finance a combination of both Green and Social Projects. Relevant framework: Sustainability Bond Guidelines.
Sustainability-linked bonds	Any type of bond instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability/ ESG objectives. Relevant framework: Sustainability-linked Bond Principles.
Climate bonds	Bonds used to finance – or refinance - projects needed to address climate. Examples include wind farms, solar, hydropower plants and building sea walls in cities threatened by rising sea levels. Relevant framework: Climate Bonds Standards.
Transition bonds	Bonds focused at industries with high GHG emissions also known as "brown industries". This bond will provide them with the opportunity to finance the goal of becoming less brown and de-carbonising business operations.
Blue bonds	Bonds utilised by island and coastal nations to reinvest in their natural resources by refinancing their national debt in a way that secures funding for conservation work that also benefits their economies.
SGD bonds	Bonds issued by private enterprises, Governments, and municipalities for the purpose of financing and supporting SDGs. When the issuers are companies, SDG bonds can either be Use-of-Proceeds or General-Purpose bonds.
Use-of-Proceeds SDG bonds	SDG bonds with strict accountability for the use of proceeds toward eligible green, social, or climate activities, in accordance with the Green and Social Bond Principles or the Climate Bond Standards (CBI). They can be unsecured, backed by the creditworthiness of the issuer, or they can be secured with collateral on a specific asset.
General-Purpose SDG bonds	SDG bonds issued by companies that have adopted a corporate-level strategy to contribute to the SDGs and that are committed to providing accountability for the general use of funds and corporate-level SDG impacts. General-Purpose SDG bonds can also be issued by Governments. These bonds are secured by the credit-worthiness of the issuer.
Green loans, Syndicated loans and Credit lines	Loans that provide lending to encourage market development in climate-aligned sectors. Interest rates are based on borrower credit scores or an ESG score assigned by an ESG rating agency. Relevant framework: Green Loan Principles.

Sustainability-linked loans	Loan instruments and/or contingent facilities (such as bonding lines, guarantee lines or letters of credit) which give incentives to the borrower's achievement of ambitious, predetermined sustainability performance objectives. The borrower's sustainability performance is measured using SPTs, which include key performance indicators, external ratings and/or equivalent metrics and which measure improvements in the borrower's sustainability profile. Relevant framework: Sustainability-linked loan principles.
SDG Equity	Common stock of companies that have adopted a corporate-level strategy to contribute to the SDGs and that are committed to providing accountability for the general use of funds and corporate-level SDG impacts.
Corporate SDG Finance	The funding of corporate-level SDG strategies using a range of financial instruments including, but not limited to, the instruments listed in this glossary.
Investment Trusts	Use of proceeds to fund a portfolio of green projects. A publicly traded vehicle consisting of pools of long-term cash-generating green assets may have tax advantages.
Low-carbon ETFs	Low-carbon Exchange Traded Funds (ETFs) are listed equity-like instruments that invest into companies that meet the fund's low carbon emission criteria.

References

- James X. Zhan, "World Investment Report," UNCTAD, 2014, https://unctad.org/en/PublicationsLibrary/wir2014_ en.pdf
- UN, "UN Secretary-General's Roadmap For Financing The 2030 Agenda For Sustainable Development," 2019, https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/UN-SG-Roadmap-Financing-the-SDGs-July-2019.pdf
- Beal, Dhar and Young, "Narrowing the SDG investment gap," BCG, 2018, https://www.bcg.com/publications/2018/ narrowing-sdg-investment-gap-imperative-development-finance-institutions
- 4. UN, "Roadmap For Financing The 2030 Agenda"
- GSIA, "2018 Global Sustainable Investment Review," 2018, http://www.gsi-alliance.org/wp-content/ uploads/2019/03/GSIR_Review2018.3.28.pdf
- 6. Chasan, "Global Sustainable Investments Rise 34 Percent to \$30.7 Trillion," Bloomberg, 2019, https://www. bloomberg.com/news/articles/2019-04-01/global-sustainable-investments-rise-34-percent-to-30-7-trillion
- 7. Lee and Baral, "Green Finance Opportunities in ASEAN," DBS Bank, 2017, https://www.DBS Bank.com/iwovresources/images/sustainability/insights/Green_Finance_Opportunities_in_ASEAN.pdf?pid=sg-group-pwebsustainability-pdf-Green_Finance_Opportunities_in_ASEAN
- 8. Lee and Baral, "Green Finance."
- 9. UN, "Roadmap For Financing The 2030 Agenda"
- 10. Dominic Godman (Arabesque), in discussions with the author, August 2020.
- 11. Mikkel Larsen (DBS Bank), in discussions with the author, August 2020.
- 12. Mushtaq Kapasi (ICMA), in discussions with the author, August 2020.
- 13. Claire Ballentine, "ESG Stock Resilience Is Paving the Way for a Surge in Popularity," Bloomberg, 2020, https://www. bloomberg.com/news/articles/2020-03-31/esg-stock-resilance-is-paving-the-way-for-a-surge-in-popularity
- David Caleb Mutua, "UBS Says Investors Should Prefer Green Bonds Over Regular Debt," Bloomberg, 2020, https:// www.bloomberg.com/news/articles/2020-03-30/ubs-says-investors-should-prefer-green-bonds-over-regulardebt
- 15. Ng Li Lian. "How SMEs can transform and go green for the future,': A conversation with Ng Li Lian." Interview by SGSME.sg. Apr 29, 2020. https://www.sgsme.sg/news/how-smes-can-transform-and-go-green-future
- 16. Mushtaq Kapasi (ICMA), in discussions with the author, August 2020.
- 17. Sustainalytics, "Sustainalytics Launches Transition Bond Second-Party Opinion Service," 2019, https://www. sustainalytics.com/esg-investing-news/sustainalytics-launches-transition-bond-second-party-opinionservice/
- 18. Sustainalytics, "Sustainable Finance," https://www.sustainalytics.com/sustainable-finance/2019/08/15/ sustainable-finance-green-bonds-green-loans-sustainability-linked-loan/
- 19. Sustainalytics, "Sustainable Finance"
- 20. Mushtaq Kapasi (ICMA), in discussions with the author, August 2020.
- 21. Cedric Rimaud (CBI), in discussions with the author, August 2020.
- 22. ACMF, "Sustainable Finance," 2017, https://www.theacmf.org/initiatives/sustainable-finance
- 23. ICMA, "External Reviews," 2020, https://www.icmagroup.org/green-social-and-sustainability-bonds/externalreviews/
- 24. Mikkel Larsen (DBS Bank), in discussions with the author, August 2020.
- 25. Mushtaq Kapasi (ICMA), in discussions with the author, August 2020.
- 26. Cedric Rimaud (Earth Wake), in discussions with the author, August 2020.
- 27. Indonesia. Financial Services Authority of the Republic of Indonesia. Copy of Financial Services Authority Regulation number 60 / POJK.04 / 2017 on the Issuance and the Terms of Green Bond. 2017. https://www.iced.or.id/wp-content/uploads/2018/02/English-SAL-POJK-60-Green-Bond.pdf
- 28. Malaysia. Bank Negara Malaysia. Discussion Paper on Climate Change and Principle-based Taxonomy. 2019. https://www.bnm.gov.my/index.php?ch=en_announcement&pg=en_announcement&ac=767insights/2020/04/ covid-19-what-does-it-mean-for-climate-change.html

- 29. Malaysia. Bank Negara Malaysia. Discussion Paper on Climate Change and Principle-based Taxonomy. 2019. https://www.bnm.gov.my/index.php?ch=en_announcement&pg=en_announcement&ac=767insights/2020/04/ covid-19-what-does-it-mean-for-climate-change.html
- 30. The Philippines. Bankgo Sentral Ng Pilipinas Office of the Governor. Circular No. 1085, Series of 2020, Sustainable Finance Framework. 2020. http://www.bsp.gov.ph/downloads/regulations/attachments/2020/c1085.pdf
- 31. The Philippines. Securities and Exchange Commission. Guidelines for Issuance of Green Bonds under the ASEAN Green Bonds Standards. 2020. https://www.sec.gov.ph/wp-content/uploads/2020/02/2018-GUIDELINES-FOR-ISSUANCE-OF-GREEN-BONDS.pdf
- 32. The Philippines. Securities and Exchange Commission. Guidelines for Issuance of Social Bonds under the ASEAN Social Bonds Standards. 2019. https://www.sec.gov.ph/mc-2019/mc-no-09-s-2019-guidelines-on-the-issuance-of-social-bonds-under-the-asean-social-bonds-standards-in-the-philippines
- 33. The Philippines. Securities and Exchange Commission. Guidelines for Issuance of Sustainability Bonds under the ASEAN Sustainability Bonds Standards. 2019. https://www.sec.gov.ph/mc-2019/mc-no-08-s-2019-guidelineson-the-issuance-of-sustainability-bonds-under-the-asean-sustainability-bonds-standards-in-the-philippines
- 34. MAS, "Sustainable Bond Grant Scheme," 2020, https://www.mas.gov.sg/schemes-and-initiatives/sustainablebond-grant-scheme
- 35. Thailand. Securities and Exchange Commission. (Unofficial Translation) Guidelines on Issuance and Offer for Sale of Green Bond, Social Bond and Sustainability Bond. http://capital.sec.or.th/webapp/nrs/data/7874ae11.pdf
- 36. Chan, Xing, "How to make green bonds work," Oxfam, 2020, https://www.oxfam.org.hk/f/news_and_publication/52643/Oxfam_CCA_Making%20Green%20Bonds%20Work.pdf
- 37. Mushtaq Kapasi (ICMA), in discussions with the author, August 2020.
- 38. Zaidi, "Implications of the COVID-19 Pandemic for Global Sustainable Finance: An Initial Framework for Response Strategies," UN Environmental Programme, 2020, https://greenfinanceplatform.org/sites/default/files/downloads/ resource/Implications_of_the_COVID-19_Pandemic_for_Global_Sustainable_Finance.pdf
- 39. Yuen, "COVID-19: What does it mean for climate change," KPMG, 2020, https://home.kpmg/sg/en/home/ insights/2020/04/covid-19-what-does-it-mean-for-climate-change.html