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WORLD ECONOMIC FORUM

In collaboration with ETH Zurich

Labelled Bonds for the Net-Zero Transition in South-East Asia: The Way Forward

WHITE PAPER

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Foreword

Gim Huay Neo
Managing Director,
Centre for Nature and Climate,
World Economic Forum

Bjarne Steffen
Climate Finance and Policy Group, ETH Zurich

The transition towards net zero will only be successful if enough private capital is channelled towards emerging markets and developing economies (EMDEs) to effectively adapt to and mitigate the impacts of climate change. Given the rapid adoption of debt finance and labelled bonds (i.e. green, social, sustainable, sustainability-linked bonds and transition bonds) in developed markets, these instruments now also represent a great opportunity for EMDEs to finance their transition. However, countries in these regions suffer from high perceived risks and often lack awareness, financial infrastructure and capacity around these tools, preventing them from becoming more established.

This paper comes as a result of a project supported by The Rockefeller Foundation and in collaboration with ETH Zurich, with the objective to create and engage a community of experts – including issuers, financial intermediaries and policy-makers – to identify solutions to promote a favourable environment to increase the issuance of labelled bonds. Drawing upon stakeholder consultations and various workshops, we identified the measures that will help alleviate the challenges that these markets are facing. With this paper, we hope to provide actionable insights and practical recommendations that empower policy-makers and other actors in the field to embrace this innovative financial tool and drive meaningful change.

By promoting labelled bonds in EMDEs, we would like to seize the opportunity to harness the power of finance for good and build a more resilient, inclusive and sustainable future in the region.

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Executive summary

Accelerating the issuance of labelled bonds in emerging markets and developing economies involves charting solutions using insights from stakeholders in the ASEAN region.

Various research shows that to reach net zero, the world needs investment of over $3 trillion every year from now until the end of 2025. Emerging markets and developing economies (EMDEs) will play a critical role in the global transition to a sustainable, net-zero future but face notable funding gaps. Green bonds represent a promising avenue for directing capital towards sustainable projects, although effective implementation requires stringent guidelines. Despite witnessing growth in labelled bond issuances, EMDEs (excluding China) still hold a relatively small share of the global market compared to developed economies, underscoring significant untapped potential. However, challenges persist in expanding the labelled bond market in EMDEs, with lessons from developed economies not always directly applicable due to differences in local contexts, including types of issuers, industries and market maturity levels.

This paper aims to pinpoint the primary challenges confronting labelled bond markets in EMDEs today and develop potential solutions to address these challenges. The paper is developed based on consultations and workshops with key stakeholders from the Association of Southeast Asian Nations (ASEAN) region or international organizations working in the region.

To support and scale a functioning labelled bond market in EMDEs, three critical elements must align: an enabling market environment (comprising the development of robust debt capital markets and the cultivation of an ecosystem where the net-zero transition agenda takes precedence), the priorities of issuers and the expectations of investors. This paper predominantly focuses on the issuer perspective as it has been identified as one of the areas where the most challenges persist.

For issuers to opt for labelled bonds over other financing instruments, the total added costs of issuing these bonds cannot be higher than the added benefits. Based on the consultations, several key benefits and cost buckets, along with the associated challenges that might prevent the benefits from increasing and the costs from decreasing, have been identified.

Different types of stakeholders, including issuers, investors, local policy-makers (e.g. governments, regulators, central banks), and the international community (e.g. multilateral development banks, non-profit and standard setters), all have potential ways to support issuers through measures aimed at increasing issuer benefits or decreasing issuer costs. The proposed sets of measures are outlined as follows:

- **Early engagement** and **close alignment** between investors and issuers.
- Provision of **enabling market environment**, including the development of transition plans.
- Clear and applicable **regulatory framework**, e.g. standards alignment, introduction of levels of “greenness” and standardized post-issuance requirements.
- **Organizational preparedness** of issuers.
- **Knowledge generation**, including directed knowledge-sharing, sovereign issuances as first-mover, education support and capacity building.
- Policies aimed at **increasing investor demand** for labelled bonds through measures like enhanced returns, reduced financial risks, investment mandates, capital requirements, tax incentives and credit ratings.
- **Direct support for issuers**, which may include issuance grant schemes and direct issuance support (developing frameworks for issuers).

To support different stakeholders in prioritizing these proposed solutions, all measures have been assessed based on their anticipated impact and ease of implementation. Highly ranked measures can then be treated preferentially on a potential implementation roadmap. Such measures include early engagement of investors, organizational preparedness of the issuer, tax incentives, sovereign issuances as well as direct issuance support from the international community.

Introduction

Labelled bonds are a key instrument to finance the transition to net-zero in EMDEs.

The importance of emerging markets and developing economies for net-zero transition

To avoid the worst effects of climate change, a swift global transition of energy systems – meaning a shift away from fossil fuels to renewable energy – is required to reach net zero by the middle of the century.[1] Emerging markets and developing economies (EMDEs) will play a decisive role in this transition (China is excluded from this report's analysis of EMDEs due to its unique role in labelled bonds, which significantly differs from other EMDEs. All data points and graphs related to EMDEs do not include China.) Not only are EMDEs home to two-thirds of the global population and have the largest population growth projection, but as their economies develop and standards of living rise, their demand for energy, infrastructure and consumer goods will also increase significantly. This will unequivocally lead to a substantial surge in carbon emissions if they follow the same high-carbon growth pathway that developed economies charted in the past.[2] Projections over the next two decades indicate a 5 gigatonne increase in greenhouse gas (GHG) emissions in EMDEs, compared to a two gigatonne reduction in advanced economies.[3]

Fortunately, thanks to technological advancements in clean energy, especially for renewables, there are low-carbon alternatives for the generation of energy for many applications.[4] However, in many cases, clean technologies are more capital-intensive than established fossil fuel-based technologies, thereby requiring high upfront investment.[5] As a consequence, the risk structure in some EMDEs creates challenges for clean energy investments despite spectacular cost reductions of low-carbon technologies in the past.[6,7]

Depending on the scenario, annual spending on clean energy in these economies needs to reach between $600 billion (sustainable development scenario) and $1 trillion (net zero by 2050 scenario) by 2030, although these figures do not account for necessary additional investments in sustainable industry, transport, land-use and adaptation measures.[8] Currently only holding 10% of global wealth, EMDEs themselves are likely unable to finance these sums and, therefore, rely on the inflow of foreign investment.[9]

Current financial flows to EMDEs are still limited. Not only are international climate finance transfers falling short of the sums committed,[10] but private capital market investments have also been stagnating, with foreign direct investments (including both equity and debt) for renewables at a four-year low in 2021.[11] In addition, the economic environment is becoming more challenging, especially in EMDEs. In total, 80% of the $10 trillion global debt burden increase in 2021 was added in EMDEs, taking the total debt burden of these countries to almost $100 trillion, or one-third of the global debt burden.[12] At the same time, the window of all-time-low borrowing rates appears to have closed. Rising interest rates in response to global inflationary pressures and the expansion of credit spreads owing to heightened geopolitical risks have had a dampening effect on debt capital markets. EMDE sovereign issuances in January 2022 were down 40% year on year.[13] Finally, higher prices for fossil fuels and key agricultural commodities sparked by the war in Ukraine have contributed to tightening financial conditions in recent years, and although retreats were observed in 2023, they are still at much tighter levels than they were in early 2022.[14]

It is therefore crucial that the development and scaling of relevant financing instruments are supported for the sustainable transition of EMDEs. While grants and concessional finance, especially from multilateral development banks (MDBs),[15] are critical sources of catalytic funding for the low-carbon energy transition, they must be reinforced by larger pools of private capital to support scale and speed. To achieve net zero by 2050, the International Energy Agency (IEA) estimates that over 70% of clean energy investment in EMDEs must be financed by private sources, with nearly 60% of this financed by debt.[16] To scale such debt finance, exchange-traded securities, such as corporate and government bonds, are key. Not only can bond markets contribute the necessary scale (in 2022, global bond issuances stood at around $59 trillion[17]) the debt capital market also allows access to a wide and international investor base, especially when issuing debt for the purpose of sustainable development. Further, long-term bonds, especially, enable a better investment horizon match with the investment needs for net-zero transition. These needs are typically heavy in upfront capital investments[18] and have relatively long payback periods.[19]

> While grants and concessional finance are critical sources of funding, they must be reinforced by larger pools of private capital to support scale and speed.

The instruments that can combine the benefits of debt financing via bonds with the possibility of directly supporting sustainability-related projects and causes are so-called labelled bonds (with green bonds as the most prominent subtype). There have been debates on these bonds' effectiveness in increasing the share of capital dedicated to low-carbon investments, especially due to questions of additionality when green bonds are used for refinancing purposes.[20,21] However, besides merely providing capital, labelled bonds have been shown to increase transparency and accountability and often require issuers to raise their "green ambitions" both in terms of their projects and their organizations' operations in general.[22] Within this paper, the current and future potential role, as well as challenges and key solutions for the further deployment of such labelled bonds in EMDEs, is explored. In doing so, the paper places a specific focus on the Association of Southeast Asian Nations (ASEAN) region. Key insights – especially on challenges and potential solutions – are based on workshops and consultations with relevant stakeholders in the region and internationally.

The role of labelled bonds in EMDE markets

Different types of labelled bonds

Following the definition of the Climate Bonds Initiative (CBI), [23] labelled bonds can be classified into two categories: First, use of proceeds (UoP) bonds, which require the raised capital only to be used for specific and pre-defined projects, and, second, impact bonds (IB) that are tied to specific environmental, social and governance (ESG) targets, although their proceeds can be used by the issuer for any purpose.

Use of proceeds bonds

- **Green bonds**: Proceeds generated from green bond issuances are earmarked for investments in projects that are expected to have positive environmental benefits. These projects typically focus on areas such as renewable energy and energy efficiency. Green bonds are the most prominent type of bond to date, and they also include subcategories such as blue bonds (i.e. proceeds are dedicated to the preservation and sustainable management of marine and aquatic systems).
- **Social bonds**: UoP is designated explicitly for the funding of social initiatives, including but not limited to health, employment and gender equality.
- **Sustainability bonds**: When a bond finances a combination of both green and social projects and activities, it will be categorized as a sustainability bond.

Impact bonds

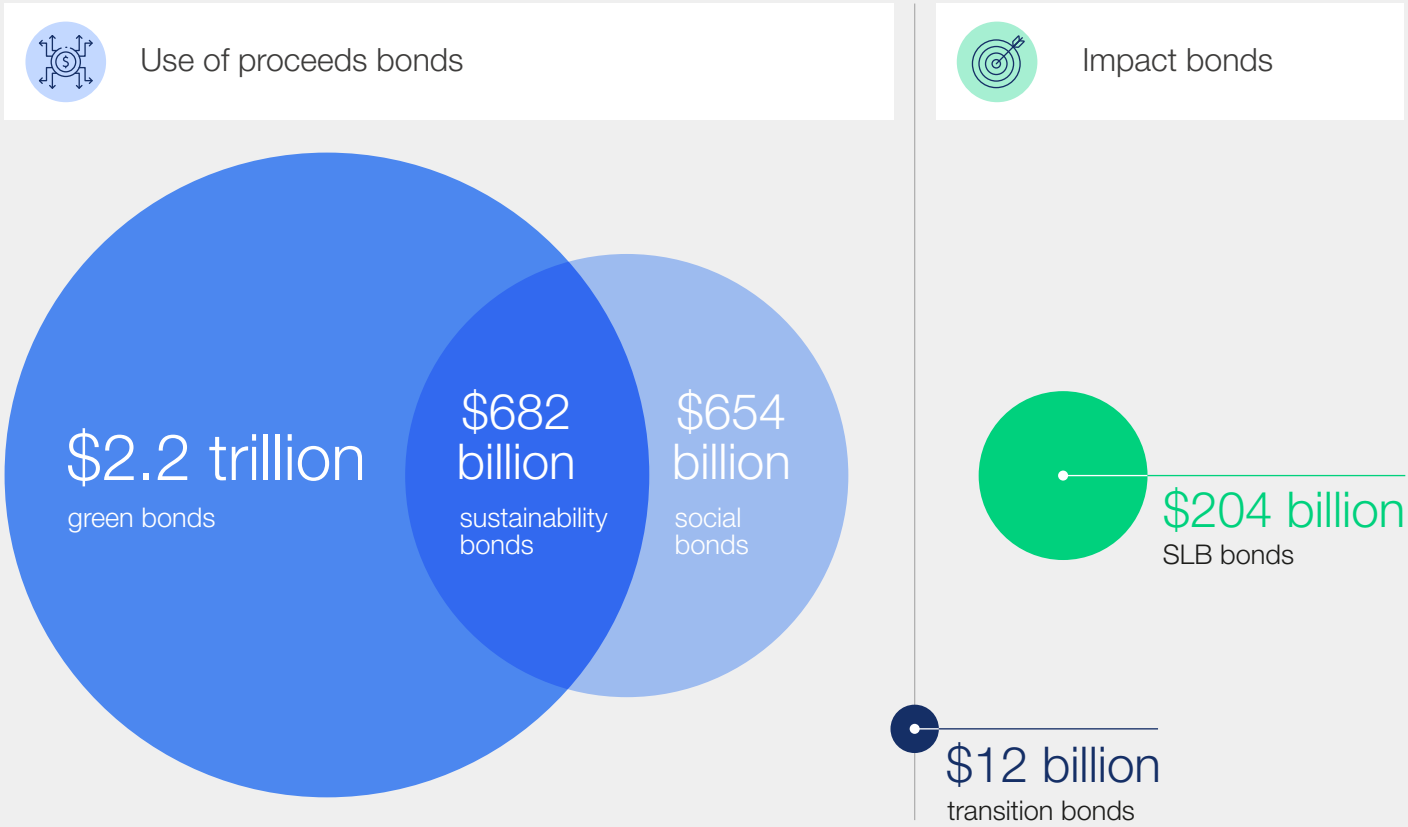
– **Sustainability-linked bonds (SLBs):** While the proceeds of these bonds can be used for general purposes, their financing (typically coupons, but any financial incentive could be used) is tied to the achievement of pre-defined and sustainability-/ESG-related key performance indicators (KPIs). This means that, based on the design of the SLB, coupons will typically increase or decrease depending on whether the issuer reaches its sustainability targets or not. Therefore, for some types of bonds, the coupon will step up if targets are not met, while others have a step-down mechanism if targets are met. There are even some types that do not change the coupon rate but require the issuer to make mandatory payments to third parties (e.g. offsets) if targets cannot be reached. Although not yet prevalent, some issuers have also been seen to issue green SLBs, combining both the mechanics of impact bonds with the use of capital for green projects.

Other labelled bonds

– **Transition bonds**: This relatively new category encompasses the financing of projects that are not necessarily low- or zero-emissions projects but might be required to transition to net zero. This means they are used for decarbonization activities that do not qualify as "green" and are typically issued within hard-to-abate and highly polluting sectors such as mining and aviation. Currently there is no clear alignment on the market yet, if transition bonds should be seen as their own category or a subcategory of green bonds. Further, some standard-setters see them as UoP type bonds, while others qualify them as general-purpose bonds.

In terms of cumulative issuance, the labelled bond market is dominated by green bonds (see Figure 1), and although the other types of bonds are slowly gaining speed, in 2022, green bonds still accounted for 57% of new issuance values globally.

FIGURE 1 **Types of labelled bonds and the corresponding sizes of cumulative issuances by 2022**

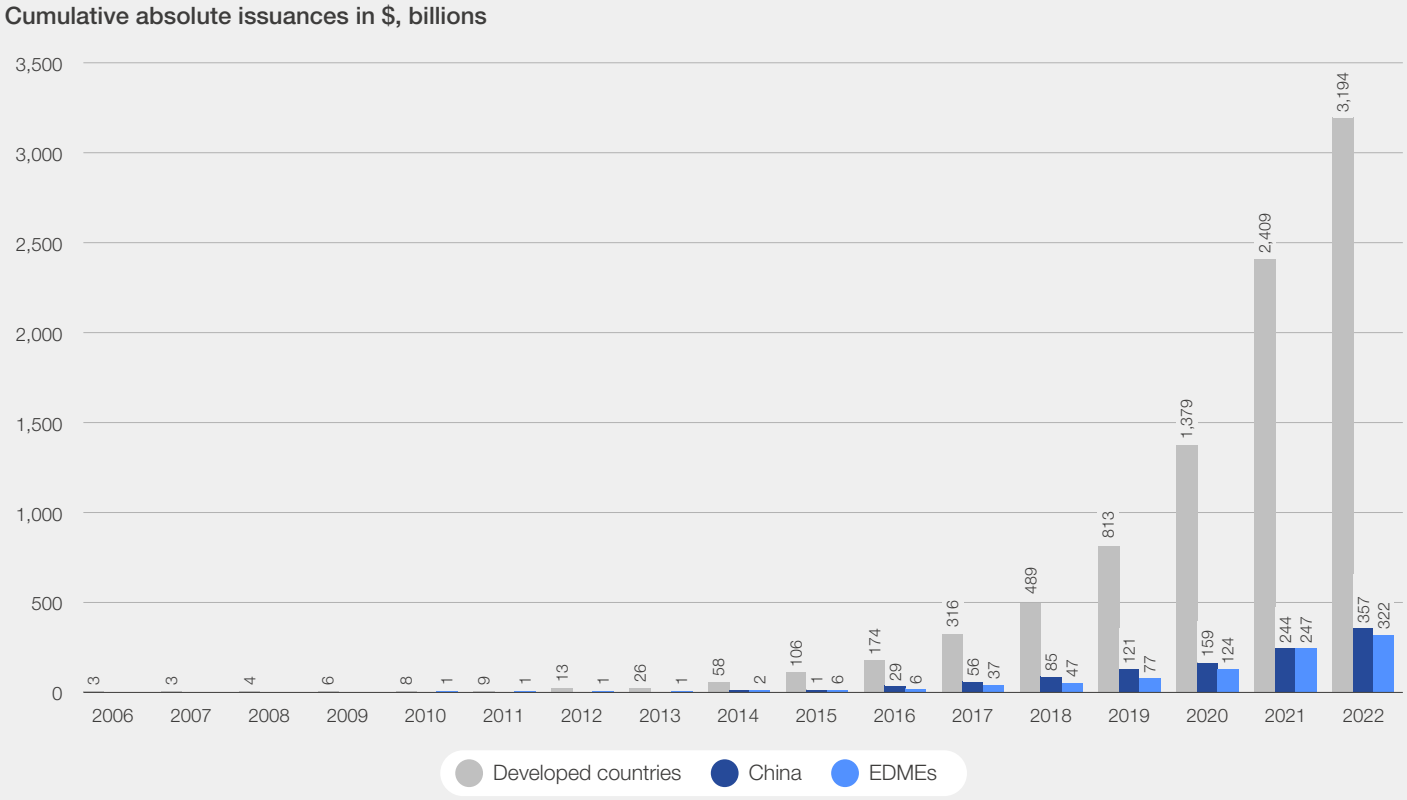


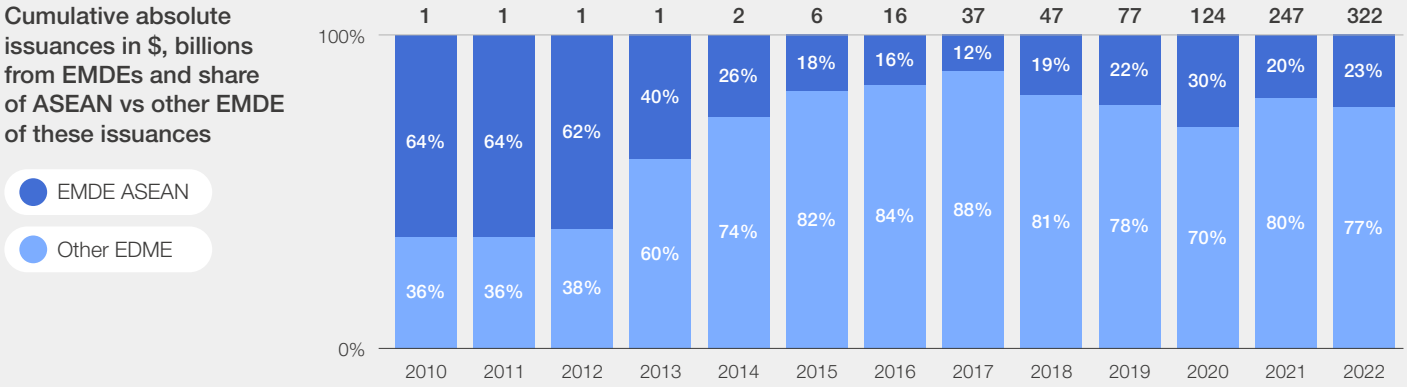
Source: Climate Bond Initiative.

Current status in EMDEs and ASEAN

While the labelled bond market started to scale up in developed markets around 2014, issuances in the EMDEs only started growing substantially in 2017 (see Figure 2). Although one of the first issuances from EMDEs was from ASEAN[24] (i.e. an issuance by the Asian Development Bank, headquartered in the Philippines), the relative importance of the region has substantially decreased since then. To date, cumulative labelled bonds from ASEAN only make up 23% of total issuances in EMDEs and 2% globally.

FIGURE 2 **Cumulative labelled bond issuance ($, billions) in developed economies, China and EMDEs (following IMF definition) from 2006 to 2022 as well as the relative importance of issuances from ASEAN vs other EMDEs of all EMDE issuances as of 2010 (first issuances in EMDEs)**





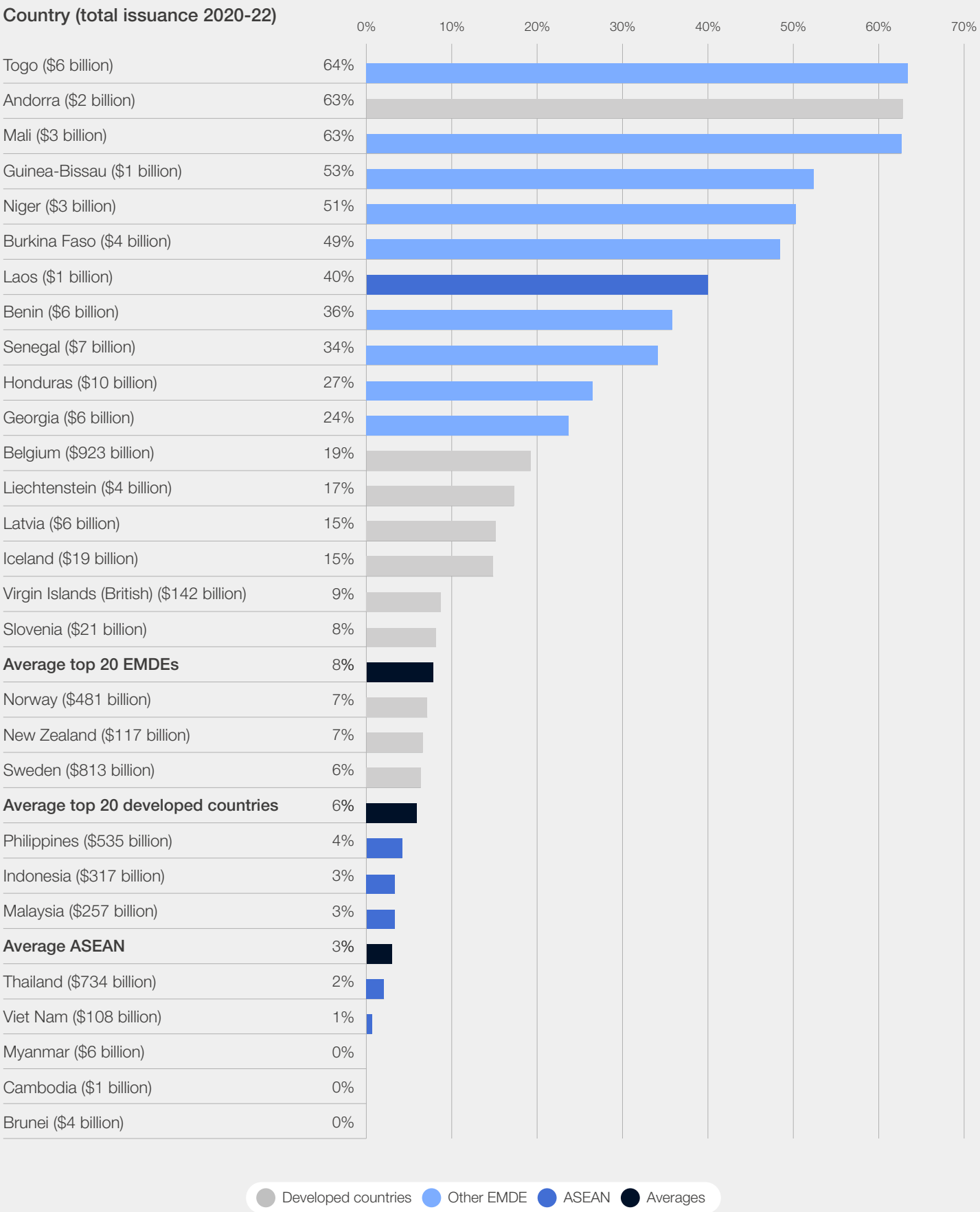
Note: Numbers include all currencies and labels (including self-labelled).

Source: ETH Zurich, Refinitiv.

The striking underrepresentation of ASEAN countries persists when looking at the relative size of the labelled bond market (in relation to general issuances) in different regions and countries (see Figure 3). On average, the share of labelled bonds in the total bond market stood at 2.9% for ASEAN countries between 2020 and 2022. At the same time, some other EMDEs reached shares of over 60%.

Part of the reason for a relative underrepresentation of ASEAN countries among the top labelled issuance share countries could lie in differences in issuer types and industries. In terms of issuer types (see Figure 4), it can be observed that in EMDEs, multilateral issuers have played an especially important role – and still do today in ASEAN. Although these issuers were also among the first to issue labelled bonds in developed economies, they were overtaken by corporate issuers early on. In ASEAN, however, multilateral organizations were, for a long time, the only type of issuers and still made up 30% of new issuances in 2020-2022. While sovereign issuers in EMDEs, as well as ASEAN specifically, make up around 40%, the share of corporate issuers is around 20 percentage points lower in ASEAN, with multilateral issuers picking up this share of issuances. However, going forward, corporates are also urgently needed when mobilizing private capital towards the net-zero transition.

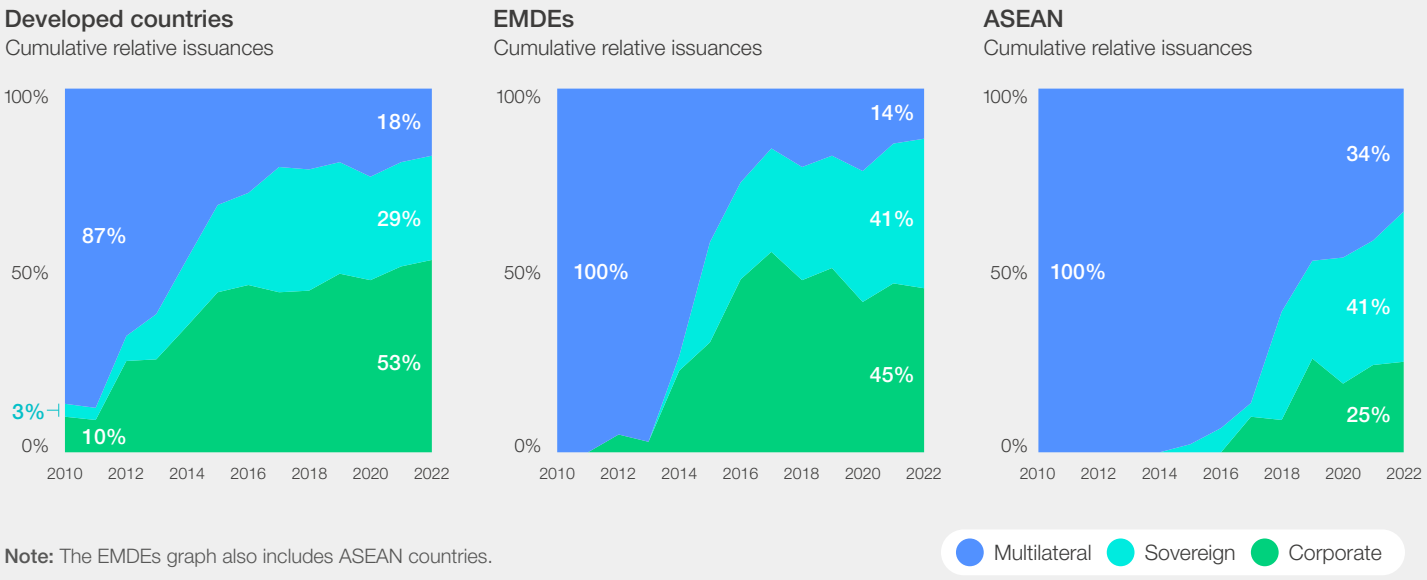
FIGURE 3 | **2020-2022 total bond issuances by country and the share of labelled bonds of that total**



Note: Shown are the top 10 developed countries and top 10 EMDEs, all ASEAN countries and averages for the top 20 developed countries, the top 20 EMDEs and ASEAN.

Source: ETH Zurich, Refinitiv.

FIGURE 4 **Share of labelled bond issuances by type of issuer. Multilateral (e.g. MDBs), sovereign (e.g. governments, agencies, municipalities, treasuries and central banks), and corporate issuers for developed countries vs EMDEs and ASEAN specifically**

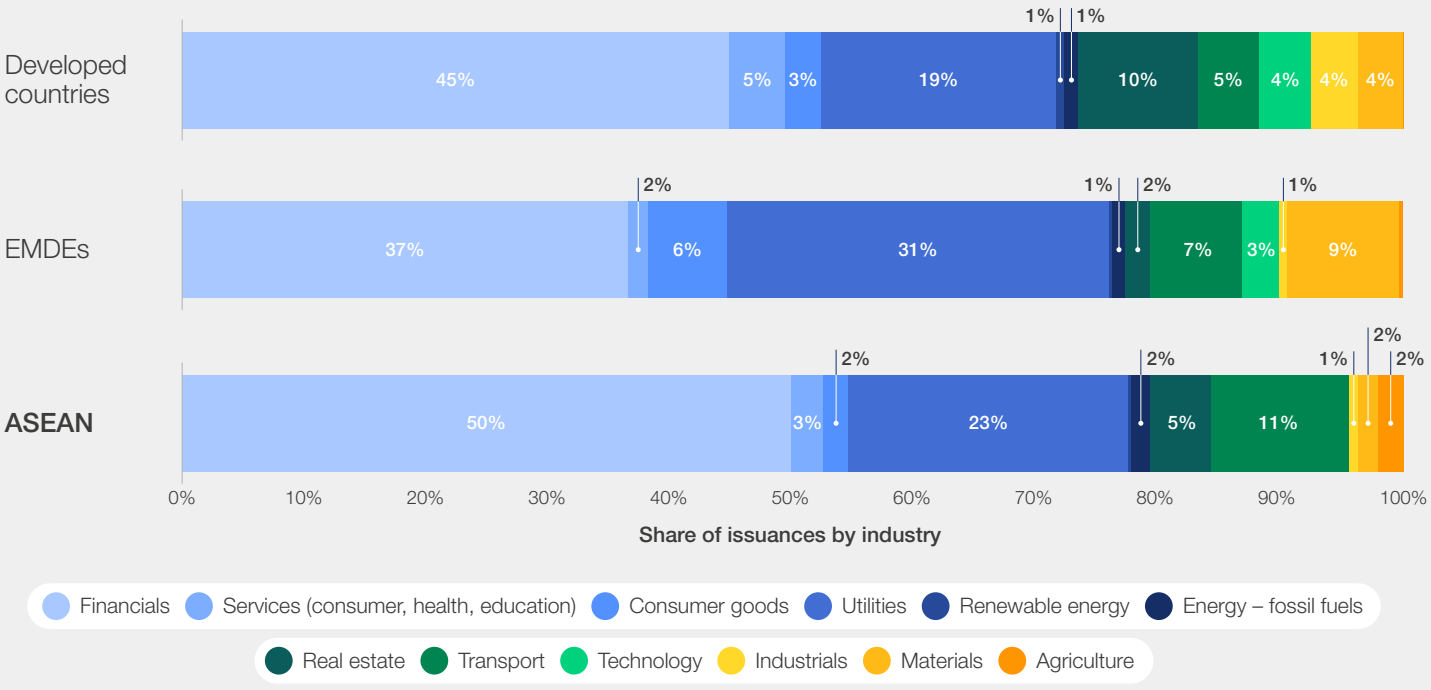


Note: The EMDEs graph also includes ASEAN countries.

Source: ETH Zurich, Refinitiv.

When taking a closer look at the industries of corporate issuers (see Figure 5), the clear dominance of "financials" and "utilities" can be observed across all types of countries. It is important to note, however, that it is not only banks and insurers that are included in the financials industry but also investment management corporations (i.e. vehicles specifically founded for a project). What can also be observed is that the relative importance of several other industries may vary. While "real estate" is an important source of labelled bond issuance in developed countries, it is less relevant in EMDEs. There, however, issuances from "materials" companies have played a significant role. In ASEAN, "transport" is the third most relevant issuer industry. Further, issuances related to "agriculture" are more prevalent in this region, whereas developed countries have seen very few, if any, issuances in that sector.

FIGURE 5 **Share of cumulative issuances until 2022 by industry for corporate issuers. Share of labelled bonds in total bond issuances in 2022 by country for developed countries vs EMDEs and ASEAN**



Note: The EMDEs graph also includes ASEAN countries.

Source: ETH Zurich, Refinitiv.

> The potential of labelled bonds in emerging markets is inherently tied to the unique contextual challenges and opportunities that these markets present.

Expected potential of labelled bonds

As can be inferred from historical issuances of labelled bonds, there are distinct differences in the financing needs of issuers in developed economies and those in developing markets. Thus, the potential of labelled bonds in emerging markets is inherently tied to the unique contextual challenges and opportunities that these markets present, which can vary even between different EMDEs. Taking the ASEAN region as an example, countries exhibit diverse needs for their development and the pursuit of net-zero transition. For instance, while both Viet Nam and Thailand are seen to boast substantial potential for green bonds to fuel investments in renewable energy projects, the former seems to already be a step ahead in realizing this potential. Meanwhile, Thailand is still lacking incentives to generate renewable energy projects at scale, despite robust investor appetite for bonds covering such projects. Yet, from stakeholder consultations, clean transport emerged as an interesting sector for Thailand's green bond potential. Conversely, countries such as Indonesia, the Philippines and Malaysia still heavily rely on coal, making transition financing a paramount necessity to steer them towards cleaner energy sources and fulfil their commitments to climate action. The contrasting landscapes within developing economies underline the importance of tailoring labelled bond strategies to address the unique needs and opportunities presented by each region and country. Thus, tangible, country-specific development plans need to be established to identify the respective financing needs and corresponding types of labelled bonds required.

Due to the varied needs, estimating an overall potential is difficult. However, a simple back-of-the-envelope calculation can provide a directional idea of how much additional potential for the labelled bond market in EMDEs and ASEAN specifically could be expected. If EDMEs achieve the same proportion of labelled bonds within their total bond market as the average seen in the top 20 developed economies, they could experience a $353 billion increase in labelled bond volume. This includes an estimated $142 billion in green bonds, assuming they maintain the current average where green bonds constitute 40% of all labelled bond issuances. For ASEAN only, the potential increase in labelled bond issuances would amount to around $19 billion, including $8 billion in green bonds – not accounting for any growth in the general bond market.

TABLE 1 **High-level calculation of further potential in labelled and green bond issuances in EMDEs and ASEAN**

	Size of bond market (in $, billions)	Potential increase in labelled bond volume (in $, billions)	Potential increase in green bond volume (in $, billions)
EMDE	7,509	355	142
ASEAN	644	19	8

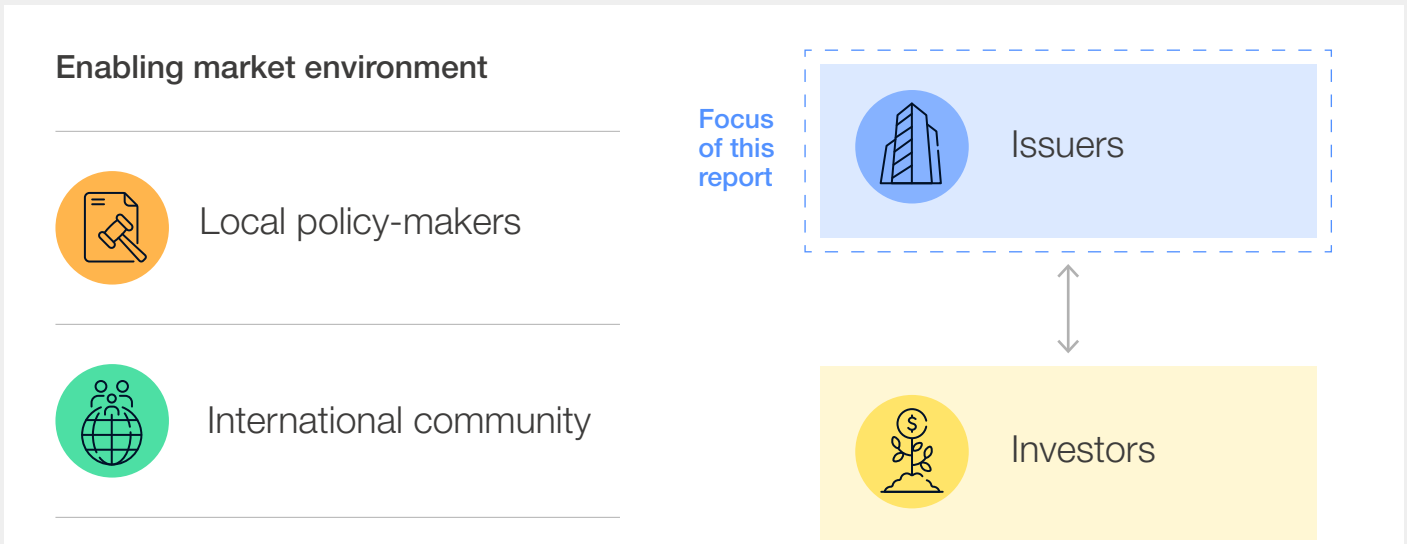
It is very difficult to quantify the overall positive effect on the climate from these investment sums, especially, as previously mentioned, due to questions of additionality and a lack of consistent forms of impact reporting. Further, not all labelled bonds are of equal quality. Yet, it can be argued that through the existence of such financing instruments that provide better and potentially cheaper financing to green issuers, additional capital is freed up and potentially even more green projects can be realized. Labelled bonds are often associated with additional positive impacts on biodiversity, electrification, standards of living and more.[25] Lastly, another key advantage of labelled bonds as a financial instrument lies in their capacity to bolster accountability and transparency. This, in turn, can increase awareness and heighten expectations among stakeholders in the market, thereby even further accelerating the net-zero transition. All things considered, it is important that, when supporting labelled bonds, it is ensured that measures promote bonds with high quality and transparency.

1 Current challenges for the labelled bond market in EMDEs

Entities considering the issuance of a labelled bond need to weigh added benefits against added costs.

To support and also scale a functioning labelled bond market in EMDEs, three critical elements must harmonize: namely an enabling market environment, the priorities of issuers and the expectations of investors (see Figure 6).

FIGURE 6 **To support labelled bonds in EMDEs, the following three elements are required: an enabling (market) environment as a foundation and issuers and investors that see a benefit in labelled bonds over other financing instruments**



The foundation of an enabling market environment encompasses both the financial infrastructure that underpins a functional debt capital market and the cultivation of an ecosystem in which the net-zero transition agenda is a priority. In many EMDEs, the domestic financial markets, including public debt markets, are not fully mature. These markets often grapple with low liquidity and limited depth, leading to volatility and high risk for investors.[26] Accordingly, the participation of retail and even institutional investors may remain modest, and with that, capital-raising costs are elevated. This means that before any specific support to scale labelled bond issuances can be effective, the local bond markets, in general, need to reach a certain level of maturity to offer attractive investment opportunities. While there are some measures that can be taken by the international community to support this development,[27] a favourable financial market environment is typically influenced by economic stability and enabling policy contexts such as appropriate legislative requirements as well as taxation and accounting frameworks[28] – all elements mostly driven by local governments and regulators.

The second aspect of an enabling environment is the responsibility of local governments, namely in cultivating an atmosphere for the net-zero transition agenda to hold paramount significance. Many

emerging economies are in the early stages of prioritizing the net-zero transition and developing corresponding incentive frameworks, such as crafting transition plans and implementing carbon pricing mechanisms. Yet such actions are imperative to incentivize both issuers and investors to embrace sustainable practices, a goal that labelled bonds can support as a catalytic instrument.

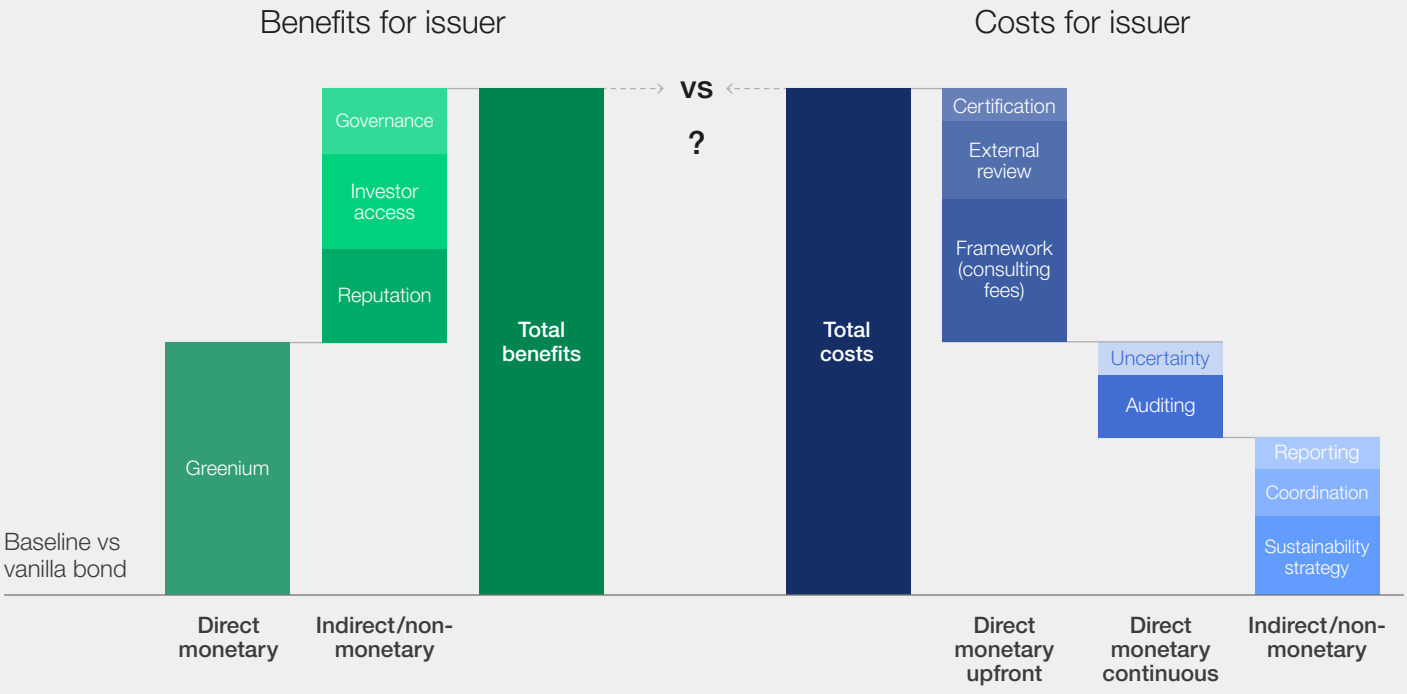
Once favourable market conditions are established, it is vital that both issuers and investors perceive the advantages of participating in the labelled bond market. Based on consultations with key stakeholders from the ASEAN region, challenges both from an investor and issuer perspective were identified. In terms of investors, a substantial portion of demand for labelled bonds currently emanates from international investors, given the incentive structures and regulatory requirements in their home markets.[29] This underscores the need to activate local investors, through incentives and mandates, for example. Further, there is still a need to educate and spread awareness about labelled bonds among certain investors who have not yet engaged in the labelled bond market. Finally, in several cases, financing terms and structures offered in EMDE issuances do not always match the investment appetite of international investors and better coordination would be required.

For issuers, challenges range from even being aware of the different potential types of labelled bonds available to the identification of attractive opportunities for such issuances, and the actual issuance and post-issuance processes, which are often costly. So far, however, previous research and reports have often not focused sufficiently on the challenges faced by issuers and how they can be supported to overcome these challenges. Therefore, this paper primarily centres on the issuer perspective, aiming to develop solutions that best support and facilitate the core benefits of issuing labelled bonds while reducing added costs. By doing so, other enabling market environment aspects, including investor demand, can indirectly be addressed as well, as they will increase issuer benefits.[30]

The issuer perspective

Issuers require compelling benefits, encompassing both financial and non-financial rewards, to outweigh the additional costs associated with issuing labelled bonds. Only then is it an interesting alternative to other capital sources. However, several challenges currently hinder many issuers from realizing the net benefits of labelled bonds, thereby slowing down their widespread adoption as a sustainable financing solution. While different benefit and cost elements do not necessarily have the same relevance for different issuers, a high-level overview of the benefit and cost types most prominently mentioned throughout the stakeholder consultations can be found in Figure 7 and are discussed in detail in sections 1.1 and 1.2.

FIGURE 7 **Monetary and non-monetary benefits and costs in the issuance of labelled versus conventional bonds have been identified**



Note: For labelled bonds to be an attractive alternative, total added benefits need to at least outweigh added costs. The sizes of benefits and cost buckets are indicative.

Source: ETH Zurich.

1.1 Benefits of issuing labelled bonds

For issuers, using labelled bonds can come with various benefits, ranging from potential monetary savings in the cost of capital to non-monetary aspects such as an improved reputation. Monetary incentives carry heightened importance for sovereign issuers, given that most of their spending, and thus their financing, still needs to cover some type of green, social or transition elements. Thus, they will more likely seek financing via labelled bonds if a financial benefit can be identified. In contrast, non-monetary incentives typically hold significant importance for issuers especially from the private sector in the renewable energy industry as well as fossil fuel and incumbent energy companies (for example issuing transition bonds or SLBs). These sectors often prioritize benefits such as reputation enhancement, aligning with sustainability goals, and accessing a broader investor base (see section "Indirect or non-monetary benefits").

Direct monetary benefits

"Greenium"

A "greenium" is often seen as the core financial benefit of labelled bonds. Greenium refers to the price premium or lower yield that investors may be willing to accept for labelled bonds. Although they are assumed to be the premium attributed to these investments' perceived positive environmental and social impact, greeniums have likely been primarily driven by supply and demand dynamics. Demand has, for a long time, outweighed supply, sometimes resulting in oversubscriptions as high as 20 times the available amount. However, more recent analyses have shown that with growing supply that meets this demand, greeniums have been dwindling.[31] Anecdotal evidence suggests that many issuers have entered into the issuance process expecting better financing terms and are disappointed to find only marginal greeniums, if at all. With many different parameters typically influencing the price of an issuance, greeniums are not guaranteed.

At the same time, it has been shown that, when greeniums exist, they tend to be larger for more credible issuances, measured both by the issuer's credibility as well as the level of certification and external reviews that a labelled bond has acquired.[32] This suggests that investors are willing to pay a larger premium for bonds they perceive as less risky in terms of greenwashing, and this can have substantial implications for EMDEs. In these economies, certification standards and taxonomies may not fully align with those in developed markets, leading to differences in understanding and assessment. This is because international standards and regulations are not always easily applicable in EMDEs. For example, there are many smaller and medium enterprises in these regions that do not have the capacity to go through complex and costly validation processes, such as having their targets approved by the science-based target initiative.

> "Labelled bonds offer an issuer the distinct advantage of gaining access to a more diverse set of investors (both in terms of geography and investor types).

Indirect or non-monetary benefits

Reputation

Issuing a labelled bond can carry a reputational benefit in signalling a company's commitment to sustainability, including its efforts to develop a sustainability strategy. Especially for issuers in the renewable energy industry, this has been referenced as a key motivational factor for issuing labelled bonds (i.e. to prove they are "best-in-class"). For these companies, labelled bonds help to raise awareness within developing markets and establish their presence as best-in-class sustainable entities. However, it is important to note that renewable energy industry issuers may also require support, education and guidance to navigate the complexities of labelled bond issuance, especially when they are just beginning their journey of issuing such financial instruments.

Investor access

Labelled bonds offer an issuer the distinct advantage of gaining access to a more diverse set of investors (both in terms of geography and investor types). This benefit has been particularly mentioned by issuers from fossil fuel or other carbon-intensive industries, as they are expecting to encounter significant challenges to secure financing at reasonable prices in the longer term. While there is a considerable debate ongoing as to whether industries should still receive investments at all, if they do, it should be ensured that such financing is clearly tied to rigorous decarbonization requirements, which can be achieved via labelled bonds (e.g. SLBs with ambitious emission reduction targets, transition bonds for projects with significant emission reduction potential). This, however, requires clear standards and controls to prevent misuse of the label, as this could, in turn, reduce the market's trust in these instruments.

Besides labelled bonds providing issuers with access to new investors, they also support better access to a broader set of investment types, such as different tranches, offering flexibility in terms of maturity and other parameters, which may not be as easily possible to do in the regular bond market.

Governance

The issuance of labelled bonds often necessitates the establishment of a robust sustainability strategy by the issuer. While this can be seen as an initial

challenge, it also offers benefits in terms of improving transparency and governance within the issuer's operations. Developing a comprehensive sustainability strategy compels the issuer to assess its environmental and social impacts, set clear sustainability goals and implement measures to achieve them. This process not only aligns the issuer with international sustainability standards but also ensures greater transparency in reporting, enabling investors and stakeholders to gain deeper insights into the issuer's commitment to responsible practices. In this way, the governance aspect of labelled bond issuance not only serves to secure funding for sustainable initiatives but also elevates the issuer's overall standards of transparency and accountability.

1.2 Costs for issuing labelled bonds

The costs associated with issuing labelled bonds can be broken down into monetary costs that directly necessitate paying an external provider for their services – both on a one-off basis during the issuance process and as costs that might recur throughout the duration of the bond. At the same time, non-monetary costs will be incurred, especially in terms of the time committed by internal resources to additional tasks that are required due to the issuance.

Direct monetary costs – upfront

External consulting to develop a labelled bond framework

One of the primary costs associated with labelled bond issuance (especially in EMDEs) is developing a comprehensive labelled bond framework, as it typically requires hiring external consultants. While some issuers also opt to develop it themselves, can access a grant, or have it taken over by a partner, many consultation stakeholders reported that issuers were making use of such external consulting services. Based on these accounts from several ASEAN countries, the costs associated with such services can range from $30,000 to $60,000. The complexities of the existing taxonomies and lack of clarity surrounding how international requirements translate to the EMDE context add to the challenge of issuers trying to independently navigate the issuance process. In addition, given the relatively nascent stage of the labelled bond markets in many EMDEs, there is limited experience and scale in the region, and thus only a few local service providers, which necessitates international consultancy support. Also, international providers are sometimes seen as more credible. However, as the market scales and matures, it is anticipated that local expertise and credibility will be built up, reducing dependence on costly external consultants from abroad. To facilitate the growth of such local ecosystems, knowledge-sharing between market participants is essential. Unfortunately, several accounts have indicated that knowledge and experience sharing can be limited, even though initial issuances have taken place. Thus, measures to reduce disparities – and with that, the complexity – of taxonomies and standards to support the initial scaling of the market and encourage effective knowledge dissemination and collaboration are expected to support the simplification of the processes and the reduction of costs over time in EMDEs.

External review

The role of undergoing an independent (e.g. second-party opinion provider, assurance or certification providers) review and verification process (costing between $15,000 and $50,000) in the labelled bond market remains essential for ensuring transparency and credibility. However, a challenge that persists is the existence of a large set of different standards from multiple standard-setters, countries or regions that may govern these opinions. There are notable disparities in the qualities of second-party opinion providers (SPOs) that might deter the effectiveness and trustworthiness of such reviews. It would, therefore, be important to further standardize and develop well-defined requirements for the external review process for all types of labelled bonds – and this is not just from the perspective of issuers in developed economies. The establishment of a consistent set of criteria and expectations would not only streamline the evaluation process but also provide a level playing field for issuers and investors, ultimately bolstering the reliability and comparability of these opinions within the labelled bond market.

Certification

The final upfront direct cost associated with some labelled bonds is the official certification of a labelled bond based on the use of proceeds, adherence to specific standards and, in the case of SLBs, the level of their performance. However, it is important to note that only a small share of labelled bonds undergo official certification. While the most significant and widely recognized certification for green bonds is the CBI certification, some issuers opt for alternative approaches. A large share of bonds is reported as "CBI-aligned", meaning that they align with the CBI's criteria but do not go through the formal certification process. Additionally, certain issuers choose self-labelling, wherein they independently assess and declare their bonds as green without third-party certification. The decision whether to pursue certification often hinges on several factors, including the issuer's

“Issuing labelled bonds often entails a somewhat underestimated prerequisite, which is the development of a comprehensive sustainability strategy.

resources and priorities and the perceived benefits of certification – arguably even more pronounced for EMDE issuers than for issuers in other countries. However, although certification is an additional layer to provide transparency and credibility, it may not be currently feasible for every issuer.

Direct monetary costs – continuous

Auditing

In terms of continuous direct costs associated with labelled bonds, one component is the auditing costs incurred for external reviews post-issuance. The need for and the type of these audits can vary depending on the type of verification chosen by issuers. While some issuers opt for voluntary audits, issuers with CBI-certified bonds must submit their annual reports for external review. The auditing process serves as an additional layer of transparency and assurance for investors, providing them with confidence in the bond's alignment with sustainability criteria. However, a key concern frequently associated with such auditing costs is the uncertainty surrounding them. This uncertainty can take various forms, including concerns about potential changes in requirements that may become more stringent and costly over time and the prospect of additional auditing requirements being introduced by standard-setters at a later stage, even if they were not initially mandated. This underscores the importance of clear and consistent standards and requirements within the labelled bond market to mitigate issuer apprehensions and enhance investor trust.

Indirect or non-monetary costs

Sustainability strategy

Issuing labelled bonds often entails a somewhat underestimated prerequisite, which is the development of a comprehensive sustainability strategy. While this is not a specified requirement by standard-setters and is therefore often overlooked, the steps that need to be taken throughout the issuance process of labelled bond typically impose (or are at least significantly facilitated by) the integration of ESG and sustainability principles into the organization's operations in one way or another. This may involve a thorough revision of the issuer's projects in terms of their climate and social impacts, emission tracking or ESG target setting (especially for SLBs). Such an integration represents a significant undertaking that requires not only added work but also effective change management to ensure alignment with sustainability goals.

Moreover, the bond issuance process itself involves numerous steps that require resources and time, from initiating the decision to issue such a bond to creating the framework (if not outsourced). This complexity can pose challenges, especially for first-time issuers. Consequently, there is internal demand for knowledge and expertise, often prompting issuers to allocate additional resources and, in some cases, establish dedicated sustainability or ESG teams.

However, a persistent issue arises from the scarcity of expertise in ESG and labelled bond issuance in EMDEs. In many instances, organizations grapple with a shortage of talent and knowledge related to ESG practices, which extends to understanding how to interact effectively with the international investor and labelled bond community. These knowledge gaps need to be bridged and the necessary capabilities built to successfully and impactfully issue labelled bonds, particularly in regions where such expertise is underdeveloped.

Coordination

Efficient coordination represents an additional challenge for labelled bond issuers, necessitating extra effort and resources. Internally aligning various teams and stakeholders, especially during the development of sustainability or transition strategies, can be a complex endeavour. Further, external coordination with diverse and often new service providers is required. Building effective relationships and ensuring seamless collaboration with external parties, such as verification agencies and auditors, becomes essential for ensuring compliance with the necessary standards.

Reporting

Preparations for regular reporting (both for the auditing process as well as general impact/allocation reports expected by the international markets) represent another cost factor for labelled bond issuers, stemming from the increased need for resources. Just as uncertainty surrounds auditing costs, the potential that reporting requirements might be significantly modified over time poses an added challenge. Issuers may find themselves in the unknown regarding the internal efforts and resources required to meet evolving reporting standards.

2 Solutions and roadmap for implementation

There are 19 measures to be implemented across the ecosystem to support the issuance of labelled bonds in ASEAN.

Based on the same consultations conducted with key stakeholders in the labelled bond market in ASEAN, a set of potential solutions has been developed to better support issuers based on the insights from the previous section. Their primary aim is to either increase the benefits or decrease the costs of labelled bonds for issuers. In the first step, solutions are described and grouped by four types of stakeholders, namely issuers, investors, local policy-makers and the international community (i.e. MDBs, non-profits, standard-setters, SPOs, rating agencies, international regulations). In the second step, these solutions are prioritized based on their ease of implementation as well as their impact. This assessment is then used to propose a roadmap for the support of labelled bonds in the ASEAN region specifically, albeit with the expectation that key elements could also apply to EMDEs more broadly.

2.1 Actions for all stakeholders in the market

Issuers

Solutions aimed at increasing issuer benefits

1 **Close alignment with investors**: To increase the benefits for issuers in the labelled bond market, it can help to establish closer and early alignment with investors throughout the issuing process. By actively involving investors from the outset, issuers can gain valuable insights into some specific expectations regarding the types of labelled bonds and bond characteristics they are seeking. While there are instances of sustainable projects requiring funding that cannot be easily made "bankable" to match the requirements of the current financial system (a challenge that needs to be tackled by a different set of solutions), there are also projects that can be an attractive investment opportunity, when structured the right way. In such cases, early collaboration will not only allow issuers to make certain tweaks to their offerings to better meet investor demand but also build trust in the market. When investors are included in the process, they are able to understand the issuer's commitment to sustainability and the quality of the labelled bonds being offered. This alignment and transparency can help mitigate unintended "greenwashing" and ensure robust demand for issuances.

Solutions aimed at decreasing issuer costs

2 **Organizational preparedness**: An element that can unexpectedly drive up costs for the issuers of labelled bonds is the absence of a solid sustainability strategy, such as including a dedicated department focusing on sustainability and ESG matters. The bond issuance process can become cumbersome and protracted without groundwork on sustainability targets and operations. This is particularly true when top management is not fully engaged, as the commitment of key decision-makers plays a pivotal role in the success of sustainability initiatives. Therefore, ensuring that an organization has its "house in order" and is properly prepared is a relevant enabling factor for cost reductions to an issuer before embarking on its labelled bond issuance journey. This preparation includes securing C-suite-level support, establishing streamlined operations and having a clear strategy and reporting mechanisms in place. Having a clear long-term strategy will also help in developing a solid pipeline of relevant and truly sustainable projects, meaning potential labelled bond frameworks can be developed very stringently with a long-term vision and, accordingly, will not need to be redesigned for each potential new issuance. Additionally, a stringent and solid framework can positively impact an issuer's benefits in terms of potentially increased greeniums.

Investors

Solutions aimed at increasing issuer benefits and decreasing issuer costs

3 **Early engagement**: Besides providing capital, investors can play an important role in the labelled bond market by actively engaging with issuers. This support includes providing valuable insights to issuers, such as regarding what types or structures of bonds are most appealing to the investor community. This can be valuable as bond markets have the potential to suffer from asymmetric information, where investors and underwriters have a better understanding of the market than issuers. While overcoming such asymmetries requires additional structures to support the issuers in understanding the market, with direct and ongoing engagement with potential issuers, larger investors can help issuers align their offerings with market preferences, thereby increasing the likelihood of a successful issuance.

Moreover, investors can disclose their willingness to pay for the additional effort required for the issuance of labelled bonds. In discussions with market participants, it has become apparent that while the premium for labelled bonds has seen a decreasing trend, many investors still recognize and appreciate the extra work and diligence required for these issuances. They are willing to pay for the added value of labelled bonds that align with their sustainability objectives. Investors could potentially even start more clearly differentiating the premiums they are willing to pay depending on the levels of ambition and credibility of the labelled bond frameworks (e.g. a lower premium for "dark green projects" or for more alignment to standards). While some previous research in experimental setups has shown that the willingness to pay for higher levels of investments might not be significant,[33] this could still be an avenue to explore (see solution 15 "Levels of "greenness"").

Further, impact-oriented investors might explore the possibility of entering into advanced market commitments, thereby assuring potential issuers that there will be sufficient demand if they issue bonds fulfilling specific requirements.

Any such investor support will not only facilitate cost reduction for issuers during the issuance process but also augment demand, the result of which might be to further boost potential greeniums. At the same time, such collaboration could enhance transparency and allow investors to gain a better understanding of the quality of the respective labelled bond issuances, which would, in turn, also reduce an investor's effort and due diligence requirements. This further underscores the mutual benefits of strong collaboration between issuers and investors in the market.

Local policy-makers (governments, regulators, central banks)

Solutions aimed at increasing issuer benefits

4 **Increased returns**: Measures aimed at supporting labelled bond returns can help incentivize issuances and drive demand. This can, for example, be achieved by implementing efficient carbon pricing mechanisms that require market participants to price in the full costs of their activities when calculating their cost of capital, thereby making sustainable projects and organizations more attractive to investors. Additionally, introducing support schemes such as renewable energy feed-in tariffs or power purchase agreements can boost returns for sustainable projects, making them more attractive to investors. These increased returns can stimulate investor demand and, with that, enhance the benefits for issuers.

5 **Reduced financial risks**: Investor demand for labelled bonds can be further stimulated through a reduction of the risks associated with these instruments. Policy measures designed to mitigate risks can act as incentives for investors. These measures may encompass government-backed guarantees, first-loss provisions or insurance mechanisms. By offering this safety net, governments can enhance investor confidence in labelled bonds, making them more appealing investment options. Such initiatives not only bolster demand from investors but also provide issuers with a more secure and supportive environment to enter the labelled bond market with confidence.

6 **Investment mandates**: A strategy to directly amplify labelled bond investments is to establish green investment requirements or quotas for domestic investors, including insurers, pension funds, development banks and government entities such as state investment funds and sovereign wealth funds. These mandates can compel such investors to allocate a certain proportion of their portfolios to green or labelled bond investments. Doing so would not only align their financial activities with sustainability objectives but also bolster demand for labelled bonds.

7 **Capital requirements**: To bolster the appeal of labelled bonds as an investment opportunity, an additional strategy could involve adjusting capital reserve requirements for investors in alignment with the ESG risk profiles of their assets. By increasing capital requirements for the holding of higher-risk assets regarding climate considerations, it would be possible to factor in the transition risk associated with such investments. This would include the potential negative consequences of failing to meet existing or future carbon reduction requirements. Alternatively, capital requirements could be reduced for highly

> Governments can bolster support for the growth of their local labelled bond markets by developing well-defined sustainability goals and comprehensive transition plans.

sustainable investments if they come at a lower transition risk. While properly quantifying the (transition) risk difference between labelled and unlabelled bonds requires further research, and reserve requirements must maintain financial stability, requiring lower capital reserves for labelled bonds could make these opportunities more attractive for financial investors compared to unlabelled bonds.

8 **Tax incentives**: Tax incentives can serve as an instrument to increase labelled bond issuances applied to both issuers and investors. On the investor's side, tax incentives could, for example, take the form of tax breaks specifically tied to investments in labelled bonds. Another approach would involve the issuance of tax credit bonds, where investors receive tax credits in place of traditional interest payments. These measures can elevate demand for labelled bonds by making them more financially appealing to investors.

Furthermore, issuers can benefit from tax incentives in the form of tax rebates that subsidize their interest payments on labelled bonds. This approach directly enhances the attractiveness of such bonds to issuers by increasing the financial benefits associated with these bonds. In this manner, tax incentives effectively serve as a dual catalyst, creating demand from investors while also providing issuers with added incentives to participate in the sustainable finance landscape.

Solutions aimed at decreasing issuer costs

9 **Issuance grant scheme**: To alleviate one of the key direct costs, meaning the cost associated with the development of labelled bond frameworks, local policy-makers can implement grant schemes to cover the expenses incurred by hiring consultancies for the purpose of developing such frameworks. These grants serve as a valuable resource, particularly in the early stages of labelled bond market development, as they provide essential support for getting initial issuances off the ground. Issuers can then use the knowledge and frameworks acquired during this process for subsequent issuances. Furthermore, once the market has achieved a certain level of scale and maturity, more local consultancies are expected to enter the market, reducing the current heavy cost associated with international consultancies.

10 **Sovereign issuances**: Governments can play a role in supporting the growth of their local labelled bond markets by taking the initiative to issue labelled bonds themselves, making sure they are role models with their issuance in terms of ambition level and ensuring additionality. In doing so, they not only demonstrate their commitment to sustainability but also become pioneers in their own markets, paving the way for other issuers. They can then actively share the experiences and knowledge gained through their own labelled bond issuances. This knowledge-sharing has the benefit of supporting the reduction of costs for all market participants since others can learn from their experiences and potentially avoid costly mistakes. Finally, sovereign issuances help build scale within local markets, facilitating the development of knowledge and expertise domestically.

11 **Knowledge sharing**: In addition to sharing insights and experiences from their own sovereign issuances, local policy-makers can play a role in fostering a culture of knowledge sharing within the broader labelled bond market. Such knowledge sharing would extend beyond the details of specific issuances and encompass valuable information on processes, information sources and strategic partners that can provide support and guidance on structuring and staffing for success. To incentivize such knowledge sharing, policy-makers should, for example, tie grants and other support schemes to clear requirements for sharing their experiences with the market.

They can also help to initiate knowledge sharing and collaborative efforts between key stakeholders (e.g. investors, issuers, consultancy firms and standard-setters) via the creation of dedicated forums or platforms. Such forums could serve as spaces for open dialogue, sharing best practices and the consensus-building necessary for setting industry-specific standards. Ideally, these knowledge-sharing and standard-setting initiatives should be conducted on an industry-by-industry basis. By aligning the efforts and expertise of stakeholders within each specific sector, a deeper understanding of the unique needs and dynamics of those industries can be cultivated.

12 **Transition plans**: Further, governments can bolster support for the growth of their local labelled bond markets by developing well-defined sustainability goals and comprehensive transition plans, serving several purposes. First, they will contribute to providing an enabling market environment by bringing the country on to a consistent, long-term and committed transformation path providing more certainty and allowing companies to afford longer-term, sustainable investments. Secondly, such plans help in the identification of the most critical and relevant industries that are required for the local net-zero transition. This will then help to determine the specific types of labelled bonds that are most relevant to these industries. This approach will also pave the way for targeted educational and promotional efforts within local markets, catering to the unique needs of each industry. For instance, in countries with a heavy reliance on coal use, transition bonds may take precedence, while SLBs might be more relevant for companies without immediate green project potential but significant decarbonization requirements. With such targeted education and support, the issuance process can be made less time- and resource-consuming for potential issuers.

13 **Capacity building**: The scale-up of labelled bond issuances demands an infusion of talent and expertise within both organizations and the

broader market (e.g. build-up of local consultancy services). Governments can provide several types of support to facilitate the development of this know-how. One approach could, for example, involve the funding of students or trainees to engage in capacity-building initiatives within organizations abroad. This hands-on learning experience would equip individuals with the skills and insights needed for labelled bond issuances and enable them to bring this knowledge back to their home countries.

Additionally, governments can support local certification and education programmes tailored to sustainable finance and labelled bond expertise. By bolstering these educational efforts, they would help ensure a steady pipeline of professionals capable of handling the complexities of labelled bond issuances. Governments could consider establishing centres of excellence in partnership with universities or other academic institutions to further strengthen the talent pool. These joint ventures could serve as hubs for knowledge, research and training, facilitating the growth of domestic expertise in the labelled bond market.

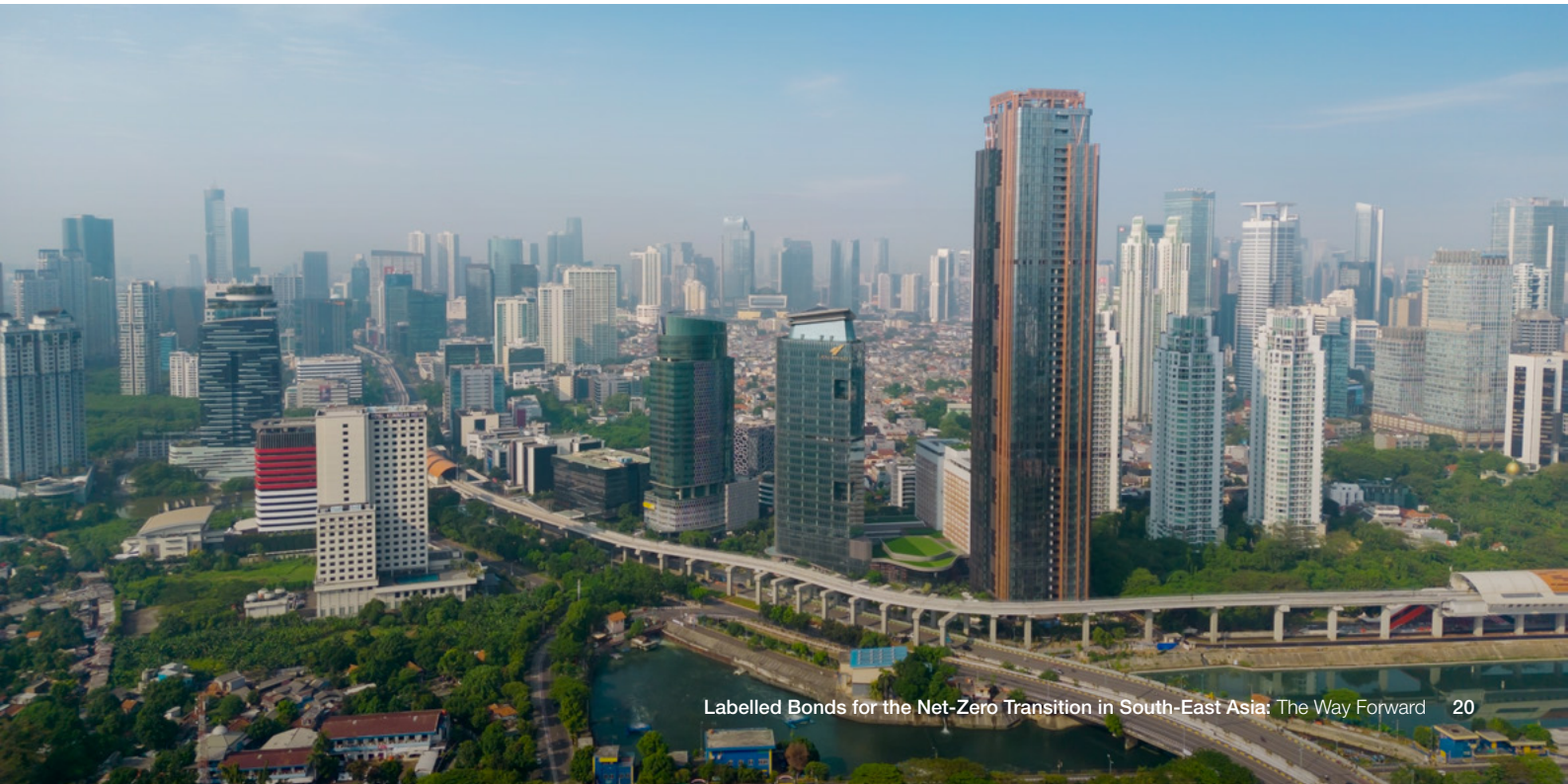
International community

Solutions aimed at increasing issuer benefits

14 **Credit rating**: Placing greater emphasis on integrating ESG factors into credit ratings could be one potential lever to enhance the attractiveness of labelled bonds as investments. At present, credit ratings tend to have a backwards-looking perspective, failing to adequately account for the risk that is, for example, associated with fossil fuel investments versus more sustainable and future-proof green investments. By integrating ESG measures more comprehensively into the assessments conducted by rating agencies, labelled bonds could potentially secure higher credit ratings. This shift is particularly vital in the context of EMDEs, where credit ratings wield substantial influence over investor decisions. Elevating the credit ratings of labelled bonds would render them more attractive to investors and thus further stimulate demand. To implement such a measure, a core prerequisite will be the implementation of well-defined climate risk disclosure frameworks to determine clear guidelines to measuring and qualifying such climate-related risks. Previous experiences of trying to include ESG performance and credible future ESG targets in such considerations have proven that this can be quite challenging. However, when such reporting is done well and implemented stringently, investors also better understand their portfolio's riskiness, which can make sustainable investment instruments like labelled bonds even more attractive.

15 **Levels of "greenness"**: To encourage a greater prevalence of certified labelled bonds, which would bolster transparency and instil investor trust in the market, the international community, particularly standard setters, should pursue greater alignment on common certification standards. Simultaneously, there should be room for a diversified array of certifications. For instance, a clear system for rating or flagging different degrees of adherence to standards or the level of ambition could be established – e.g. as a measure of "greenness".

Such a multifaceted approach would enable more issuers to attain certifications, building market confidence, especially in EMDEs. Moreover, it would open the door to a tiered approach, where greeniums could be negotiated and set at varying levels, giving the possibility to better remunerate and support top-tier/deep-green projects. Similar to the varying values assigned to different types of carbon offsets in the market (see Box 1), this approach acknowledges that investors may have varying levels of willingness to pay according to the quality and sustainability credentials of the investment.



BOX 1 | Carbon credits

In the voluntary carbon market, a wide range of prices for various types of carbon credits is observed, reflecting different levels of willingness to pay for these credits.

Ranges as well as median prices observed for different types of carbon credits in dollars per tonne of carbon dioxide equivalent (tCO_2e)

The following are among the different factors that contribute to the variations in price:

Project type: Projects with high costs, such as those involving advanced technologies or extensive reforestation efforts, often yield higher-priced credits.

Type of credit: The type of carbon credit seems to matter, with removal credits (e.g. direct air capture) often commanding higher prices than avoidance credits.

Project credentials: The credentials of projects typically also influence projects' pricing, with projects certified for their positive environmental and social impacts by widely accepted standards generally fetching higher prices.

Developer quality: The reputation and quality of the credit developer or issuer can impact pricing since projects associated with reputable organizations may be seen as more trustworthy and, consequently, more valuable in the market.

Source: Abatable.

Solutions aimed at decreasing issuer costs

16 **Direct issuance support**: Organizations can also play a role in bolstering the labelled bond market through direct issuance support, a practice that MDBs have been notably engaged in. This support extends beyond mere advocacy and takes the form of active assistance, especially for first-time issuers. It involves actively guiding issuers through the entire process, from covering the development of the framework to potentially even engaging as investors in the issuances themselves.

17 **Educational support**: The international community can further support the effectiveness of the labelled bond market by providing education and expertise to stakeholders in EMDEs. Approaches could include, for example, the creation of dedicated forums and platforms where a diverse range of stakeholders (including seasoned international participants, local issuers and investors) can come together, creating constructive feedback loops and collaborative development. The international community could further support local capacity building by setting up training programmes accessible for EMDEs (see the International Finance Corporation's Green Bond Technical Assistance Program as a notable example) or sponsoring student programmes domestically or abroad to ensure the transfer of expertise. By facilitating such knowledge exchanges, the international community would empower local participants in the labelled bond market, enabling them to make informed decisions and drive down the costs of issuances.

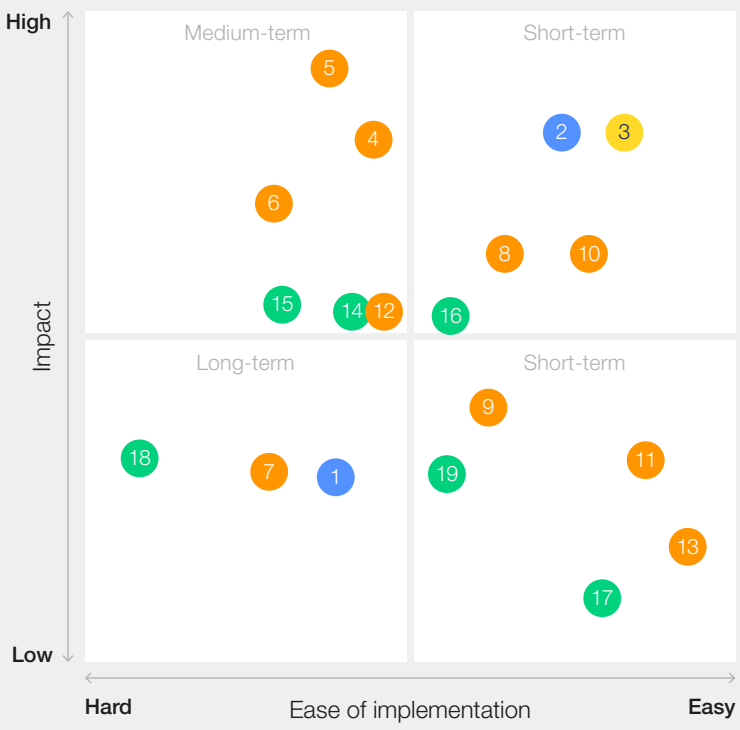
18 **Standards alignment**: To ensure easier accessibility of the labelled bond market and a higher chance for EMDE issuers to achieve certification, there is a need to simplify and enhance the clarity of international standards and taxonomies. This involves ensuring the many different regulations/standards from all over the world are more homogenous or at least more easily comparable. While this streamlining is essential, it should be accompanied by a concerted effort to ensure that such standards are not solely tailored to developed economies. They should also account for the distinctive requirements and capacities of EMDEs, considering that an important aspect of climate financing for EMDEs is adaptation finance. This recognition calls for a more nuanced and differentiated view of labelled bonds from EMDEs. It acknowledges that projects or KPIs, which might be seen as less ambitious from an international standard's perspective, are not necessarily an attempt at greenwashing by the issuer. Instead, they could align with the region's distinct sustainability goals and developmental priorities and capabilities. Nevertheless, the standards should ensure that the requirements and ambitions it sets are relevant (e.g. definitions of UoP are solid and precise, and there are clear legal implications if not met) and ambitious for the respective context to ensure that they are seen as relevant green investments for investors. To enhance alignment, standard-setters could, for instance, offer representatives from these regions a seat at the decision-making table. They could also promote collaborations with local stakeholders to develop standards that accurately reflect the unique realities and challenges faced by EMDEs.

19 **Post-issuance requirements**: To enhance predictability and enable better planning for post-issuance costs in the labelled bond market, clearer and more consistent requirements could be established regarding reporting and auditing. This would include providing assurances that these requirements would not undergo frequent and unpredictable changes. To achieve this, standards could, for example, be set contractually per issuance or be changed only within a defined timeframe, with reviews occurring only at specific intervals.

2.2 Prioritization and roadmap

As capacities might be too limited to implement all the identified measures at the same time, it can be helpful to prioritize such solutions and plan an implementation roadmap accordingly. To enable a high-level view of such a prioritization, the key stakeholders consulted throughout the development of this paper were invited to share their perspectives on the list of proposed measures. They were asked to assess each solution by ranking them based on their anticipated impact and to provide an evaluation of the feasibility of implementing these solutions. The aggregated output of these individual assessments can be found in Figure 8.

FIGURE 8 | **Aggregated results of solution assessment evaluated based on expected impact and ease of implementation**



Issuers

1 Close alignment with investors
2 Organizational preparedness

Investors

3 Early engagement

Local policy-makers

4 Increased returns
5 Reduced financial risks
6 Investment mandates
7 Capital requirements
8 Tax incentives
9 Issuance grant scheme
10 Sovereign issuances
11 Knowledge-sharing
12 Transition plans
13 Capacity building

International community

14 Credit rating
15 Levels of "greenness"
16 Direct issuance support
17 Education support
18 Standards alignment
19 Post-issuance requirements

Notes: Each dot in the matrix marks where the consulted set of stakeholders see the respective solution to rank.

This overview can give a first idea of which general areas are worth addressing immediately and which solutions might need to be tackled later.

It is generally recommended that highly impactful and relatively easily implementable measures are applied as soon as possible. Based on this assessment, measures for all types of stakeholders can be found in the upper right quadrant – from organizational preparedness of issuers to direct issuance support of (international) organizations. Further, given the urgency of addressing the climate crisis, it is advisable to tackle all measures that are easily implemented in the short term, even if some of them are expected to have a lower impact. Here, it can also make sense to consider which of these measures might have additional positive effects outside of the labelled bond market, for example, in capacity building. A workforce with a solid education on sustainability and climate finance will likely have added benefits besides the development of labelled bond financing.

Solutions that are more difficult to implement (shown towards the left side of the matrix) may require more time to be addressed. Here, it would be advisable to prioritize more impactful measures for the medium term on the roadmap. Meanwhile, the least impactful and most challenging solutions should be addressed in the long term.

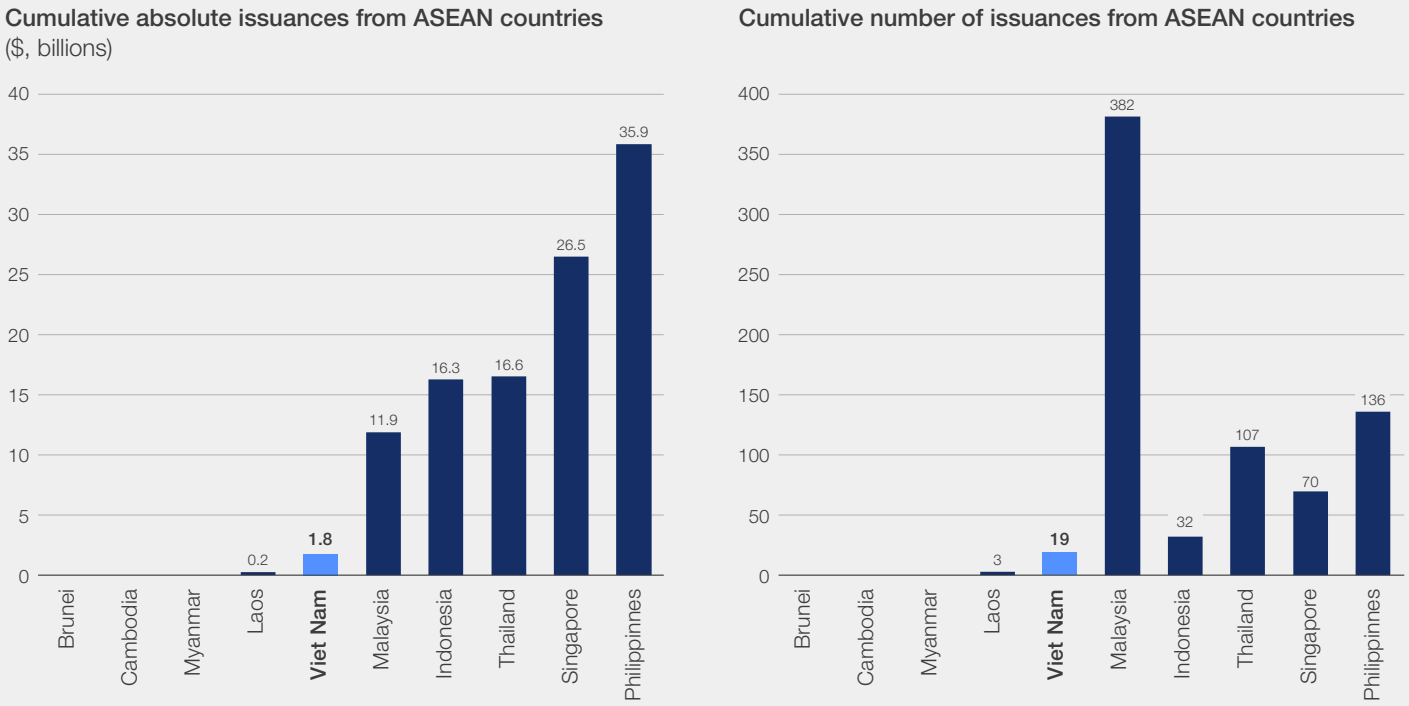
Of course, it should be kept in mind that the exact qualification of these measures might differ depending on the country or regional context. For example, based on what is already being addressed or has previously been implemented in a country, some measures might be much easier to realize in one country as opposed to another – especially in terms of local policies. Moreover, the summary is only based on a limited set of individual assessments and should only be seen as a first suggestion for potential prioritization. Despite its broad scope, this high-level assessment can provide valuable first guidance on where to focus efforts initially. It can assist various stakeholders in creating their own strategies to effectively support issuers and the labelled bond market in ASEAN and EMDEs more broadly.

3 Viet Nam case study

3.1 Current status of labelled bonds in Viet Nam

The first labelled bonds in Viet Nam were green bonds issued in 2016 by local government entities in Ho Chi Minh City and Ba Ria-Vung Tau province. Although Viet Nam was among the first ASEAN countries to issue such labelled bonds (the Asian Development Bank, located in the Philippines, issued the first in 2010, and Ihsan Sukuk Bhd in Malaysia in 2015), it was not until 2020, when the labelled bond market in Viet Nam really started to experience some momentum and a peak of 11 issuances was reached in 2021. Despite the recent uptake, Viet Nam still has significant potential to grow its labelled bond market, especially when compared to other ASEAN countries (both in terms of value and number of issuances), as can be seen in Figure 9.

FIGURE 9 **Cumulative labelled bond issuance in billions of US dollars and number of labelled bonds in ASEAN countries from 2010 to 2022**



Note: The numbers include all currencies and labels (including self-labelled). Note that Viet Nam numbers come from a GGGI report and the remaining data from the Refinitiv database and might thus underestimate total issuances in ASEAN countries outside Viet Nam.

Source: ETH Zurich, Refinitiv, GGGI.

Some recent key milestone issuances include the VND 1,725 billion (Vietnamese dollars) (approximately $75 million) green bond issued in June 2022 by EVNFinance, a domestic financial services company. This partially guaranteed (by GuarantCo) bond was the first internationally certified bond in local currency. It both adheres to the ICMA's Green Bond Principle 2021 as well as the ASEAN Green Bond Standards. EVNFinance was supported by GuarantCo, who partnered with the Global Green Growth Institute (GGGI) to assist in structuring and verifying this bond. This support was part of GGGI's Viet Nam Green Bond Readiness Programme, funded by the Ministry of Finance, the Government of Viet Nam and the Government of Luxembourg. The first senior, fully unsecured and unguaranteed green bond was then issued by the Bank for Investment and Development of Viet Nam (BIDV) and followed a year later in October 2023. This issuance (VND 2,500 billion, approximately $100 million) also adheres to ICMA Green Bond Principles.

However, other than EVNFinance, BIDV primarily received international backing with the World Bank and the International Finance Corporation (IFC), providing technical and financial support (e.g. by paying the external reviewer) through their Joint Capital Market Development Program (J-CAP). Finally, a third noteworthy issuance was the first local SLBs issued in August 2023 by BIM Land Group, a leading Vietnamese tourism and property developer. The IFC also supported this issuance by helping develop the sustainability-linked financing framework and tailor-made sustainability performance targets, as well as investing up to $150 million into the bonds.

3.2 Solutions in the Viet Nam context

Existing actions and potential next steps

To better understand how advanced and well-supported the Viet Nam labelled bond market is to date, the proposed key measures 1-19 are considered in the specific Viet Nam context. For that purpose, relevant local stakeholders were consulted, and a dedicated Viet Nam workshop was conducted in March 2024. The results of these consultations are presented by grouping the measures according to whether and to what extent such actions have already been implemented.

Solutions not yet developed or implemented

6 **Investment mandates**: Although several governmental directives and decisions have promoted green credit and banking growth, no specific investment mandates have been implemented for local investors by March 2024. On the contrary, in 2022, the Law on Insurance Business has been amended to introduce restrictions preventing insurance companies from investing in bonds used to refinance debt. Accordingly, labelled bond issuances that are issued for the refinancing of sustainable projects (and thus offer a relatively less risky investment) will also be negatively impacted by such a regulation.

7 **Capital requirements**: No specific capital requirements relating to environmental or social risks have been incorporated yet in the Vietnamese banking sector.

8 **Tax incentives**: While certain tax incentives exist for income from producing renewable energy, no specific tax incentives have been implemented to finance such projects using labelled bonds. There are also no tax incentives for investments in such bonds.

15 **Levels of "greenness"**: So far, no specific levels of greenness have been developed in Viet Nam or globally. The only perceived differences in the quality of bonds can be determined by their approved alignment to specific standards and certifications. However, uncertainty exists around such alignments, depending on different providers that check for such alignments. Further, no clear agreements around quality differences and respective premiums that could be charged have been reached yet.

Solutions partially developed or partially implemented

1 **Close alignment with investors**: In Viet Nam, while issuers of larger financial offerings have generally worked closely with investors, this collaboration has primarily involved multilateral development banks. Thus, issuers should still work on getting closer and aligning early with local investors.

2 **Organizational preparedness**: Viet Nam has seen a strong ESG momentum, with many businesses incorporating ESG into their strategy and making, or planning to make, ESG commitments. However, experts think that issuers can do even more and will need to develop clear roadmaps and plans that state specific objectives and benefits and actively incorporate green bonds as part of their long-term ESG journey.

3 **Early engagement**: While some international investors (e.g. IFC) have been actively involved in local issuances of labelled bonds, less specific engagement from local investors has been identified. Accordingly, this measure still holds relevant potential in the Viet Nam context.

4 **Increased returns**: Although Viet Nam had previously implemented feed-in-tariffs for renewable energy, these have been discontinued. Such a policy discontinuation can introduce uncertainty that is not desirable for developing the labelled bond market. On the other hand, a carbon pricing mechanism is being implemented, and a pilot carbon trading platform is expected to launch in 2025. While this is a start, the effectiveness of such an emission trading scheme will highly depend on how well it is implemented, and clearly, there is significant additional potential for further measures aimed at increasing labelled bond returns.

5 **Reduced financial risks**: There have been instances of guarantees for labelled bonds (see issuance by EVNFinance). However, even more financial risk reduction measures could be implemented in the future. This could, for example, include local credit enhancement facilities.

9 **Issuance grant scheme**: So far, only some small financial benefits, like the 50% reduction of certain service fees for the public issuance applied in stock exchanges and Viet Nam Securities Depository, have been proposed. Further, issuers deciding to issue a bond in the Singapore market can benefit from the grant scheme implemented there by the Ministry of Finance in Singapore. However, a similar scheme has not yet been implemented in Viet Nam.

10 **Sovereign issuances**: While the first labelled bonds issuances locally were done by government entities, these did not have any clear effect on future issuances, as the next labelled bonds issued only followed several years after. Potentially, the market was not ready and educated enough at the time. Further, knowledge-sharing might not have been done effectively. However, additional sovereign issuances at this point could potentially help support the current momentum. Such issuances would have to ensure that, this time, a significant amount of knowledge-sharing will occur.

14 **Credit rating**: Some ESG elements have already been taken into consideration by credit rating institutes globally (not Viet Nam-specific only). For example, S&P takes ESG credit factors into account for credit rating analysis, however, only when these are very clearly identifiable and material to the ability to pay (e.g. risks to a company's cash flows if it will have to pay high potential carbon tax in the future). Accordingly, there is still considerable room to extend such risk considerations beyond the easiest quantifiable risks.

18 **Standards alignment**: In 2017, an ASEAN-specific green bond standard was introduced. This standard is based on the international Green Bond Principles and CBI Climate Bond Standards. Several of the bonds following the ASEAN standards have also received CBI certification. However, several experts still see the ASEAN standard as too far removed from the Viet Nam-specific context and identify the development of a Viet Nam standard as an important priority. Further, no locally specific standards exist for beyond green bonds (i.e. for other types of labels).

19 **Post-issuance requirements**: While post-issuance requirements are captured in respective standards, additional measures could be taken to reduce uncertainty for issuers around future changes. This also includes clear penalty regulations in case of non-adherence.

Solutions fully developed with multiple elements implemented

11 **Knowledge sharing**: Several local knowledge-sharing initiatives have previously been implemented. These include a handbook co-authored by CBI and the State Securities Commission of Viet Nam, as well as roundtable conferences and forums organized by local entities (e.g. by the Vietnamese Minister of Finance in collaboration with Luxembourg, Vietnam Institute of Directors and Viet Nam Investment Review). However, much more knowledge-sharing could still be implemented, especially in learning from prior deals, as this has been insufficient so far. Local experts also suggest that clear guidance documents from the government could help develop local knowledge.

12 **Transition plans**: A detailed Viet Nam energy transition plan was published at the UN Climate Change Conference at the end of 2023 (COP28). A total spending of $15.5 billion is expected for this transition.

13 **Capacity building**: At the end of 2023, the Ministry of Education and Training and the UNESCO Hanoi Office held a consultation workshop on the national education for sustainable development initiative. While this is a good start to local capacity building, this still needs to be developed into a clearly actionable programme.

16 **Direct issuance support**: Several international institutions have previously been involved in direct issuance support in Viet Nam. This includes the IFC/World Bank, ADB or GGGI. Ideally this support will continue, also for smaller issuances.

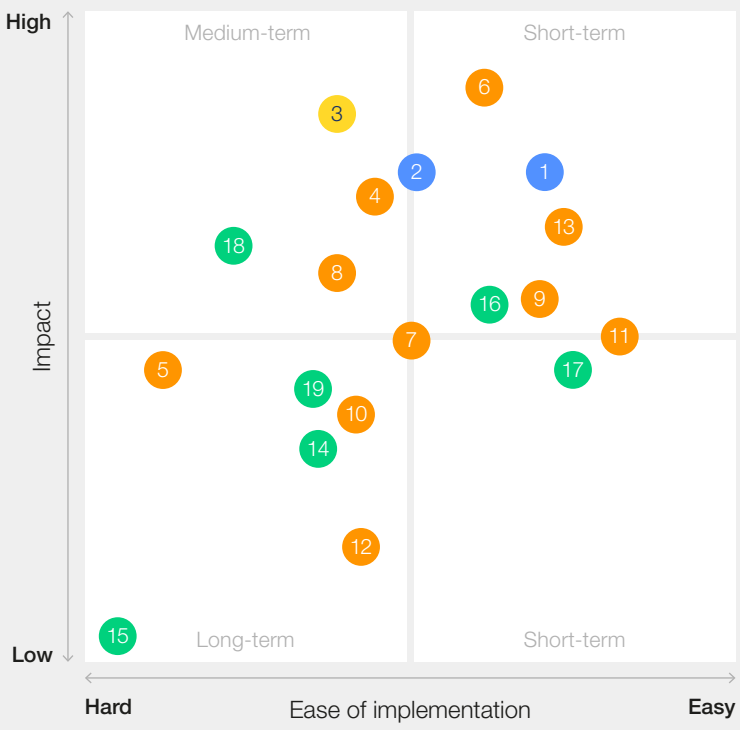
17 **Educational support**: Many international programmes that offer educational support for the labelled bond market in Viet Nam are ongoing. This, for example, includes a capacity-building programme with a series of training events by GGGI and the Viet Nam's Ministry of Finance, the Viet Nam Green Bond Readiness Programme supported by GGGI and the government of Luxembourg, in-person training programmes in green bond issuances offered by State Securities Commission of Vietnam (SSC), in collaboration with the German development agency GIZ (as part of their Macroeconomic Reforms/ Green Growth Programme). There are also several publications and guides for Viet Nam specifically (e.g. by CBI) as well as for the region more broadly (e.g. by the Asia Sustainable Finance Initiative, Capacity-Building Alliance of Sustainable Investment (CASI), international training academy by CBI, ICMA sustainable finance online education, ADB guide for issuing ESG bonds in developing countries). With such a vast offering, keeping a good overview and choosing which support scheme to use might be difficult. Accordingly, in this case, a key next step might be to provide an overview of existing key offerings and potentially ensure coordination and synchronization among them to ensure new issuers are not overwhelmed by the large and diverse set of potential support offers.

Viet Nam-specific priorities

Based on the specific context of labelled bonds in Viet Nam as identified, the proposed measures have been reassessed to identify key next steps

to best support the future development of the market. For that purpose, the same assessment as previously done for the entire ASEAN region has been repeated for Viet Nam. Here, core Viet Nam experts and stakeholders were invited to give each solution a ranking for the anticipated additional impact and implementation feasibility. The output of this assessment can be found in Figure 10.

FIGURE 10 **Aggregated results of Viet Nam-specific solution assessment evaluated based on expected impact and ease of implementation**



Issuers

1 Close alignment with investors
2 Organizational preparedness

Investors

3 Early engagement

Local policy-makers

4 Increased returns
5 Reduced financial risks
6 Investment mandates
7 Capital requirements
8 Tax incentives
9 Issuance grant scheme
10 Sovereign issuances
11 Knowledge-sharing
12 Transition plans
13 Capacity building

International community

14 Credit rating
15 Levels of "greenness"
16 Direct issuance support
17 Education support
18 Standards alignment
19 Post-issuance requirements

Note: Each dot in the matrix marks where the consulted set of stakeholders see the respective solution to rank.

If comparing this view with the general ASEAN assessment in Figure 9, some of the measures are assessed very similarly, for example, increased returns (4) and direct issuance support (16). Others see a somewhat larger jump. While sovereign issuances (10) were identified as good short-term measures in general, they are seen as much less feasible and impactful in Viet Nam. Further, transition plans (12), reduced financial risk (5) and levels of "greenness" (15) saw significant drops in perceived impact, making them unattractive for immediate implementation. On the other hand, close alignment with investors (1) seems to be a much more impactful and easily implementable measure in Viet Nam, making it relatively high-priority. Finally, it can be noted that many measures previously ranked as easy to implement but not as impactful became much more impactful in the context of Viet Nam. A large share of these measures is concerned with capacity and knowledge development both by local policy-makers and through the support of international stakeholders (11, 13, 17).

A roadmap for Viet Nam can be developed following the same logic as applied in the high-level ASEAN assessment. Solutions to prioritize in the short term here include both issuer measures (especially alignment with investors) as well as measures for local policy-makers and international stakeholders. While some of these solutions will be more budget-heavy, such as grant schemes and direct issuance support, several of the measures can be implemented without significant capital deployment. This includes setting clear investment mandates for local investors (e.g. minimum share of green investment for institutional investors) as well as all the educational measures, where a large impact can be achieved through coordinating efforts. Key measures to tackle in the medium term include engagement by investors, increased return (besides carbon pricing that will be implemented soon, feed-in-tariffs could, for example, be reintroduced), tax incentives (e.g. consensus suggests a tax rate around 5%), as well as the continuation of developing a Viet Nam-specific standard that is aligned with international requirements (also beyond green bonds only).

Conclusion

A rapid transition from fossil fuels to renewable energy is imperative to avert the worst consequences of climate change and achieve global net-zero emissions by mid-century. This is especially true in EMDEs, which are projected to significantly increase carbon emissions over the next decades without a shift to low-carbon alternatives. This requires significant investments, which EMDEs cannot carry on their own. While labelled bonds could be a valuable instrument to attract such international investments, EMDEs have not yet played a substantial role in the labelled bond market due to various challenges and barriers.

A functioning labelled bond market requires three elements: an enabling market environment, the alignment of issuer priorities and investor expectations. This paper focuses on the issuer perspective and identifies the key benefits and costs, both direct and indirect, associated with their participation in the labelled bond market. It postulates that for labelled bonds to be an attractive financing option, issuers need to achieve net benefits from such issuances. Several measures are developed to support this, either aimed at enhancing issuer benefits or mitigating key costs.

This set of potential solutions encompasses, among others, financial support mechanisms and incentives, recommendations on facilitation of education and (international) coordination, as well as suggestions to improve market structures and standards. While all stakeholders, including policy-makers, the international community and investors, hold levers to support issuers and, with that, the growth of labelled bond markets, issuers must also actively engage. This includes investing in their organizational preparedness, such as incorporating sustainability into their core organizational framework. Not only is such integration advantageous for bond issuance, but it ultimately contributes to achieving the core impact that labelled bonds promise: tangible, positive climate impact of projects and companies that are financed via this instrument.

The consultations showed that labelled bonds, in many instances, fulfil their purpose of providing attractive financing to low-carbon projects, incentivizing issuers to reduce their emissions. However, there is still a lack of reliable measures to identify the impacts and effectiveness of different types of labelled bonds. Focusing future research on these questions will aid in understanding if and when different types of labelled bonds are most effective and will ultimately allow the refinement of targeted recommendations.

Finally, this paper primarily examined the labelled bond market from an issuer's viewpoint. However, going forward, the analysis of challenges and solutions in the EMDE labelled bond markets should be extended to the investor perspective. Among other issues, a key aspect that needs further evaluation is how the whole financial system could evolve to better support sustainable financing – including labelled bonds. Additional insights from an alternative perspective could further enhance understanding of how to effectively promote labelled bond markets and ultimately support the global shift towards an environmentally responsible financial market.

Contributors

ETH Zurich

Sara Eberhart
Doctoral Researcher, Climate Finance and Policy Group, ETH Zurich

World Economic Forum

Luis Alvarado
Head, Giving to Amplify Earth Action (GAEA)

Annika Baudin
Operations Lead

Maximilian De Kepper
Project Specialist, Nature and Climate Finance

Christina Eng
Project Engagement & Communications Specialist - Sustainability & Innovation

Yvonne Leung
Global Strategic Engagement Lead, Philanthropy for Nature and Climate

Qiuping Li
Lead, Institutional Communities

Acknowledgements

Miranda Andruccioli
Community Specialist, Regional and Global Cooperation, Asia-Pacific, World Economic Forum

Derek Baraldi
Head of Sustainable Finance, World Economic Forum LLC

Frances Chen
Head, Corporate Sustainability, HSBC Singapore

Zhen Yu Chin
Assistant Director, Financial Markets Development, Monetary Authority of Singapore

Bing Chomprasob
Deputy Head, Regional Agenda, Asia Pacific, World Economic Forum

Shannen Nicole Chua
Chief Treasury Operations Officer, Bureau of Treasury of the Philippines

Robert Clover
Managing Director, Net Zero Transition Finance and Strategy, Accenture

Duke Donald Contoco
Economist, Department of Finance of the Philippines

Prasert Deejongkit
Executive Vice-President, Manager Corporate Finance Department, Merchant Banking Division, Bangkok Bank

Claire Kismet Diaz
Technical Assistant, Bureau of Treasury of the Philippines

Helena Dill
Consultant, International Finance Corporation (IFC)

Cora Dizon
Chief Finance Officer, ACEN Renewables

Florian Egli
Professor of Public Policy for the Green Transition, TU Munich

Clemence Friry
ESG Advisory, DBS Bank

Manuela Stefania Fulga
Lead, Sustainable Finance, World Economic Forum

Luying Gan
Head, Sustainable Bonds, Debt Capital Markets, Asia-Pacific, HSBC

Efrem Garlando
Community Specialist, International Organizations and Humanitarian Agenda, World Economic Forum

Jadeh Grierson
Strategy Director, Trading, Investments and Optimization Strategy, Accenture

Diana Guzman
Director, Group Environmental, Social and Governance (ESG), Prudential

Rachel Hemingway
Head of Transition Programme, Climate Bonds Initiative

Sean Henderson
Co-Head of DCM ASP, HSBC

Chris Humphrey
Executive Director, EU-ASEAN Business Council

Liza Jansen
Head, Responsible Investment, Prudential

Sean Kidney
Co-Founder and Chief Executive Officer, Climate Bonds Initiative

Eugene Leong
Division Head, Financial Products & Solutions, Monetary Authority of Singapore

Nicole Lim
Investment Analyst, ESG, Fixed Income, Abrdn

Vibunrith Long
Deputy Director-General, National Bank of Cambodia

Espen Mehlum
Head, Energy Transition Intelligence and Regional Acceleration, World Economic Forum

Flora Mile
Senior Analyst, Sustainalytics

Anh Tung Nguyen
Senior Manager, Credit Risk Research & Sustainable Finance Services, FiinRatings

Catherine Okwara
Investor Relations Associate, Africa Finance Corporation (AFC)

Kaikham Onedamdy
Team Leader, Green Bond Technical Assistance Program, IFC

Jirawat Panpiemras
Vice-President, Office of the President, Bangkok Bank

Justine Roche
Lead, Energy Initiatives, World Economic Forum

Hrithik Sharma
Senior Manager and America's Lead, Sustainalytics

Rafael Silvestre
Specialist, Financing Net Zero Transition, Principles for Responsible Investment

Araya Sirinapanont
Senior Analyst, PTT Public Company

Sakorn Suriyabhivadh
Head, Fund Raising Department; Head, Investment and Innovation, B.Grimm Power

Kelvin Tan
Managing Director, Head of Sustainable Finance and Investments, ASEAN, HSBC

Cristhian Veintimilla
Associate Director Sustainable Capital Markets, Rabobank

Supreeya Virakul Wattanasuttiwong
Manager, PTT Public Company

Chi Xiang Wong
Senior Analyst ASEAN, Climate Bonds Initiative

The Rockefeller Foundation Project Team

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Production

Phoebe Barker
Designer, Studio Miko

Laurence Denmark
Creative Director, Studio Miko

Martha Howlett
Editor, Studio Miko

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World Economic Forum
91–93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland

Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744
contact@weforum.org
www.weforum.org