



DETAILED GUIDANCE FOR ISSUING GREEN, SOCIAL, AND SUSTAINABILITY BONDS

Acknowledgements

This product is a joint initiative, developed by the United Nations Development Programme (UNDP) and the Securities and Exchange Regulator of Cambodia (SERC). It is an updated version of the Detailed Guidance for Issuing Green Bonds in Developing Countries, which was originally prepared by the Asian Development Bank and published in 2021.

UNDP and SERC are grateful to the organizations and individuals who contributed directly or indirectly to this product. This document was produced by Mr. Alexander Wiese and has benefited from the reviews and contributions from SERC Team, namely His Excellency Sou Socheat, Delegate of the Royal Government in charge as Director General, and UNDP Team, namely Mr. Enrico Gaveglia, Resident Representative, Ms. Alissar Chaker, former Resident Representative, Mr. Shakeel Ahmad, Deputy Resident Representative, Mr. Ivan Gonzalez de Alba, former Country Economist, and Ms. Diyora Kabulova, Regional SDG Finance Specialist.

Special thanks are also due to Her Excellency Hor Likea, Director of Research, Training, Securities Market Development, and International Relations Department, and SERC colleagues, and to Mr. Ahmed Shifaz, Environmental Programme Specialist, Ms. Nimnuon IvEk, Assistant Resident Representative, Dr. Khoy Rada, National Economist, Mr. Oudom TEM, Climate Finance Coordinator, and Ms. Thida Pan, Project Assistant, from UNDP.

About UNDP

UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet. Learn more at undp.org or follow at @UNDP.

About the Climate Finance Network



The UNDP Climate Finance Network (CFN) supports Asia-Pacific countries in bridging the gap between climate goals and the investment needed to reach them. As a regional platform, CFN provides technical and policy support to integrate climate into public finance, mobilize private and innovative capital, and create the enabling environment required for lasting impact through regional knowledge exchange and peer learning.

Learn more at <https://go.undp.org/climate-finance-network>.

Disclaimer

This is an adaptation of an original ADB work titled *Detailed Guidance for Issuing Green Bonds in Developing Countries*. The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of UNDP or the governments they represent. UNDP does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use. Any reference to a commercial entity or product in this publication does not imply endorsement.

Copyright ©UNDP 2026. All rights reserved.

#53, Pasteur Street, Boeung Keng Kong 1, Phnom Penh, Cambodia

This report was made possible by the generous support of the UK government's flagship Climate Action for a Resilient Asia (CARA) programme and the Government of Sweden through the Swedish International Development Cooperation Agency (SIDA).



Contents

Acknowledgements	i
Table, Figures, and Boxes	iv
About This Guidance Note	1
Outline of the Labeling Process	1
Two Parallel Tracks	5
The First Time Is Challenging but Worth It	6
Identifying Green and/or Social Projects, Assets, and Expenditures	8
Selecting an Appropriate Set of Green and Social Definitions	8
Creating the List	10
Screening projects for Eligibility and Performance: Information Flows	11
Managing the Portfolio of Green and /or Social Projects and Assets Over Time	12
Developing a Green, Social or Sustainability Bond Framework	13
Expected Contents	13
Clarity of the Issuer's Narrative	13
Flexibility and Updating	15
Leveraging Successful Examples	15
Confirming Internal Processes and Controls	16
Leveraging Existing Arrangements	16
Creating New Groups and Conversations	16
Documentation of Procedures	17
Decision-Making, Disclosure, and Governance	18
Reporting on Allocations and Green/Social Credentials	19
Satisfying Green and/or Social Eligibility Requirements	19
Investor and Market Expectations	22
Reporting Formats and Channels	22

Setting Up for Impact Reporting	23
Input–Output–Outcome–Impact Frameworks	23
Examples of Impact Indicators	24
Ex Post versus Ex Ante Reporting	26
Data and Systems	26
Engaging the External Reviewer	28
Scoping Out What You Need	28
Engagement Contracts	28
Pre-Issuance and Post-Issuance Assessments	30
Pricing and Timing Expectations	31
Managing the External Review Process	32
Sharing Information with the External Reviewer	32
External Review Procedures	32
Draft Reports and Close-Out Processes	33
Form and Use of Final Reports	33
Seeking Certification or Recognition	34
Investor and Market Expectations	34
International versus Regional versus National Approaches	35
Pathways for Recognition	35
Key Decision Points	38
Media, Stakeholders, Indices, and Listings	39
Building Momentum	39
Media Formats and Channels	39
Index Inclusion	40
Listing Platforms	41
Post-Issuance Reporting and Disclosure	42
Further Issuance of Labeled Instruments	44
Strong Investor Appetite	44
Green, Social, and Sustainable Portfolios	44
Tracking the Stacks	44
Efficiencies and Transaction Costs	45
Appendix – Green and Social Categories as Defined by ICMA and ASEAN	46

Table, Figures, and Boxes

Table

1:	Overview of Thematic Bond Labeling	3
2:	Examples of the Impact Indicators for Social Projects and Assets Include the following:	25
3:	United Nations Sustainable Stock Exchange Initiative Members among ASEAN+3 Stock Exchanges	41

Figures

1:	Labeling Process	1
1:	Gender Bonds within the Use-of-Proceeds Bond Space	4
2:	Projects, Assets, and Expenditures Eligible for Inclusion in a Thematic Bond	8
5:	Green and Social Definitions	9
3:	Creating the List of Green and/or social Projects and Assets	11
4:	Required Components of a Green, Social and Sustainability Bond Framework	14
5:	Key Aspects of the Selection Process for Thematic Bond Issuance	17
6:	Two Approaches to the Allocation of Proceeds	20
7:	Examples of Green Definitions	21
8:	Examples of Social Definitions	21
9:	Input–Output–Outcome–Impact Frameworks	24
10:	Examples of Green Impact Indicators	25
12:	Overview of German Sovereign Green Bonds Allocation Report for Electric Mobility category	27
13:	The Four Types of External Review	29
11:	Key Considerations for External Review	31
12:	Pre-Issuance External Review Process	33
13:	Various Approaches Around the World and at Different Levels of Coverage	35
17:	Green and Sustainability Bond Case Studies for Selecting Pathways for Recognition	36
18:	Social Bond Case Studies for Selecting Pathways for Recognition	37
14:	Allocation Reporting	42
15:	Eligibility Reporting	43
16:	Impact Reporting	43
17:	Different Approaches to Tracking Thematic Bonds and Green Projects Projects	45

Boxes

1:	ICMA Gender Bond Guidance – Bonds to Bridge the Gap	4
2:	Experience of BTS Group Holdings PCL, a regular green bond issuer from Thailand	6
3:	SchneiTec Dynamic Green Project Bond in Cambodia	6
4:	Royal Group Phnom Penh SEZ (PPSP/RGPPSEZ) Green Bond in Cambodia (Wastewater Treatment)	7
5:	Banco Compartamo Gender Bond in Mexico	7
6:	ASEAN Taxonomy Framework at a Glance	10
7:	Experience of Public Debt Management Office, Ministry of Finance, Thailand	34
8:	Solactive Green Bond Index	40

About This Guidance Note

This detailed guidance note was created to assist bond issuers and their advisors to understand the process and key considerations for a successful thematic bond issuance. This is the second edition that expands coverage of the first edition of the guidance note beyond green bonds and includes other “labeled” bond types, such as social bonds. This aims to help those issuers that are interested in financing their social portfolios, including gender and MSME-related operations, by providing detailed guidance.

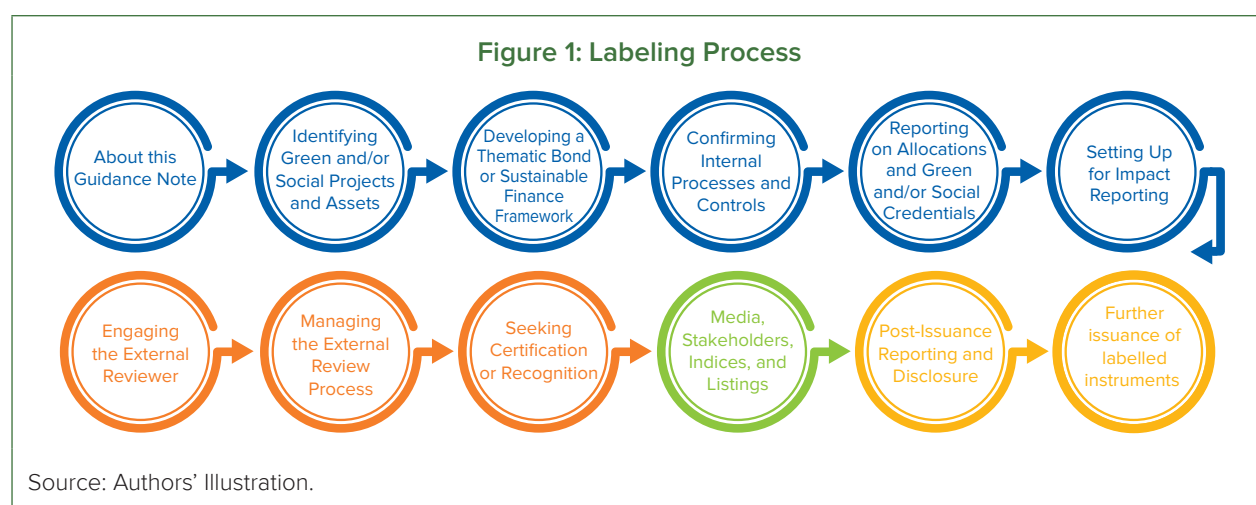
Thematic bonds refer to green, social, and sustainability, and other labelled bonds which refer to any type of bond instrument where the proceeds will be exclusively applied to eligible environmental and social projects or a combination of both¹. The terms GSS+ and thematic bonds will be used in this document interchangeably.

There is often confusion among issuers and advisors on the differences between a sustainability bond and a sustainability-linked bond. It is important to clarify the use-of-proceeds model compared to sustainability-linked arrangements, as this guidance note only covers the use-of-proceeds model.

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

The guidance note covers all of the steps required to follow best practices in labeling bonds as green, social or sustainability bonds. The sections on each step include relevant examples, links to further details, and key resources for thematic bond issuers and their deal teams (Figure 1).

Outline of the Labeling Process



1 https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Mapping-SDGs-to-GSS-Bonds_June-2022-280622.pdf

There are currently two major approaches to identifying bonds and debt instruments as having positive green, social or sustainability value. Green, climate bonds, social bonds, and sustainability bonds all rely on the use-of-proceeds approach. This is the most common approach used by bond issuers. It identifies specific green and /or social projects, assets, activities, and expenditures that are associated with the thematic bond.

Recently, there has been a surge in the alternative approach, which links sustainability outcomes for the bond issuer to the amount of interest (coupon rate) that is paid to investors. This usually involves a step-up or step- down in coupon rates triggered by the achievement (or not) of specific sustainability targets.

1. **Use-of-proceeds approach.** Per the Green Bond Principles and Social Bond Principles, this refers to “any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible green or social projects, assets, and expenditures, and which are aligned with the four core components of the ICMA Green Bond Principles and Social Bond Principles.” For Gender Bonds application of proceeds should be in line with “Bonds to Bridge The Gap: A Practitioner’s Guide to Using Sustainable Debt for Gender Equality” in addition to Social Bond Principles (see Box 1).
2. **Sustainability-linked approach.** Per the Sustainability-Linked Bond Principles, this refers to “any type of bond instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability or (environmental, social, or governance) objectives. In that sense, issuers are thereby committing explicitly (including in the bond documentation) to future improvements in sustainability outcome(s) within a predefined timeline. Sustainability-linked bonds are a forward-looking, performance-based instrument and are aligned with the Sustainability-Linked Bond Principles.”

Table 1: Overview of Thematic Bond Labeling

Green Bonds	Focused on environmental outcomes and guided by the ICMA Green Bond Principles (GBP). They are well established globally with strong investor demand and regulatory alignment (e.g. EU Green Bond Standard, ASEAN Green Standards). Fossil fuel exclusions and climate taxonomies (e.g. ASEAN Taxonomy for Sustainable Finance, EU taxonomy for sustainable activities) are commonly applied. Illustrative examples: renewable energy (e.g. solar PV), energy efficiency retrofits in public buildings, wastewater treatment, solid waste and recycling infrastructure.
Social Bonds	Defined under the ICMA Social Bond Principles (SBP), these target improved outcomes for vulnerable or underserved populations. Use cases include affordable housing, healthcare, and inclusive infrastructure. While the market saw rapid expansion during COVID-19, they are still smaller than green bonds. Illustrative examples: affordable housing, public health facilities, education infrastructure, water and sanitation services in underserved areas.
Sustainability Bonds	Governed by both the GBP and SBP, these finance a combination of green and social objectives. Most commonly used by sovereign, bank, and development issuers, they offer flexibility where project portfolios are cross-cutting or integrated. Illustrative examples: combined portfolio financing (e.g. renewable energy + affordable housing; or clean transport + healthcare/education access).
Sustainability-Linked Bonds (SLBs)	Structured under the ICMA Sustainability-Linked Bond Principles, SLBs hold fundamental differences to sustainability bonds. They are general-purpose instruments with financial characteristics (usually coupon rates) tied to achieving predefined sustainability performance targets. Popular with corporates, they emphasize KPIs, baselines, and credible sustainability strategies. Illustrative examples: coupon step-up/down linked to KPIs such as GHG emissions intensity reduction, renewable energy share, or workforce gender representation targets (issuer-level, not use-of-proceeds).
Blue Bonds	A thematic variant typically framed under the ICMA GBPs, while informed by several existent MDB guidance publications (2025 IFC Guidelines for Blue Finance, 2023 ICMA/IFC/UNEP/ADB Bonds to Finance the Sustainable Blue Economy: A Practitioner's Guide). Blue bonds earmark proceeds for marine and freshwater-related investments (e.g. ocean conservation, sustainable fisheries, wastewater management). Illustrative examples: wastewater management to reduce marine pollution, sustainable fisheries/aquaculture, river basin restoration, mangrove/coastal ecosystem protection.
Gender Bonds	Structured in line with the ICMA Social Bond Principles and further informed by the 2023 ICMA-IFC-UN Women Guidance “Bonds to Bridge the Gender Gap.” Gender bonds emphasize women’s economic empowerment, leadership, and inclusion. Investor expectations are increasingly including sex-disaggregated impact data and intersectional reporting. Illustrative examples: financing for women-led SMEs, women’s entrepreneurship and skills programmes, maternal health services, and gender-based violence prevention/support infrastructure (with sex-disaggregated reporting).

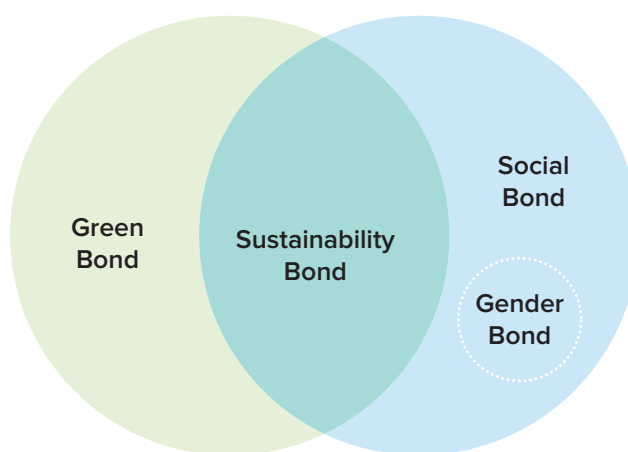
Box 1: ICMA Gender Bond Guidance – Bonds to Bridge the Gap

In 2021, ICMA, with the IFC and UN Women, released “Bonds to Bridge the Gap: A Practitioner’s Guide to Using Sustainable Debt for Gender Equality,” providing the first detailed market guidance on structuring gender-focused bonds. They are positioned within the space of social bonds and can be considered when the issuer aims to raise its profile as a gender equality leader, the pipeline or forecast includes gender projects exclusively focused on gender equality, and the aggregate financial needs of the pipeline projects are expected to equate to the size of the bond planned to be issued. Otherwise, gender projects may be instead integrated within a social or sustainability bond.²

Gender Lens Investing Tools and Definitions Vary

Gender equality is an important focus area within social and sustainability bonds, but the criteria differ depending on the standard used. Under the ICMA/IFC/UN Women Gender Bond Guidance, activities for public and private sector use-of-proceeds have illustrative examples to frame the projects that could be financed through social bonds. For public, these include thematic categories such as redistribution and reduction of unpaid care and socioeconomic advancement and empowerment of women, and reducing gender-based violence. Meanwhile, the private sector focus is more on internal processes, looking at leadership (in regard to representation), employee representation and safety, supply chain elements, products and services, and community. Under the EU Final Report on Social Taxonomy, gender is more integrated under other areas such as “promoting decent work” and “promoting equality and non-discrimination at work,” targeted economic opportunity and reducing pay gaps. This shows the two approaches to defining gender; whether it is singled out as its own area of focus, or a component built into other categories.

Figure 1: Gender Bonds within the Use-of-Proceeds Bond Space



The guidance builds directly on the ICMA SBPs and outlines how gender-focused investments can be financed through social bonds or broader sustainable finance frameworks. They include the following key features:

² ICMA, UN Women, IFC (2021). Bonds to Bridge the Gender Gap: A Practitioner’s Guide to Using Sustainable Debt for Gender Equality. <https://www.icmagroup.org/assets/documents/Sustainable-finance/ICMAUN-WomenIFC-Bonds-to-Bridge-the-Gender-Gap-A-Practitioners-Guide-to-Using-Sustainable-Debt-for-Gender-Equality-November-2021.pdf>

Eligible Use of Proceeds

Focused on activities that close gender gaps in access to services, resources, and opportunities. The following are selected from a non-exhaustive list included in the guidance:

- Leadership Representation: Provide coaching, leadership, and mentoring programs to strengthen the pipeline of female talent for board, leadership, and management positions
- Supply chain financing & equipment: Provide access to financial services for women-owned or women-led businesses (including producers, suppliers, manufacturers, distributors, and retailers)
- Community Engagement: Implement targeted engagement, consultations, or programs with women in the community (for example, to improve access to benefits).

Project Evaluation and Selection Criteria

Issuers are encouraged to align with national development priorities, along with other plans/strategies/regulations pertaining to gender. UN Women's Empowerment Principles (UN WEPs) Gender Gap Analysis is further outlined as a mechanism to identify gender inequalities to be addressed, while the guidance provides a broader list of resources for statistics.

Reporting

Reporting is encouraged to be done using gender-disaggregated indicators. Indicators from the Joint Impact Indicators (JII), the 2X Criteria, Transparency and Accountability Framework of UN WEPs indicators, and SDG indicators (primarily SDG 5, and gender-related indicators from others).

Two Parallel Tracks

There are two tracks of work to consider when labeling a bond, loan, or *sukuk* (Islamic bond) as “green,” “social” or “sustainability.” These two tracks are equally important to investors when they are considering the labeled investment.

The first track is for the eligibility of the projects, assets, and expenditures. This involves the issuer demonstrating that the projects, assets, and expenditures associated with the green, social or sustainability bonds are aligned with a set of green and/or social definitions, or a “taxonomy.” Selecting which taxonomy to use, or when not to use one, is described in Identifying Green and /or Social Projects, Assets, and Expenditures.

The second track is for the integrity of the issuer's internal systems and controls when it comes to the processes involved in labeling a bond. This includes procedures and governance for selecting green and /or social projects, assets, and expenditures; management of the bond proceeds; and regular reporting and disclosure in line with the issuer's Green, Social or Sustainability Bond Framework.

The guidance note highlights best practices for both of the abovementioned tracks. Issuers can achieve best practices in the second track of work, no matter which green and/or social definitions are used. These internal systems and controls can support a broad range of labeling activities for an issuer (e.g. green, social, or sustainability).

The First Time Is Challenging but Worth It

Issuers of green and social bonds have described the extra effort required for labeling as being significant for the first labeled transaction but much less so for future activities. Subsequent transactions use the same thematic bond framework, internal processes, and controls and tracking of proceeds as for the first thematic bond transaction, so it is much easier and faster compared to the first time (Box 2).

Treasurers from thematic bond issuers have described their strong intention to issue further thematic debt instruments, even though there was extra effort required to label the first transaction.

There are substantial benefits for thematic bond issuers if they can be the first to issue a thematic bond in a particular jurisdiction or a new sector, or by using a new structure. This amplifies the potential for the thematic bond to provide positive momentum for the issuer's sustainability credentials.

Box 2: Experience of BTS Group Holdings PCL, a regular green bond issuer from Thailand

BTS Group's second series of green bonds issued in November 2020 with 3.3x oversubscription indicated investors' confidence and goodwill towards the company and our green projects. On the back of strong demand, BTS Group decided to exercise the THB3,600 million greenshoe option, bringing the total issue size to THB8,600 million. The proceeds will be used to fund two new monorail projects (Pink line: 34.5 kilometers, Yellow line: 30.5 kilometers) in Bangkok, which are targeted to operate during 2021–2022. Both are anchored projects that will elevate Bangkok's electric mass transit network that will lessen the use of fossil-fueled vehicles, resulting in the reduction of carbon emissions and fine dust particles in the Bangkok metropolitan area. It is estimated that both projects will help reduce carbon dioxide emissions by 28,000 tons per year and will play an important role in bringing cleaner air quality to the city. Although issuing a green bond required additional work and resources to comply with our Green Bond Framework, we felt it is truly worthwhile. It is also worth mentioning that since this is our second issuance, our team had quite a steep learning curve and was able to work much faster.

Source: Surayut Thavikulwat, Chief Financial Officer, BTS Group Holdings PCL.

Box 3: SchneiTec Dynamic Green Project Bond in Cambodia

In April 2025, SchneiTec Dynamic issued a 15-year green bond of KHR 196.64 billion (approximately USD 49 million) to finance a 60 MW solar photovoltaic power plant in Kampong Chhnang province, and the bond was listed on the CSX.³ The transaction has been cited as Cambodia's first-ever project bond, and included credit enhancement via a guarantee from the CGIF,⁴ supporting investor confidence and market participation.

Use of proceeds focused on funding the solar project and associated infrastructure, demonstrating how domestic capital markets can be used to finance climate mitigation assets in Cambodia.

3 GGGI (2025). 50 million USD green bond issued for a solar plant in Kampong Chhnang province (Cambodia). <https://gggi.org/50-million-usd-green-bond-issued-for-a-solar-plant-in-kampong-chhnang-province-cambodia/>

4 Credit Guarantee and Investment Facility (2025). CGIF Guarantees Cambodia's First-Ever Project Bond. https://www.cgif-abmi.org/?press_release=cgif-guarantees-cambodias-first-ever-project-bond

Box 4: Royal Group Phnom Penh SEZ (PPSP/RGPPSEZ) Green Bond in Cambodia (Wastewater Treatment)

In June 2024, Royal Group Phnom Penh SEZ Plc (PPSP/RGPPSEZ) issued a green bond (first tranche reported at KHR 41 billion / approx. USD 10 million) and listed it on the CSX.⁵ Proceeds were directed to environmental infrastructure, including a wastewater treatment plant and related infrastructure within the SEZ, illustrating a “use of proceeds” approach that is easily understood by local investors and replicable by other corporates. The issuance was supported through Cambodia’s sustainable bond market development efforts and benefitted from credit enhancement arrangements (including CGIF involvement).⁶

Box 5: Banco Compartamo Gender Bond in Mexico

In August 2022, Banco Compartamos, with support from BBVA México as Co-Lead Underwriter, successfully completed its second issuance of a Gender Bond in the Mexican market, totaling MXN 2.5 billion (approx. USD 134 million).⁷ The deal, issued under the ticket COMPART 22S, was well received by the market, reaching a 1.45x oversubscription rate with a total demand of MXN 3.61 billion (approx. USD 194 million). The bond was issued at 60 basis points over the 28-day TIE (28-day Interbank Equilibrium Interest Rate), resulting in a first coupon of 9.40% on a 4-year floating structure. Investors included a range of Afores (pension funds), development banks, and brokerage firms, reflecting confidence in the bank’s mission and gender-lens approach.

Use-of-Proceeds from the bond are directed toward paying down existing debt, and expanding the bank’s loan portfolio, which holds a strong focus on women-led microenterprises. Banco Compartamos holds a long-standing track record in financial inclusion, and their 2023 Annual report outlined that 81.7% of their group loans (generally for working capital or business investment) went towards women, while 57% of their individual loans were directed towards women.⁸

Source: EC International Platform on Sustainable Finance, Strengthening clarity in social finance: scaling up social bonds, Banco Compartamo website

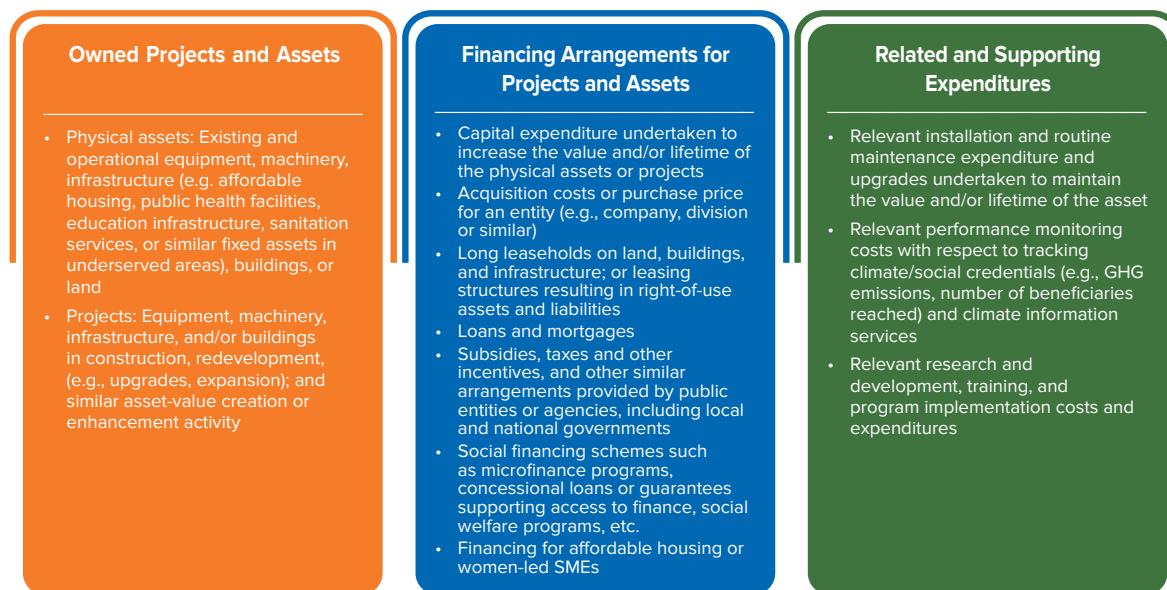
-
- 5 GGGI (2024). Unlocking green finance: Royal Group Phnom Penh SEZ takes action with green bond issuance. <https://gggi.org/unlocking-green-finance-royal-group-phnom-penh-sez-takes-action-with-green-bond-issuance/>
 - 6 Construction Property (2024). Royal Group Phnom Penh SEZ Secures Nearly US\$10m from Green Bond Listing. <https://construction-property.com/royal-group-phnom-penh-sez-gets-nearly-us10-million-from-green-bond-listing/>
 - 7 BBVA (2022). Banco Compartamos, assisted by BBVA, successfully places its second issue of an MXN2.5 billion gender bond. <https://www.bbvacib.com/deals/banco-compartamos-assisted-by-bbva-successfully-places-its-second-issue-of-an-mxn2-5-billion-gender-bond/>
 - 8 Banco Compartamos (2024). Social Bond Framework. <https://www.gentera.com.mx/wcm/connect/b71ea012-6b1a-4659-a179-e0960203d254/Banco+Compartamos+-+Social+Bond+Framework+2024+clean.pdf?MOD=AJPERES>

Identifying Green and/or Social Projects, Assets, and Expenditures

The initial step for a bond issuer looking to use one of the thematic bonds labels for the first time is to identify what they can finance with their thematic bond. The most common approach is to identify hard assets that have green and/or social credentials, but there is actually a lot of flexibility in terms of what can be counted as a green or social project, asset, investment, or expenditure.

A variety of projects, assets, activities, refinancing, new capital, and relevant expenditures are all eligible to be associated with a thematic bonds. The types of projects, assets, and expenditures that can be included in a thematic bond include (i) owned projects and assets, (ii) financing arrangements for projects and assets, and (iii) related supporting expenditures (Figure 2.)

Figure 2: Projects, Assets, and Expenditures Eligible for Inclusion in a Thematic Bond



GHG = greenhouse gas.

Source: Climate Bonds Standard version 3.0., ICMA Social Bond Principles

Selecting an Appropriate Set of Green and Social Definitions

Once the underlying projects, assets, and expenditures are identified, thematic bond issuers need to determine which set of green and/or social definitions is going to be used for their selection of green and/or social projects and assets. There are a few options available, and it is important to understand the key considerations for this important choice. Many in the thematic bond market have adopted the word “taxonomy” to describe a set of green and/or social definitions (Figure 5). In practice, however, “taxonomy”

should be understood primarily in the green context: although the EU has explored a social taxonomy, there is currently no established social taxonomy within ASEAN, and ICMA does not directly recommend referencing a social taxonomy - unlike for green bonds. Some taxonomies (e.g., the ASEAN Taxonomy) incorporate social considerations within overall compliance. For social bonds specifically, reference should be made to the ICMA Social Bond Principles and the ASEAN Social Bond Standards.

Figure 5: Green and Social Definitions

CURRENT OPTIONS FOR GREEN OR SOCIAL DEFINITIONS

- ICMA GREEN AND SOCIAL BOND PRINCIPLES HIGH-LEVEL LIST**
- o Very broad range of high-level categories for green and/or social projects and assets
 - o Seen as the minimum level of green and social ambition
 - o Further explanation of green credentials is usually included by issuers

- ASEAN GREEN, SOCIAL and SUSTAINABILITY BOND STANDARD**
- o The ASEAN Capital Markets Forum (ACMF) launched the ASEAN Green Bond Standards in 2017, and later the ASEAN Social Bond Standards and ASEAN Sustainability Bond Standards in 2018
 - o Uses high-level categories from ICMA's Bond Principles
 - o Social projects must clearly identify target populations, providing an additional requirement when compared to green bonds
 - o Additional condition that fossil fuel power generation projects must be excluded
 - o Projects which involve a negative social impact related to alcohol, gambling, tobacco and weaponry are excluded from the ASEAN Social Bond Standards
 - o Issuers must have a geographic or economic connection to ASEAN

- NATIONAL OR REGIONAL TAXONOMIES OR GUIDELINES FOR GREEN PROJECTS**
- o The PRC has a Green Project Catalogue (updated in 2024).
 - o The ASEAN Taxonomy for Sustainable Finance (updated to Version 3 in 2024).
 - o Regional examples: Indonesia Taxonomy for Sustainable Finance, Malaysia Climate Change and Principle-based Taxonomy, Singapore-Asia Taxonomy for Sustainable Finance, Thailand Taxonomy, Vietnam Green Taxonomy
 - o Other ASEAN countries are looking to develop locally relevant taxonomies, with Cambodia planning to adopt a National Green Taxonomy soon..

- FOR GREEN PROJECTS**
- o Most commonly used international set of definitions with a focus on climate
 - o Used by most thematic bond index providers and adopted by some external reviewers
 - o Also has sector-specific criteria that are used for certification under the Climate Bonds Standard

- EUROPEAN UNION'S SUSTAINABLE FINANCE TAXONOMY**
- o Very complex approach with additional checks beyond just green credentials
 - o Will be expanded beyond climate issues to deal with other sustainability topics
 - o May be necessary for green or sustainability bond issuers to clarify alignment if they are looking to issue their bond in an EU jurisdiction or attract investors from the EU

Legend: ■ Minimum level ■ ■ ■ ■ ■ Complex level

KEY CONSIDERATIONS FOR CHOOSING A SET OF GREEN or SOCIAL DEFINITIONS

- LABELING REQUIREMENTS IN THE JURISDICTION WHERE THE ISSUANCE WILL OCCUR**
- o Some jurisdictions require issuers of thematic bonds to follow very specific regulations and approval pathways (e.g. the PRC).
 - o Other jurisdictions have voluntary guidelines that add to investor confidence.

- MARKETS AND INVESTORS BEING TARGETED FOR THE BOND ISSUANCE**
- o If the issuer is targeting local investor, then local definitions are usually enough.
 - o For international investors, it may be necessary to use regional or international definitions.

- LOCATIONS OF THE GREEN OR SOCIAL PROJECTS AND ASSETS**
- o The relevant jurisdictions may have specific green and/or social definitions that need to be used.
 - o Definitions used in advanced economies may not be relevant for other markets, especially emerging markets in Asia.

- TYPES OF GREEN AND /OR SOCIAL PROJECTS AND ASSETS AVAILABLE TO THE THEMATIC BOND ISSUER**
- o Green and/or social projects and assets can use definitions with more elevated ambition.
 - o Some sectors or subsectors are not covered by existing taxonomies.
 - o For those cases, the ASEAN Taxonomy provides the Foundation Framework (a principles-based, overarching structure for qualitative assessment) that can be applied when technical screening criteria are absent.

- INVESTOR AND MARKET PERSPECTIVES ON THE LEVEL OF AMBITION OF GREEN AND SOCIAL DEFINITIONS**
- o Some investors are concerned that definitions with low ambition are riskier from a greenwashing and social-washing perspective.
 - o Most investors are comfortable with the ICMA Green Bond Principles and Social Bond Principles' high-level list with extra exclusions for fossil fuel sectors and projects which involve activities that pose a negative social impact related to alcohol, gambling, tobacco or weaponry.

ASEAN = Association of Southeast Asian Nations, EU = European Union, PRC = People's Republic of China.

Source: Authors' compilation.

Box 6: ASEAN Taxonomy Framework at a Glance

Foundation Framework (FF). Principles-based, sector-agnostic screening used across ASEAN to assess an activity's environmental contribution and apply Do No Significant Harm (DNSH) and Social Aspects safeguards. The FF yields a simple label using the Traffic Light System.

Traffic Light System (TLS). Classifies activities as Green (environmentally sustainable), Amber/Transition (on a credible pathway with safeguards), or Red (incompatible/harmful). Labels reflect both current performance and transition intent.

Plus Standard (Technical Screening Criteria). Where available, activities are assessed against sector-specific, science-based TSC (e.g. thresholds, metrics). Passing the TSC still requires meeting DNSH and Social Aspects.

DNSH and Social Aspects. DNSH checks ensure an activity does not significantly harm other environmental objectives; Social Aspects require compliance with labour, human rights, community impact and safety safeguards (aligned with international norms and ASEAN context).

Source: ASEAN Taxonomy for Sustainable Finance

Investors want to see the details of the green and /or social projects and assets associated with the bond, but they often do not have the technical background to judge their merits. External reviews of thematic bonds can provide investors with confidence based on a number of different proprietary approaches and reassuring narratives on green/social credentials.

Useful links

- ICMA's Green Bond Principles
- ICMA's Social Bond Principles
- ICMA's Sustainability Bond Guidelines
- ASEAN Green Bond Standards
- ASEAN Social Bond Standards
- ASEAN Sustainability Bond Standards
- Climate Bonds Taxonomy
- ASEAN Taxonomy for Sustainable Finance
- The PRC's Green Project Catalogue (updated in 2024)
- European Union's Sustainable Finance Taxonomy
- International Platform on Sustainable Finance's Common Ground Taxonomy

Creating the List

Once the issuer has considered the types of assets, investments, and expenditures that can be used—and selected an appropriate set of green and/or social definitions—a list of green and/or social projects and assets can be created by the issuer (Figure 3).

Figure 3: Creating the List of Green and/or social Projects and Assets

CREATING THE LIST

The issuer needs to prepare documents and internal procedures to do the following:

-  Identify the green and/or social projects and assets that are proposed to be associated with the Thematic Bond and that have been assessed as likely to be eligible;
-  Establish a list of green and/or social projects and assets that can be kept up-to-date during the full term of the Thematic Bond;
-  Establish, document, and maintain a decision-making process to determine the eligibility of the green and/or social projects and assets in the list; and
-  Establish, document, and maintain a process to identify and manage potentially material social and environmental risks associated with the projects.

Source: Authors' compilation.

These documents and procedures should align with existing processes and governance structures inside the issuer's organization. Many existing structures for decision-making and tracking over time can be used. This will minimize the number of new internal procedures and processes that need to be created by the issuer.

Issuers should seek to clarify any related eligibility and exclusion criteria, as well as any other policies or processes by which the issuer identifies and manages perceived social and environmental risks associated with the selected projects and assets.

The issuer's processes should seek to ensure that the relevant project(s) do not cause significant harm to other environmental and social objectives. The issuer should also communicate its analysis, any mitigation measures enacted, and the monitoring to be undertaken in cases when the issuer assesses the potential risks to be meaningful.

Screening projects for Eligibility and Performance: Information Flows

Many green and/or social projects and assets will be eligible just based on what they are. For example, solar or wind power facilities and electrified transport are all "green enough" based on their role in a future green economy. Another example is a project which removes barriers for women's employment or eliminates and prevents all forms of gender-based violence, which can be considered "social".

Other green and /or social projects, assets, and expenditures need to demonstrate their eligibility through performance criteria. For example, green commercial buildings or energy efficiency initiatives need to comply with certain "green" industry standards and thresholds according to certain taxonomies, or in other

words to be green enough, so that they make a real contribution to achieving a future green economy. Buildings that are slightly greener than the average, or small improvements in energy use, are not aligned with what investors want to see in bonds labeled as green. Example of the screening criteria that are applicable to a social projects include a share of women in the management of the company or share of vulnerable population benefiting from the newly constructed healthcare facility.

Sometimes this green and/or social performance information is not tracked, or it is not readily available to the thematic bond issuer. For example, a bank with a loan to a commercial building owner may not receive any green performance information as part of the loan arrangements. Therefore, the issuers need to establish processes to collect the relevant information for their green and /or social projects and assets so that they can demonstrate their eligibility as well as track their impact (through ICMA-aligned indicators). In some cases—especially where alignment with a taxonomy is sought—there may be a need to monitor ongoing performance to ensure continued alignment with the taxonomy criteria. This may mean establishing new information flows within the organization or between entities involved with green and /or social projects and assets.

Issuers need to ensure that the information flows from relevant departments to the team within the issuing entity that is responsible for reporting are established and working as intended. This is often more complex within a government or public sector structure compared to private sector players, but it is equally important for the integrity of the process.

Managing the Portfolio of Green and /or Social Projects and Assets Over Time

The use-of-proceeds approach requires specific green and/or social projects and assets to be associated with the thematic bond. However, the green and/or social projects and assets identified prior to the issuance of the bond may not be available to the issuer or large enough for the full term of the bond.

Additional green and/or social projects, assets, and expenditures can be added to—or used to substitute or replenish—the portfolio of green and/or social projects, assets, and expenditures associated with the thematic bond, as long as the additional projects, assets, and expenditures are eligible under the issuer’s thematic bond framework.

Most issuers of thematic bonds will regularly update their list of green and/or social projects, assets, and expenditures, and then each year disclose the changes in their regular reporting to bond holders.

Issuers of multiple thematic bonds or other labeled debt instruments can manage their labels on a portfolio basis. This means that multiple thematic bonds can be “stacked up” and associated with a large pool of green and/or social projects and assets. More information on this approach is provided in Further Issuance of Labeled Instruments.

Developing a Green, Social or Sustainability Bond Framework

The issuer of a thematic bond needs to have a green, social or sustainability bond framework that lays out the information required to demonstrate the integrity of the respective label. This information is often presented using the four core components of the ICMA Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines: (i) use of proceeds, (ii) process for project evaluation and selection, (iii) management of proceeds, and (iv) reporting.

Bond issuers are usually very large organizations, so this framework will often describe how the issuer's existing procedures or governance structures are used as well as any new procedures that have been created for the purpose of a thematic bond issuance. Issuers may also choose to align their frameworks with the Green Loan Principles and Social Loan Principles (from LMA, LSTA, and APLMA), allowing the document to function as a Green, Social, or Sustainability Finance Framework that applies to both loans and bonds. External reviews are also conducted to gauge alignment of the framework with its guiding principles.

Expected Contents

The bond frameworks can either be quite short (3–5 pages) or very long and detailed (20+ pages). Many examples are available from a wide variety of issuers from over 50 different countries. Figure 4 lists the items that must be included in an issuer's framework document.

Clarity of the Issuer's Narrative

The statements in the objectives of the thematic bond and the issuer's broader green, social and sustainability objectives (Figure 4, items a. and b.) are usually included in the introduction or overview section of the Thematic Bond framework.

A wide variety of green and/or social objectives are possible. These can vary from increasing the installed capacity of

low-carbon assets, such as solar power facilities, to having a specific objective focused on the operations or indirect effects of the projects and assets, such as emissions reductions. From a social perspective this can include advancement of women's leadership and improving health/education outcomes of the most vulnerable population.

This is a very important aspect of the thematic bond issuance process because it provides the issuer with the opportunity to directly explain to investors why and how thematic bonds fit within their long-term vision or corporate strategy.

Many thematic bond issuers have already articulated their green, social or sustainability objectives in corporate sustainability reports or other statements on green, social or sustainability topics. Using a thematic bond to raise money in the capital markets usually complements the issuer's broader green, social or sustainability objectives and narrative.

Many thematic bond investors consider the issuer's profile and take into consideration the quality of the issuer's overall profile and performance regarding environmental and social responsibility. In the presence of controversial issues—such as fossil fuels, extractive or nuclear-based activities, or limited overall sustainability credentials—investors, stock exchanges, index providers, and other market participants may also require additional transparency from the Thematic Bond issuer.

Figure 4: Required Components of a Green, Social and Sustainability Bond Framework

THEMATIC BOND FRAMEWORK

- | | |
|----------|---|
| A | A statement on the environmental, social, and/or sustainability objectives of the thematic bond; |
| B | How the green, social, and/or sustainability objectives of the thematic bond are positioned within the context of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability; |
| C | Confirmation that the bonds that will be issued under the bond framework are aligned with one or more established approaches to labeling. This may include statements of alignment with applicable standards such as the ICMA Green Bond Principles, ICMA Social Bond Principles, ASEAN Green Bond Standards, ASEAN Social Bond Standards, ASEAN Sustainability Bond Standards, ICMA Sustainability Bond Guidelines, the Climate Bonds Standard, or local/regional regulations, guidelines or taxonomies; |
| D | A list of eligible green projects and/or social project categories and its target populations, alignment with taxonomy (if applicable) as well as expected and/or achieved impact indicators of projects; |
| E | The list of proposed green and /or social projects and assets associated with the thematic bond (if this is available and/or can be disclosed prior to issuance of the thematic bond); |
| F | A description of the decision-making process that has been used to select the green and /or social projects and assets; |
| G | An estimate of the share of the thematic bond proceeds that will be used for financing new green and/or social projects and assets and the share used for refinancing existing green and/or social projects and assets, including the relevant green and/or social projects and assets or investment areas that may be refinanced, the applicable look-back period for eligible expenditures (aligned with ICMA guidance), and - optionally, where relevant (e.g., under CBI practices)—the expected timeline for full allocation of proceeds |
| H | The intended approach to providing update reports while the thematic bond remains outstanding. |

Source: Authors' compilation.

In particular, additional disclosure may be sought around the strategic importance of sustainability for the business, demonstration of the issuer's transition strategy, and/or the sustainability benefits of the underlying projects that go beyond established sector norms and business as usual. It is important that thematic bond issuers are ready for these discussions.

Flexibility and Updating

A thematic bond issuer can create a framework that is just for the issuance of one green, social or sustainability bond, or they can create a framework for a broader range and number of sustainable finance transactions. Many issuers have created an overarching Sustainable Bond Frameworks, with the potential to issue green, social or sustainability bonds/sukuk in the future.

Transparency is the most important part of the labeling of bonds and other debt instruments. The green, social or sustainability bond framework created by the issuer is the key channel for communicating to investors and other stakeholders the basis and integrity of the label. It is used by external reviewers and index providers, as well as a wide range of market participants.

Updating the framework should occur whenever there is a material change. This can include expanding the range of eligible projects and assets, shifting the focus to a broader range of labels, or reflecting a change in the issuer's organization. Most issuers will notify investors and other stakeholders when their framework has been updated, and they often use the opportunity to highlight the progress or ambition of the issuer.

Leveraging Successful Examples

It is very useful to look at other bond frameworks to understand the level of detail and tone of voice that issuers provide in these documents. There is quite a lot of variety across the many framework documents that have been used for thematic bond and sustainable finance transactions.

Many examples are available from market information providers or from individual issuer websites. Issuers will benefit from reviewing examples of frameworks that are similar to their own situation. For instance, useful insights can be gained from looking at examples from the same jurisdiction or for similar green and/or social projects and assets, organization structures, or targeted investors.

Confirming Internal Processes and Controls

The issuer of a thematic bond needs to establish and maintain internal processes and controls. These must enable the issuer to reliably undertake procedures and make decisions on the selection of green and /or social projects , assets, expenditures, the management of Thematic Bond proceeds, and reporting.

A summary of the issuer's approach needs to be provided in its bond Framework; the issuer also needs to develop internal procedures that guide the actions and decisions of the issuer. The external reviewer will assess the issuer's internal controls and processes as part of the external review process.

Leveraging Existing Arrangements

The actual extent of internal controls and processes for the thematic bond will depend on the issuer's organization and the existing complexity around information flows and decision-making. For example, a pure-play solar power company is likely to have simple procedures, while a government issuer may have quite complex information flows and decision-making structures to support its thematic bond or sustainable finance transactions.

Most issuers of thematic bonds already have comprehensive internal controls and processes for making investment decisions, tracking funds within the business, and signing off on external statements. The key requirements for thematic bonds can be met by using or adjusting the existing arrangements within the issuer organization.

Creating New Groups and Conversations

While many existing arrangements can be leveraged, the information required for eligibility of the projects, assets, and expenditures may represent new arrangements for sourcing and compiling information as well as requiring new teams to be formed. Many supporters of thematic bonds have highlighted these new teams and conversations within the issuer as being one of the most valuable outcomes from the effort to use the green, social, or sustainability label. They provide new channels for discussion and improved understanding of green and/or social opportunities and risks across the issuer's organization.

For example, many issuers will set up a project/asset selection committee consisting of senior members of staff from relevant departments (e.g., finance, engineering, and operations). The committee is tasked with screening the underlying projects, assets, and expenditures according to the green and social definitions and criteria being used. The committee provides recommendations for the selection of projects, assets, and expenditures that is then confirmed (i.e., "signed off") by the issuer's relevant decision-making body or key person.

Similarly, sovereign issuers of thematic bonds often describe their newly created governance processes for the selection of green and /or social projects, assets, and expenditures. For example, relevant projects, assets, and expenditures are screened by a joint committee consisting of representatives of the finance ministry, environment ministry, transport ministry, ministries of education and health and other relevant ministries. Selection decisions are then sent to an appropriate body or government ministry for formal approval.

Documentation of Procedures

While each issuer might have a different way of selecting green and /or social projects, assets, and expenditures, or of managing the proceeds from the thematic bond, the key point is that the issuer should be as transparent as possible to provide investors with comfort that the issuer's internal processes and controls are robust.

The internal processes and controls that the issuer uses for its thematic bond need to be documented. These need to include the following items as detailed in Figure 5.

Figure 5: Key Aspects of the Selection Process for Thematic Bond Issuance



Selection of green or social projects and assets

The selection process determines whether the green or social projects and assets meet the relevant eligibility requirements of the chosen set of green and social definitions or taxonomy. This should include any green or social standards or certifications referenced in the selection criteria. It can also refer to exclusion criteria or any other process applied to identify and manage potentially material environmental, social, or governance risks associated with the projects and assets.

Management of the Thematic Bond proceeds

These need to cover three key aspects with respect to management of proceeds:

► Tracking of proceeds

The proceeds of the Thematic Bond can be credited to a sub-account, moved to a sub-portfolio (often called "ring-fencing" of proceeds), or otherwise tracked by the issuer in an appropriate manner and documented (often called "earmarking" of proceeds).

► Earmarking funds to green and/or social projects and assets

An earmarking process can be used to manage and account for funding to the green or social projects and assets and enables estimation of the share of the Thematic Bond proceeds being used for financing and refinancing.

► Managing unallocated proceeds

The balance of the Thematic Bond proceeds that have not yet been allocated to green or social projects and assets should be managed so that the proceeds are not being used for other projects and assets not covered by the bond framework. This usually involves holding cash or cash-equivalent instruments as part of a broader Treasury function.



Reporting on allocations, eligibility, and impact

This refers to processes to bring together all of the relevant information and provide robust reports for internal and external audiences. See further details on reporting in Post-issuance Reporting and Disclosure.

Source: Authors' compilation

Decision-Making, Disclosure, and Governance

Labeling a bond as green, social or any other label requires the issuer to make decisions, disclose to investors and the public, and provide confidence that the label is robust.

Most issuers of Thematic Bonds already have these capabilities internally based on their existing business or public sector operations. These should be used as much as possible by the issuer.

Investors and market players want to have confidence that these aspects of the issuer's Thematic Bond offering are robust and transparent, even if they are not often interested in the details. External reviewers will assess the issuer's internal processes and controls as part of their review procedures. See [Engaging the External Reviewer](#) and [Managing the External Review Process](#) for further details.

Reporting on Allocations and Green/Social Credentials

The use-of-proceeds approach is described in the Green and Social Bond Principles under Green or Social Bond Definition. Below are the definitions of a Green and Social Bond⁹.

Any type of bond instrument where the proceeds will be exclusively applied to finance or refinance, in part or in full, new and/or existing eligible green/social projects, assets, and expenditures that are aligned with the four core components of the Green/Social Bond Principles.

Thus, the value of the green and /or social projects, assets, and expenditures must be equal to or higher in value than the amount of the bond to be issued. So if a \$100 million thematic bond is issued, then the issuer needs to have at least \$100 million worth of green and /or social projects, assets, and expenditures. Most issuers will include a buffer so, for example, they may associate \$120 million of green and /or social projects, assets, and expenditures with the Thematic Bond in this example.

The issuer needs to establish internal mechanisms that allow it to effectively track and allocate proceeds from the labeled bond to eligible projects, assets, and expenditures (Figure 6). These mechanisms are described in the ICMA Green Bond Principles and Social Bond Principles on management of proceeds; the same approach applies to Sustainability Bonds.

The net proceeds of the green/ social bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio, or otherwise tracked by the issuer in an appropriate manner.

Satisfying Green and/or Social Eligibility Requirements

The eligibility requirements for the issuer's green and /or social projects, assets, and expenditures depend on the set of green and social definitions, or taxonomy, that the issuer is using. The choice of taxonomy has a major impact on whether projects, assets, and expenditures will be "green enough" to be associated with a thematic bond.

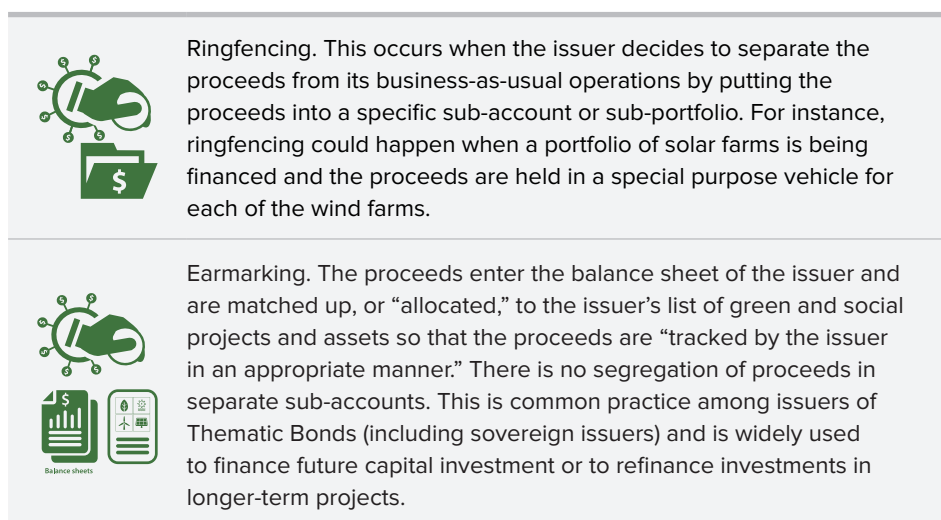
Some of the taxonomies are very prescriptive in what is needed to demonstrate eligibility, but this also depends on the types of projects, assets, and expenditures being considered. For example, for assets such as solar farms, wind farms, or electrified public transport, green eligibility is based on the core properties of the assets themselves. No further evidence is required beyond their existence and the value ascribed to them in the issuer's list.

⁹ International Capital Market Association. Green Bond Principles. <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>. International Capital Market Association. Social Bond Principles. <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/social-bond-principles-sbp>

For other assets such as green buildings, hydropower facilities or resilient and inclusive water and sanitation infrastructure, there is a much broader range of eligibility requirements contained in the various taxonomies. This means that investors will often require more detailed information about projects, assets, and expenditures in these categories, which flows through to the issuer needing to obtain and provide that information. This could include certifications for green buildings or actual performance data if that is the form of an eligibility threshold.

For social projects to be considered “social enough,” issuers should demonstrate clear positive social outcomes for defined target populations and describe the underlying social issues that hinder or damage well-being (e.g. access, affordability, quality, inclusion). In ASEAN (where there is currently no established social taxonomy) issuers should reference the ICMA Social Bond Principles and the ASEAN Social Bond Standards, and, where relevant, align with local regulations or benchmarks. Examples include projects connected to provision of child care and child support or ensuring access to quality healthcare products and services for everyone.

Figure 6: Two Approaches to the Allocation of Proceeds



Source: Authors’ compilation.

For green and social definitions that only align with the ICMA Green and Social Bond Principles’ high-level categories, there is much more flexibility for the issuer to define its own green and social eligibility requirements. Issuers need to ensure that they are transparent on the eligibility of the green and social projects, assets, and expenditures associated with their Thematic Bonds. This may include demonstrating the eligibility of existing projects, assets, and expenditures, by clearly explaining criteria/thresholds applied (Figures 7 & 8).

Figure 7: Examples of Green Definitions

Example 1. Commercial buildings under Climate Bonds Taxonomy are defined as being in the top 15% of the buildings in that city in terms of greenhouse gas performance per square meter of net lettable area. The Green Bond Principles' high-level categories have no thresholds for green buildings, so the issuer can choose any approach to eligibility, such as "better than building code" or "20% better than average." Issuers should map this eligibility to the ICMA GBP "Green buildings" category and disclose alignment to applicable local/regional taxonomies (e.g., ASEAN Taxonomy) and/or international standards (e.g. Climate Bonds Standard).



Example 2. Hydropower is a source of renewable energy but is also controversial for many investors based on the social and environmental impacts of hydropower development. Under the ASEAN Green Bond Standards, all renewable energy is eligible; while under the Climate Bonds Standard, there are substantial requirements for hydropower assets. Furthermore, under the Climate Bonds Standard, any hydropower asset must meet a threshold based on its greenhouse gas emissions footprint as well as undergo a site-specific assessment using the Environmental, Social, and Governance Gap Analysis Tool. Issuers should map the asset to the ICMA GBP "Renewable energy" category and disclose which taxonomy or standard is referenced (e.g. ASEAN Green Bond Standards, Climate Bonds Standard) and the project's alignment.

Source: Authors' compilation.

Figure 8: Examples of Social Definitions

Example 1:
Affordable Housing
Eligibility Thresholds
Differ

Affordable housing is a common social project category, but definitions of eligibility differ across frameworks and contexts. The ICMA Social Bond Principles outline affordable housing as a core eligible category, while leaving issuers to define "affordable" themselves. Iceland's sovereign gender bond framework, for example, refers to domestic regulations for thresholds governing affordability. The EU Platform on Sustainable Finance's Final Report on Social Taxonomy discusses how affordable housing contributes to the objective of "access to adequate housing", linking it to international human rights standards such as those from CESCR and UN-Habitat. Contributing to adequate living standards and well-being through access to housing involves improving the availability and accessibility of housing units for low-income and disadvantaged groups, typically by ensuring that rents are at least x% below the area average.

Example 2:
Access to Essential
Services – Healthcare

Projects that improve access to affordable, quality, and equitable healthcare services for underserved populations. This includes infrastructure development, service delivery, and technologies aimed at addressing public health challenges. Eligible criteria can include construction, expansion, or modernization of public hospitals or clinics in low-income or rural areas; procurement of medical equipment and supplies for facilities serving marginalized or vulnerable groups; deployment of mobile health clinics to reach remote or displaced communities; investment in digital health technologies to extend care access (e.g. telemedicine) for disabled, elderly, or isolated individuals; and public vaccination campaigns targeting vulnerable populations (e.g., low-income households, undocumented migrants).

Investor and Market Expectations

Prior to issuance of the thematic bond, the issuer's bond framework plays an important role in providing transparency for potential investors on

- what green and /or social projects , assets, and expenditures will be associated with the thematic bond;
- whether the selected projects, assets, and expenditures are green and/or social enough; and
- how the issuer will report on these things during the term of the thematic bond.

After the thematic bond has been issued, the issuer is expected to prepare and update an allocation & impact report at least annually, while the thematic bond remains outstanding, and on a timely basis if there are any material developments in the bond's green or social label. The update report includes information on the allocation of proceeds; eligibility of green and /or social projects , assets, and expenditures; and impact reporting. See Post-Issuance Reporting and Disclosure for further details.

Material developments could include early repayment of the bond; change of control or acquisition; change of name; changes to the eligibility of assets or projects; as well as any material amendments, supplements, and other updates to deal documents.

The issuer needs to make the update report available to holders of the thematic bond and is strongly encouraged to make the report available to the public. If the update report cannot be made available to the public, then the thematic bond may not be aligned with some of the more stringent approaches to identifying thematic bonds that require public disclosure of annual reports. Some national regulators require public disclosure of allocation and impact reports, so the issuer should check with local regulations.

Reporting Formats and Channels

Thematic bond issuers provide their information in a wide variety of formats. Sometimes, the information is included in a broader sustainability report for the organization. Often, the Allocation & Impact report is provided by the issuer as a separate document.

For new issuers of thematic bonds, it is good to look at examples of what other issuers have done to understand the level of detail and tone of voice in similar circumstances.

Most thematic bond issuers provide their related documents on a “sustainability” or “thematic bonds” page on their website. This enables investors to easily access the information on a regular basis. The timing of providing the update report can be aligned with the issuer's schedule of regular reporting and regulatory requirements, and does not need to follow the anniversary of the issuance of the thematic bond.

Other channels include various market information providers such as *AsianBondsOnline*, Environmental Finance, the Climate Bonds Initiative (CBI), and stock exchanges.

Issuers are encouraged to make the update reports available through existing reporting channels for the capital markets, such as the issuer's website, a stock exchange information dissemination portal, or a local Thematic Bond platform. This streamlines the information-gathering process for investors and analysts, further strengthening the value of the green and/or social label and reducing transaction costs.

Setting Up for Impact Reporting

Green and/or social projects, assets, and expenditures have a wide variety of environmental and social impacts. This is not surprising given the diverse range of green and social sectors, subsectors, and supporting infrastructure that have already been supported by thematic bonds.

There is much focus on impact reporting by thematic bond investors. This is often the focus of asset managers who buy thematic bonds in the market and then sell their green and social investment products to investors. They want to have quantified green and/or social impacts from each of the Thematic Bonds to assist with demonstrating the green and social credentials of their funds or products.

However, the impacts recognized by thematic bond investors are actually indicators that cover the outputs, outcomes, and impacts from green and/or social projects, assets, and expenditures. Therefore, the focus for thematic bond issuers should be on impact indicators that can be readily derived from the information they already have available to them.

It is highly recommended to prepare the list of impact indicators associated with eligible project categories even before issuing the thematic bonds to ensure smooth and timely reporting.

Input–Output–Outcome–Impact Frameworks

Many projects are designed and evaluated based on a framework that covers the progression from inputs and activities through to impacts. Figure 9 illustrates this framework.

Based on the framework in Figure 9, impact reporting in the thematic bond market could perhaps be better described as indicator reporting, where the indicators reported by thematic bond issuers include a variety of outputs, outcomes, and impacts.

Key indicators for specific green sectors, subsectors, and supporting infrastructure have been suggested and compiled by a working group under the Green Bond Principles. The group has published and continues to update the Handbook – Harmonised Framework for Impact Reporting, which provides useful suggestions for indicators from a growing list of sectors.

Key indicators for specific social sectors, subsectors, and supporting infrastructure have been suggested and compiled by a working group under the Social Bond Principles. The group has published and continues to update the Handbook - Harmonised Framework for Impact Reporting for Social Bonds, which provides useful suggestions for indicators from a growing list of sectors.

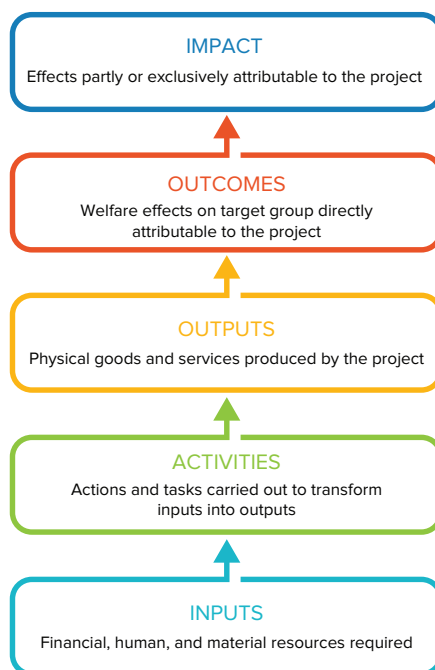
Examples of Impact Indicators

The flow from outputs, such as renewable energy capacity installed, through to impacts, such as greenhouse gas (GHG) emissions avoided, can often require many assumptions and detailed methodologies (Figure 12).

For example, in the case of a wind farm, the output is the installed capacity. The outcome is the production of electricity with zero GHG emissions. The impact is GHG emissions avoided, based on the potential displacement of fossil fuel electricity sources from the same grid compared to what would have happened if the wind farm were not operating.

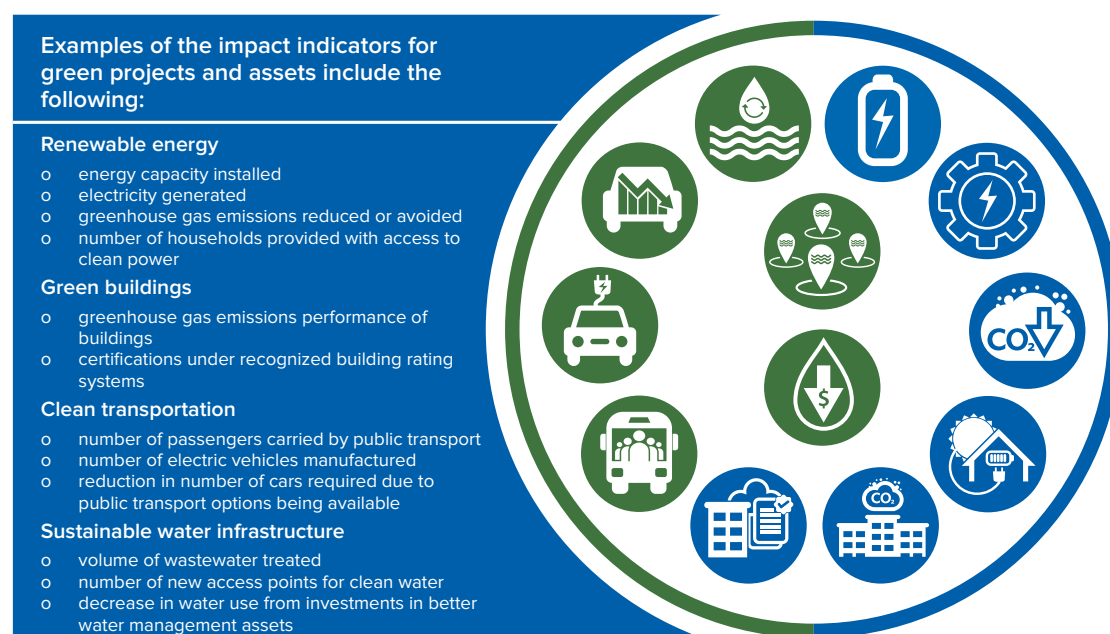
Similarly, in case of health the output could be new facilities built, or existing facilities renovated. The measurable outcome indicator could be number of people getting access to affordable healthcare, health products, pharmaceuticals, or devices. And, finally, the impact of such project is the improved health outcomes (reduced child/maternal mortality, death rate from non-communicable diseases, increased longevity, etc.).

Figure 9: Input–Output–Outcome–Impact Frameworks



Source: Authors' compilation.

Figure 10: Examples of Green Impact Indicators



Source: Authors' compilation.

Table 2: Examples of the Impact Indicators for Social Projects and Assets Include the following:¹⁰

Access to Essential Services – Health, Education, and Social Housing

- number of individuals receiving healthcare or education
- number of patients treated or student places supported
- square meters of affordable or social housing delivered
- number of households benefiting from improved living conditions

Employment Generation

- number of jobs created or supported
- number of people receiving vocational training or employment services
- share of jobs retained due to social program intervention

Socioeconomic Advancement and Empowerment

- number of microloans or SME loans disbursed to underserved groups
- number of women or minority-owned businesses supported
- share of financial services provided to previously unbanked individuals

Food Security and Basic Infrastructure

- number of people provided with access to basic utilities (e.g. electricity, water)
- tons of food distributed or meals provided to vulnerable groups
- number of rural households connected to infrastructure services

Gender Equality

- number of women benefiting from targeted programs
- proportion of beneficiaries who are women, youth, or persons with disabilities
- number of gender-based violence prevention or support interventions delivered

¹⁰ ICMA (2025). Handbook: Harmonised Framework for Impact Reporting for Social Bonds. <https://www.icmagroup.org/assets/documents/Sustainable-finance/2025-updates/Handbook-Harmonised-Framework-for-Impact-Reporting-for-Social-Bonds-June-2025.pdf>

The methods used by the issuer for measuring or estimating the impacts of green and /or social projects, assets, and expenditures need to be disclosed in the impact report. Methods include the framework used and the calculation methodology, including if impact indicators are annual, annualized, and/or lifetime calculations.

Both proprietary and institutional frameworks may be used, institutional frameworks may be referenced, and proprietary and new frameworks should be described in sufficient detail to allow assessment. Examples of institutional and proprietary frameworks are the ICMA's *Handbook - Harmonized Framework for Impact Reporting* (institutional) and the *Nordic Public Sector Issuers: Position Paper on Green Bond Impact Reporting* (proprietary).

Ex Post versus Ex Ante Reporting

The expected impacts from green and /or social projects , assets, and expenditures (known as ex ante) are usually estimated as part of the formulation of the Thematic Bond, and the estimates are often reported as part of the pre-issuance disclosure from a Thematic Bond issuer.

Gathering ex post information on the actual performance and impacts of green and /or social projects , assets, and expenditures can create a substantial workload for issuers. This is a key consideration for Thematic Bond issuers, especially if their portfolio of green and /or social projects , assets, and expenditures cover a variety of green and social sectors.

There is usually a lot of effort, cost, and potential risk involved with the issuer providing ex post information in reports, but this is greatly applauded by investors.

The use of ex ante information (estimates of impact) can be easier for issuers, and it is usually enough to satisfy investors when looking for relevant impact indicators.

The ICMA Green Bond Principles and ICMA Social Bond Principles recommend the use of qualitative indicators and, where feasible, quantitative performance measures of expected impact. Issuers with the ability to report achieved impacts are encouraged to include those also in their regular update reporting.

Data and Systems

More and more companies and public organizations are using purpose-built systems to capture relevant green and sustainability data and produce the information they need for reporting. These systems make it easier for external reviewers to verify information flows and data integrity, as well as provide up-to-date information for management reporting.

Thematic bond issuers with large portfolios of green and /or social projects , assets, and expenditures are encouraged to adopt these systems to ensure the integrity of their green and/or social portfolios over time and simplify their regular processes for compiling and confirming reports.

This is particularly important for dynamic green/social portfolios, where projects, assets, and expenditures are entering and leaving the green/social list in between the annual allocation reports being provided.

Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, ICMA Green Bond Principles and Social Bond Principles recommend reporting information in generic terms or on an aggregated portfolio basis. For example, the government of Germany provides reporting on portfolio basis for certain categories such as electric mobility due to a large number of project of similar nature and small size.

Figure 12: Overview of German Sovereign Green Bonds Allocation Report for Electric Mobility category

1.2.3. Measures for the expansion of electric mobility

Budget chapters and items:	6092 683 04
Eligible expenditures 2021:	€182.2 million
GHG emission reduction:	N/A
Other indicators:	424 individual projects in 146 consortia (BMBF) 341 projects (BMW i) 74 projects (BMU)
	5,453 charging points in BMW i-funded “Elektro-Mobil” projects 763 electric vehicles and 330 charging points (BMU)
Funding share:	33% As a rule, the project duration is three years, hence the funding share is stated as 33%. Third-party financing is not taken into account.
EU environmental objectives under Article 9 of the Taxonomy Regulation:	a) d) e)
Assumptions and limitations: Most of the projects are multi-year. As a rule, the project duration is three years, hence the funding share is stated as 33%. Third-party financing is not taken into account.	
Links: https://www.batterieforum-deutschland.de/projektdatenbank/	

Engaging the External Reviewer

All of the principles and guidelines for labeling a thematic bond include strong recommendations that issuers engage an external reviewer to provide an opinion on the thematic label. In many jurisdictions, it is mandatory for the labels to be accompanied by an opinion from an external reviewer.

The most comprehensive list of external reviewers is provided by the CBI, which has an approved verifier program to ensure the quality of the service providers. There is also a list available from the ICMA on their website.

Scoping Out What You Need

There are four different external review products that are used in the Thematic Bond market (Figure 13). The most common approach is a second-party opinion (SPO), while there is increasing use of certification approaches that rely on national, regional, or international standards or guidelines. Most external

reviewer providers will offer multiple types of external review so it is up to the issuer to choose which is the most appropriate for their situation.

The type of external review selected by the Thematic Bond issuer will depend on a few key considerations:

- Jurisdiction of issuance. Are there regulations or guidelines that specify what type of external review must be used?
- Investor preference. Some investors have very strong preferences for the type of external review that should be undertaken. Do the target investors have these preferences?
- Best practice narrative. Is the issuer claiming they are using best practice in formulating their Thematic Bond? If so, then certification or a strong second-party opinion are more aligned with those claims.

Engagement Contracts

The external reviewer is traditionally engaged (contracted) by the Thematic Bond issuer, although this is not always the case. Sometimes, a different entity involved in the Thematic Bond transaction may have an easier pathway to engaging a service provider.

For example, in the municipal bond market in the United States, the issuer is restricted by regulations on what can be included in the transaction costs for the bond issuance. In this case, the arranging bank or securities firm supporting the issuance can engage the external reviewer.

Figure 13: The Four Types of External Review



CBI = Climate Bonds Initiative; ESG = environmental, social, and governance; EU = European Union.

Source: Author's compilation.

The contract with the external reviewer should specify the following:

- scope of the work;
- form of the opinion being provided, including any formal alignment or conformance with the Green/Social Bond Principles, ASEAN Green/Social Bond Standards, Climate Bond Standard, or regional and local taxonomies;
- expected timeline for the work;
- approach being used by the external reviewer to formulate its opinion, including any standards or other professional services codes of conduct;
- obligations of each party to provide information and undertake the assessment; and
- expected use of the external reviewer's report.

Best practice is to have a single engagement contract that covers the pre-issuance activities as well as the post-issuance assessment.

The external reviewer will often ask to see draft versions of the issuer's key documents before they can determine their level of effort and, hence, the price for the engagement.

Pre-Issuance and Post-Issuance Assessments

Best practice entails having an external review prior to the issuance of the Thematic Bond and at least one external review after the Thematic Bond has been issued.

Pre-Issuance external review involves the assessment and confirmation of the bond issuer's Thematic Bond framework and internal processes, including the:

- selection process for projects and assets,
- systems for internal tracking of proceeds,
- allocation system for funds, and
- reporting arrangements.

In case of taxonomy alignment, the external reviewer will assess the compliance with taxonomy requirements, such as technical screening criteria, DNSH and social aspects criteria.

This results in an external reviewer's report that can be provided to potential investors and other stakeholders prior to the issuance of the Thematic Bond.

A public version of the external reviewer's report is often disclosed to the public after the bond has been issued, usually via the issuer's website. This disclosure of the external reviewer's report is also a key requirement for many market information and index providers.

Post-Issuance external review involves the assessment and confirmation of the Thematic Bond's label, which must be undertaken after the allocation of bond proceeds is underway.

The external reviewer undertakes procedures so that it can provide confirmation that the issuer and the bond actually meets all of the nominated requirements (e.g., ICMA Green Bond Principles, ICMA Social Bond Principles, ASEAN Green Bond Principles, ASEAN Social Bond Principles, or Climate Bonds Standard, among others).

The post-issuance external review process is focused on

- confirming that the Thematic Bond that has been issued is in line with the Thematic Bond framework provided prior to issuance;
- confirming that the internal processes examined during the pre-issuance external review are working as expected;
- examining the allocations of net proceeds that have been made so far and the information provided on eligibility (and impacts) for those projects and assets; and
- assessing any update reports that have been provided by the issuer, or the internal processes to generate those reports.

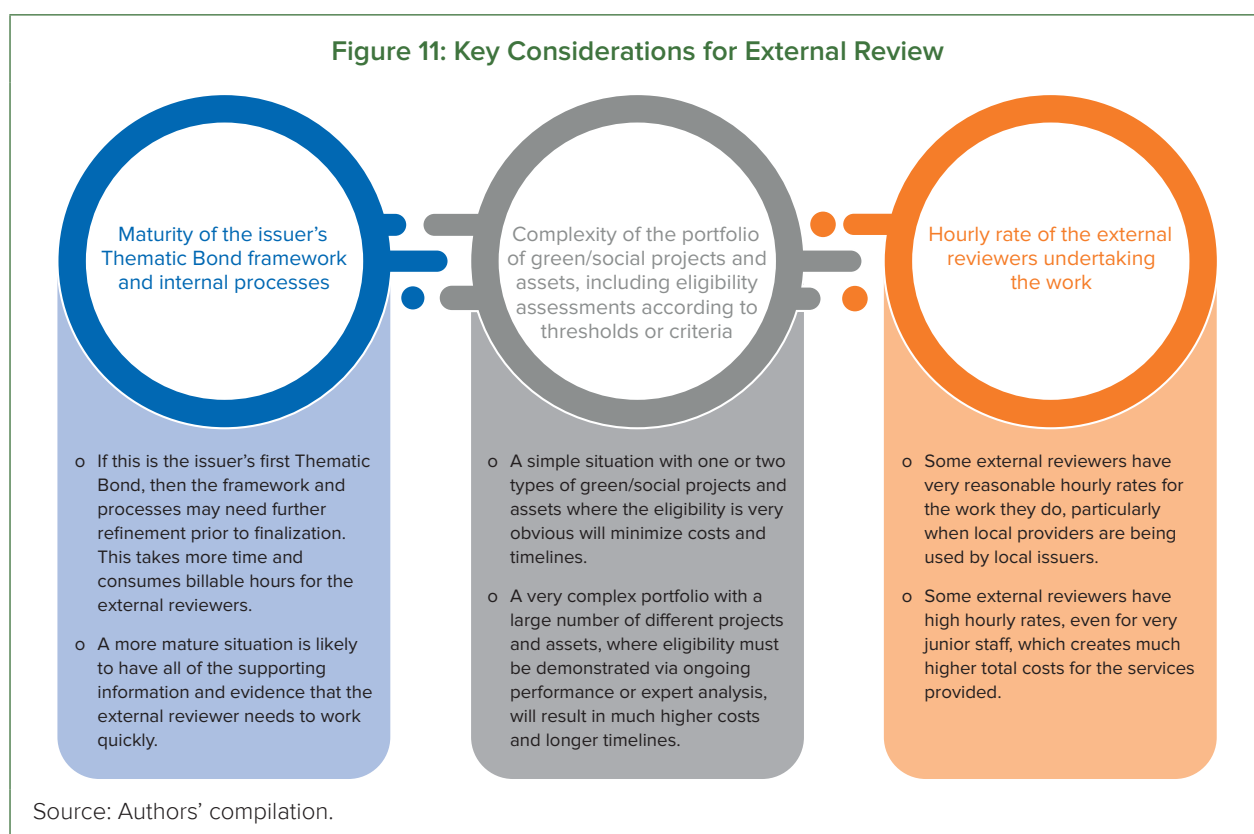
The external reviewer provides a finalized report to the issuer, who then provides the report to the bond holders and other stakeholders, such as regulators or certification systems, as part of their regular reporting and disclosure on the Thematic Bond.

Pricing and Timing Expectations

Most Thematic Bond issuers describe the costs of the external reviewer as low compared to the other transaction costs associated with issuing a bond such as credit ratings, legal support, investor road shows, and lead manager fees.

However, the timeline for external review is a major consideration for the issuer's approach to raising capital via a bond issuance. Some lead time needs to be built into the issuer's timeline for going to market with the bond offering. Six weeks is a common time frame for an external review to go from contracting to delivery of the final report.

Figure 11 shows the three key considerations that determine the timing and costs of the external review for a Thematic Bond label.



Many jurisdictions are offering support to issuers who engage external reviewers. This comes in the form of capped subsidies or other contributions, and are currently in place in a number of ASEAN+3 markets.

Managing the External Review Process

The early years of the Thematic Bond market saw a lot of issuers use “self-labeling.” This was accepted by many investors because at that time all Thematic Bond issuers were either multilateral development banks or other very trusted entities.

As the diversity of Thematic Bond issuers grew, investors wanted to have more confidence that the green and social claims being made by the issuer were valid. The investors also recognized the value of having an expert provide an opinion when the investor’s own green and/or understanding was limited.

In today’s Thematic Bond market, there are still a few entities who use self-labeling, but this number is shrinking. The vast majority of Thematic Bonds have an external review prior to issuance. A smaller number of issuers have an external review after the issuance, but this trend is increasing.

External reviewers are essentially providing an audit function, but the focus is not like we see in financial auditing.

Sharing Information with the External Reviewer

The external reviewer needs the issuer to provide relevant information. Often the external reviewer will have template information requests that it uses at various stages of the process.

This first occurs during the engagement process, where the external reviewer needs to understand the issuer’s situation and Thematic Bond plans so that they can prepare a quote and expected timeline for the engagement contract. Usually, it involves the issuer providing a draft Thematic Bond framework document and some supporting information.

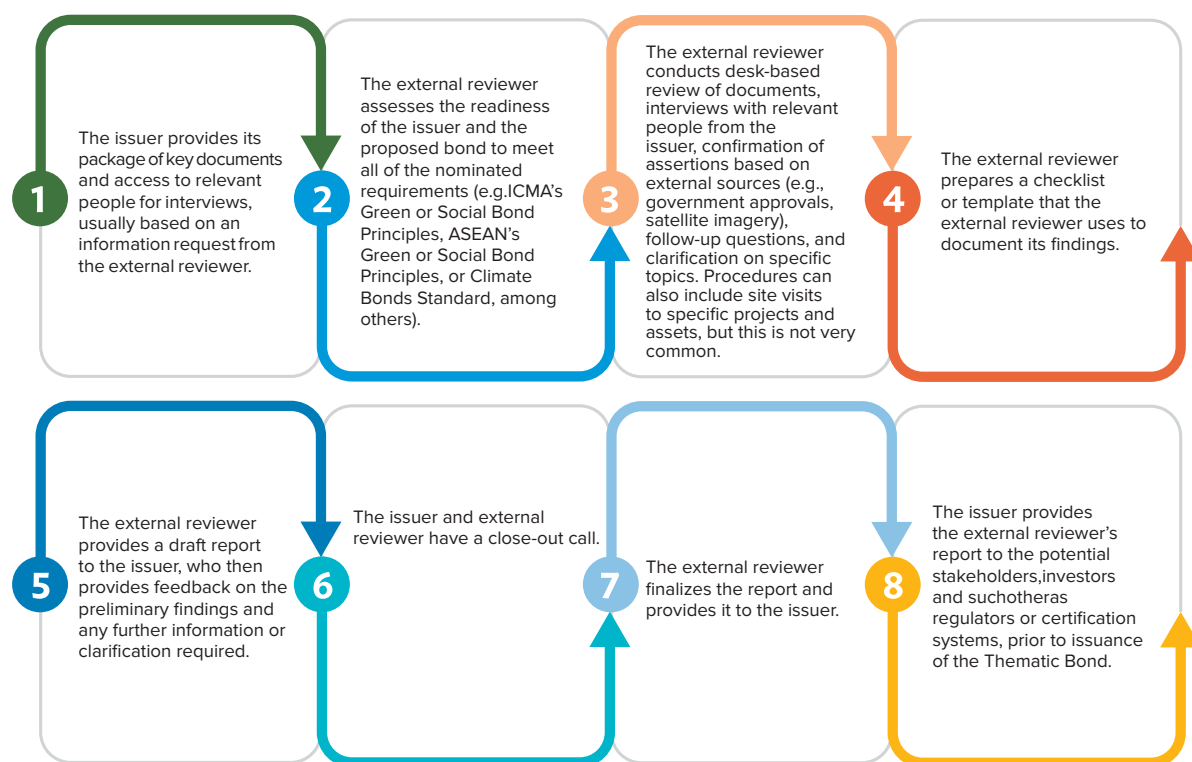
During the external review, the issuer will then need to provide a more formalized package of information to support the statements in its Thematic Bond framework and to demonstrate green and/or social eligibility.

External Review Procedures

External reviewers use a variety of procedures to understand the situation and arrive at an opinion. The actual procedures used range from formal information requests to telephone interviews, use of external data sources, site visits, and clarification requests.

Generally, the pre-issuance external review process follows the eight steps outlined in Figure 15.

Figure 12: Pre-Issuance External Review Process



Source: Authors' compilation.

Draft Reports and Close-Out Processes

The external reviewer will provide a draft report when they have completed the main body of assessment work. The draft report will highlight any gaps that still need to be filled and provide a preliminary opinion. The issuer needs to respond to the report, clarify any remaining topics, and then confirm that they want the report finalized, usually in a close-out meeting with the external reviewer.

The external reviewer will often have internal processes and quality control that will be part of moving from the draft report to the final opinion and report.

Form and Use of Final Reports

The report from the external reviewer is seen as a key component of any Thematic Bond offering, along with the issuer's Thematic Bond framework document.

Often the draft report provided to the issuer will have much more detail than a cut-down report that can be used by the issuer for its Thematic Bond marketing and then be published after the issuance of the bond.

The final report and opinion are sometimes very brief (e.g., a few pages) even though there has been a lot of work completed to reach that final opinion.

Seeking Certification or Recognition

The process of issuing a Thematic Bond can help the financing function of the issuing organization and enable senior management to think more actively about how sustainability relates to their business and operations.

Issuers have access to new investors and a wider range of investors if they can label their bond as green/social. Deeper investor engagement is also a key benefit for Thematic Bond issuers, creating more enduring investor relationships.

For many issuers, there is a benefit in terms of pricing for their Thematic Bond compared to other bonds that are not labeled. This price differential, which is often called a “greenium,” is usually driven by the large demand for Thematic Bonds compared to the emerging supply.

Investor and Market Expectations

As Thematic Bond markets have grown and attracted increased attention, there is more mainstreaming of investors who buy into these instruments. While a certain group of investors are those with green and/or social mandates and ESG investing activities, there is also increased uptake by so-called “vanilla investors.”

Large pension funds and asset managers are increasingly looking for sustainability and low-carbon investments; often, these Thematic Bonds are exactly what they are looking for.

Box 7: Experience of Public Debt Management Office, Ministry of Finance, Thailand

Thailand’s gov issued its first sustainability bond in 2020, which received strong demand.

Patricia Mongkhonvanit, Director-General, Public Debt Management Office announced that on the 13 August 2020, book building was held for the Kingdom of Thailand’s inaugural sustainability bond issuance, which is first of its kind in ASEAN.

The groundbreaking transaction was highly successful with exceptionally strong demand from the investors with amount submitted totaling THB60,911 million, 3.05 times the announced offering, and attracting an interest rate of 1.585%, which is lower than the market yield of the existing 15-year benchmark bond.

Moreover, the sustainability bond attracted a diversified group of investors including banks, asset management companies, financial institutions, insurance companies, and offshore investors.

Since then, the gov has continued to issue sustainability bonds regularly, with total issuances exceeding \$14 billion, in local currency equivalent, as of 2020.

These regular issuances serve not only to mobilize funds for sustainable development and support the green economy, but also to raise awareness among local investors. Moreover, they promote the adoption of thematic bonds by SOEs, helping to accelerate the country’s transition toward a low-carbon and inclusive economy.

Source: Government of Thailand, Public Debt Management Office.



There are substantial climate change risks to insurers, and they are becoming increasingly aware of this long-term challenge. Raising the amount of low-carbon investments in their portfolio is part of that long-term risk mitigation.

Investors, stock exchanges, index providers, and other market participants also consider Thematic Bonds against their own environmental assessment standards and investment criteria that may set target thresholds for energy efficiency improvements and include broader ESG requirements.

Some of these market participants and stakeholders exclude bonds funding fossil fuel-related projects or child labor, while others may, for instance, include energy efficiency investments that do not facilitate a long-term lock-in of high-carbon infrastructure.

International versus Regional versus National Approaches

There are different approaches to gaining recognition or certification of a Thematic Bond. This situation is evolving quickly as the market grows and covers a wider variety of sectors and jurisdictions.

More and more regional and national approaches are being defined by governments and regulators. This is a sign that many see great potential in Thematic Bonds as a way to drive improved climate and social outcomes in their own jurisdictions as well as on the international stage (Figure 13).

Figure 13: Various Approaches Around the World and at Different Levels of Coverage



ASEAN = Association of Southeast Asian Nations, EU = European Union.
Source: Authors' compilation.

International best practices, such as certification under the Climate Bonds Standard, will always be well received by investors and market commentators. However, demand for Thematic Bonds is so strong that less stringent approaches, such as alignment with the ICMA Green and/or Social Bond Principles, will be sufficient for most potential investors.

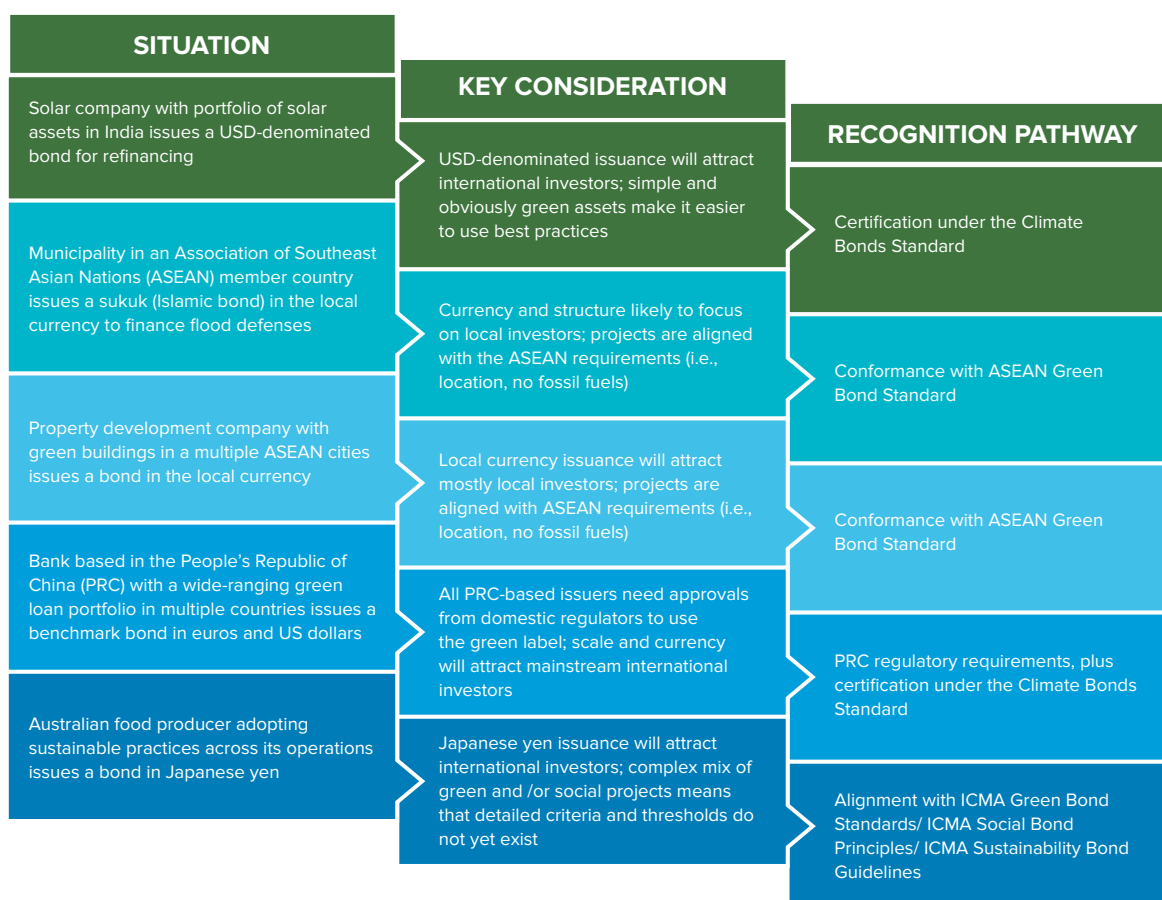
Pathways for Recognition

There are a number of different pathways for recognition of a Thematic Bond label (Figure 17). Each of them has specific requirements, but all of them are based on the platform provided by the Green Bond Principles.

The recognition of the green and/or social label can come in different forms:

- alignment with ICMA Green Bond Principles,
- alignment with ICMA Social Bond Principles,
- alignment with ICMA Sustainability Bond Guidelines
- conformance with the ASEAN Green Bond Standards,
- conformance with the ASEAN Social Bond Standards,
- conformance with the ASEAN Sustainability Bond Standards
- certification under the Climate Bonds Standard, or
- alignment with specific national guidelines or listing requirements.

Figure 17: Green and Sustainability Bond Case Studies for Selecting Pathways for Recognition



ASEAN = Association for Southeast Asian Nations, US = United States, USD = US dollar.

Source: Authors' compilation.

Figure 18: Social Bond Case Studies for Selecting Pathways for Recognition

Situation	Key Consideration	Recognition Pathway
A microfinance institution in Latin America issues a local-currency gender bond to expand lending to women entrepreneurs in rural areas.	Local currency issuance improves affordability for domestic borrowers; strong social rationale but no established thresholds for gender-focused finance may require issuer-defined impact targets.	Conformance with ICMA Social Bond Principles with guidance from the ICMA-IFC-UN Women Gender Bond Framework.
A private healthcare provider or HealthTech firm in Southeast Asia issues a local-currency social bond in Thailand to expand mobile health units in underserved rural areas.	Private sector issuers can align with national development goals and SDG 3 (health); may need blended finance or outcome-based financing to attract investors due to limited scale and credit profiles.	Conformance with ICMA Social Bond Principles/ ASEAN Social Bond Standards
A Southeast European EdTech company or telecom operator issues a social bond to finance digital learning tools and broadband access for public schools in post-COVID recovery.	Digital inclusion projects clearly aligned with SDG 4 (education); weak standardization in educational KPIs may require issuer-defined reporting; collaboration with public sector improves credibility.	Conformance with ICMA Social Bond Principles
A national development bank in Sub-Saharan Africa issues a USD-denominated sustainability bond to support affordable housing for low-income families.	USD-denominated issuance aims to attract international investors; lack of regional housing eligibility standards means issuer must transparently define affordability thresholds and targeting methods.	Conformance with ICMA Social Bond Principles

Key Decision Points

Selecting which is the most appropriate pathway for recognition of a particular Thematic Bond and Thematic Bond issuer is based on a number of key considerations:

- Where the bond is being issued. Are there local or regional regulations or guidelines for thematic labeling in the jurisdiction where the bond is being issued?
- Where the projects and assets are located. Are there specific requirements for green and /or social projects in that jurisdiction?
- Type of investor being targeted. What sort of recognition is preferred by the targeted investors? Do they have smoother due diligence processes for certified offerings?
- Currency of the issuance. Is the issuance in local currency or a G3 currency (i.e., United States dollars, euros, or Japanese yen)? If the issuance is in local currency, are international investors likely to participate?
- Types of green and /or social projects and assets associated with the bond. Are there criteria or thresholds for the projects and assets? What effort is required by the issuer to meet the criteria or thresholds?

The most appropriate recognition or certification for a Thematic Bond depends on how well the thematic label is received by the potential investors in the Thematic Bond. The thematic label is a marketing tool; therefore, it comes down to what label the customers accept, respect, and desire.

Issuers should discuss these preferences with their existing investors and other advisers to get early guidance on what they should do, and not do, in seeking recognition for their thematic label.

Media, Stakeholders, Indices, and Listings

Thematic bonds are debt securities issued by financial, corporate, or public entities where the proceeds are used to finance green and /or social projects and assets. They are just like regular vanilla bonds in structure and credit rating. The green and/or social label is a bonus feature to the bond from the investor's perspective and a powerful market signal from the issuer's perspective.

The thematic label for the bond refers to the projects and the assets associated with the Thematic Bond, rather than broader green and/or social credentials of the issuer. However, any issuer of a Thematic Bond is interested in how the issuance will assist its overall marketing efforts.

The thematic label is also valuable for asset managers, who buy Thematic Bonds as a service for investors higher up the investment food chain. Asset managers have a strong interest in demonstrating their green and/or social efforts and achievements so that they can further enhance their potential to win new mandates from their investor clients.

Building Momentum

Many organizations are moving to identify and highlight their sustainability credentials to their stakeholders. This is a very strong trend in most advanced economies and is growing quickly in emerging and developing economies as well.

The market is seeing a wide variety of sustainability reports and ESG assessments from companies and a determined move toward integrated reporting across financial and nonfinancial outcomes. The use of green and/or social financing, through issuing Thematic Bonds or buying them, provides reinforcement to an organization's green and sustainability efforts, and hence builds momentum for an organization that is on that journey.

Investors are often the most powerful stakeholder group for an organization. Reflecting green and sustainability ambitions through increased investor engagement, transparency, and labeling is a way to quickly build momentum in this area.

Media Formats and Channels

Thematic Bond issuers are often motivated by the opportunity to attract media attention from their labeled transaction. This may be for capital market-focused media channels or information flows, or for broader media attention outside of the capital market.

Most Thematic Bond issuers create media attention through official media releases as well as discussions with relevant media outlets and reporters. Many use social media to amplify the reach of their media efforts.

The media attention that results from a Thematic Bond transaction can be used to enhance stakeholder awareness of the issuer's green and/or social objectives and achievements.

Index Inclusion

Most Green Bond index providers currently get their base data from the CBI. The CBI's Green Bond Database has been created over many years and has recently had an update to its methodology.

Many more organizations are creating robust information flows for sustainable finance market players and index providers. As the Thematic Bond market matures, there has been a shift from early data sources (e.g., the CBI, which is a nonprofit, nongovernmental organization) in the direction of more established service providers in the capital markets (e.g., Bloomberg).

Index providers have different criteria by which Thematic Bonds are included in their indices. Not all Thematic Bonds are included, so it is important to understand their criteria and methodologies.

One of the ICMA Green Bond Principles working groups produced a report in June 2018, Summary of Green–Social– Sustainable Fixed Income Indices Providers,¹¹ that provides a structured summary as of the date of publication.

In addition, Solactive has a range of Green, Social and Sustainable Bond indices. Box 7 describes the Solactive Green Bond Index and the definition of what is included in its selection pool.

Box 8: Solactive Green Bond Index

Solactive has a range of Green, Social and Sustainable Bond indices. The Solactive Green Bond Index has the following definition of what is included in the selection pool, which comprises bonds that fulfill the following conditions:

- a. defined as a Green Bond by the Climate Bonds Initiative;
- b. amount outstanding of at least \$100 million;
- c. issued on or before rebalance day;
- d. time to maturity of at least 6 months; and
- e. excludes inflation-linked bonds, convertible bonds, United States municipal bonds, and asset- or mortgage- backed securities and other structured securities.
- f. private placements are excluded. However, if a Regulation S version of the 144A Private Placement is or becomes available, then the Regulation S version is included

Source: Solactive. 2025. Index Guidelines – Solactive Green Bond Index Family, Version 1.1

¹¹ International Capital Market Association, GBP SBP Databases and Indices Working Group (2018). Summary of Green – Social – Sustainable Fixed Income Index Providers. https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/2018_Green%20and%20Social%20Bond%20Indices%20140618.pdf

Some indices may include bonds that are not actually labeled as green or social, particularly when there are unlabeled bonds issued by “green pure-play” or “social pure-play” companies. This includes examples such as Tesla, which issues bonds but does not label them green although most investors see Tesla as a very green company. On the social side, CreditAccess Grameen Ltd (microfinance focused on low-income women) or ASA International are often treated as social pure-plays; if they issue unlabelled bonds, indices may still classify those as social exposure due to the issuers’ core business models.

There is an increasing focus on the ESG and climate credentials of bond issuers. These credentials can be boosted by issuing a Thematic Bond that is included in market indices.

Listing Platforms

Many stock exchanges and securities exchange platforms around the world are creating green, social and sustainable finance products. This is a growing trend in Asia in particular (Table 3).

The Sustainable Stock Exchange Initiative has around 100 partner exchanges, of which around 60 have a listing platform for small and medium-sized enterprises, and over 30 have ESG bond segments.

Listing a Thematic Bond on one or more exchanges or listing platforms creates greater awareness and increased access for potential investors. For smaller-scale Thematic Bonds, being listed can improve liquidity and expand the number of investors who can buy the bond.

Table 3: United Nations Sustainable Stock Exchange Initiative Members among ASEAN+3 Stock Exchanges

Stock Exchange	Economy
Hong Kong Exchanges and Clearing Limited	People’s Republic of China
Shanghai Stock Exchange	People’s Republic of China
Shenzhen Stock Exchange	People’s Republic of China
Indonesia Stock Exchange	Indonesia
Japan Exchange Group	Japan
Korea Exchange	Republic of Korea
Bursa Malaysia	Malaysia
Philippine Stock Exchange	Philippines
Singapore Exchange	Singapore
Stock Exchange of Thailand	Thailand
Hanoi Stock Exchange	Viet Nam
Ho Chi Minh Stock Exchange	Viet Nam

ASEAN = Association of Southeast Asian Nations.

Note: ASEAN+3 refers to the 10 members of the Association of Southeast Asian Nations plus the People’s Republic of China, Japan, and the Republic of Korea.

Source: Sustainable Stock Exchanges Initiatives. <http://sseinitiative.org/exchanges-filter-search/#>.

Post-Issuance Reporting and Disclosure

Green, social and sustainability bond issuers are expected to provide regular reporting to investors and the market after their Thematic Bond has been issued. These update reports are important aspects of investor communications and the issuer's green and/or social objectives. The format and frequency of the update report will depend on the specific circumstances of the issuer and the relevant bond, loan, or other debt instrument, as well as the program of bond issuances.

Update reports usually contain three different types of reporting, and often the first two types of reporting are combined into the allocations section of the update report:

- 1. Allocation reporting.** This confirms the allocation of the bond proceeds to green and /or social projects and assets (Figure 14).
- 2. Eligibility reporting.** This confirms the characteristics or performance of green and /or social projects and assets that support their eligibility to be associated with the thematic bond (Figure 15).
- 3. Impact reporting.** This discloses the indicators that reflect the expected or actual impact of green and /or social projects and assets (Figure 16).

Figure 14: Allocation Reporting

The allocation reporting part of the update report should include the following:

- confirmation that the thematic bond is aligned with one or more established approaches to labeling, including statements of alignment with other applicable standards such as the ICMA Green Bond Principles, ICMA Social Bond Principles, the ASEAN Green Bond Standard, the ASEAN Social Bond Standard, the Climate Bonds Standard, domestic regulations in the People's Republic of China, Japanese Green Bond Guidelines, or other approaches;
- a statement on the objectives of the thematic bond;
- the list of green and/or social projects and assets to which proceeds have been allocated (or reallocated);
- the amounts allocated to the green, social and combination of green and social projects and assets;
- an estimate of the share of the thematic bond proceeds used for financing and refinancing, which green and/or social projects and assets have been refinanced, and the look-back period for refinanced projects and assets; and
- the geographical distribution of the green and/or social projects and assets.

ASEAN = Association of Southeast Asian Nations.

Source: Authors' compilation.

Figure 15: Eligibility Reporting

The eligibility reporting part of the update report should include the following:

- confirmation that the green and/or social projects and assets continue to meet the relevant eligibility requirements that are described in the thematic bond framework, and
- information on the environmental and social characteristics or performance of the selected projects and assets and their alignment with the eligibility requirements.

Source: Authors' compilation.

Some bonds have a very stable allocation of proceeds and do not need to track any performance indicators to maintain the eligibility of the projects and assets. This means that the updated report provided by the issuer each year can be very concise and simply restate the information from previous reports.

If there are limits to the amount of detail that can be made available in the update report about specific green and /or social projects and assets, then the issuer can provide summary information such as the sectors covered by the green and /or social projects and assets, or the regions where they are located.

Figure 16: Impact Reporting

The impact reporting part of the update report (if it covers impact reporting) should include the following:

- expected or actual outcomes or impacts of the green and social projects and assets with respect to the objectives of the thematic bond;
- qualitative performance indicators and, where feasible, quantitative performance measures of the outcomes or impacts of the green and/or projects and assets; and
- methods and the key underlying assumptions used in preparation of the performance indicators.

Source: Authors' compilation.

While impact reporting is strongly encouraged by investors, Thematic Bond issuers need to weigh the benefits and costs of the efforts required to track and quantify impacts over the term of the bond. Please see page 18 for reporting format and channels.

Further Issuance of Labeled Instruments

There is more demand for Thematic Bonds and sustainable finance products than there is supply across all geographies, sectors, and ratings bands.

This supply–demand imbalance is likely to continue and perhaps become even more stark. Many cite this supply–demand dynamic as driving the relatively lower funding costs for some Thematic Bonds when compared with similar conventional bonds.

Strong Investor Appetite

Investor engagement is a key part of labeling a bond and the increased transparency enjoyed by labeled bond investors is likely to be a lasting shift resulting from the rise of green, social, sustainability, and other labelled bonds.

Many issuers of Thematic Bonds have found that they have much more market power in their labeled transactions compared to normal issuance dynamics. Some have used investor selection processes to assist with aligning issuance distributions with investor credentials.

Some Thematic Bond issuers have benefited from reverse inquiries from investors who are looking to provide capital to the issuer outside of the defined bond issuance transactions, with resulting low transaction costs for the issuer.

Green, Social, and Sustainable Portfolios

Most investors in green bonds also have mandates to invest in bonds labeled as social or sustainable. Investors are very encouraging of issuers to explore these other labels as well.

There is important guidance available on labeling bonds as either social or sustainable, similar to the use of the Green Bond Principles for green labeling, based on the Social Bond Principles and the Sustainable Bond Guidelines available on the International Capital Market Association website.

Many governments have a wide variety of projects, assets, and expenditures that cover a broader range of priorities than just environmental aspects (i.e., green). A broader labeling regime—including green, social, and sustainable projects, assets, and expenditures—has been successfully used by a variety of government issuers.

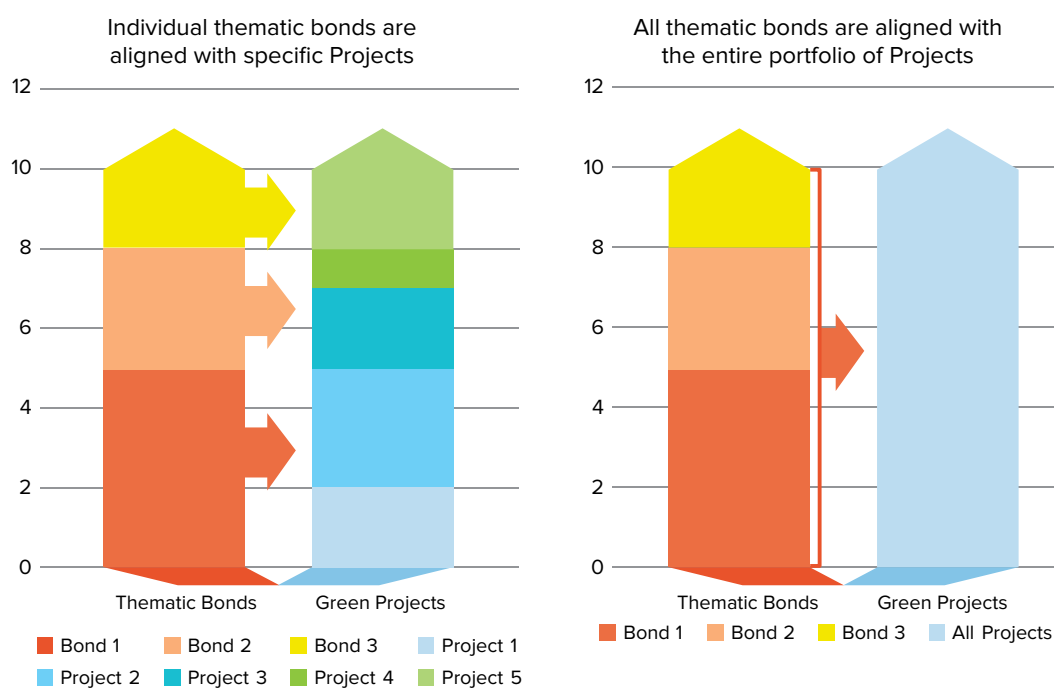
Tracking the Stacks

Many thematic bond issuers have large portfolios of green and/or social projects, assets, and expenditures, and they will issue multiple thematic bonds (or thematic loans) over time.

When tracking the net proceeds from the thematic bonds and the value of the green and /or social projects , assets, and expenditures, most issuers have two stacks in their tracking system (Figure 17). This is to ensure that the total value of the green and /or social projects, assets, and expenditures is always more than the total outstanding value of the thematic bonds issued.

Some issuers will allocate specific projects, assets, and expenditures to particular thematic bonds, while other issuers will look at the broader portfolio of green and /or social projects, assets, and expenditures as a single piece.

Figure 17: Different Approaches to Tracking Thematic Bonds and Green Projects



Source: Authors' compilation.

Efficiencies and Transaction Costs

As described in the overview, the first Thematic Bond issuance is challenging for most issuers but worth the effort. Following an initial issuance, the vast majority of Thematic Bond issuers say that they will definitely issue another Thematic Bond. For the sustainability bond framework, the issuer can issue a green, social or sustainability bond, subject to selected projects for each bond issuance.

Issuers that present a program of Thematic Bonds (or other labeled instruments) are inherently more attractive to investors, as they hold the prospect of reduced due diligence for future transactions.

The costs and resources required to establish the necessary frameworks and internal processes are generally front-loaded, meaning that the effort required for the second Thematic Bond is substantially less than for the first, while the effort for the third is less than for the second, and so on. As further labeled issuance occurs, the extra effort from the issuer for labeling continues to decline.

The Climate Bonds Standard includes a formal approach to this situation called “programmatic certification.” This streamlined approach is being used by a variety of frequent issuers in the Thematic Bond market.

Appendix – Green and Social Categories as Defined by ICMA and ASEAN

The following list various eligibility categories which can be used as per ICMA's GBP or SBP:

Green eligibility categories according to ICMA's Green Bond Principles ¹²	Social eligibility categories according to ICMA's Social Bond Principles ¹³
• Renewable energy (including production, transmission, appliances and products); • Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products); • Pollution prevention and control (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy); • Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes); • Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments); • Clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions); • Sustainable water and wastewater management (including sustainable infrastructure for clean and/ or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation); • Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems); • Circular economy adapted products, production technologies and processes (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services); and/or certified eco-efficient products; • Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance.	• Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy) • Access to essential services (e.g. health, education and vocational training, healthcare, financing and financial services) • Affordable housing • Employment generation and programmes designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, climate transition projects and/or other considerations for a “just transition” (such provision and/or promotion could include SME financing and microfinance) • Food security and sustainable food systems (e.g. physical, social, and economic access to safe, nutritious, and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale producers) • Socioeconomic advancement and empowerment (e.g. equitable access to and control over assets, services, resources, and opportunities; equitable participation and integration into the market and society, including reduction of income inequality)

¹² [nce/2025-updates/Green-Bond-Principles-GBP-June-2025.pdf](https://www.icmagroup.org/assets/documents/Sustainable-finance/2025-updates/Green-Bond-Principles-GBP-June-2025.pdf) <https://www.icmagroup.org/assets/documents/Sustainable-finance/2025-updates/Social-Bond-Principles-SBP-June-2025.pdf>

¹³ <https://www.icmagroup.org/assets/documents/Sustainable-finance/2025-updates/Green-Bond-Principles-GBP-June-2025.pdf>

The following list various eligibility categories which can be used as per ASEAN's Green Bond Standards or Social Bond Standards:

Green eligibility categories according to ASEAN's Green Bond Standards ¹⁴	Social eligibility categories according to ASEAN's Social Bond Standards ¹⁵
• Renewable energy; • Energy efficiency; • Pollution prevention and control; • Environmentally sustainable management of living natural resources and land use; • Terrestrial and aquatic biodiversity conservation; • Clean transportation; • Sustainable water and waste water management; • Climate change adaptation; • Eco-efficient and/or circular economy adapted products, production technologies and processes; • Green buildings which meet regional, national or internationally recognised standards or certifications.	• Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy); • Access to essential services (e.g. health, education and vocational training, healthcare, telecommunication, financing and financial services); • Affordable housing (e.g. construction, renovation and maintenance, provision of housing loans, development and provision of rental housing); • Employment generation (e.g. SME financing, microfinance, skills development for employability and entrepreneurship); • Food security (e.g. sustainable farming and fishery, agricultural credit and insurance, crop innovation, infrastructure development for agriculture and aquaculture); • Socioeconomic advancement and empowerment (e.g. targeted financing schemes such as loans to women-owned businesses; social support services such as rehabilitation, counselling and integration programmes; development of community centres and facilities)

¹⁴ <https://www.theacmf.org/images/downloads/pdf/AGBS2018.pdf>

¹⁵ <https://www.theacmf.org/images/downloads/pdf/ASBS2018.pdf>



United Nations Development Programme
#53, Pasteur Street, Boeung Keng Kang I
P.O. Box 877, Phnom Penh, Cambodia

www.kh.undp.org