February 2021

Green, Sustainability, and Social Bonds for COVID-19 Recovery

A Thematic Bonds Primer

Mobilizing Financial Markets for Achieving Net Zero Economies

The impact of the coronavirus disease (COVID-19) pandemic has focused attention on the need for sustainable economic recoveries across the world, including in developing member countries of the Asian Development Bank (ADB). Green, sustainability, and social bonds were already gaining traction before COVID-19. They are now an even more important financial instrument for countries in catalyzing funds for green and sustainable recovery programs and projects. Many countries are also focusing more on achieving net zero emissions to alleviate the climate change crisis. As such, green capital markets can play a critical role in providing funds to accelerate the development of green projects and closely monitoring their actual impact during their operation. This primer provides a brief overview of these thematic bond types and related emerging trends.

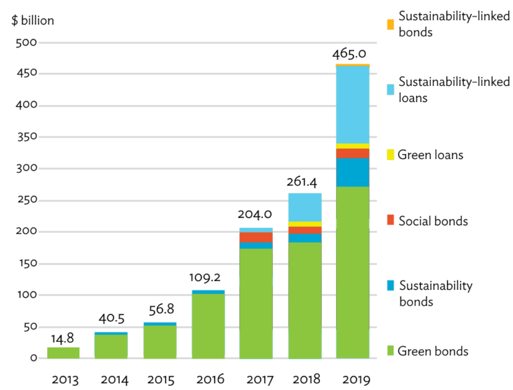
The Need for Urgent PIC Funding

Private, institutional and commercial (PIC) funds were already critical in meeting the massive financing needs in developing Asia and the Pacific to support its climate resilience and sustainable development goals. ADB has estimated the region will need to invest $1.7 trillion per year in infrastructure until 2030 to maintain growth momentum, tackle poverty, and respond to climate change. The infrastructure investment gap—the difference between investment needs and current investment levels—equals 2.4% of projected gross domestic product for the 5-year period from 2016 to 2020 when incorporating climate mitigation and adaptation costs. These financing needs have likely worsened since the COVID-19 outbreak, with government budgets reallocated to urgent relief efforts at the expense of planned infrastructure investment. Increasingly, these needs cannot be met by the public sector alone and there is an urgent incentive to mobilize PIC sources, especially the capital markets, at scale across developing Asia.

Capital Market Trends

Capital market instruments have the ability to quickly tap into global pools of institutional funds, including pension and insurance funds, projected to be worth between $45 trillion and $60 trillion globally. Investors have already shown clear interest in thematic bonds, such as green, sustainability, and social bonds. These thematic bonds emerged from the growth in green bonds in the wake of the 2015 Paris Agreement, a turning point in global efforts to address climate change. Although the first green bond had been issued in 2007 by the European Investment Bank (EIB), growth since 2015 has been dramatic. The Climate Bonds Initiative (CBI), an international, not-for-profit organization, puts the 2020 green bond issuance figure at $269.5 billion, including green bonds, loans, sukuk[1] and green asset-backed securities, just above the 2019 final total of $266.5 billion for climate bonds.

Total Thematic Bond Issuance (2013-2019)

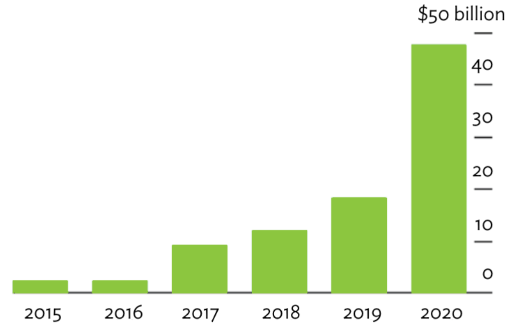


Source: Climate Bonds Initiative. 2020. Climate Bonds Initiative Market Summary H1 2020. August.

1 sukuk is a sharia-compliant bond-like instruments used in Islamic finance.

According to credit rating agency Moody's, global sustainability bond issuance reached nearly $100 billion in the second quarter of 2020, a quarterly record and 65% higher than the first quarter. Record quarterly issuance of both social bonds at $33 billion and sustainability bonds at $19.1 billion, accounted for the strong total. Global social bond issuance reached $41.9 billion in the first half of 2020, a 376% increase over the same period the previous year. Combined green, social, and sustainability bond issuance jumped dramatically in 2019 to $465 billion.

Social Bonds Total Issuance

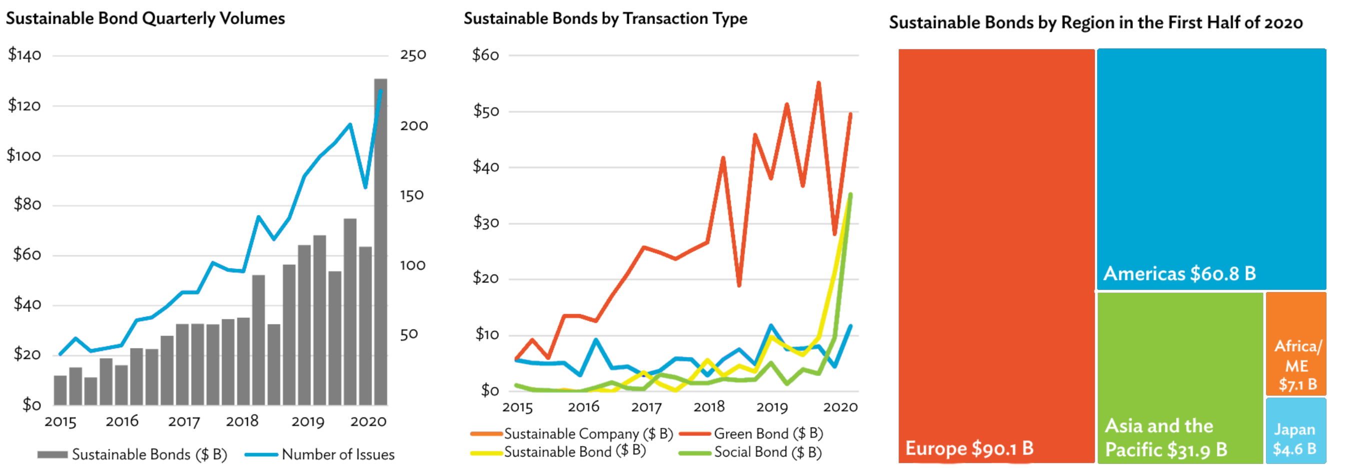


Note: Full year data presented for 2015-2018. For 2020, data covers from 22 January to 22 July.

Source: BloombergNEF. 2020.

Immediately after the outbreak of the COVID-19 pandemic, the green bond market has been overshadowed by social and sustainable bonds, driven by an increasing need for financing inclusive and poverty alleviation projects, as well as to meet the approaching United Nations Sustainable Development Goals (SDGs). Climate-related or green bonds are now once again being put forward by global leaders as key to green recoveries.

Sustainable Bonds Overview



B = billion

Source: Refinitiv. 2020. Sustainable Finance Review 1H 2020.

Thematic Bonds Explained

There are a variety of terms currently for bonds and other debt issuances with environment, social, and governance (ESG) components. Some thematic bond issuances address environmental concerns (green bonds, blue or water bonds, and forest bonds), while others are named after target sectors for which the financing is being raised (education, affordable housing, and gender, for example). Still others are known as sustainability or SDG-linked bonds or loans, to signal commitments by the issuer to specific themes, or to one or more of the SDGs.

Green bonds were created to fund projects that have positive environmental outcomes or contribute to climate change reduction. Certain green bonds are aligned with the Green Bond Principles of the International Capital Market Association (ICMA). Green bond taxonomies can indicate the sectors eligible for financing from bond proceeds and include renewable energy, energy efficiency, pollution prevention and control, urban and mass transit, circular economy adapted products, green buildings, and marine protection.

The majority of green bonds issued are green "use-of-proceeds" or asset-linked bonds. Proceeds from these bonds are earmarked for green projects but are backed by the issuer's entire balance sheet. There have also been green use-of-proceeds revenue bonds, green project bonds, and green securitized bonds.

Sustainability bonds are bond instruments where the proceeds will be exclusively applied to finance or refinance a combination of green and social projects. Sustainability bonds are usually aligned with the ICMA's Sustainable Bond Guidelines or the Sustainability Bond Principles. Sustainability-linked bonds are a variant where the financing or structuring of the bond's coupon rate is linked to the entity's achievement of set key peformance indicators and environmental and/or ESG objectives, failing which there is an uptick of the coupon rate as a penalty. These are also aligned to the ICMA's Sustainability Bond principles.

Social bonds are use-of-proceeds bonds that raise funds for new and existing projects with positive social outcomes. Social project categories include affordable basic infrastructure, access to essential services, affordable housing, employment generation, food security, and socioeconomic advancement.

Transition bonds are a relatively new class of bonds that aim to help companies in industries with high greenhouse gas (GHG) emissions (known as brown industries) raise capital specifically to finance decarbonisation. Given the urgency of meeting the Paris Agreement's temperature targets, it is seen as imperative that dirty industries transition rapidly from brown to green to make mitigation targets feasible.

Types of Bonds

While green bonds have matured to incorporate different structures over the years, the overview below is relevant to sustainability or social bonds with applicable principles and frameworks applied to use-of-proceeds. There have been several examples over the years, both in the private and public sectors, as well as multilateral development bank issuers that have utilized one or many of the examples below.

Type	Proceeds of bond sale	Debt recourse
Use of proceeds bond	Earmarked for eligible projects	Recourse to the issuer: same credit rating applies as issuer's other bonds.
Use of proceeds revenue bond or ABS	Earmarked for refinancing projects	Revenue streams from the issuers through fees, taxes etc. are collateral for the debt.
Project bond	Ring-fenced for specific underlying project(s)	Recourse is only to the project's assets and balance sheet.
Securitisation (ABS) bond	Refinanced portfolios of projects or proceeds are earmarked for green or social projects	Recourse is to a group of projects that have been grouped together (e.g. solar leases or green mortgages).
Covered bond	Earmarked for eligible projects included in the covered pool	Recourse to the issuer and if the issuer is unable to repay the bond, to the covered pool.
Loan	Earmarked for eligible projects or secured on eligible assets	Full recourse to the borrower(s) in the case of unsecured loans. Recourse to the collateral in the case of secured loans but may also feature limited recourse to the borrower(s).
Other debt instruments	Earmarked for eligible projects	

ABS = asset-backed securities

Source: ASEAN Green Financial Instruments Guide - Climate Bonds Initiative 2019.

Investor Perspective: The Demand

> Sustainable investment assets reached \$30.7 trillion at the start of 2018, a growth of 34% in 2 years in the five major markets of the United States, Europe, Japan, Canada, and Australia and New Zealand. With the Action Plan on Sustainable Finance moving capital markets toward green investment and the recent ratification of the Sustainable Finance taxonomy at the European Union parliament, momentum can be expected to grow further.
>
> Source: GSI-Alliance. 2018. Global Sustainable Investment Review.

Anecdotal evidence suggests that there are investors with ready capital that can be used for sustainable and green projects and businesses if the supply and appropriate investment opportunities are properly presented. The Amundi Planet Emerging Green One fund jointly promoted by the International Finance Corporation (IFC) and Amundi Asset Management, is an example of an IFI enabled vehicle. It raised over \$1.4 billion for investment, with the IFC having identified an opportunity as large as \$29 trillion in emerging markets that could be funded by both green and non-green bonds.

Investors such as PIMCO, one of the biggest bond managers in the world, sees SDG bonds as a positive emerging trend and welcomes the two main instruments and structures currently in the market. These are the use-of-proceeds approach and the linking of the covenant of the bond to the issuer's commitment to tackling climate change or promoting the SDGs. The consensus seems to be that green and social bonds are important ways of growing the bond market, particularly in developing economies. PIMCO's particular focus is on how the climate and sustainable strategies of issuers are aligned to their wider corporate strategies and PIMCO's ESG policy as an investor.

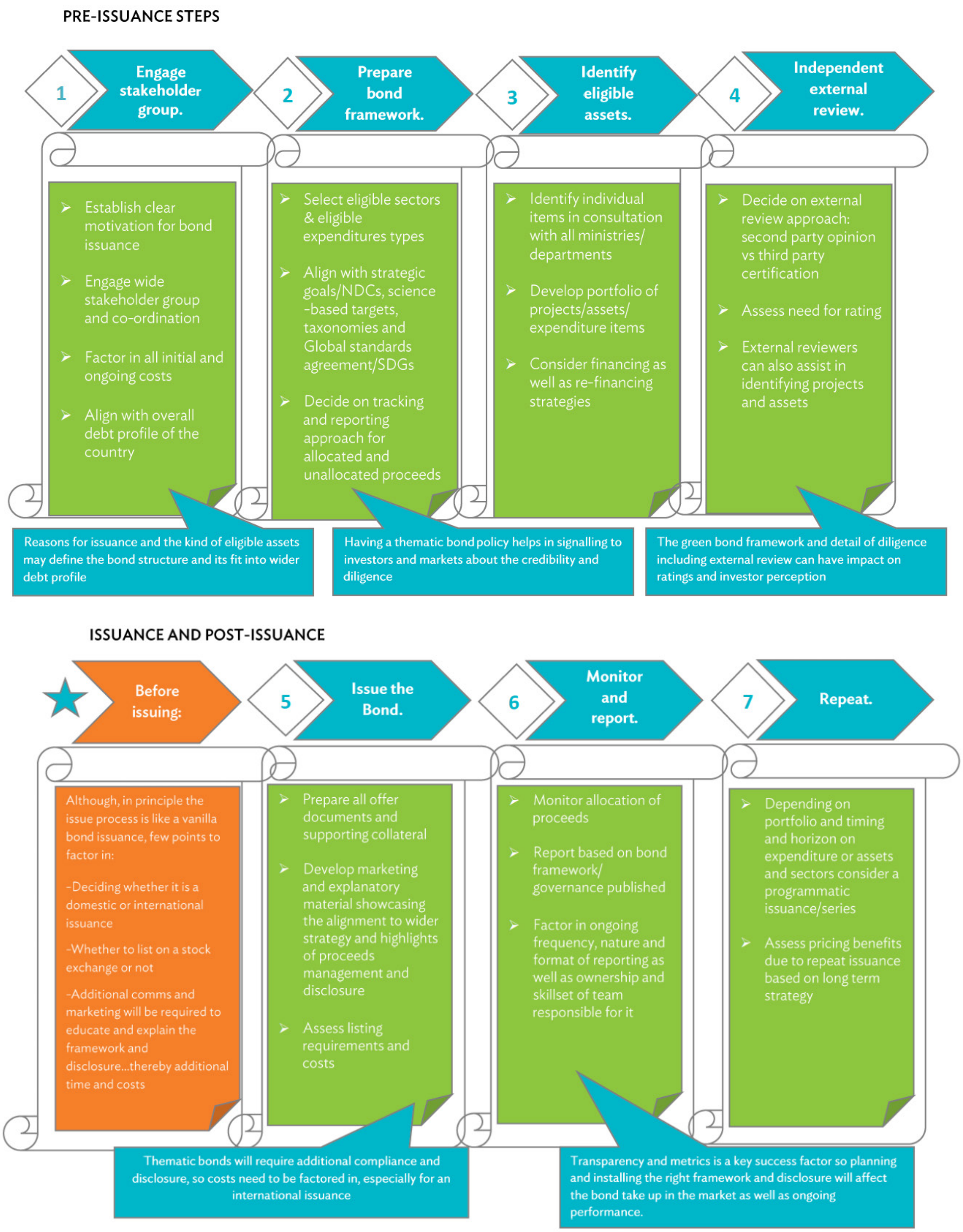
Issuer Perspective: The Supply

Issuers, whether governments or the private sector, can benefit reputationally by showcasing their commitment to social, sustainable, and environmental causes and raise their profile accordingly in the market. Being seen as an organization or sovereign supporting the SDGs or Paris Agreement targets could also increase the size of the investor base issuers can access. This is because more and more investors are allocating finance to these causes, as ethical investing gains traction globally or sources like pension funds, on behalf of whom investors are working, prioritize such investments. A growth in corporate transparency and media focus on the ethics of investing have also driven interest in green and social instruments. This can also have a positive effect on their book building during issuances as well as the long-term cost of capital, as they enter the market again for issuances and re-financing needs. Evidence also suggests that investment funds deemed socially responsible hold 13.5% of outstanding green bonds while just 0.6% of ordinary bonds are held by these funds, according to the Brookings Institution.

Steps to Issuing a Bond

Although green, social and sustainability bonds are no different from normal bonds as far as the transaction process goes (i.e., appointing a banker, arranger, rating agency, etc.), there are some key strategic and process issues that distinguish them from conventional bonds. The schematic below summarises the key factors to be considered.

Bond Issuance Flowchart



Source: ASEAN Catalytic Green Finance Facility.

Global Standards and Frameworks: Building Credibility

To promote integrity, grow the thematic bond market and encourage investment, there's a clear need for principles to be adhered to in designing such bonds. The Green Bond Principles, the Social Bond Principles, and the Sustainability Bond Guidelines, collectively referred to as 'the principles' have become the leading framework globally for the issuance of thematic bonds. The ICMA serves as secretariat, assuming administrative duties and providing guidance for the governance of the principles. As the principles are designed to be industry wide, bond issuers, investors and banks are invited to participate.

As administrator of the ASEAN Infrastructure Fund (AIF), ADB has developed a set of Investment Principles and Eligibility Criteria for its ASEAN Catalytic Green Finance Facility (ACGF) that provides clear eligibility criteria for financing green infrastructure and projects.

Moving Forward

One of the main challenges in scaling up capital market issuances is the preparation involved. This includes assessing and improving issuer credit ratings and governance aspects; the underlying quality of subprojects; adherence to green, sustainability, or other principles; market sizing; and the timing of issuance. Critically, in the longer-term it is necessary for issuance of such bonds to extend to state-owned enterprises (SOEs) and local governments, bringing financial rigor and discipline to such entities. ADB and the ACGF can help in a number of these areas through its technical assistance and lending products. Their support to Thailand's capital markets is a recent example.

ADB's Private Sector Operations Department has been supporting green finance development in Thailand. Projects include:

- The THB5 billion ($155 million) purchase of Thailand's B.Grimm Power Public Company Limited's maiden 5-year and 7-year green bonds in 2018. These are the first certified climate bonds to be issued in Thailand.
- The purchase of a THB3 billion ($100 million) tranche within Energy Absolute's maiden green bond issuance of THB10 billion ($330 million) in 2019.

Source: ASEAN Catalytic Green Finance Facility.

ADB and ACGF Support to Thailand's Capital Markets

Thailand's First Sovereign Sustainability Bond

The ASEAN Catalytic Green Finance Facility (ACGF) has been supporting the Government of Thailand's Public Debt Management Office (PDMO) as it issued in August 2020 the first sovereign sustainable bond that aims to raise $954 million. Book building was complete on 14 August. The bond was the first of its kind, which combines green, social, and coronavirus disease (COVID-19) recovery aspects, among members of the Association of Southeast Asian Nations.

Thailand's Ministry of Finance said the issuance was highly successful with exceptionally strong demand from investors, with the amount submitted being three times the announced offering, with an interest rate of 1.585%, lower than the market yield of the existing 15-year benchmark bond. The bond attracted a diverse group of investors including banks, asset management companies, financial institutions, insurance companies and offshore investors.

The Government of Thailand accessed the market again in November 2020 with a further tap of THB20 billion ($667 million) to refinance the MRT asset pool, bringing the total bond outstanding to date to THB50 billion ($1.65 billion).

The proceeds from the sustainability bond will be used to support Bangkok's MRT Orange Line (East), enhancing green urban transport. Proceeds will also be used for COVID-19 relief projects. The bond will be one of a benchmark series and will continue to be reopened to achieve sufficient size for liquidity enhancement.

The National Housing Authority's Social Bond

The ACGF has also been supporting Thailand's National Housing Authority and the Bank of Agriculture and Agricultural Co-operatives in their social and sustainable bond programs. The bond was issued on 23 September 2020 in three tranches totalling THB6.8 billion ($220 million). It is among the first social bonds issued by a state-owned enterprise in Southeast Asia. The bond will finance affordable housing in Thailand and promote sustainable communities.

Source: ASEAN Catalytic Green Finance Facility.

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