ASEAN Capital Markets Forum

ASEAN Sustainable Finance Compendium: A Practical Guide to Instruments, Tools and Frameworks

October 2026



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OCTOBER 2026

ASEAN Capital Markets Forum

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Foreword

ASEAN's transition towards a low-carbon and climate-resilient economy presents both an important challenge and a significant opportunity. Mobilising private capital alongside public resources will be essential to translating the region's climate and sustainable development ambitions into investment and supporting long-term prosperity.

ASEAN has made significant progress in developing its sustainable finance architecture, with regional taxonomies, sustainability-linked finance standards, transition finance guidance and disclosure frameworks complemented by a growing range of national initiatives. As this ecosystem becomes increasingly complex, an important next step is helping financial institutions and market participants navigate these resources and apply them in practice.

The UK is pleased to support the development of the Sustainable Finance Compendium through the ASEAN-UK Green Transition Fund. Rather than creating another framework, the Compendium provides a practical entry point to the existing sustainable finance landscape. It brings together relevant resources and illustrates how they can support different stages of sustainable finance activity, from identifying eligible activities and selecting financing instruments to structuring transactions, monitoring and reporting.

This practical approach is particularly valuable across a diverse region, where markets and institutions are developing from different starting points. I would like to thank the ASEAN Capital Markets Forum, Palladium, alongside financial sector stakeholders and other contributors who have supported the development of this Compendium. I hope the Compendium will help make sustainable finance resources more accessible and easier to apply, encourage wider participation in sustainable finance, and support the development of a stronger pipeline of credible sustainable and transition finance opportunities across ASEAN.

The UK values its partnership with ASEAN, and we look forward to continuing our cooperation in support of a more sustainable, resilient and prosperous region.

Helen Fazey
UK Ambassador to the Association of Southeast Asian Nations (ASEAN)

A clearer understanding of the options available can help an enterprise take its next step toward sustainable financing. Investors and financial institutions need the same clarity as they assess opportunities and develop solutions. Making reliable information accessible allows more participants to move forward with confidence.

The ASEAN Sustainable Finance Compendium: A Practical Guide to Instruments, Tools and Frameworks supports these decisions. It brings together an overview of sustainable finance across ASEAN Member States, helping readers understand the region's instruments, approaches, and resources.

Issuers and financial institutions can use the Compendium to consider financing options and develop solutions. Investors can explore instruments and approaches that may align with their objectives. Greater familiarity with these resources can help broaden participation in financing sustainable and transition activities.

The Compendium also makes our region's diversity a source of learning. Markets are at different stages of development, with varying experience in taxonomies, financing instruments, sustainability targets, disclosure practices, and supporting tools. Bringing these experiences together helps readers identify approaches relevant to their circumstances.

This exchange supports the ACMF Action Plan 2026–2030 and its priorities for institutional foundations, sustainability and resilience, inclusivity and financial empowerment, regional integration, and digitalization. It also advances our R.I.S.E. agenda and reflects "Navigating Our Future, Together" by making shared knowledge available to those who can use it.

We encourage financial institutions to share the Compendium within their organizations and apply relevant lessons in product development and decision-making. Its use can also identify gaps in knowledge and skills. Continued engagement among regulators, market participants, and relevant ASEAN Sectoral Bodies can help ensure that capacity-building responds to these needs.

We thank the ASEAN-UK Green Transition Fund and its Building Resilient Investments for a Diverse Green Economy (BRIDGE) project for supporting this publication. We also acknowledge Palladium Group and PricewaterhouseCoopers (PwC), our technical consultants, and the ASEAN Members, financial institutions, and other stakeholders who contributed their expertise.

We hope readers will return to the Compendium as their work develops and new opportunities arise. By putting shared knowledge to use, we can help more participants contribute to financing a sustainable ASEAN.

Francisco Ed. Lim
Chairperson, Securities and Exchange Commission Philippines
ACMF Chair 2026

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Background and Context of ASEAN-UK GTF: BRIDGE

This Compendium has been developed with support from the ASEAN-UK Green Transition Fund (GTF). The ASEAN-UK GTF is the UK's programme to support ASEAN's shift towards a low-carbon, climate-resilient economy through sustainable finance and green solutions. Under its Green Finance pillar, the BRIDGE (Building Resilient Investments for a Diverse Green Economy) project aims to strengthen the capacity of ASEAN financial institutions to mobilise private capital for climate mitigation by reducing investment barriers, fostering international collaboration and enhancing the practical application of sustainable finance tools, guidelines and market instruments.

Positioning and Purpose of the Compendium

Endorsed by the ASEAN Capital Markets Forum (ACMF), this Compendium supports ACMF's broader efforts to advance sustainable finance and strengthen sustainable capital markets across Southeast Asia. It provides a practical reference for financial institutions and other market participants seeking to understand, select and apply sustainable finance tools, guidelines and instruments across ASEAN markets.

The Compendium complements existing ACMF initiatives by bringing together relevant regional and international sustainable finance frameworks, tools, guidelines and instruments in a single reference. It is intended to help users understand what resources are available, when they may be relevant, and how they can be applied in practice.

As the sustainable finance market in ASEAN matures, financial institutions face an increasing range of standards, taxonomies, guidance and financing instruments. The Compendium seeks to help users navigate this landscape and translate relevant frameworks into practical financing solutions, from identifying eligible activities and selecting appropriate instruments to structuring transactions and undertaking monitoring and reporting. The Compendium is primarily intended for ASEAN financial institutions, issuers and investors. It may also serve as a reference for regulators, policymakers, corporates, project developers, capacity-building organisations and other stakeholders involved in sustainable finance.

Specifically, the Compendium aims to:

- Provide an overview of relevant sustainable finance guidelines, tools and instruments
- Explain the purpose and practical application, including how different tools and guidelines may be used throughout the sustainable finance transaction cycle
- Support decision making by helping users identify and compare resources and instruments relevant to their financing objectives
- Illustrate market application through practical examples and case studies from ASEAN markets
- Highlight actionable considerations for translating sustainable finance guidelines and tools into credible and investable transactions
- Promote consistency and credibility by encouraging alignment with recognised regional and international standards and good market practices

Structure of this Compendium

The scope of this Compendium covers:

Section	Overview
Section 1	ASEAN climate commitments, developments in sustainable finance markets and opportunities for market growth
Section 2	Sustainable finance tools and guidelines that support the mobilisation of climate and sustainable finance
Section 3	Sustainable finance instruments and practical implementation examples across the ASEAN market
Section 4	Enabling mechanisms and opportunities to strengthen sustainable finance ecosystems and support market development
Section 5	Key findings, considerations and way forward

This Compendium is not intended to provide regulatory, legal or tax advice, investment recommendations, project-specific financing decisions or transaction documentation. It is intended to serve as a reference point for market participants seeking to understand the sustainable finance ecosystem and the interaction between relevant frameworks.

Applying in Practice

The Compendium is intended to be used as a practical reference throughout the sustainable finance transaction lifecycle. Depending on the user's objective, different sections can be used independently or together.

User objective	Relevant Section	Example
Understand the context	**Section 1** describes ASEAN climate commitments, and sustainable finance market developments	*A bank is developing a sustainable finance strategy and seeks to understand regional market trends prior to identifying priority sectors*
Select appropriate tools and guidelines	**Section 2** identifies the tools, standards, taxonomies and guidance most relevant to the financing objective	*A lender is preparing a green loan framework and is determining whether to reference the ASEAN Taxonomy, Green Loan Principles and/or appropriate risk assessment tools*
Explore suitable sustainable finance instruments	**Section 3** compares available instruments, explains their applications and presents practical case studies	*A financial institution seeks to determine which instrument (a green bond, sustainability-linked loan (SLL) or green loan) is most suitable for a renewable energy project*
Identify opportunities to strengthen implementation	**Section 4** describes how institutions can strengthen data systems, build internal capabilities, improve instrument structuring and leverage enabling mechanisms to scale sustainable finance	*A bank has identified eligible green projects but faces constraints in attracting investment. Section 4 sets out de-risking mechanisms and institutional capability measures that may support transaction structuring*

The content of **Sections 1 – 4** may be applied to support transaction structuring, internal decision-making, product development and institutional capacity building within users' respective organisations.

Methodology, Scope and Limitations

Below is a high-level summary of the approach used to map sustainable finance instruments, tools and guidelines across ASEAN Member States (AMS). The approach taken can be summarised in two key stages:

Stages	Overview
Stage 1 – Mapping and categorisation	A consolidated mapping of sustainable finance instruments, tools and guidelines was developed using publicly available market data, regulatory materials and relevant regional and international guidelines. Instruments were categorised according to their purpose and applicability and grouped based on whether they are supported by an applicable ASEAN standard. Instruments with established ASEAN standards are presented first, followed by newer and emerging instruments not currently covered by dedicated ASEAN-level guidance. Tools and guidelines were similarly mapped according to their role in enabling sustainable finance transactions and application across the financing lifecycle.

Stages	Overview
Stage 2 – Stakeholder engagement and validation	Financial institutions across AMS were engaged through surveys and interviews to validate findings from the sustainable finance landscape assessment and provide practical insights into current awareness, adoption and application of sustainable finance tools, guidelines and instruments. The engagements also explored implementation experiences, challenges and considerations across different markets and types of financial institutions.

Key Limitations:

Interpretation of findings should consider the following constraints:

- The Compendium reflects information available as of September 2026. Sustainable finance instruments, tools and guidelines continue to evolve across ASEAN and internationally
- The mapping focuses on sustainable finance instruments, enabling tools and relevant guidelines applicable to ASEAN, rather than providing an exhaustive assessment of the broader sustainable finance ecosystem
- Figures have been converted to a common currency where relevant, using exchange rates as of **September 2026**[1]
- Where available, Bloomberg and other publicly available market data have been used to illustrate market activity and adoption. Data availability and coverage vary across instruments and AMS, particularly for emerging products and less developed sustainable finance markets
- Bloomberg issuance data include both active and matured instruments. Bond searches cover corporate and government issuances, while loan searches are conducted at the tranche level. Accordingly, the figures represented reflect issuance volumes captured within the defined Bloomberg search parameters
- Comparisons should be interpreted with caution. Stakeholder engagement coverage was limited for Timor-Leste, Lao PDR and Myanmar owing to outreach constraints.
- Participating financial institutions were predominantly commercial and retail banks. Their experiences and perspectives may therefore differ from those of other financial institutions such as Islamic banks, development finance institutions, capital market intermediaries and other specialised institutions

[1] All monetary values have been standardised to USD unless stated otherwise

1 Setting the Context

1.1 ASEAN's Collective Climate Ambition

Sustainable finance in Southeast Asia has expanded significantly over the past decade, supported by the development of regional and national taxonomies, a growing range of labelled financial instruments, and increasing climate commitments across AMS.

AMS have collectively committed to advancing the goals of the UNFCCC and the Paris Agreement, including through regional efforts on energy transition, climate resilience, and biodiversity protection. This is evidenced by the ASEAN Climate Change Strategic Action Plan 2025-2030 and the ASEAN Plan of Action for Energy Cooperation (APAEC) 2026-2030, which includes collective ambitions of achieving a 30% renewable energy (RE) share in total primary energy supply (TPES) and a 45% share of RE in installed power capacity by 2030.

At the national level, AMS have set greenhouse gas (GHG) reduction targets and climate priorities through their Nationally Determined Contributions (NDCs). These commitments are supported by national policies, strategies, and initiatives that guide each AMS's transition to a low-carbon and climate-resilient economy. The table below summarises selected national climate commitments and related initiatives.

AMS	Overview of Latest NDC Commitments	Examples of Relevant Climate Initiatives *(Non-Exhaustive)*
Brunei Darussalam	▪ Target to **reduce GHG emissions by 20%** relative to a BAU scenario **by 2035,** using 2015 as the baseline year	▪ Brunei Darussalam National Climate Change Policy
Cambodia	▪ Aims to **reduce GHG emissions by 16% unconditionally, and up to 55% with international support**, compared to its 2035 BAU scenario ▪ **Reduction priorities** include reaching 80% renewable energy, expanding electric mobility, promoting climate-smart agriculture and delivering clean energy to 99% of rural Cambodia	▪ Cambodia Climate Change Strategic Plan 2024 – 2033
Indonesia	▪ **2030 target** for GHG emissions is **1,350 – 1,490 million tCO2e** with emissions projected to start declining from this peak, between **1,260 – 1,490 million tCO2e by 2035** ▪ **Mitigation priorities** include expanding renewable energy, boosting energy efficiency, accelerating EV and biofuels, reducing deforestation and restoring ecosystems	▪ National Energy Policy ▪ OJK Regulation No.14 on Carbon Trading ▪ Indonesia Taxonomy for Sustainable Finance ▪ Net FOLU Sink 2030 ▪ Presidential Regulation No. 110 of 2025 on the Implementation of Carbon Economic Value Instruments and National Greenhouse Gas Emission Control (PR 110/2025)
Lao PDR	▪ **Unconditional emission reduction** target of **60% by 2030,** which is equivalent to **62,000 ktCO2e** ▪ Seeks to achieve Net Zero emissions by 2050 with international support	▪ National Strategy on Climate Change towards 2030 ▪ The National Green Growth Strategy

AMS	Overview of Latest NDC Commitments	Examples of Relevant Climate Initiatives *(Non-Exhaustive)*
Malaysia	▪ Commits to peaking GHG emissions between 2029 and 2034 (with the goal to peak by 2030) and **reducing 15 – 30 million tCO2e by 2035** from the peak level, with up to 20 million tCO2e unconditional and a further 10 million tCO2e conditional on international support, on the path to Net Zero by 2050 ▪ **Mitigation priorities** include accelerating renewable energy, phasing down coal, expanding low-carbon transport, decarbonising industry, protecting biodiversity and scaling up circular economy solutions	▪ National Policy on Climate Change 2.0 ▪ National Energy Transition Roadmap ▪ 13th Malaysia Plan 2026 to 2030 (13 MP) ▪ National Carbon Market Policy (NCMP)
Myanmar	▪ **Unconditional emission reduction target of 244.52 million tCO2e** and a **conditional target of 414.75 million tCO2e by 2030**	▪ Myanmar Climate Change Strategy
Philippines	▪ Commits to **projected emissions reduction and avoidance of 75%**, of which 2.71% is unconditional and 72.29% is conditional, representing the Philippines' climate mitigation ambition for **2020 - 2030**	▪ National Climate Change Action Plan, 2011-2028 ▪ National Adaptation Plan 2023-2050 ▪ Philippine Sustainable Finance Taxonomy Guidelines
Singapore	▪ Reduce emissions to between **45 – 50 million tCO2e by 2035** on the path to **Net Zero by 2050**	▪ Singapore Green Plan 2030 ▪ Finance for Net Zero Action Plan ▪ Carbon Pricing Act ▪ Long-Term Low-Emissions Development Strategy (LT-LEDS)
Thailand	▪ **Cut net GHG emissions by 47% by 2035 from 2019 levels**, in line with the 1.5°C pathway and **Net Zero by 2050** ▪ **Mitigation priorities** have an estimated financial need of USD 7.05 billion in investment by 2035, covering energy transition and other sectors including IPPU, agriculture, and waste	▪ Thailand Taxonomy: A Reference Tool for Sustainable Economy ▪ First Sovereign SLB ▪ Long-Term Low Greenhouse Gas Emission Development Strategy ▪ Climate Change Master Plan (2015-2050)
Timor-Leste	▪ **No quantified national GHG emissions reduction target at this stage** ▪ Organises planned areas of intervention into: (1) Climate Risk Governance, (2) Nature-Positive Growth and Transition, (3) Low-Carbon Development, (4) Adaptation and Resilience-Building and (5) Loss and Damage	▪ National Climate Change Policy
Viet Nam	▪ **Unconditional reduction of 15.8% and conditional target of 43.5% by 2030** compared to the BAU scenario with a 2014 base year	▪ National Strategy on Climate Change ▪ National Adaptation Plan ▪ National Green Taxonomy ▪ Just Energy Transition Partnership ▪ National Green Growth Strategy

The climate commitments and national priorities of AMS create significant financing needs across energy, transport, buildings, industry, agriculture, forestry and other sectors. These priorities also create opportunities for financial institutions to develop financing solutions that support mitigation, adaptation and transition objectives.

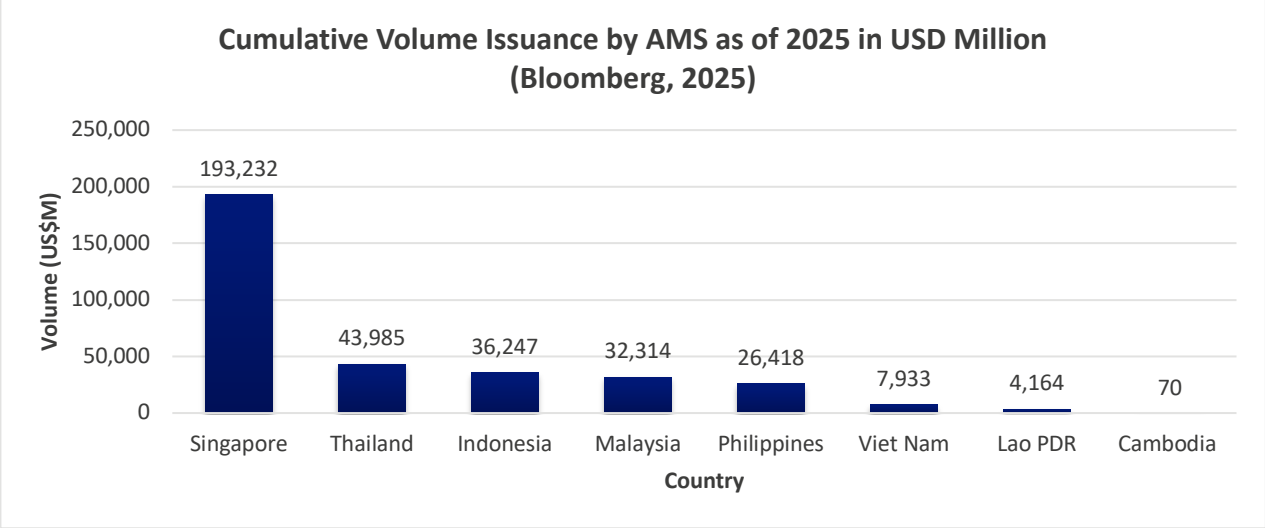
The national policies and taxonomies across ASEAN also highlight the importance of understanding the relevant jurisdictional and regional frameworks when structuring sustainable finance transactions. Regional tools and standards can support greater consistency and comparability, while national frameworks provide country-specific criteria and priorities.

Collectively, these commitments demonstrate AMS' shared ambition to advance decarbonisation and sustainable development. Given the scale of investment required across priority sectors, public budgets alone are unlikely to meet the region's financing needs[2]. Sustainable finance instruments, alongside public finance and policy support, can help mobilise private capital, direct investments towards transition activities, and support efforts to address the region's sustainable development and financing needs.

1.2 Sustainable Finance Needs: Economic Opportunities

While ASEAN's combined GDP reached approximately USD 4.25 trillion in 2025[3] and the region is projected to become one of the world's largest economies by 2030[4], the current sustainable finance flows suggest limitations in the investments required to achieve national climate targets and objectives.

Sustainable finance activity remains uneven across AMS, as reflected in the cumulative issuance volumes presented in the Bloomberg data below, which encompasses instruments including green and sustainability bonds and loans, as well as sustainability-linked instruments. These differences highlight varying levels of sustainable finance market development and the opportunity to further scale sustainable finance across the region.



- **Higher issuance markets:** ~88% of total labelled issuances originate from Singapore, Indonesia, Thailand and Malaysia. Singapore accounts for the largest share of recorded regional issuance, at approximately USD 193 billion of a total of approximately USD 344 billion
- **Emerging issuance markets:** The Philippines and Viet Nam collectively account for approximately 9% of total recorded issuance
- **Limited issuance markets:** Lao PDR and Cambodia account for less than 1% of total issuance. No issuance for Brunei Darussalam, Myanmar or Timor-Leste was identified in the Bloomberg-labelled dataset used for this analysis as of 2025
- **Instrument leadership:** Singapore records the highest issuance volumes for green bonds, green loans and SLLs, while the Philippines leads sustainability bonds. Thailand records the highest issuance of sustainability-linked

[2] Asian Development Bank. (n.d.). ASEAN taxonomy for sustainable finance — 5 things to know. Southeast Asia Development Solutions. https://seads.adb.org/articles/asean-taxonomy-sustainable-finance-5-things-know
[3] ASEANstats Data Portal. (Aug, 2026). https://data.aseanstats.org/
[4] World Economic Forum. (Dec, 2025). ASEAN is a future driver of global growth. https://www.weforum.org/stories/2025/12/asean-global-growth-digital-economy-wef/

bonds (SLBs), while Indonesia accounts for the largest share of green sukuk issuance, reflecting the differing market structures and development pathways across ASEAN sustainable finance markets

Achieving the climate ambitions outlined in Section 1.1 would require substantial financing across a range of priorities, including climate change mitigation and adaptation, biodiversity and ecosystem conservation, environmental protection, and resilient and sustainable infrastructure. These financing needs cut across sectors including energy, transport, industry, agriculture, land use and waste, and require both public and private sources of capital. For example, Southeast Asia's climate-resilient infrastructure investment needs alone have been estimated at approximately USD 210 billion annually[5].

Public finance will remain important, particularly for supporting public goods, addressing investment risks and improving project bankability. However, constrained fiscal resources mean that public finance alone will not be able to sufficiently meet the scale of ASEAN's sustainable development and climate financing needs. Mobilising private capital would be critical to bridging the financing gap, with public finance playing a role through mechanisms such as de-risking investments and crowding in private capital[6].

The table below illustrates selected sustainable finance instruments that may support financing needs across priority sectors identified in ASEAN's climate commitments. The examples are non-exhaustive, and the suitability of an instrument will depend on the nature of the financing, applicable eligibility or performance criteria, and relevant standards or guidance.

Sector	Why it matters	Examples of Applicable Instruments
Energy	The energy sector is central to achieving ASEAN's climate and energy transition objectives, as decarbonising power generation and scaling up renewable energy deployment are critical to reducing emissions and meeting NDC commitments.	Green bonds, green sukuk, green loans, transition finance, SLLs
Transport	The transport sector plays a key role in reducing emissions and improving urban connectivity, with investments needed to support low-carbon mobility solutions and more sustainable transport systems across the region.	Green bonds, green sukuk, green loans, transition finance
Industry	Hard-to-abate sectors such as steel, cement, chemicals and refining are among the most challenging to decarbonise due to their energy-intensive processes and process-related emissions, making credible transition pathways and financing essential for achieving ASEAN's climate goals.	Transition finance, SLBs, carbon credits
Agriculture, Forestry and Other Land Use (AFOLU)	The agriculture, forestry and other land use (AFOLU) sector is critical for reducing emissions, enhancing carbon sequestration and promoting sustainable land management practices.	Sustainability bonds, green bonds, green and sustainability deposits, sustainability sukuk, green sukuk
Nature-based Solutions	Nature-based solutions help conserve and restore ecosystems, strengthen biodiversity, enhance carbon sinks and improve resilience to climate-related risks and extreme weather events.	Green bonds, blue bonds, sustainability bonds, carbon credits, sustainability sukuk, green sukuk

[5] Asian Development Bank. (Jul, 2023). ADB Southeast Asia Green Finance Hub: Catalysing Green and Innovative Finance. https://www.adb.org/publications/adb-southeast-asia-green-finance-hub

[6] ASEAN Socio-Cultural Community Knowledge Hub. (Nov, 2024). Access to Finance: Issues and Challenges to ASEAN. https://knowascc.asean.org/publication/access-to-finance-issues-and-challenges-to-asean/

Sector	Why it matters	Examples of Applicable Instruments
Waste	Effective waste management helps reduce pollution, improve resource efficiency and support circular economy objectives. Investments in waste collection, treatment and recycling infrastructure can also reduce emissions and contribute to sustainable urban development.	SLLs, green and sustainability deposits, green bonds, sustainability bonds, sustainability sukuk, green sukuk

These sectors are closely aligned with priorities identified under NDCs and are broadly aligned with sectors and activities covered under the ASEAN Taxonomy for Sustainable Finance, which provides a common framework for assessing and classifying sustainable and transition activities. Financing for these sectors may be supported through various sustainable finance instruments and related regional standards and guidance. The ASEAN Green Bond Standards, for example, set out requirements for financing eligible green projects through use-of-proceeds bonds, while the ASEAN Sustainability-Linked Bond Standards support performance-based financing linked to sustainability objectives. The ASEAN Transition Finance Guidance further provides guidance for credible transition finance pathways in the region.

While ASEAN's sustainable finance needs represent a significant economic opportunity, current climate finance flows remain well below the region's estimated requirements. The ASEAN Climate Finance Access and Mobilisation Strategy estimates that current climate finance flows amount to only USD 3.2–6 billion annually, compared with an estimated USD 422.16 billion required by 2030 to meet the region's climate mitigation and adaptation objectives[7]. Against the broader financing needs outlined above, this underscores the importance of mobilising and directing additional capital towards ASEAN's sustainability priorities.

Sustainable investment is also increasingly reflected in rising issuance of labelled debt, sustainability-linked instruments and transition finance, supported by developed regional frameworks (e.g. ASEAN Taxonomy, ASEAN Bond Standards, ASEAN Transition Finance Guidance).

For example, Thailand's sovereign SLB[8] and Singapore's retail green bond[9] were oversubscribed by more than 2.7 times and 1.06 times, respectively. Both issuances were structured under their respective national financing frameworks – the Kingdom of Thailand Sustainability-Linked Financing Framework and, for Singapore, the Significant Infrastructure Government Loan Act 2021 (SINGA), with proceeds applied in accordance with the Singapore Green Bond Framework[10]. Both frameworks are aligned with relevant ASEAN Bond Standards.

These issuances indicate that sustainable finance instruments can support the mobilisation of private capital within AMS, while offering wider potential benefits such as improved market access, development of lower-carbon infrastructure pipelines and employment opportunities in green sectors.

1.3 Current Regional Landscape

In response to financing needs and gaps, ASEAN has progressively developed a sustainable finance ecosystem to mobilise and direct capital towards activities that support the region's climate and broader sustainability objectives. Sustainable finance integrates environmental and social considerations into financing and investment decisions, with different instruments and mechanisms serving different financing needs[11].

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[7] Association of Southeast Asian Nations. (n.d.). Climate finance access and mobilisation strategy for the member states of ASEAN. https://asean.org/book/climate-finance-access-and-mobilization-strategy-for-the-member-states-of-the-association-of-southeast-asian-nations/

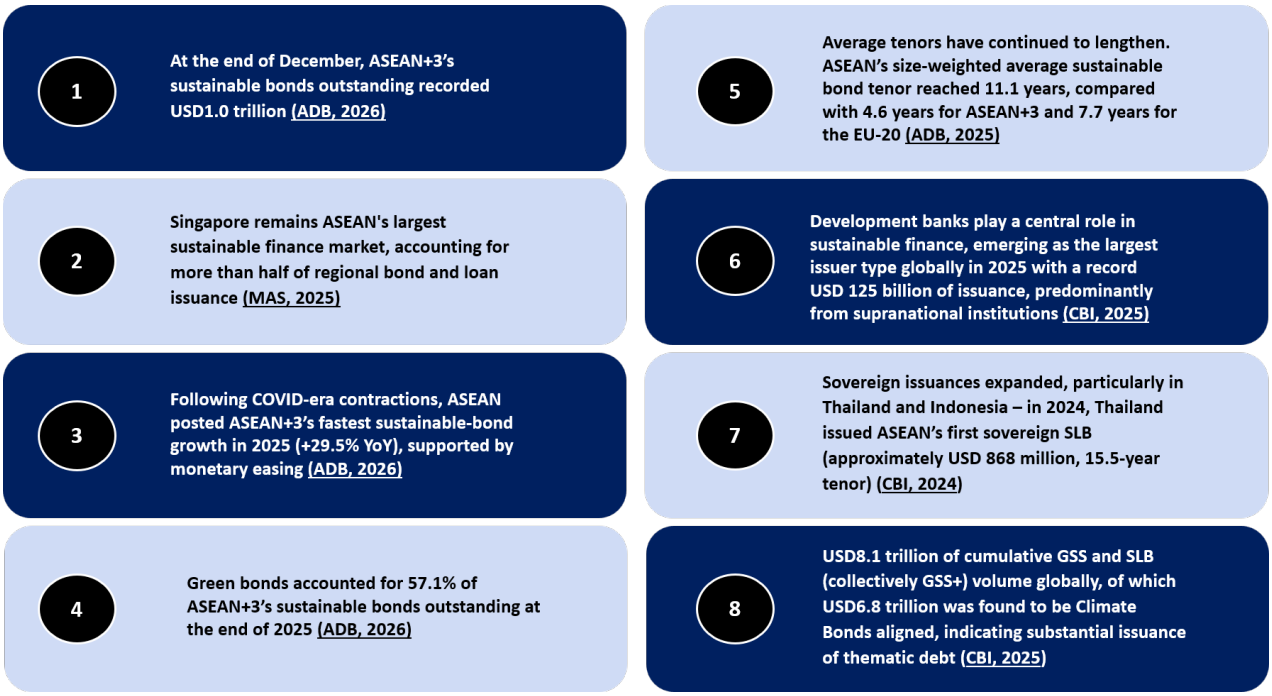
[8] Bangkok Post. (n.d.). Huge demand for Asia's first sustainability-linked bonds. https://www.bangkokpost.com/business/investment/2909952/huge-demand-for-asias-first-sustainability-linked-bonds

[9] Monetary Authority of Singapore (2022). Announcement of Results for Placement and Public Offer for Aug-72 (NC22300W). https://www.google.com/goto?url=CAEShQIB6zswFZ-lNImQliFVjVmKU9TVm3YhtlMHeiWi9kDPHtqoLm-Pb8PbqOsbzllyDh6DmwDX2CflMu0K-rz1swwmHT3XFKEiD4mP_5cXfNR2qLrhubBSNkHcsnmP9NxOU3Png3s5zFAswqO-YO8JSMPzLiLzRYlclgilHg_fF5-gtk1u-qjH2jCF2pq9ENYQUlX7Cde3Dxi4yPqheMQJlFz_s-fqQqSixPSCe1TEtU8cvx_kWb5BDOmZDoc7gxHO0WOOX8AlOd4lChUuIzEib1XY324nQkniRP4ZHeihmoyca_iOiS7Za2S642hd9Pk2vENMSM_VbpG2P0O3rBIDCV8cKepPjTY

[10] MOF (2025). Progress in Sustainable Finance: Second Edition of Singapore Green Bond Framework and MOF's Progress Report on Green Budgeting Practices https://www.mof.gov.sg/news-resources/newsroom/progress-in-sustainable-finance-second-edition-of-singapore-green-bond-framework-and-mof-s-progress-report-on-green-budgeting-practices/

[11] ASEAN Taxonomy Board. (Nov, 2025). ASEAN Taxonomy Board Releases Complete Version of ASEAN Taxonomy for Sustainable Finance. https://asean.org/asean-taxonomy-board-releases-complete-version-of-asean-taxonomy-for-sustainable-finance/

Use-of-proceeds instruments such as green, social and sustainability bonds and loans, direct capital towards eligible projects, while sustainability-linked instruments connect financing terms to predefined sustainability performance objectives. Transition finance can support credible pathways, mainly in hard-to-abate sectors, while blended finance, guarantees and other risk-sharing mechanisms can improve project bankability and help mobilise private capital alongside public resources.



The trends highlighted above reflect ASEAN's growing sustainable finance market, supported by continued efforts to strengthen the regional policy and regulatory structures needed to scale sustainable finance and mobilise greater capital.

Building on these developments, the ACMF Action Plan 2026 – 2030[12] aims to further strengthen ASEAN's capital markets by promoting sustainable finance, enhancing market connectivity, and supporting greater mobilisation of private capital towards the region's sustainability transition objectives. The Action Plan reinforces ongoing regional sustainable initiatives, including the ASEAN Taxonomy for Sustainable Finance and various ACMF guidance, and provides a strategic roadmap for scaling sustainable finance across ASEAN's capital markets. Additionally, governments and regulators are embedding sustainability considerations into financial sector guidelines while the adoption of international frameworks (e.g. IFRS Sustainability Disclosure Standards) is raising expectations around climate risk management and financial materiality assessments. Investor expectations are also evolving, with investors increasingly seeking robust ESG information, credible sustainability transition strategies and greater transparency, which may in turn support the continued development of ASEAN's sustainable finance ecosystems. These trends reflect growing market sophistication in ASEAN, but significant variations exist across member states in terms of maturity, capacity and implementation approaches.

Stakeholder engagements with financial institutions were conducted between November and December 2025 to understand current sustainable finance practices, perspectives and capability needs across ASEAN. While the engagements covered broader upskilling needs, insights relevant to this Compendium included financial institutions' use and understanding of sustainable finance instruments, tools and guidelines, as well as challenges encountered in practical application.

Common implementation challenges identified in the engagements include:

- Building capacity to structure **sustainable finance instruments**, particularly in transition finance
- Developing an understanding of **key performance indicators (KPIs)** and **sustainability performance targets (SPTs)** and their application in sustainability-linked instruments
- Navigating evolving **taxonomies** and **sector-specific guidance**
- Improving the availability and consistency of **ESG data**

[12] ASEAN Capital Markets Forum (ACMF). (n.d.). ACMF action plan 2026–2030. https://www.theacmf.org/images/downloads/pdf/3%20Nov_ACMF%20AP_Public.pdf

- Operationalising **sustainable finance tools** within existing business operations

This Compendium seeks to respond to relevant aspects of these challenges by consolidating key sustainable finance instruments, tools and guidelines; explaining their purpose and practical application; and illustrating how they can be applied within sustainable finance transactions. In doing so, it provides a practical reference to support financial institutions in navigating relevant frameworks and translating them into credible and investable transactions. Addressing these challenges will be central to scaling the adoption and deployment of sustainable finance across the region.

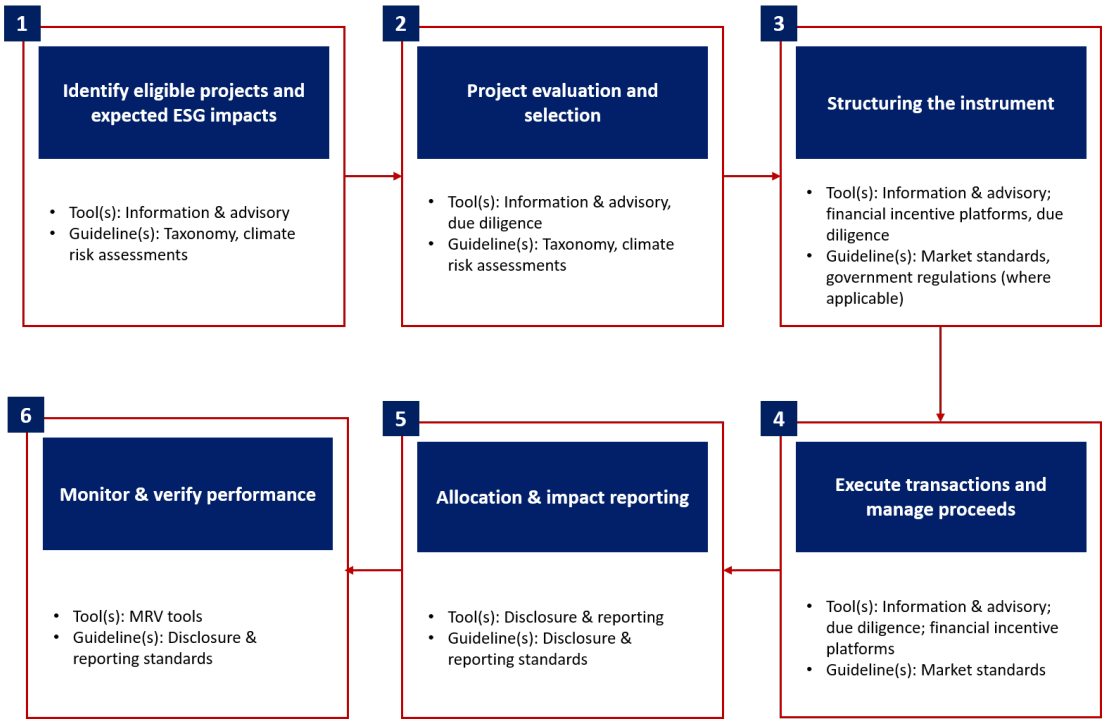
2 Sustainable Finance Tools and Guidelines

2.1 Enabling Infrastructure for Sustainable Finance

Sustainable finance is supported by a range of tools and guidelines that enable the structuring, implementation and ongoing management of sustainable finance transactions. In this Compendium, tools refer to platforms, services and technology solutions that support decision-making and transactions across the sustainable finance lifecycle, while guidelines refer to frameworks, standards, taxonomies and regulatory requirements that establish common definitions, eligibility criteria and expectations for credible sustainable finance. Together, they help market participants identify eligible activities, structure instruments, assess sustainability risks and impacts and support ongoing reporting and verification.

The categories presented in this section were developed through desktop research of sustainable finance practices, relevant regional and international frameworks and available market solutions, supplemented by input from a sustainable finance subject matter expert. Tools were grouped according to their primary function within the sustainable finance transaction lifecycle, while guidelines were categorised according to their role in establishing eligibility, disclosure, regulatory and risk management requirements. The categories are intended to provide a practical organising framework rather than a mutually exclusive classification, recognising that individual tools and guidelines may support multiple stages of sustainable finance transactions.

In practice, tools and guidelines are not applied in isolation. Their relevance depends on the stage of transaction, the activity being financed and the proposed financing instrument. The illustrative flow below demonstrates how an issuer may draw on different tools and guidelines from initial project identification and eligibility assessment, through instrument structuring, management of proceeds, reporting and post-issuance monitoring[13,14]:



The illustrative flow demonstrates how different tools and guidelines may interact across a sustainable finance transaction. To demonstrate how this may be translated into practice, the following example scenario applies the

[13]International Capital Market Association. (2024). Guidelines for sustainability-linked loans financing bonds (June 2024 update). https://www.icmagroup.org/assets/documents/Sustainable-finance/2024-updates/Guidelines-for-Sustainability-Linked-Loans-financing-Bonds-June-2024.pdf
[14] World Bank. (n.d.). Green bond handbook. https://documents1.worldbank.org/curated/en/099854406222232086/pdf/IDU07c8498af092330405d0b43101bc10ba9c88d.pdf

transaction flow to a large ASEAN financial institution structuring sustainable finance for a manufacturing client seeking to decarbonise their operations.

Example Scenario: An ASEAN financial institution (FI) is considering financing a manufacturing company's investment in rooftop solar, energy efficiency improvements and lower-carbon production equipment. The example demonstrates how the financial institution may use different sustainable finance guidelines and tools to assess eligibility, evaluate risks, structure the financing and monitor its environmental outcomes.

Stage	Financial Institution's Role	Guidelines and Tools Applied
1 **Identify eligible projects and expected impacts**	The FI works with the manufacturing client to understand financing needs and expected environmental benefits, including potential GHG emission and energy consumption reductions	• **Information & advisory tools** and **emission data / calculators** to establish baseline emissions profile and energy consumption, identify emission hotspots and estimate potential reductions from proposed investments (e.g. GHG Protocol, System Advisor Model, MEASUR tool)
2 **Project evaluation and selection**	The FI determines whether the proposed activities qualify as sustainable and evaluates relevant environmental and credit risks before deciding whether the project can be financed	• **ASEAN Taxonomy** and **applicable national taxonomies** for FIs to screen proposed activities against relevant eligibility criteria to determine their sustainability classification. Where applicable, the Plus Standard provides sector-specific technical screening criteria and thresholds • **Climate risk assessment / due diligence** to evaluate risks that could affect the project or client, informing the financial institution's overall financing decision
3 **Structuring the sustainable finance instrument**	Based on the eligible activities and client's financing needs, the FI determines the appropriate instrument (e.g. a green loan or green bond) and establishes eligible use-of-proceeds and reporting requirements	• Activities identified as eligible inform the **use-of-proceeds** of the selected instrument. For a green bond for example, the ASEAN Green Bond Standards may guide the issuer in defining eligible use-of-proceeds • **Advisory or financing platforms** can support the development of the financing framework • **SPO / external review** provides an independent assessment of alignment
4 **Execute transactions and manage proceeds**	The FI provides financing and establishes processes to ensure proceeds are allocated to eligible activities and appropriately tracked	• **Market standards / applicable government regulations** to establish requirements • **Financing platforms, due diligence** tools or **internal systems** to support transaction execution and tracking
5 **Allocation and impact reporting**	The FI obtains information from the client on allocation of proceeds and environmental outcomes, such as renewable energy generated, energy saved and GHG emissions reduced / avoided	• **Reporting guidelines** to establish allocation and reporting expectations (e.g. IFC Performance Standards, ASEAN Green Bond Standards, CDP) • **Reporting tools** to collect and consolidate sustainability and transaction data (e.g. Gprnt)
6 **Monitor and verify performance**	The FI monitors whether financed activities continue to meet relevant criteria and whether expected environmental outcomes are being delivered	• **MRV tools** track agreed indicators to assess whether activities are delivering the expected environmental outcomes (e.g. Persefoni, internal tracking systems) • **External assurance** where applicable to independently assess reported information and outcomes

This scenario draws on practices and approaches shared by various ASEAN financial institutions during stakeholder engagements, supplemented by desktop research on relevant sustainable finance guidelines and market tools. It is a composite example and does not represent the practices or transaction of any single financial institution. In practice, the sequence and relevance of individual tools and guidelines may vary depending on the financing instrument, underlying activity, jurisdiction, applicable requirements and the financial institution's existing processes and capabilities. As such, not every category of tool or guideline will necessarily be applied at every stage of a transaction.

Sections 2.2 and 2.3 provide further details on each category, including their purpose, practical application and selected examples relevant to ASEAN markets. Appendix A and Appendix B provide a consolidated catalogue of additional guidelines and tools for further reference.

2.2 Sustainable Finance Guidelines

Sustainable finance guidelines are global, regional and national market standards and taxonomies that directly inform the structuring, development, and issuance of sustainable finance instruments. Guidelines provide rules and frameworks for structuring, labelling, and reporting sustainable finance. In practice, these frameworks operate across

multiple levels: international standards provide widely recognised principles and market practices, ASEAN frameworks promote regional alignment, and national regulations translate these into jurisdiction-specific requirements. When these frameworks are used together, they can support alignment with international practices while enabling practical application across ASEAN markets.

ASEAN markets are also beginning to review and evolve sustainable finance frameworks beyond traditional climate mitigation and use-of-proceeds approaches towards more impact-oriented models that integrate environmental, social and economic outcomes. Emerging areas of focus include climate adaptation, resilience, biodiversity and SDG-linked financing. This reflects broader international developments, where transition planning, nature-related considerations, and climate resilience are increasingly being integrated into the sustainable finance architecture.

Appendix A provides a catalogue of sustainable finance guidelines for further reference. Any references to commercial providers in case studies are for illustrative purposes only and do not constitute endorsement by ACMF, the UK Government or other delivery partners.

Sustainable Finance Guidelines Category	Overview
Market Standards	Guides the structuring of sustainable finance instruments
Taxonomies	Defines which economic activities are classified as "sustainable"
Disclosure and Reporting Standards	Standardises sustainability reporting and improves comparability and transparency on sustainability disclosures
Government Regulations	Ensures legal compliance and safeguards market integrity by establishing legally binding requirements for sustainable finance instruments and markets
Climate Risk Assessments	Integrates climate considerations into strategy and risk management

2.2.1 Market Standards

Voluntary frameworks or benchmarks that various stakeholders (including but not limited to government, FIs, corporates, investors, external reviewers, etc.) can use in issuing, adopting and/or governing sustainable finance products to achieve sustainability-related goals

Purpose

- Provide a common framework for structuring, assessing, and validating sustainable finance instruments
- Ensure transparency, consistency, and credibility across market participants
- Guide issuers, investors, regulators, and external reviewers in aligning with recognised sustainability criteria
- Support the design of labelled instruments (e.g. green, social, sustainability bonds/loans)
- Enable comparability across global, regional, and national markets, strengthening investor confidence

Application in Practice

- Used by issuers to structure sustainable finance instruments and develop frameworks (e.g. Green Bond Frameworks)
- Inform listing requirements and regulatory expectations set by exchanges and authorities
- Applied by investors to assess alignment with recognised principles and evaluate credibility
- Serve as benchmarks for second-party opinions (SPOs), verification, and assurance processes
- Adapted across jurisdictions, including regional (e.g. ASEAN) and national frameworks, to ensure local relevance

Case Study Examples

Geographic Coverage	Case Study Examples
Regional	**ASEAN Green Bond Standards[15]:** ▪ Provide guidance on the issuance of ASEAN green bonds, where proceeds are exclusively applied to finance or refinance eligible green projects ▪ Core components are leveraged from the ICMA Green Bond Principles, with ASEAN-specific features including a requirement that the issuer or issuance has a geographical or economic connection to the region, the exclusion of fossil fuel power generation projects, and continuous accessibility of information to investors throughout the tenure of the bond
Regional	**ASEAN Social Bond Standards[16]:** ▪ Provide guidance on the issuance of ASEAN social bonds, where proceeds are exclusively applied to finance or refinance eligible social projects that address or mitigate a specific social issue for a defined target population ▪ Core components are leveraged from the ICMA Social Bond Principles and apply the same ASEAN eligibility and disclosure features as the ASEAN Green Bond Standards
Regional	**ASEAN Sustainability Bond Standards[17]:** ▪ Provide guidance on the issuance of ASEAN sustainability bonds, where proceeds are exclusively applied to finance or refinance a combination of both green and social projects ▪ Core components are leveraged from ICMA and mirror that of the ASEAN Green Bond Standards and ASEAN Social Bond Standards
Regional	**ASEAN Sustainability-linked Bond Standards[18]:** ▪ Provide guidance on the issuance of ASEAN SLBs, where financial or structural characteristics vary according to whether predefined Sustainability Performance Targets are met and proceeds are applied for general purposes ▪ Core components are leveraged from the ICMA Sustainability-Linked Bond Principles, with the ASEAN nexus requirement applied as in the ASEAN Green, Social and Sustainability Bond Standards
Regional	**ASEAN Transition Finance Guidance[19]:** ▪ Provide a guide for assessing and demonstrating a credible transition in the ASEAN context, enabling entities in high-emitting and hard-to-abate sectors to access financing from capital markets ▪ Grounded in existing global and regional transition finance guidelines, with regional contextualisation delivered through a tiered approach that categorises entities as Aligned and Aligning 1.5°C, Aligned and Aligning Well Below 2°C, or Progressing ▪ Version 2, endorsed October 2024, replaces Version 1 and adds clarity on the types and applications of transition finance together with reference transition pathways for ASEAN companies

[15] ACMF. (March, 2019). ASEAN Green bond Standards. https://www.theacmf.org/initiatives/sustainable-finance/asean-green-bond-standards
[16] ACMF. (Mar, 2019). ASEAN Social Bond Standards. https://www.theacmf.org/initiatives/sustainable-finance/asean-social-bond-standards
[17] ACMF. (Mar, 2019). ASEAN Sustainability Bond Standards. https://www.theacmf.org/initiatives/sustainable-finance/asean-sustainability-bond-standards
[18] ACMF. (Oct, 2022). ASEAN Sustainability-linked Bond Standards. https://www.theacmf.org/sustainable-finance/publications/asean-sustainability-linked-bond-standards
[19] ACMF. (Oct, 2024). ASEAN Transition Finance Guidance V.2. https://www.theacmf.org/initiatives/sustainable-finance/asean-transition-finance-guidance-v2

Geographic Coverage	Case Study Examples
Regional	**ASEAN VCM Development Plan[20]:** ▪ Provide a multi-year plan of action to develop voluntary carbon markets across ASEAN, addressing the role of securities regulators in promoting financial integrity within the VCM ecosystem ▪ Structured around four dimensions covering regulatory frameworks, primary market issuance, secondary market trading, and credit use and disclosure, with the ASEAN VCM Guidance adopting a building block approach based on ecosystem readiness and institutional capacity ▪ Anchored on the IOSCO 2024 Report on Voluntary Carbon Markets and encourages adoption of the ICVCM Core Carbon Principles to support credit integrity and regional interoperability

As the case studies show, market standards provide a structured and widely recognised foundation for labelled green and sustainability bonds globally, regionally and within AMS. Their influence is visible in market outcomes – as of 2025, labelled ASEAN GSS+ bonds totalled approximately USD 18,233.77 million[21].

By offering common definitions and baseline integrity standards, market standards help enhance transparency and build investor confidence. This has, in turn, supported a growing pipeline of issuers across the ASEAN market, supporting green project financing and energy transition investments which account for a significant amount of green bond proceeds in the region[22].

Given growing investor appetite, regulatory interest and the expanding role of sustainable finance in the ASEAN market's development agenda, market standards are expected to continue supporting market development through enabling comparability, facilitating cross-border issuances and underpinning growth in the region's sustainable bond market.

2.2.2 Taxonomies

Scientific classification system designed to identify and categorise economic activities based on their contribution to environmental objectives and alignment with sustainability principles. It serves as a common framework to guide sustainable finance, using defined criteria

Purpose

- Provide a common classification system to identify and define environmentally sustainable activities
- Guide capital allocation by setting clear criteria for what qualifies as "green" or "transition" activities
- Support governments, financial institutions, and corporates in aligning with climate and sustainability goals
- Enhance comparability, consistency, and transparency across sustainable finance markets
- Reduce greenwashing risks by establishing science-based thresholds and definitions

Application in Practice

- Used by regulators to shape policies, national strategies, and sustainable finance requirements
- Applied by financial institutions to structure instruments and assess eligibility of investments
- Support corporates in internal decision-making, project evaluation, and sustainability reporting
- Serve as benchmarks for investors and external reviewers to evaluate environmental integrity and impact
- Implemented across global, regional, and national levels to balance comparability with local relevance

[20] ACMF. (Nov, 2025). ACMF Voluntary Carbon Market Development Plan. https://www.theacmf.org/sustainable-finance/publications/acmf-voluntary-carbon-market-development-plan
[21] ACMF Statistics. (n.d.). https://www.theacmf.org/sustainable-finance/statistics
[22] ADB Institute. (Jan, 2020). Green Bonds for Financing Renewable Energy and Energy Efficiency in Southeast Asia: A Review of Policies. https://www.adb.org/publications/green-bonds-financing-renewable-energy-efficiency-southeast-asia

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**Climate Bonds Taxonomy[23]:** ▪ Guide to what is climate-aligned – activities and assets are measured against climate science criteria, to determine whether substantial contributions are made to climate mitigation and/or climate resilience ▪ Used by issuers, investors, corporates and governments to understand what will deliver a low-carbon, climate-resilient economy globally, enabling aligned lending, policy and investment portfolios with credible mitigation outcomes ▪ Users can filter by sector, sub-sector and climate theme to identify eligible activities and determine which are also eligible for certification under the Climate Bonds Standard
Regional	**ASEAN Taxonomy for Sustainable Finance[24]:** ▪ Multi-tiered overarching guide used to identify and classify sustainable projects and economic activities in the ASEAN market ▪ Guides capital towards activities that can promote the sustainable transition of the economy ▪ Covers six focus sectors: ▪ Agriculture, forestry and fishing ▪ Manufacturing ▪ Electricity, gas, steam and air conditioning supply ▪ Transportation and storage ▪ Construction and real estate activities ▪ Water supply, sewerage, waste management, and remediation activities ▪ Covers three enabling sectors: ▪ Information and communication ▪ Professional, scientific and technical activities ▪ Carbon capture, utilisation and storage ▪ Activities seeking classification under the ASEAN Taxonomy must demonstrate that they contribute to at least one of the EOs and fulfil minimum requirements of three ECs
National	**Indonesia Taxonomy for Sustainable Finance (TKBI)[25]:** ▪ Classifies economic activities that support Indonesia's sustainability goals and serves as a guide to facilitate capital allocation towards Indonesia's ambitions of Net Zero emissions by 2060 ▪ Consists of six focus sectors ▪ Energy ▪ Construction & real estate ▪ Transportation and storage ▪ Agriculture, forestry and other land uses (AFOLU) ▪ Manufacturing ▪ Water supply, sewerage & waste management ▪ Classifies activities into green (meets "green" criteria in one of the environmental objectives (EOs) and all essential criteria (ECs)) and transition (meets "transition" criteria in one of the EOs and partially fulfils the ECs)

The growing adoption and continued refinement of taxonomies, including the ASEAN Taxonomy for Sustainable Finance, demonstrate the increasing role of taxonomies as a common language for guiding and facilitating the allocation of capital towards sustainable activities. Its evolution shows support for the general push towards coherent, science-based classification systems that can be used by investors, governments, regulators and corporates alike.

[23] Climate Bonds (n.d.). Climate Bonds Taxonomy https://www.climatebonds.net/expertise/taxonomy/climate-bonds-taxonomy
[24] ACMF. (Nov, 2025). ASEAN Taxonomy for Sustainable Finance. https://www.theacmf.org/sustainable-finance/publications/asean-taxonomy-for-sustainable-finance-version-4
[25] Otoritas Jasa Keuangan. (Feb, 2025). Indonesia Taxonomy for Sustainable Finance. https://data.sbfnetwork.org/sites/default/files/survey-attachments/2025-05/INDONESIA%20TAXONOMY%20FOR%20SUSTAINABLE%20FINANCE%202025%20%28version%202%29.pdf

By providing clarity on what qualifies as sustainable, taxonomies help reduce risks, combat greenwashing and facilitate more efficient allocation of private capital towards environmentally aligned activities. As such, they are likely to become foundational in how sustainable finance develops over the coming years, particularly within the ASEAN market.

2.2.3 Disclosure and Reporting Standards

Defines what sustainability-related information should be disclosed, how it is measured and how it is reported at the entity, portfolio and product levels

Purpose

- Provide structured frameworks for disclosing climate and sustainability-related information
- Enhance transparency, comparability, and reliability of ESG data across organisations
- Support risk management and communication of sustainability performance to stakeholders
- Enable investors and lenders to assess financial resilience and long-term value
- Align local reporting practices with global expectations and regulatory developments

Application in Practice

- Used by businesses to prepare consistent sustainability and climate disclosures
- Support identification of material risks and opportunities and tracking of key ESG metrics
- Applied by investors and lenders to evaluate creditworthiness and risk exposure
- Guide regulators and financial institutions in setting disclosure requirements, including for SMEs
- Enable alignment with global frameworks while adapting to regional and national contexts
- Implemented across global, regional, and national levels to balance comparability with local relevance

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**IFRS S2 Climate-related Disclosures[26]:** ▪ Aims to ensure entities provide transparent and consistent information about climate-related risks and opportunities that could reasonably affect their financial prospects ▪ Requires information on impacts on cash flows, access to finance and cost of capital ▪ Aims to support investors, lenders and other stakeholders in making informed decisions about resource allocation by understanding how climate change influences an entity's financial performance ▪ Structured across four key components: ▪ Governance ▪ Strategy ▪ Risk Management ▪ Metrics and Targets
Regional	**ASEAN Simplified ESG Disclosure Guide (ASEDG)[27]:** ▪ Aims to help SMEs in supply chains voluntarily track and report standardised sustainability disclosures aligned with global standards to meet stakeholder requirements ▪ Covers disclosures across E, S and G pillars, including key topics such as emissions, DEI and risk management

[26] IFRS. (2025). IFRS S2 Climate-related Disclosures. https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/

[27] ACMF. (Nov, 2025). ASEAN Simplified ESG Disclosure Guide (ASEDG). https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/

Geographic Coverage	Case Study Examples
National	**Philippine Financial Reporting Standards (PFRS) S1 & S2[28]:** ▪ Issued by Philippine Sustainability Reporting Committee (PSRC), which is under the Financial and Sustainability Reporting Standards Council (FSRSC) ▪ Aligns with the IFRS to promote transparent and comparable financial and sustainability reporting within the Philippines and support stakeholders in making informed decisions ▪ Adopted for regulatory reporting through SEC Memorandum Circular No. 16, Series of 2025, which sets out the sustainability reporting guidelines for publicly listed companies and large non-listed entities in the Philippines **Can also be considered as a government regulation given the mandatory nature*

Disclosure and reporting standards are gaining traction to improve transparency and align local disclosures with global investor expectations – multiple jurisdictions are either using or considering sustainability disclosure standards[29].

As sustainability reporting grows (driven by both regulation and investor demand), these standards will play a key role in enabling consistent ESG data, facilitating risk assessment and supporting capital allocation in green and transition finance.

In this way, disclosure and reporting standards serve as a critical component to market standards and taxonomies – ensuring that not only are sustainable finance products well defined and structured, but also that their sustainable and financial impacts are tracked, disclosed and comparable over time.

2.2.4 Government Regulations

Mandatory requirements set by a government body for a specific sustainable finance instrument or general sustainable finance market, that all relevant market players must abide by

Purpose

- Establish legally binding requirements governing the issuance, monitoring, and reporting of sustainable finance instruments
- Ensure compliance with defined criteria for eligible activities, environmental safeguards, and use of proceeds
- Promote market integrity, reduce greenwashing, and strengthen accountability
- Support national climate, environmental, and development objectives through enforceable frameworks
- Represent the most prescriptive layer of governance within the sustainable finance ecosystem

Application in Practice

- Applied by regulators to set mandatory disclosure, reporting, and compliance requirements
- Used by issuers to meet eligibility criteria and access green or sustainable financing instruments
- Guide environmental approvals, project classifications, and allocation of proceeds
- Enforced through audits, compliance checks, and regulatory oversight mechanisms
- Often integrated with broader policy frameworks (e.g. environmental laws, financial regulations) to drive national sustainability goals

[28] IFRS. (Jun, 2025). Philippines IFRS Snapshot. https://www.ifrs.org/content/dam/ifrs/publications/sustainability-jurisdictions/pdf-snapshots/philippines-ifrs-snapshot.pdf
[29] ACCA Global. (Jul, 2025). Sustainability Reporting in ASEAN: an overview of current development. https://www.accaglobal.com/content/dam/ACCA_Global/professional-insights/sustainability-asean/PI-ASEAN-Sustainability-Reporting%20FINAL.pdf

Case Study Examples

Geographic Coverage	Case Study Examples
National	**Viet Nam's 2020 Environment Protection Law[30]:** ▪ Mobilises financial resources for environmental protection and promotes the transaction of green finance instruments ▪ Creates a regulation on principles whereby issuers and investors purchasing green bonds receive incentives as specified by law ▪ Provides principles, policies and frameworks for environmental protection as well as GHG and climate change management ▪ Provides information on economic instruments for environmental incentives and assistance schemes **Viet Nam's 95/2018/ND-CP[31]:** ▪ Promotes the issuance and trading of green bonds ▪ Mobilises capital for environmental protection projects defined under the Law of Environmental Protection and includes a list of projects which public investment funds are allocated in

While government regulations for sustainable finance are less common, they still can have measurable impact where implemented. Country-specific regulatory measures, whether tied to environmental protection laws, securities regulation or banking supervision, are expected to grow as governments seek to reduce greenwashing, scale private capital mobilisation and meet Net Zero targets.

Overall, while not yet widespread in the ASEAN context, government regulations are increasingly recognised as a critical means for driving market discipline and ensuring integrity in sustainable finance. As AMS continue to strengthen their policy frameworks, regulatory requirements are likely to expand in scope and influence, complementing voluntary standards and taxonomies to create a more robust sustainable finance landscape.

2.2.5 Climate Risk Assessments

Approach used to assess climate-related financial risks under different physical and transition scenarios, supporting risk management, capital planning and supervisory assessments

Purpose

- Assess how climate transition pathways and physical risks impact financial systems, institutions, and portfolios
- Support forward-looking analysis of climate-related financial risks and opportunities
- Strengthen resilience by identifying vulnerabilities and exposure to climate scenarios
- Inform strategic planning, risk management, and decarbonisation pathways
- Increasingly embedded as a core tool for regulators and financial institutions in managing climate risk

Application in Practice

- Applied by central banks and regulators to assess macroeconomic and financial stability risks
- Used by financial institutions for stress testing, portfolio analysis, and scenario modelling
- Support the identification of sectors with elevated emissions intensity or transition risk exposure under different climate pathways
- Enable alignment of business strategies with long-term climate goals (e.g. Net Zero)
- Adapted to local contexts to reflect jurisdiction-specific risks, data availability, and policy environments

[30] A Chau Environment. (2020.) Law on Environmental Protection. https://moitruongachau.com/en/law-on-environmental-protection-no-72-2020-qh14.html
[31] 95/2018/ND-CP. (2018). https://thuvienphapluat.vn/van-ban/EN/Chung-khoan/Decree-95-2018-ND-CP-issuance-registration-trading-government-debt-instruments-securities-market/389688/tieng-anh.aspx

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**NGFS scenarios: Purpose, use cases and guidance on where institutional adaptations are required[32]:** ▪ Outlines the NGFS scenarios' structure and application, detailing their development using integrated assessment models, physical risk models and macroeconomic tools to assess climate-related financial risks ▪ Highlights areas requiring scenario adaptation (e.g. tipping points, societal impacts, financial sector dynamics), introduces short-term scenarios for near-term stress testing and discusses enhancements to improve granularity, coverage and relevance in climate risk analysis ▪ Supports stress testing while allowing institutions to tailor them to specific jurisdictions, data gaps and evolving climate conditions
National	**Bank Negara Malaysia's Policy Document on Climate Risk Management and Scenario Analysis:** ▪ Provides requirements and guidance for Malaysian financial institutions to use climate-related scenario analysis and stress testing to assess resilience, inform risk management and integrate climate risks into business strategies and capital planning ▪ Covers principles and standards on governance, strategy, risk appetite and management, scenario analysis and supervisory expectations

The adoption of climate risk assessments across ASEAN markets is accelerating, driven by increasing alignment with global practices such as NGFS. Several ASEAN central banks are now NGFS members – including Bank Negara Malaysia, Monetary Authority of Singapore and Bank Indonesia[33].

As global platforms such as the NGFS scenarios continue to refine scenario guidance and enhance granularity, these elements will be particularly important for ASEAN jurisdictions with limited data or modelling capacity.

Overall, climate risk assessments are becoming a core guideline in ASEAN markets, supporting regulators and financial institutions in understanding climate-related financial risks and informing transition planning. As data availability improves, these assessments are expected to become increasingly standardised and embedded across the region's financial sector.

2.3 Sustainable Finance Tools

Sustainable finance tools are digital platforms and technology offerings that facilitate the deployment, credibility, and scalability of sustainable finance instruments. These tools may be used to execute transactions, manage risk and support implementation at each stage of a transaction from origination to reporting.

See Appendix B for a catalogue of sustainable finance tools for reference to the many available resources. Any references to commercial providers in case studies are for illustrative purposes only and do not constitute endorsement by ACMF, the UK Government or other delivery partners.

Sustainable Finance Tools Category	Overview
Information and Advisory Tools	Provides ESG, climate and sustainability insights across multiple thematic areas to support informed decision-making throughout the sustainable finance lifecycle
Financing and Incentive Platforms	Facilitates the mobilisation of capital by enabling trading, allocation, and monetisation of sustainability-related assets

[32] NGFS. (Jan, 2024). NGFS Scenarios: Purpose, use cases and guidance on where institutional adaptations are required. https://www.ngfs.net/system/files/import/ngfs/medias/documents/ngfs_guidance_note_on_the_scenarios.pdf
[33] NGFS. (Aug, 2026). NGFS Membership. https://www.ngfs.net/en/about-us/membership

Sustainable Finance Tools Category	Overview
Due Diligence and Risk Assessment Tools	Identifies, assesses, and quantifies ESG and climate-related risks to inform financial decision-making; can include external review mechanisms such as Second Party Opinions (SPOs), which assess the alignment of sustainable finance frameworks or instruments with relevant standards
Disclosure and Reporting Tools	Aggregates and standardises ESG data to support sustainability reporting and regulatory compliance
Monitoring, Reporting and Verification (MRV) Tools	Includes assurance and verification services that assess reported sustainability performance, impacts and other sustainability-related information

2.3.1 Information and Advisory Tools

Digital platforms that provide data, analytics and expert guidance, helping financial institutions, investors and policymakers identify sustainable investment opportunities and make informed decisions

Purpose

- Provide data, analytics, and insights across the sustainable finance lifecycle – from design to monitoring and reporting
- Enable assessment of ESG risks and opportunities across themes (e.g. climate, biodiversity, circular economy)
- Support alignment with global frameworks (e.g. EU Taxonomy, UN SDGs) through standardised data
- Enhance transparency, credibility, and informed decision-making
- Increasingly adopted by banks, though not yet fully institutionalised

Application in Practice

- Embedded in financial systems for instrument structuring, due diligence, and reporting
- Used to track sustainable instruments (e.g. green and SLBs) and market flows
- Support ESG risk analysis, including emissions tracking and climate modelling
- Operate as digital platforms providing accessible, up-to-date sustainability data and advisory guidance
- Reduce data duplication and improve efficiency through centralised information
- Survey and interview responses indicate these tools are widely recognised but not yet fully institutionalised, with some banks exploring them ahead of mandatory requirements to strengthen transparency and alignment

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**Bloomberg's Sustainable Finance Solutions:** ▪ Digital suite integrated into the Bloomberg Terminal and enterprise data services that provides comprehensive ESG and climate-related analytics. It offers standardised ESG data and incorporates global frameworks (e.g. EU Taxonomy, UN SDGs) for compliance and reporting[34] ▪ Tracks green, social, sustainability-linked, and transition debt instruments, enabling users to monitor market trends and financing flows[35]. ▪ Provides ESG data and coverage for various sustainable finance solutions. Some examples include: ▪ ***Green Economy:*** BNEF Transition Exposure dataset which tracks Clean Energy Revenue[36] ▪ ***Climate Mitigation:*** Provides Scope 1, 2 and 3 emissions data for 130,000+ companies[37]
Global	**Global Nature Watch (formerly Global Forest Watch (GFW))[38]:** ▪ Free online forest monitoring and alert system developed by the World Resources Institute, combining satellite technology, open data and cloud computing to show where tree cover loss is occurring ▪ GFW Pro was designed with companies and financial institutions to screen investment and supply chain locations for deforestation risk and demonstrate compliance with regulations such as the EU Deforestation Regulation ▪ Provides over 65 global and local datasets and near-real-time deforestation alerts, supporting nature-related risk assessment in lending and investment decisions
Regional (ASEAN plus EU)	**All-Countries Common Equivalence Platform for Taxonomies (ACCEPT)[39]:** ▪ Free public utility platform initiated by the Sustainable Finance Institute Asia covering 8 taxonomies across 7 jurisdictions, including the ASEAN Taxonomy, EU Taxonomy and five ASEAN national taxonomies ▪ The Taxonomy Navigator allows users to explore and compare taxonomy requirements; the Taxonomy Analyser provides indicative classification of economic activities ▪ Recognised in the Joint Statement of the 12th ASEAN Finance Ministers and Central Bank Governors' Meeting as a key initiative supporting sustainable finance integration
National	**Thailand SEC Sustainable Finance Information Platform[40]:** ▪ Digital hub designed to enhance transparency and accessibility in Thailand's sustainable finance ecosystem. It provides data on ESG financial products, namely ESG bonds and SRI funds, including the offering value of ESG bonds and the value of assets under the management of SRI funds ▪ The platform also provides links to regulations, standards, guidelines, or articles related to ESG financial products[41]

The examples above illustrate that information and advisory tools consolidate fragmented sustainability data into a single reference point, covering market pricing data, satellite imagery, taxonomy requirements and fund-level disclosures. They differ principally in scope rather than in function. Global commercial providers offer broader coverage and analytical depth, while regional and national platforms provide closer alignment with local regulatory

[34] Bloomberg. (n.d). ESG Sustainable Finance Solution. https://professional.bloomberg.com/products/bloomberg-terminal/sustainable-finance/#overview
[35] Bloomberg. (n.d.). Sustainable Finance Data. https://professional.bloomberg.com/products/data/enterprise-catalog/sustainable-finance/
[36] Bloomberg: Low-Carbon Transition Analytics. (Oct, 2025). Bloomberg Expands Analytics to HOctInvestors Evaluate Transition Risk and Opportunity Amid the Rise of Low Carbon Technologies. https://www.bloomberg.com/company/press/bloomberg-expands-analytics-to-help-investors-evaluate-transition-risk-and-opportunity-amid-the-rise-of-low-carbon-technologies/
[37] Bloomberg: Climate & Carbon Data. (n.d.) Climate and Nature Solution, https://www.bloomberg.com/professional/solutions/sustainable-finance/natural-climate-solutions/#net-zero-alignment
[38] Global Nature Watch. (n.d.) Global nature Watch Horizon. https://horizon.globalnaturewatch.org/
[39] Sustainable Finance Institute. (n.d.). ALL-COUNTRIES COMMON EQUIVALENCE PLATFORM FOR TAXONOMIES (ACCEPT) https://www.sfinstitute.asia/accept/
[40] SEC. (Jan 2023). SEC launches "ESG Product Platform" – Sustainability Financial Products Information Center. https://www.sec.or.th/EN/Pages/News_Detail.aspx?SECID=10388
[41] SEC TH. (n.d.).Sustainable Finance Ecosystem of Thailand Capital Market https://sustainablefinance.sec.or.th/

requirements. For ASEAN financial institutions, this suggests that no single tool is likely to be sufficient and that complementary use of global and regional data sources may be appropriate.

2.3.2 Financing and Incentive Platforms

Digital marketplace that links sustainable projects with investors, financial institutions and corporates

Purpose

- Facilitate access to capital by enabling the trading, allocation, or monetisation of sustainability-related assets
- Directly support financing of green and sustainable initiatives, particularly at the issuance stage
- Incorporate verification mechanisms to ensure measurable environmental and social outcomes
- Encourage market participation and mobilise capital flows towards sustainability goals
- Typically used within specific functions but plays a critical role in driving tangible impact

Application in Practice

- Provide platforms for trading instruments such as carbon credits and renewable energy certificates (RECs)
- Support project financing by connecting buyers and sellers of sustainability-linked assets
- Utilise technologies (e.g. blockchain, satellite monitoring) to enhance transparency and verification
- Enable organisations to offset emissions and meet sustainability or Net Zero commitments
- Operate within regulated or voluntary market frameworks to ensure credibility and trust
- Survey and interview responses indicate these platforms are used within specific departments, but remain critical to mobilising capital flows, encouraging market participation and driving tangible progress towards sustainability goals

Case Study Examples

Geographic Coverage	Case Study Examples
Regional	**ASEAN Interconnected Sustainability Ecosystem (ASEAN-ISE)[42]:** ▪ Collaboration between Bursa Malaysia, IDX, SET, SGX and PSE to implement common ESG metrics across their data infrastructures, with Bursa Malaysia as secretariat ▪ Aims to build a centralised ASEAN ESG data infrastructure enabling standardised collection, analysis and reporting, with a Request for Information issued in November 2024 ▪ Intended to connect corporate supply chains to ESG-oriented investment capital and help suppliers with strong ESG disclosure secure more competitive financing rates
National	**Climate Impact X[43]:** ▪ Singapore-based global carbon trading platform that facilitates the buying and selling of high-quality carbon credits through its Carbon Exchange and Project Marketplace ▪ Leverages advanced technologies (e.g. satellite monitoring, blockchain) for carbon credit transactions ▪ Covers a wide range of projects such as natural climate solutions (NCS)[44], climate adaptation and waste management

[42] ASEAN Exchanges. (Oct, 2023). Interconnected Sustainability Ecosystem Initiative. https://www.aseanexchanges.org/content/interconnected-sustainability-ecosystem-initiative/
[43] DBS – Climate Impact X. (n.d.). Climate Impact X An international marketplace for high-quality carbon credits. https://www.dbs.com.sg/corporate/solutions/climateimpactx?pk_source=typed&pk_medium=direct&pk_campaign=bookmarked&nav=12
[44] Climate Impact X.(Mar, 2022). Climate Impact X launches global carbon marketplace to accelerate climate action through quality carbon credits. https://climateimpactx.com/press-release/climate-impact-x-launches-global-carbon-marketplace-to-accelerate-climate-action-through-quality-carbon-credits/

Geographic Coverage	Case Study Examples
National	**Bursa Carbon Exchange[45]:** ▪ Malaysia's voluntary carbon market platform, created to support the country's net-zero emissions goal by 2050 – it enables companies to trade verified carbon credits to offset their greenhouse gas emissions in a regulated environment ▪ First Shariah-compliant carbon exchange, offering both carbon credit and renewable energy certificate (REC) trading
National	**IDXCarbon[46]:** ▪ Indonesia's official carbon trading platform developed by the Indonesia Stock Exchange, backed by Presidential Regulation No. 98/2021 and supervised by OJK ▪ Offers four trading mechanisms: auction, marketplace, continuous trading and negotiated trading ▪ Participation grew from 16 to 132 entities with eight registered projects as of 2025, since launch in 2023

The examples above illustrate financing and incentive platforms operating at two levels. Three are national carbon exchanges providing market infrastructure for a specific instrument, where credibility depends on regulatory backing, verification standards and the level of market participation. ASEAN-ISE operates at the regional level, providing a shared data layer intended to facilitate cross-border capital flows. Taken together, these examples indicate that the constraint on capital mobilisation in ASEAN may be shifting from the availability of trading venues towards interoperability between them.

2.3.3 Due Diligence and Risk Assessment

Digital tools that provide a structured process of investigation and analysis to evaluate all relevant aspects of a potential transaction, project, or ongoing operation with respect to sustainability, subsequently delineating environmental impacts

Purpose

- Identify and evaluate sustainability-related risks and performance across key thematic areas (e.g. climate, biodiversity, environmental impact)
- Provide forward-looking analysis (e.g. scenario modelling) to assess potential investment outcomes
- Support informed decision-making through risk screening, feasibility assessments, and impact quantification
- Cover multiple risk dimensions, including reputational, environmental (physical and transition), and sector-specific risks
- Widely embedded in financial institutions, enabling integration of sustainability considerations into lending and investment processes

Application in Practice

- Applied during due diligence to screen investments against ESG risks, exclusion criteria, and policies
- Used for reputational risk monitoring (e.g. controversy screening) and environmental risk assessments
- Support sector-specific analysis (e.g. biodiversity, deforestation, green buildings, energy impacts)
- Enable portfolio-level assessments using spatial analysis and scenario modelling tools.
- Integrated with internal systems and global standards (e.g. IFC guidelines, frameworks) to strengthen consistency and compliance
- Survey and interview responses indicate these are among the most widely embedded tools in bank business practices
- Banks use platforms such as RepRisk to quantify risk prior to financing, and IFC-aligned diligence forms to screen against exclusion criteria and policies

[45] Bursa Carbon Exchange. (n.d.) Introducing Bursa Carbon Exchange. https://bcx.bursamalaysia.com/about.html
[46] IDX Carbon. (n.d.). Indonesia Commitment On A Low-Emissions Future. https://idxcarbon.co.id/

- Issuers have started to develop ESG ratings via registered rating agencies such as RAM and MARC in Malaysia
- Sector-specific applications include IFC EDGE guidelines for green building assessments and spatial analysis tools for physical risk exposure across asset portfolios
- Specialised tools such as Global Forest Watch and the WWF Biodiversity Risk Filter are also used to identify and manage nature-related risks

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**Sustainalytics[47]:** ▪ ESG Risk Ratings: Evaluates company-level exposure to ESG risks ▪ Provides SPOs for green bonds, social bonds, and SLLs and ensures alignment with market standards (e.g., ICMA Principles) ▪ Provides EU Taxonomy alignment and CSRD reporting support and climate risk metrics and low-carbon transition ratings ▪ Provides investor platform for ESG data and APIs and data feeds for portfolio integration
Global	**Biodiversity Integrated Assessment and Computation Tool (B-INTACT)[48]:** ▪ Provides a thorough biodiversity assessment of project-level activities in the Agriculture, Forestry and Other Land Use (AFOLU) sector ▪ Quantifies the biodiversity impact of various investments at project and policy-level using globally recognised environmental assessment methodologies ▪ Provides decision-makers with a set of policy indicators to help make informed decisions ▪ Extends the scope of environmental assessments to capture biodiversity concerns which are not accounted for in conventional carbon pricing ▪ Supports countries in accessing funds from international financial institutions and mechanisms to fund projects, programmes and policies
Global	**IFC EDGE (Excellence in Design for Greater Efficiencies)[49]:** ▪ Free online design and modelling software calculating potential savings in energy, water and embodied carbon for building projects ▪ Internationally recognised certification with third-party verification, making certified projects eligible for green bonds, SLLs and preferential mortgage rates ▪ Implemented in over 9,000 projects across 96 countries, covering 409,000 housing units
Global	**LSEG MarketPsych ESG Analytics[50]:** ▪ AI-powered analytics solution that analyses sustainability-related news and social media in near real time to provide external insights into companies' and countries' ESG performance and market perceptions ▪ Generates quantitative ESG indicators across key environmental, social and governance themes, drawing on millions of articles from global news and social media sources ▪ Analytics can support investors in investment and risk management decisions and enable corporates, regulators and researchers to monitor ESG perceptions and identify potential greenwashing

[47] Sustainalytics. (n.d.). ESG Risk Rating. https://www.sustainalytics.com/corporate-solutions/esg-solutions/esg-risk-ratings
[48] FAO – B-INTACT. (n.d.). The Biodiversity Integrated Assessment and Computation Tool (B-INTACT). https://www.fao.org/in-action/epic/ex-act-tool/suite-of-tools/b-intact/es/
[49] EDGE. (n.d.) Certify Green Building with Edge. https://edgebuildings.com/
[50] MarketPsych (n.d.) LSEG MarketPsych ESG Analytics. https://www.marketpsych.com/esg4/intro

Geographic Coverage	Case Study Examples
Regional (ASEAN)	**ASEAN Disaster Risk Financing and Insurance (ADRFI) Platform 2.0[51]:** ▪ Government-focused platform helping ASEAN Member States strengthen financial resilience against natural disasters, developed with the World Bank Group and SEADRIF ▪ Provides risk assessment and analytics to model disaster exposure and fiscal impact, and financial adequacy analysis of existing risk financing instruments ▪ Supports advisory on insurance and risk transfer design, and facilitates regional coordination on risk pooling and catastrophe bonds

This group demonstrates how far due diligence has moved beyond conventional credit and ESG screening. Sustainalytics addresses issuer-level risk, B-INTACT addresses biodiversity impact at project level, EDGE addresses asset performance in the built environment, ADRFI 2.0 addresses sovereign exposure to physical climate risk and LSEG MarketPsych ESG Analytics addresses market and public perception of ESG performance by analysing sustainability-related news and social media sources. Each answers a different question at a different unit of analysis, which is why banks typically run several in parallel rather than choosing between them. The common thread is that they convert environmental, physical and perception-related risk into quantified inputs that can be priced into a financing decision.

2.3.4 Disclosure and Reporting Tools

Digital solutions that allow businesses to generate disclosures aligned with mandatory and voluntary reporting requirements

Purpose

- Aggregate and standardise ESG data to support sustainability reporting and disclosure requirements
- Help organisations identify material issues, track KPIs, and align with global frameworks
- Simplify reporting processes through automated tools and self-assessment features
- Improve transparency, consistency, and credibility of sustainability disclosures
- Enable organisations, including SMEs, to initiate and scale their reporting practices

Application in Practice

- Used to collect, manage, and report ESG data in line with regulatory and market standards
- Support KPI tracking and monitoring of sustainability performance over time
- Automate conversion of operational data into ESG metrics and standardised reports
- Provide platforms for supply chain engagement and sustainability-related services
- Facilitate access to sustainable financing by linking reported data to financial instruments and solutions
- Insights from banks highlight a strong integration of these tools, which are used to identify material issues, standardise reporting practices, collect relevant data and track set KPIs

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**GHG Protocol Tools Suite[52]:** ▪ Collection of standardised cross-sector, sector-specific and country-specific tools for measuring, reporting and managing greenhouse gas emissions ▪ Supports credible GHG inventories aligned with CDP, TCFD and ISSB through consistent methodologies and emission factors ▪ Largely Excel-based with accompanying guidance documents, keeping the barrier to adoption low

[51] SEADRIF. (n.d.). Welcome to the Southeast Asia Disaster Risk Insurance Facility. https://seadrif.org/

[52] Green House Gas Protocol. (n.d.). Tools and Resources. https://ghgprotocol.org/tools-resources

Geographic Coverage	Case Study Examples
Regional	**ESGpedia[53]:** ▪ Digital platform in Asia Pacific that collects ESG data to help businesses meet sustainability and regulatory requirements. ▪ Provides tools for ESG reporting, carbon accounting, sustainable financing, and supply chain engagement, while also offering a marketplace for certifications and ESG services. ▪ Aims to simplify ESG compliance and improve data transparency
National	**BPAM Sustainable Taxonomy Platform (STP)[54]:** ▪ Centralised sustainability data platform supporting Malaysian capital market participants and financial institutions in applying the CCPT framework ▪ Provides tools for taxonomy assessment, sustainability reporting and data analysis ▪ Improves data transparency, consistency and accessibility by consolidating sustainability information in a single platform
National	**Gprnt[55]:** ▪ A platform launched by MAS, designed to streamline ESG data collection and reporting by automating the conversion of operational data into sustainability metrics ▪ Enables financial institutions to connect their clients to green and sustainability-linked offerings, and to track SPTs, and SMEs to act with tailored decarbonisation solutions and financing options ▪ Offers two main components: ▪ Gprnt Disclosure, which generates standardised ESG reports aligned with global frameworks ▪ Gprnt Marketplace, which connects users to decarbonisation solutions and sustainability services
National	**Centralised Sustainability Intelligence (CSI) Platform[56]:** ▪ Bursa Malaysia platform enabling companies and their supply chains to measure carbon emissions, generate standardised climate-related disclosures and access green financing ▪ Reporting on the platform is mandatory for Public-Listed Companies in Malaysia ▪ Petronas has adopted CSI for its Supplier Support Programme, helping over 80% of its OGSE suppliers, most of them SMEs, begin sustainability reporting
National	**SET Carbon, e-One Report and ESG Data Platform[57]:** ▪ SET platform enabling companies and their supply chains to measure GHG emissions, generate standardised sustainability disclosures, and support climate-related reporting ▪ Certified by the Thailand Greenhouse Gas Management Organisation and aligned with international standards, including the GHG Protocol and ISSB ▪ Integrated with SET's e-One Report and ESG Data Platform, helping listed companies meet regulatory disclosure requirements and improve access to sustainable finance

The examples reflect a range of adoption drivers. CSI forms part of Malaysia's mandatory reporting infrastructure, Gprnt is regulator-led but voluntary, SET Carbon and BPAM STP are market-led platforms supporting disclosure and taxonomy implementation, ESGpedia is commercially operated, and the GHG Protocol suite is a freely available methodological standard. Notwithstanding these differences, the examples address a common objective: reducing reporting burdens while producing information on which regulators, financial institutions and investors can rely. The growing integration of supply-chain data, taxonomies and financing pathways also indicates that disclosure tools are increasingly serving as enabling infrastructure for sustainable finance rather than functioning solely as reporting platforms.

[53] ESGpedia. (n.d.). One-stop Digital Platform to empower Sustainability in Asia. https://esgpedia.io/
[54] BPAM. (n.d.). BPAM EKO: A comprehensive platform for quality data. https://eko.bpam.com.my/bstp
[55] MAS - Gprnt. (Nov, 2023). MAS Launches Digital Platform for Seamless ESG Data Collection and Access https://www.mas.gov.sg/news/media-releases/2023/mas-launches-digital-platform-for-seamless-esg-data-collection-and-access
[56] Bursa Malaysia. (n.d.). Centralised Sustainability Intelligence (CSI) Solution. https://www.bursamalaysia.com/trade/our_products_services/csip/overview
[57] SET (Jan 2025). SET News: SET and partners launch SET Carbon to advance Thailand's carbon data management. https://www.set.or.th/en/market/news-and-alert/newsdetails?id=93190200&symbol=SET

2.3.5 Monitoring, Reporting and Verification (MRV) Tools

Digital tools that automate and enhance the collection of sustainability-related data, compile this information into standardised reports, and facilitate validation by an independent third party

Purpose

- Track, measure, and demonstrate performance against key sustainability metrics (e.g. GHG emissions, SDGs)
- Support portfolio alignment with sustainability objectives through ongoing monitoring
- Enhance transparency and credibility via detailed reporting and verification processes
- Enable impact assessment and integration of third-party validation
- Adoption is growing, though still uneven across Southeast Asian financial institutions' reporting practices

Application in Practice

- Used to measure and monitor emissions (Scope 1, 2, and 3) and sustainability performance over time
- Support preparation of performance reports for internal tracking and external disclosure
- Enable impact tracking at project, portfolio, and community levels
- Integrate data collection tools (e.g. mobile/web platforms) for real-time, on-the-ground reporting
- Facilitate verification processes to strengthen data credibility and accountability
- Survey and interview responses indicate integration is generally present, but adoption remains uneven across Southeast Asian banks, leaving room for broader use to strengthen sustainability outcomes

Case Study Examples

Geographic Coverage	Case Study Examples
Global	**SME Climate Hub Suite[58]:** ▪ Free digital platform offering carbon calculators, emissions reporting frameworks and educational modules to help SMEs measure, reduce and disclose emissions ▪ Connects businesses to financing opportunities and incentives, and aligns emissions calculations with the GHG Protocol ▪ 9,629 businesses have committed to halve emissions by 2030, reach net zero by 2050 and report progress annually through the platform
Global	**Business Emissions Evaluator (BEE)[59]:** ▪ Platform developed by The Change Climate Project enabling businesses to estimate, visualise and reduce emissions across Scope 1, 2 and 3 ▪ Uses spend-based and activity-based data for rapid emissions calculation, highlights emissions hotspots and supports scenario planning ▪ Integrates with lifecycle assessments and third-party data for enhanced accuracy under the GHG Protocol
Global	**Ecovisea[60]:** ▪ Free, web-based GHG emissions calculator tailored to Southeast Asian businesses and enabling them to measure, manage and reduce their carbon footprint across Scope 1, 2 and 3 emissions ▪ Aligns with the GHG Protocol and offers secure access controls and visualisation tools to support sustainability and decarbonisation planning

[58] SME Climate Hub. (Nov, 2021). The SME Climate Hub launches new suite of tools, enables small business climate action. https://smeclimatehub.org/sme-climate-action-tools/
[59] Change Climate project. (n.d.). The BEE: Accessible, Affordable Carbon Management. https://www.changeclimate.org/bee
[60] Ecovisea. (n.d.). https://ecovisea.com/

Geographic Coverage	Case Study Examples
Global	**Dimagi[61]:** ▪ Provides digital solutions (e.g. CommCare platform) that enable organisations to design mobile and web applications for structured data collection and outcome monitoring ▪ Supports frontline workers with job aids and decision support allowing institutions to capture actionable data and link that data into performance reporting ▪ Enables impact data to be collected from communities in remote ASEAN regions, supporting a Just Transition

The examples above are available at low or no cost and are based on the GHG Protocol, indicating that the principal constraint on MRV relates less to methodology than to the cost and capability of data collection, particularly for SMEs and projects in remote locations. Ecovisea and the SME Climate Hub address cost constraints, BEE accommodates spend-based proxies where activity data is unavailable, and Dimagi supports field-level data collection. Uneven adoption across Southeast Asia therefore reflects capability gaps rather than a shortage of available tools.

2.4 Key Considerations in Applying Tools and Guidelines Together

The practical application of sustainable finance tools and guidelines will vary across ASEAN markets depending on the regulatory environment, market maturity, data availability, institutional capacity and nature of the transaction. Key considerations include:

Applicable regulatory context and intended use when selecting frameworks – Financial institutions should first consider applicable domestic regulatory requirements and national frameworks, where these exist. ASEAN frameworks can provide a common regional reference point, particularly for cross-border activities or where greater regional comparability is sought. International frameworks may be considered where required by investors, or where access to international capital markets is desired. These frameworks can therefore be complementary rather than mutually exclusive

[61] Dimagi. (n.d.). https://dimagi.com/

Illustrative application of different frameworks

User Archetype	Framework Considerations
Domestic FI financing primarily within one ASEAN market	National requirements/frameworks first, supplemented by ASEAN frameworks to support regional alignment
Regional FI operating across multiple ASEAN markets	Consider ASEAN frameworks as a common regional reference, alongside applicable national requirements in each jurisdiction
FI accessing international capital markets, or engaging with international investors	Use national, ASEAN and relevant international frameworks where appropriate, to meet national requirements while also supporting regional and international expectations

Data availability and technical capacity influence the depth of application – data availability and ESG maturity vary across ASEAN jurisdictions and financial institutions, influencing how sustainable finance tools and guidelines can be applied. Institutions with more limited data and technical capacity may rely on qualitative assessments, while more advanced institutions may undertake granular, quantitative analysis and integrate sustainability data into financing and portfolio management

Illustrative application of different capabilities

Capability	Illustrative Application
Limited sustainability data and technical capability	Use available project data, qualitative screening and simpler tools/guidelines (e.g. ASEAN Taxonomy Foundation Framework) to assess activities and determine sustainability considerations
More consistent sustainability data and technical capability	Use risk assessment tools and emissions calculators to quantify select indicators; apply taxonomy criteria and incorporate findings into monitoring and reporting
Granular data and established technical expertise	Use integrated ESG data, climate risk and MRV tools to conduct detailed assessments; apply technical screening criteria and monitor sustainability performance

Tools and guidelines serve different implementation needs – sustainable finance tools and guidelines are designed for different purposes and levels of complexity within sustainable finance transactions. Their application can reflect factors such as type of instrument, transaction objectives, size and sustainability maturity of the organisation and data availability. For example, an SME may rely on simplified frameworks and disclosure guidance, while larger and more mature organisations may apply more detailed, technical criteria and specialised tools.

Stage	Example SME Application
1 Identify eligible projects and expected impacts	FI obtains available information from the SME on the proposed activity and its environmental impacts, using readily available data where appropriate
2 Project evaluation and selection	FI may apply the ASEAN Taxonomy Foundation Framework to qualitatively assess the SME's activities against environmental objectives and criteria, and classify it as green, amber or red
3 Structuring the sustainable finance instrument	Based on the assessment, the FI determines an appropriate financing product and associated sustainability requirements, proportionate to the SME's circumstances
4 Execute transactions and manage proceeds	FI uses its existing transaction and monitoring processes to execute the financing and track the financed activity
5 Allocation and impact reporting	The SME can use the ASEAN Simplified ESG Disclosure Guide (ASEDG) to identify and report relevant ESG information to the FI
6 Monitor and verify performance	FI monitors relevant indicators using information provided by the SME; indicators and level of monitoring can reflect the SME's sustainability maturity and nature of the financed activity

Illustrative example of an SME application[62][63]

[62] ASEAN Taxonomy Board. (Dec, 2024). ASEAN Taxonomy for Sustainable Finance: Supplementary Document: Foundation Framework Use Cases. https://asean.org/book/asean-taxonomy-for-sustainable-finance-supplementary-document-foundation-framework-use-cases/

[63] ASEAN Capital Markets Forum. (Apr, 2025). ASEAN Simplified ESG Disclosure Guide (ASEDG) for SMEs in Supply Chains. https://www.theacmf.org/sustainable-finance/publications/asean-simplified-esg-disclosure-guide-asedg-for-smes-in-supply-chains

3 Sustainable Finance Instruments

This section provides a practical overview of the main sustainable finance instruments across the ASEAN market. Sustainable finance instruments channel capital into environmental and/or social outcomes, through a range of structures, including use-of-proceeds, performance-based and other sustainability-linked or sustainability-focused approaches. Bonds and sukuk are presented together where they share the same sustainability objective or performance-based approach, with sukuk additionally structured in accordance with Shariah principles. Where relevant, one or two case studies are presented for each instrument to demonstrate its practical application across different structures and contexts. Appendix C lists sustainable finance instruments with tagged case study examples for reference. Any references to commercial providers in case studies are for illustrative purposes only and do not constitute endorsement by ACMF, the UK Government or other delivery partners.

Instruments	Overview
Green Bonds	Use-of-proceeds debt instruments where funds are exclusively allocated to eligible green projects in line with recognised frameworks (e.g. ASEAN Green Bond Standards, ICMA Green Bond Principles). Green sukuk apply to the same green use-of-proceeds approach while being structured in accordance with Shariah principles (e.g. asset-based, no interest, non-halal activities)
Sustainability Bonds	Use-of-proceeds instruments where funds are exclusively allocated to a combination of eligible green and social projects, in line with recognised frameworks (e.g. ASEAN Sustainability Bond Standards, ICMA Sustainability Bond Guidelines). Sustainability sukuk apply to the same sustainability use-of-proceeds approach, while being structured in accordance with Shariah principles
Sustainability-Linked Bonds (SLBs)	Performance-based bonds where financial and/or structural characteristics vary depending on achievement of predefined Sustainability Performance Targets (SPTs). Sustainability-linked sukuk apply the same performance-based approach while incorporating Shariah-compliant structuring
Sustainability-related Equity Instruments	Equity investments (e.g. stocks, funds) in companies that prioritise ESG factors, often defined by inclusion in sustainability-related indices or funds
Blue Bonds	Use-of-proceeds bonds where funds are exclusively allocated to ocean and marine-related sustainability projects, in line with recognised principles (e.g. ICMA). Similar financing objectives can also be supported through Shariah-compliant structures.
Sustainability-Linked Loans (SLLs)	Loan instruments where financial terms (e.g. pricing) are linked to the borrower's achievement of predefined Sustainability Performance Targets (SPTs)
Green Loans	Loan instruments where proceeds are exclusively allocated to eligible green projects, in line with recognised frameworks (e.g. Green Loan Principles)
Green and Sustainability Deposits	Interest-bearing deposit instruments where funds are allocated to environmental and social projects by the bank
Green Mortgages	Mortgage loans offering preferential terms for properties that meet recognised environmental standards, typically linked to certified green buildings
Transition Finance	Financial support that enables the decarbonisation of economic activities, particularly for high-emitting sectors transitioning toward low-carbon pathways
Carbon Credits	Tradeable instruments representing a unit of greenhouse gas (GHG) emissions reduced or removed, issued by certified carbon-crediting programmes

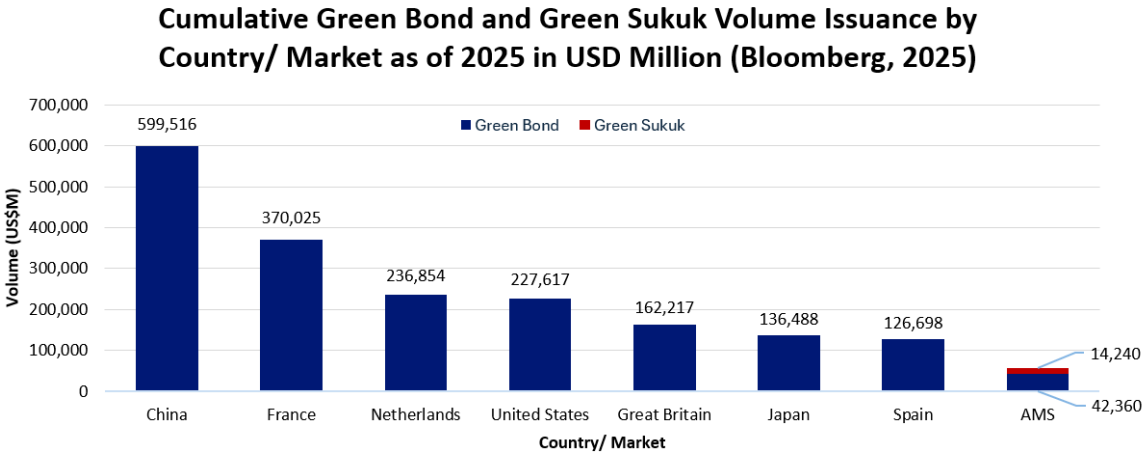
3.1 Green Bonds and Sukuk

Purpose

- Debt instruments where proceeds are exclusively used for eligible green projects (e.g., renewable energy, transport)
- Channels capital into large-scale environmental investments, and supports sectoral decarbonisation
- Green sukuk serves the same green financing purpose while incorporating Shariah-compliant structuring, broadening access to Islamic finance markets

Application in Practice

- Issuer establishes a framework covering eligible green projects, selection, management of proceeds and reporting
- Issuer identifies eligible projects in accordance with the ASEAN Green Bond Standards and may reference the ASEAN Taxonomy, relevant national taxonomies, or tools, to support the assessment of underlying green activities
- Issuer additionally obtains, where appropriate, a pre-issuance SPO or other external review. Following issuance, the issuer reports on the allocation of proceeds and environmental impact of projects
- For green sukuk, the financing additionally incorporates Shariah compliance confirmation



Note: The figures represent cumulative Green Bond issuance volumes by country, based on Bloomberg data for instruments classified under the "Green Bond" label, as of 2025. The AMS figure reflects available data only, as Bloomberg did not record issuances for all AMS.

Market Overview *(based on Bloomberg data):*

- Global issuance totals approximately USD 4.0 trillion, representing a compound annual growth rate (CAGR) of 43.8% since 2007
- ASEAN issuance totals approximately USD 56.6 billion, or 1.41% of global total, with a CAGR of 30.8% since 2010
- Malaysia and Indonesia were among the earliest issuers of green sukuk, with ~USD 14.2 billion issued as of 2025
- Key sectors include energy, transport and real estate sectors
- Over >90% of ASEAN deals have SPOs
- ASEAN deals have an average tenor of 9 years

Case Study: BIDV – ~USD 104 million Green Bond (Viet Nam)	Case Study: UiTM Solar Power – RM240M Green SRI Sukuk (Malaysia)
▪ Marks the first senior, unsecured, unguaranteed issuance in Viet Nam	▪ Finances a 50 MW solar photovoltaic project ▪ Aligns with ASEAN, ICMA, and national frameworks

Case Study: BIDV – ~USD 104 million Green Bond (Viet Nam)	Case Study: UiTM Solar Power – RM240M Green SRI Sukuk (Malaysia)
▪ Allocates proceeds to energy efficiency, transport, water, agriculture and waste projects ▪ Benefits from World Bank support, which strengthened reporting and monitoring systems ▪ **Key observation:** A credible, well-structured framework supports scaling of low-carbon infrastructure financing while reducing greenwashing risks	▪ Holds ratings including a "Gold" rating (MARC) and "Dark Green" (CICERO) ▪ **Key observation:** Green sukuk can broaden the investor base by combining Islamic finance structures with climate financing, supporting the mobilisation of capital in Shariah-compliant markets across ASEAN

3.2 Sustainability Bonds and Sukuk

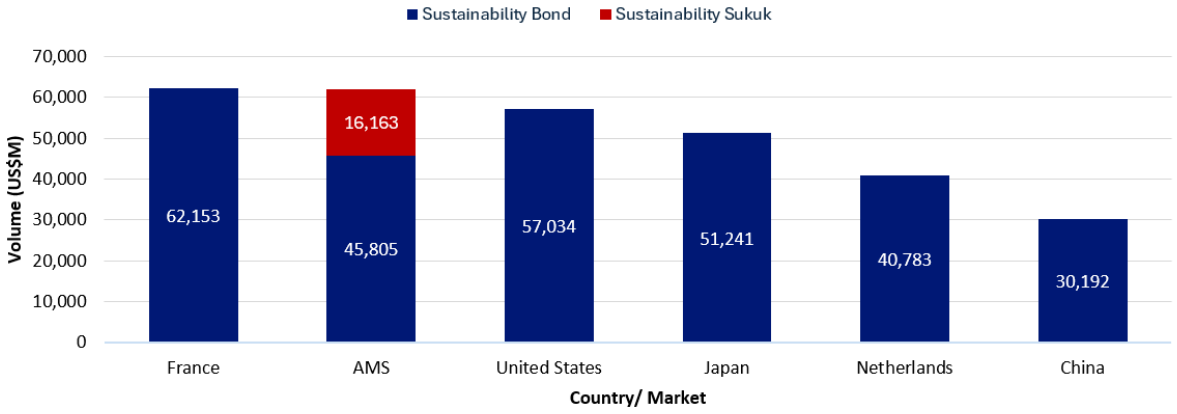
Purpose

- Bonds where proceeds fund both green and social projects; provides broader eligible use by supporting combined environmental and social outcomes (e.g. energy and healthcare, housing)
- Sustainability sukuk serves the same purpose, broadening access to Islamic finance markets

Application in Practice

- Issuer establishes a sustainability bond framework covering eligible green and social project categories, including relevant populations, project selection, management of proceeds, and reporting
- Issuer identifies eligible green and social projects in accordance with the ASEAN Sustainability Bond Standards and may reference the ASEAN Taxonomy or relevant national taxonomies / frameworks (e.g. Malaysia's SRI Sukuk Framework) to support the classification of underlying green and social activities
- Issuer additionally obtains, where appropriate, a pre-issuance SPO. Following issuance, the issuer reports on the allocation of proceeds and the environmental and social impacts of projects
- For sustainability sukuk, the financing additionally incorporates Shariah compliance confirmation

Cumulative Sustainability Bond and Sustainability Sukuk Volume Issuance by Country/ Market as of 2025 in USD Million (Bloomberg, 2025)



Note: The figures represent cumulative Sustainability Bond issuance volumes by country, based on Bloomberg data for instruments classified under the "Sustainability Bond" label, as of 2025. The AMS figure reflects available data only, as Bloomberg did not record issuances for all AMS.

Market Overview *(based on Bloomberg data):*

- Global issuance totals approximately USD 1.49 trillion, representing a CAGR of 24.6% since 1995

- ASEAN issuance totals approximately USD 61.9 billion, or 4.1% of the global total, with a CAGR of 95% since 2018
- In ASEAN, Malaysia and Indonesia have a collective issuance of ~USD 16 billion in sustainability sukuk issuances
- Key sectors include energy, essential services and transport sectors
- ~94% of ASEAN deals have SPOs
- ASEAN deals have an average tenor of 9 years

Case Study: Indonesia Infrastructure Finance (IIF) – USD150M sustainability bond (Indonesia)	Case Study: RM3 billion Sukuk Wakalah Programmes and Maiden Issuance of Sustainability Sukuk (Malaysia)
▪ Funds renewable energy, water and social infrastructure (healthcare, telecoms) ▪ Reports impacts included clean water for 159,000 households and emissions reduction of ~190,724tCO2e ▪ The issuance was 2.6 times oversubscribed and was recognised as Sustainability Bond of the Year ▪ **Key observation:** The structure supports green and social outcomes, with the SPO supporting the credibility of the issuance	▪ Marks the first DFI in Malaysia to issue a sustainability sukuk to meet its funding and working capital requirement ▪ Channels proceed to projects that support 11 UN SDGs ▪ Covers Green and social project categories are recognised by various global and ACMF guidance ▪ **Key observation:** The issuance shows how capital can be mobilised while broadening access to Shariah-compliant investors

3.3 Sustainability-Linked Bonds (SLBs) and Sukuk (SLS)

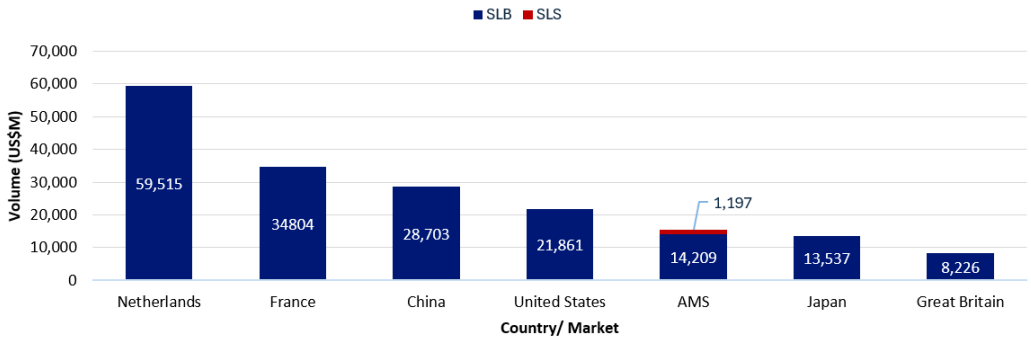
Purpose

- Bonds where financial terms (e.g. coupon) are linked to Sustainability Performance Targets (SPTs)
- Incentivises issuers to achieve predefined ESG outcomes
- Embeds accountability into financing through performance-based structures
- Sustainability-linked sukuk (SLS) serves the same purpose through Shariah-compliant structures

Application in Practice

- Issuer selects material KPIs and sets SPTs against a baseline and relevant benchmarks
- Issuer structures the bond in accordance with the ASEAN Sustainability-Linked Bond Standards (ICMA SLBP plus an ASEAN nexus requirement)
- Issuer obtains a pre-issuance external review assessing KPI relevance and SPT ambition, and seeks independent verification of SPT performance at least annually and at relevant trigger dates
- Issuer additionally incorporates applicable Shariah requirements for SLS

Cumulative SLB and SLS Volume Issuance by Country/ Market as of 2025 in USD Million (Bloomberg, 2025)



Note: The figures represent cumulative SLB issuance volumes by country, based on Bloomberg data for instruments classified under the "Sustainability-Linked Bond" label, as of 2025. The AMS figure reflects available data only, as Bloomberg did not record issuances for all AMS.

Market Overview *(based on Bloomberg data):*

- Global issuance totals approximately USD 357 billion, representing a 33.15% CAGR since 2019
- ASEAN issuance totals USD 15.4 billion, or 4.3% of the global total, with a 57.9% CAGR since 2015
- In ASEAN, SLS issuances for Indonesia remain exploratory, while Malaysia has recorded ~USD 1.2 billion as of 2025
- Issuers are diversified, including corporates and sovereigns
- ~63% of deals in ASEAN have SPOs
- ASEAN deals have an average tenor of 6.6 years

Case Study: Paramount's Sustainability-Linked Financing Framework (Malaysia)	Case Study: Thailand PDMO – USD 870 million sovereign SLB (Thailand)
▪ Sets 2030 targets of 45% or more green-certified floor area, 55% or more health-and-safety-certified sites and a 25% reduction in Scope 1 & 2 emissions ▪ Aligns with SC Malaysia's SRI-linked Sukuk Framework and ICMA's SLB Principles ▪ **Key observation:** The framework links financing outcomes directly to measurable sustainability performance	▪ Links its coupon to GHG reduction and EV adoption targets ▪ Includes coupon step-up/down (2.5 bps) ▪ Draws on GGGI support for technical assistance, reporting and verification ▪ Demonstrates a shift from use-of-proceeds to performance-based instruments ▪ **Key observation**: The bond embeds performance-based accountability, backed by robust KPIs/SPTs and supported by technical assistance and guarantee

3.4 Transition Finance

Purpose

- Financing that enables decarbonisation of high-emitting sectors and activities
- Supports transition from carbon-intensive operations to low-carbon pathways
- Supports the achievement of Net Zero and climate targets

Application in Practice

- Borrower or issuer prepares a transition plan setting out its decarbonisation pathway, milestones and capital expenditure
- Borrower or issuer structures the plan in accordance with the ASEAN Transition Finance Guidance (ATFG), with climate ambition assessed against a science-based pathway and the robustness of its ability to deliver
- Borrower or issuer obtains external verification confirming pathway credibility, including just transition impacts
- Borrower or issuer discloses progress after issuance using Scope 1, 2 and 3 MRV tools

Market Overview:

- Bloomberg does not track transition finance as a discrete label; available third-party sizing spans USD 416 billion to USD 1.52 trillion depending on scope, and generally includes green bonds and loans counted separately above (Data Intelo, Growth Market Report)
- Asia Pacific is rapidly emerging as the key growth engine for the Energy Transition Finance market, with a market size of approximately USD 410 billion in 2025, representing around 27.0% of the global market (Growth Market Report)
- ASEAN sustainable finance was flat in 2025, with ESG bonds at USD 20.3 billion and ESG loans at USD 43 billion (LSEG), but transition-labelled issuance is not separately reported (EDB Singapore)
- New guidance released in 2025 (LMA transition loans, ICMA transition bonds, SSFA guidance on the Singapore-Asia Taxonomy) is expected to support growth in 2026 (EDB Singapore)
- Key sectors include energy and transport
- ASEAN Transition Finance Guidance provides a regional framework for assessing and demonstrating credible transition

Case Study: ADB – USD 500M Transition Loan (Philippines)	Key observations
▪ Supports coal phase-out and renewable energy expansion ▪ Targets retiring 900 MW of coal and adding 1,500 MW of renewables ▪ Includes just transition measures (worker reskilling, livelihoods) ▪ Aims to reduce ~33 million tCO_2 by 2030	▪ Plays a key role in helping hard-to-abate sectors transition to low-carbon models ▪ Integrates climate and social (just transition) objectives ▪ Relies on blended finance and technical assistance to de-risk and scale adoption ▪ Depends on clear standards, capacity and credibility frameworks for market growth ▪ Shows strong potential given regional climate urgency and investment needs

3.5 Carbon Credits

Purpose

- Tradeable instruments representing 1 unit of GHG emissions reduced or removed
- Enables organisations to offset emissions and support climate projects
- Channels financing into sustainability initiatives (e.g. nature-based, energy projects)

Application in Practice

- Developer designs the activity in accordance with a recognised methodology, establishing the baseline and additionality
- Developer obtains credit issuance under a programme meeting the ICVCM Core Carbon Principles, with the ACMF VCM Development Plan and applicable national rules, such as Indonesia's OJK 14/2023, setting regional and domestic eligibility

Market Overview:

- Global issuance totals approximately USD approximately USD 479 billion, with a CAGR of 39%; ASEAN represents ~5% of global projects (Grand View Research)
- Carbon pricing is expanding across ASEAN: Indonesia's power sector ETS covered 563 installations by 2025, Viet Nam launched a pilot ETS in August 2025 covering 110 facilities in power, steel and cement, Malaysia has announced a carbon tax on iron, steel and energy for 2026, and the Philippines is evaluating ETS options (World Bank Carbon Pricing Dashboard)
- Indonesia leads in issuances with ~27% of ASEAN projects *(Bloomberg)*
- Key sectors include energy, manufacturing, transport and services
- ACMF's Voluntary Carbon Market Development Plan supports the development of transparent and credible voluntary carbon markets across ASEAN
- Market faces credibility concerns, driving a focus on high-quality credits
- Growth has been supported by corporate demand, climate targets, and policy development

Case Study: Nature-based Carbon Credit Tender (Singapore)	Key observations
▪ Sought 500,000+ high-quality Article 6-aligned credits ▪ Attracted SGD 1.3 billion in bids from global players ▪ Supports NDCs and allows firms to offset up to 5% of taxable emissions ▪ Quality of carbon credits is a key consideration	▪ Mobilises finance towards emissions reduction projects ▪ Shows strong growth potential in ASEAN, given climate exposure and project pipeline ▪ Relies on credibility and quality assurance for long-term viability ▪ Supports both carbon reduction and economic development outcomes

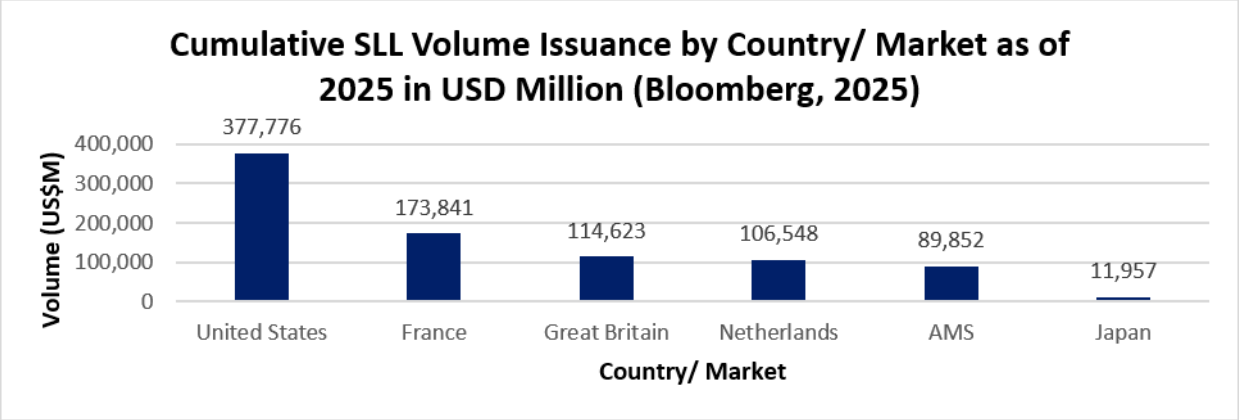
3.6 Sustainability-Linked Loans (SLLs)

Purpose

- Loans whose pricing is linked to Sustainability Performance Targets (SPTs), incentivising ESG improvements
- Provides flexible, general-purpose financing (not restricted to specific green projects)
- Supports uses such as decarbonisation, energy efficiency and Net Zero alignment
- Embeds sustainability into core financing decisions through margin step-up/down mechanisms

Application in Practice

- Borrower and lender agree KPIs and SPTs that are material and measurable over the tenor
- Borrower and lender structure the loan under the Sustainability-Linked Loan Principles; no ASEAN standard exists, though ASEAN SLB Standards are a useful reference for calibration
- Borrower and lender verify SPT performance annually, triggering the margin step-up or step-down; ASEAN SPO coverage is around 60%, reflecting bilateral loan documentation



Note: The figures represent cumulative SLL issuance volumes by country, based on Bloomberg data for instruments classified under the "Sustainability-Linked Loan" label, as of 2025. The AMS figure reflects available data only, as Bloomberg did not record issuances for all AMS.

Market Overview *(based on Bloomberg data):*

- Global issuance totals approximately USD 1.9 trillion, representing a CAGR of 15.24% since 2017
- ASEAN issuance totals approximately USD 90 billion, with a CAGR of 28.8% since 2017
- Singapore represents ~80% of regional issuance amongst AMS
- Key sectors include real estate and energy
- ASEAN deals have an average tenor of 7 years

Case Study: IFC & OCBC Indonesia – USD53M SLL (PT Nirvana Wastu Pratama)	Key observations
▪ Supports energy efficiency and green certification (EDGE) ▪ Covers 11 certified assets, with 6 more in the pipeline ▪ Links financing to measurable sustainability outcomes	▪ Offers more flexibility than green loans/bonds and suits mixed portfolios ▪ Enables commercially viable decarbonisation (esp. real estate) ▪ Gains credibility and market uptake from MDB support ▪ Benefits from de-risking mechanisms that improve bankability and support adoption at scale

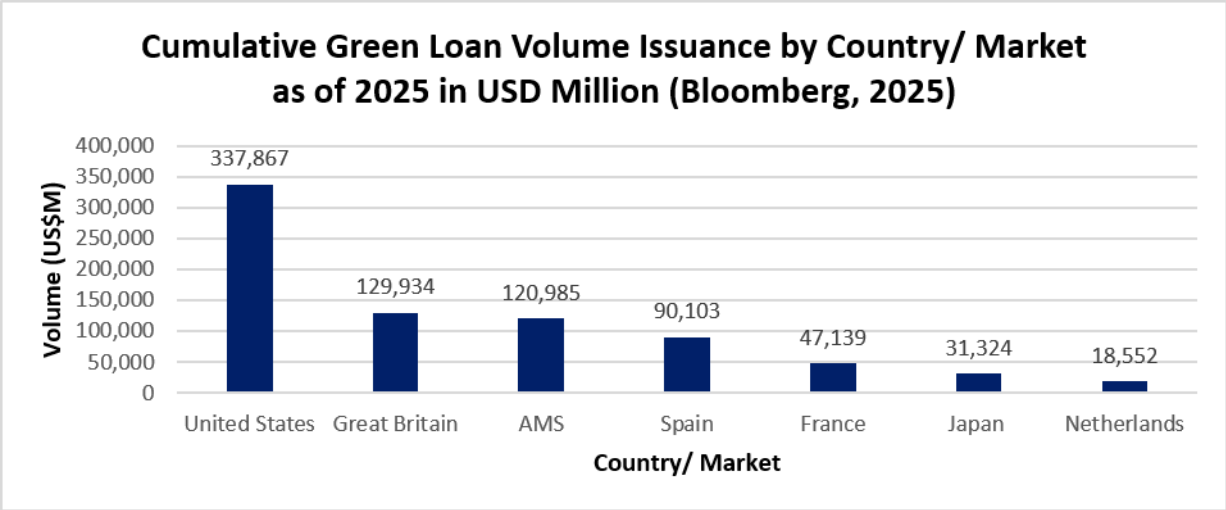
3.7 Green Loans

Purpose

- Loans where proceeds are exclusively used for eligible green projects
- Supports low-carbon infrastructure and environmental investments
- Finances renewable energy, real estate, and transport projects

Application in Practice

- Borrower identifies the eligible green project and agrees the use-of-proceeds definition with the lender
- Borrower structures the loan under the Green Loan Principles; no ASEAN standard exists, though the ASEAN Green Bond Standards are a useful reference for calibration
- Borrower obtains an SPO or project certification
- Borrower tracks allocation in a dedicated ledger after drawdown and reports impact



Note: The figures represent cumulative Green Loan issuance volumes by country, based on Bloomberg data for instruments classified under the "Green Loan" label, as of 2025. The AMS figure reflects available data only, as Bloomberg did not record issuances for all AMS.

Market Overview *(based on Bloomberg data):*

- Global issuance totals approximately USD 1.4 trillion, representing a CAGR of 24% since 2017
- ASEAN issuance totals approximately USD 120 billion, with a CAGR of 33.25% since 2017
- Amongst AMS, Singapore represents ~66% of issuances, with Indonesia, Thailand and Viet Nam forming secondary markets
- Key sectors include energy, real estate and transport
- ASEAN deals have an average tenor of 10 years

Case Study: AirTrunk — USD 1.75bn green loan (Singapore)	Key observations
▪ Secured Singapore's largest green loan for a data centre at ~USD1.75 billion ▪ Includes an option to convert the green loan into an SLL ▪ Links the financing to certified environmental standards, including a BCA Green Mark Platinum rating and a 1.20 PUE	▪ Allows financing to evolve with performance maturity through an SLL conversion option ▪ Sets measurable thresholds through certifications (Green Mark Platinum, 1.20 PUE), helping curb greenwashing ▪ Anchors eligibility in taxonomy alignment where no ASEAN loan standard exists ▪ Shows green loans scaling into energy-intensive digital infrastructure

3.8 Blue Bonds

Purpose

- Bonds where proceeds fund marine and ocean-related sustainability projects
- Supports the blue economy (e.g. fisheries, marine conservation, ocean energy)
- Promotes the sustainable use of ocean and coastal resources

Application in Practice

- Issuer establishes a framework defining eligible marine and water-related categories
- Issuer structures the bond in accordance with the ICMA and UNEP FI blue economy guidance and IFC Guidelines for Blue Finance; blue bonds may also be issued under the ASEAN Green Bond Standards, subject to applicable requirements
- Issuer obtains external certification, where generally applicable
- Issuer reports on allocation and impact after issuance, as for green bonds, using marine-specific metrics such as wastewater treated

Market Overview:

- Global issuance totals approximately USD 2.4 billion, with projected growth of 22.1% CAGR; Asia Pacific issuance totals USD 920 million, with projected growth of 24.5% CAGR to 2033 (Growth Market Reports)
- Adoption is emerging in ASEAN, with Thailand and the Philippines as early movers
- Key sectors include marine conservation, fisheries, ocean energy and waste management
- Market remains small but is expanding rapidly
- Growth has been supported by blue economy demand, policy support, and a funding gap for marine ecosystems
- Blue sukuk remains nascent in ASEAN: Malaysia issued the world's first labelled blue sukuk issuance in July 2026 through Air Selangor's RM200 million issuance, while Indonesia has explored blue sukuk structures but has yet to implement a labelled issuance (CIMB Newsroom)

Case Study: Air Selangor – RM200 million Blue Sukuk Issuance (Malaysia)	**Case Study: EXIM – THB3B Blue Bond (Thailand, 2024)**
▪ Carries a 15-year tenor, with proceeds directed to the sustainable management, restoration and efficient utilisation of water resources and water-related ecosystems ▪ Follows Air Selangor's Sustainable Development Sukuk Framework, which aligns with... ▪ **Key observation:** The issuance establishes an important precedent for blue-labelled financing instruments, demonstrating how sustainable financing can strengthen water infrastructure	▪ Funds marine conservation, aquaculture, and waste management ▪ Carries DNV certification and an AAA rating from Fitch) ▪ Aligns with national Net Zero and sustainability agenda ▪ Provides a pricing benchmark for the domestic market ▪ **Key observation:** Blue bonds tap the ~USD165B annual ocean-finance gap, with certification and credit guarantees key to attracting investors as the blue economy gains global traction

3.9 Sustainability-related Equity Instruments

Purpose

- Equity investments in companies that prioritise ESG factors
- Enables investors to support sustainable business models and transition pathways
- Supports inclusion in sustainability indices or ESG funds

Application in Practice

- Issuer establishes ESG disclosure against IFRS S1 and S2 or a national equivalent, sufficient to meet index or fund screening criteria
- Issuer aligns disclosure with the WFE Green Equity Principles, the international reference, as no ASEAN standard currently exists; FTSE4Good ASEAN 5 screening acts as the de facto regional test
- Index providers and ESG ratings agencies perform the assessment in place of an external review, with index constituency reviewed periodically

Market Overview:

- Global issuance totals USD 15.06 trillion for 2026, with projected growth of 12.34% by 2031 (Mordor Intelligence)
- ASEAN adoption is growing through ESG indices and dedicated funds
- Key sectors include technology, energy and finance
- Performance indicates that ESG indices (e.g. ASEAN) outperform regional benchmarks
- Growth has been supported by investor demand, ESG standards, and climate-focused capital allocation

Case Study: Keppel Corporation (Singapore)	Key observations
▪ Features in a low-carbon index (SGX iEdge) with carbon intensity screening ▪ Invests in hydrogen-ready power, sustainable urban renewal and green data centres ▪ Has invested in the Keppel Sakra Cogen Plant, which blends up to 30% hydrogen with natural gas, and a cooling system that delivers 30–40% energy savings	▪ Shows how corporates can integrate transition pathways across operations, as seen in investments in hydrogen-ready power ▪ Demonstrates integration of sustainability across operations and strategy

3.10 Green and Sustainability Deposits

Purpose

- Interest-bearing deposits where funds are allocated to environmental and social projects
- Enables retail and institutional participation in sustainable finance
- Channels capital into green sectors (e.g. energy) and social programmes (e.g. financial inclusion)

Application in Practice

- Bank defines the eligible asset pool that deposits are matched against, screened against the national taxonomy
- Bank references the UN Principles for Responsible Banking at the institutional level, as no ASEAN or international standard currently exists
- Bank obtains external review, where applicable, though this is uncommon and, where present, covers the bank's overall framework rather than individual products
- Bank reports allocation via its annual sustainability report after issuance, rather than at product level

Market Overview:

- Global issuance totalled approximately USD 1.34 billion in 2024, with projected growth of 20.7% CAGR from 2025 to 2033 (Growth Market Reports)
- Asia Pacific market size totalled approximately USD 270 million in 2024 (Growth Market Reports)
- Key sectors include energy, agriculture and pollution reduction (International Journal of Global Economic Light)
- Standardisation and SPO use remain limited compared to other instruments
- Market remains smaller in scale relative to bonds/loans

Case Study: Land Bank of the Philippines – GreenGrowth Deposit (Philippines)	Key observations
▪ Accepts deposits from individuals and institutions, with a low minimum deposit (~USD 837) ▪ Funds renewable energy, green tech, and social programmes ▪ Supports financial inclusion and broader public participation	▪ Expands access to sustainable finance to retail and smaller investors ▪ Supports inclusive participation alongside environmental impact ▪ Faces growth constraints from a lack of standardisation and weaker commercial incentives ▪ Requires stronger policy support, instrument development, and pipelines to scale

3.11 Green Mortgages

Purpose

- Mortgage loans offering preferential terms for certified green properties
- Incentivises energy-efficient housing and green building adoption
- Supports low-carbon real estate and residential decarbonisation

Application in Practice

- Lender defines eligibility by reference to a certification such as IFC EDGE, BCA Green Mark or GreenRE, as no ASEAN or international standard currently exists
- Certifier performs the verification function on the lender's behalf
- Lender applies preferential terms through a rate discount or fee waiver

Market Overview:

- Global issuance totalled USD 204.9 billion in 2025, with projected growth of 13.7% CAGR from 2026 to 2034 (Growth Market Reports);
- Asia Pacific issuance totals USD 31.5 billion (Infrastructure Asia)
- Key sectors include real estate (green buildings)
- Standardisation relies on recognised building certifications
- Market uptake remains relatively low compared to other instruments
- Growth has been supported by green building demand and affordability incentives

Case Study: BPI-Helios Solar Mortgage (Philippines)	Key observations
▪ Integrates solar solutions into home loans ▪ Offers fixed rates, fee waivers and a cash-flow-positive model ▪ Demonstrates affordable and accessible renewable energy adoption	▪ Enables household-level participation in sustainable finance ▪ Improves affordability and adoption through financial incentives and energy savings ▪ Offers an innovation opportunity to embed climate solutions into retail banking instruments ▪ Gains scalability and affordability from credit guarantees and public support ▪ Depends on housing demand, policy support and ecosystem maturity for market growth

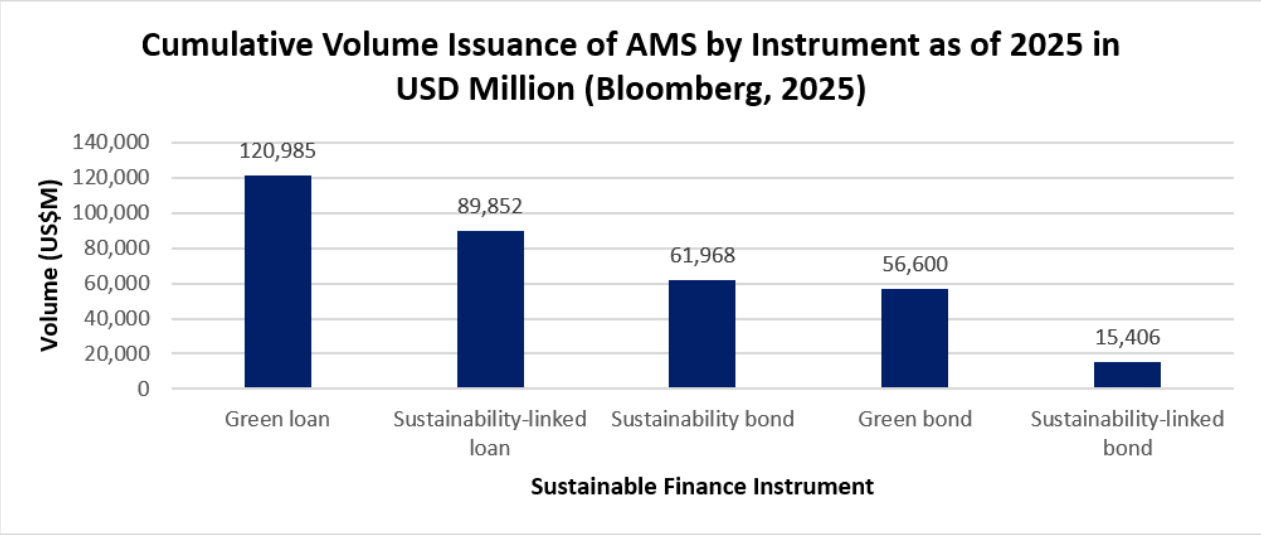
3.12 Key Considerations for Sustainable Finance Instruments

Instruments can be adapted for portfolio integration, targeted sector interventions or blended structures to meet diverse financing needs. Clear eligibility rules, robust disclosures and independent verification are needed to secure investor and stakeholder trust. Institutional readiness is also an important determinant of outcomes: issuers with established sustainability frameworks, data systems and investor relations functions are generally better positioned to access favourable pricing and a broader investor base.

4 Opportunities

4.1 Advancing Sustainable Finance and Decarbonisation in ASEAN

ASEAN has made progress in advancing sustainable finance. Bloomberg data indicates that green loans, SLLs and sustainability bonds are currently the most widely used instruments in the region.



In terms of decarbonisation, sustainable finance instruments play a key role in mobilising capital towards low carbon solutions such as energy efficient infrastructure, renewable energy and nature-based solutions (NbS), with evidence linking scaled green finance flows to significant CO2 emission reductions[64][65].

Bloomberg data provide further context on the relative scale of sustainable finance activity across AMS. As of 2025, green, sustainability and SLBs collectively represented approximately 0.5% of cumulative bond issuance recorded across AMS, while green and SLLs represented approximately 10% of cumulative loan issuance. These figures reflect cumulative historical issuance volumes and do not represent the value of instruments currently outstanding. Looking specifically at new issuance in 2025, green loans and SLLs represented approximately 16.4% and 3.9% of total loan issuance, respectively, while sustainability, green and SLBs represented approximately 0.49%, 0.34% and 0.08% of total bond issuance, respectively.

This produces variations in instrument availability and project pipelines that can impede efficient capital allocation to sustainability- and climate-aligned activities[66]. In response to these constraints, transition finance plays a key role in complementing green finance flows and credible decarbonisation pathways. Transition finance supports emission reductions through efficiency improvements, fuel switching and phased coal retirement, rather than immediate alignment with fully green activities – a role reinforced by the ASEAN Transition Finance Guidance. Additionally, regional policy efforts such as the ASEAN Taxonomy for Sustainable Finance aims to reduce fragmentation by providing a common classification framework for sustainable and transition activities to strengthen interoperability across national markets.

Stakeholder engagements have also suggested that sustainable finance upscaling in ASEAN should prioritise instruments with lower current issuance but high decarbonisation potential – this includes transition finance instruments, SLBs, blue bonds, green mortgages, green and sustainability deposits and carbon credits. While nascent or unevenly adopted, these instruments can support emission reductions where linked to credible transition plans,

[64] Elhaj (2025). Financing the green transition: how green finance and renewable energy drive CO2 mitigation; Energies, 18(21), 5563. https://www.mdpi.com/1996-1073/18/21/5563
[65] Chowiendo (2025). Green Bonds Issuance Role In Reducing Carbon Emission: Evidence from ASEAN. https://www.researchgate.net/publication/391660392_Green_Bonds_Issuance_Role_In_Reducing_Carbon_Emission_Evidence_From_ASEAN
[66] ISEAS – Yusof Ishak Institute. (2025). ASEAN's evolving climate governance framework. https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2025-88-aseans-evolving-climate-governance-framework-by-sharon-seah-melinda-martinus-and-qiu-jiahui/

robust KPIs and measurable mitigation outcomes, from industrial decarbonisation (transition finance, SLBs, green and sustainability deposits) and energy efficient buildings (green mortgages) to ocean sustainability (blue bonds) and financing of nature-based solutions (carbon credits). Scaling these instruments would require a combination of capital market development measures and enabling mechanisms, including de-risking mechanisms and clear national guidance. While some measures may be advanced through capital market regulators and market participants, others may require coordination across relevant government agencies, financial supervisory authorities and other regional bodies to mobilise public capital, establish risk-sharing mechanisms and align sustainable finance priorities with broader national and sectoral objectives.

In terms of carbon markets, evidence suggests that ASEAN carbon markets remain less developed than major international markets. Fragmented regulatory approaches and uneven access to green finance may constrain their contribution to regional decarbonisation[67]. Despite this, carbon market mechanisms have been gaining prominence within the ASEAN market, expanding avenues for green finance and increasing access for entities to purchase and retire carbon credits to offset hard-to-abate emissions. The ACMF's Voluntary Carbon Market (VCM) Plan identifies high-intensity carbon credits as a means of mobilising capital and facilitating financing for climate mitigation activities that face funding constraints under conventional debt or equity instruments. When supported by robust governance, credible standards and transparent MRV systems, carbon credits may support more efficient cross-border trading and contribute to measurable emission reductions[68].

Together, ASEAN's decarbonisation pathway would require a coordinated use of green finance for immediate emission reductions, transition finance to enable structural changes in high-emitting sectors, expanding other instruments with high decarbonisation potential, and strengthening carbon markets to address hard-to-abate emissions. These efforts would be supported by stronger governance frameworks, transparent regulation and independent verification.

4.2 Strategic Enablers for Scaling Sustainable Finance in ASEAN

Building on this, stakeholder engagements indicate that significant opportunities remain to strengthen market infrastructure, institutional capabilities and enabling environments. While ASEAN has made progress through the development of various sustainable finance instruments, tools and guidelines, scaling sustainable finance will require targeted efforts to improve data quality, enhance structuring capabilities and develop a bankable project pipeline.

Strategic Area	Enablers for Sustainable Finance	Potential Implementing Actors
ESG data and disclosure systems	Improve ESG data quality, disclosure practices and MRV systems to enable better access to reliable climate and sustainability information and support investment decision-making. **Example:** ▪ **Bursa Malaysia's Centralised Sustainability Intelligence Platform[69].** Designated the exchange's official reporting channel in March 2025 with IFRS S1 and S2 modules and a Scope 1 and 2 calculator at no cost, onboarding rose from over 130 listed companies to approximately 180 by May 2025. The provision of a free, centralised reporting channel increased participation by approximately one third within two months, and the platform now supports Malaysia's phased National Sustainability Reporting Framework (NSRF)	▪ Stock exchanges and market operators, as platform owners and reporting channels ▪ Securities regulators and central banks, in setting phased disclosure requirements ▪ National sustainability reporting bodies, in adopting and localising ISSB standards

[67] Zin Lin (2026). Bridging the energy gap in ASEAN: Scaling green finance and carbon markets for a sustainable transition. https://www.researchgate.net/publication/399486369_Bridging_the_Energy_Gap_in_ASEAN_Scaling_Green_Finance_and_Carbon_Markets_for_a_Sustainable_Transition

[68] ISEAS – Yusof Ishak Institute. (2025). ASEAN's evolving climate governance framework. https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2025-88-aseans-evolving-climate-governance-framework-by-sharon-seah-melinda-martinus-and-qiu-jiahui/

[69] TheStar. (Dec, 2025). Bursa launches platform for sustainability reporting. https://www.thestar.com.my/business/business-news/2025/12/16/bursa-launches-platform-for-sustainability-reporting#goog_rewarded

Strategic Area	Enablers for Sustainable Finance	Potential Implementing Actors
Enhance Instrument Structuring Capabilities	Build institutional expertise in structuring sustainable finance instruments, particularly transition finance, sustainability-linked instruments, carbon markets and nature-based solutions, reflecting areas where engagements with FIs identified a need for greater practical understanding. **Example:** ▪ **ADB's GSS+ Bonds Initiative[70].** Launched in 2020 and jointly implemented by the ACGF and the ASEAN+3 Asian Bond Markets Initiative, advisory support to issuers has catalysed over USD 5bn in GSS+ transactions and generated a further USD 15bn in follow-on issuances. The three-to-one ratio indicates structuring capability, once built, is retained and reused; the initiative also shaped disclosure regulations and supported local verifiers	▪ ACMF and its Sustainable Finance Working Group, as standard setters ▪ Financial institutions, as arrangers and structuring agents ▪ MDBs and DFIs, through transaction-level technical assistance ▪ Industry associations and banking institutes, in delivering training ▪ Development partners funding capability programmes
Improve Regional Alignment and Interoperability	Strengthen alignment between national taxonomies, disclosure frameworks and regional initiatives such as the ASEAN Taxonomy to reduce fragmentation, improve comparability and facilitate cross-border capital flows despite varying levels of market development. **Example:** ▪ **Convergence of national taxonomies on the ASEAN Taxonomy[71].** UNEP FI's March 2025 analysis of the five AMS with national taxonomies found increasing alignment with the ASEAN Taxonomy in environmental objectives, sector prioritisation and Do No Significant Harm treatment, strengthening as national criteria expand. Alignment is bidirectional: the 2024 revision to electricity transmission and distribution criteria was made expressly to improve interoperability with the EU and Singapore-Asia Taxonomies. Furthermore, for AMS that have not yet developed or implemented taxonomies, lessons from early adopters within ASEAN could accelerate their progress [72]	▪ ASEAN Taxonomy Board ▪ National taxonomy owners and securities regulators across the ten AMS ▪ Sustainable Finance Institute Asia, as secretariat ▪ Financial institutions applying the taxonomy across borders

[70] ADB. (April, 2026). GSS+ Bonds Initiative: Scaling Sustainable Finance in Southeast Asia. https://www.adb.org/publications/gss-bonds-initiative-southeast-asia
[71] UNEPFI. (Mar, 2025). Sustainable Finance Taxonomies in ASEAN: Towards Regional Harmonization. https://www.unepfi.org/regions/asia-pacific/webinar-sustainable-finance-taxonomies-in-asean-towards-regional-harmonization/
[72] UNEPFI (Apr, 2025). How are ASEAN Member States Approaching Sustainable Finance Taxonomies? New analysis reveals trends towards regional harmonisation. https://www.unepfi.org/regions/asia-pacific/asean-taxonomies-analysis/

Strategic Area	Enablers for Sustainable Finance	Potential Implementing Actors
Developing Bankable Project Pipelines	Expand project preparation support, technical assistance and blended finance solutions to increase green, blue and transition projects **Example:** ▪ **ASEAN Catalytic Green Finance Facility, 2025 results[73].** ACGF delivered USD 937m in linked financing across four projects in Indonesia, Cambodia and Lao PDR, supporting USD 2.1bn in total project value including USD 1.1bn of expected private capital, with 15 more in origination. Across 2020–2025 it has leveraged USD 13 of partner financing per USD 1 of AIF funds and avoided 3.2 million tons of CO2e annually, evidencing that project preparation rather than capital availability constrains pipeline.	▪ MDBs and DFIs, particularly ADB as ACGF manager ▪ ASEAN member governments, as project sponsors and ACGF owners ▪ Line ministries and state-owned enterprises originating projects ▪ Bilateral development partners providing technical assistance grants ▪ Commercial banks and institutional investors, as eventual financiers
Scaling de-risking mechanisms	Increase the use of credit guarantees, concessional capital, catalytic capital, technical assistance facilities and other de-risking mechanisms to crowd-in private investment and improve project bankability **Example**: ▪ **Cambodia Energy Efficiency Revolving Fund[74].** Established under the USD 82.5 million Energy Transition Sector Development Programme approved in 2025, the fund is capitalised with USD 12 million from the UK and USD 8m from the Green Climate Fund, plus USD 2.5m from ACliFF for a credit guarantee. Cambodia's first such vehicle, it enables local banks to lend to SMEs for energy-saving technologies and retrofits, with at least 30% expected to fund women-owned or women-led enterprises	▪ MDBs, DFIs and guarantee facilities such as CGIF ▪ Climate funds and concessional capital providers ▪ Ministries of finance, through sovereign guarantees and on lending ▪ Commercial and investment banks structuring hedges and blended facilities
Strengthening Institutional Capacity	Enhance capabilities in climate risk assessments, ESG integration, sustainable finance instrument development and reporting **Example**: ▪ **Malaysia's Joint Committee on Climate Change (JC3)[75].** Co-chaired by Bank Negara Malaysia and the Securities Commission, JC3 has driven adoption of the CCPT framework in bank lending and monitoring and issued an Application Handbook for SRI-Linked Sukuk and SLBs developed with RAM Sustainability and industry input from MIBA and ICMA. Institutional capability translated into issuance: 38 issuances totaling RM 13.3bn were raised under the SRI Sukuk Framework and/or ASEAN Standards in 2024 through collective engagement with GLCs, GLICs and corporates.	▪ Central banks and financial regulators, through supervisory expectations ▪ Banking associations ▪ MDBs and development partners funding capacity programmes ▪ Financial institutions, through internal capability building ▪ Academic institutions and research bodies

[73] ADB. (Feb, 2026). ASEAN Catalytic Green Finance Facility 2025. https://www.adb.org/documents/asean-catalytic-green-finance-facility-2025

[74] Ibid

[75] Bank Negara Malaysia. (Jan, 2025). Joint Statement by Bank Negara Malaysia and Securities Commission Malaysia on the 14th Joint Committee on Climate Change (JC3) Meeting. https://www.bnm.gov.my/-/jc3-mtg14

Strategic Area	Enablers for Sustainable Finance	Potential Implementing Actors
Support Carbon Market Development	Improve market infrastructures, transparency and access to high-quality and high-integrity carbon credits to support decarbonisation and facilitate additional financing opportunities **Example:** ▪ **IDXCarbon, Indonesia**[76]. Since launching in September 2023, registered participants grew from 16 to 100 by end-2024, with cumulative traded volume passing one million tonnes. International trading opened in January 2025 with 1.78m tCO2e authorised from five energy projects, following strengthening of the national registry, MRV, SPE-GRK certification and Article 6 corresponding adjustment; at COP30 the exchange recorded 2.75m tCO2e in transactions and commitments	▪ ACMF and securities regulators, on financial integrity in the VCM ▪ Environment ministries and national carbon registries ▪ Carbon exchanges and market operators ▪ Project developers, validators and verifiers
Promoting Inclusive and a Just Transition	Strengthen the incorporation of GEDSI, SME participation and just transition to ensure sustainable finance benefits are distributed across ASEAN economies and communities **Example** ▪ **Philippines Accelerating Coal Transition investment plan**[77]. Endorsed by the Climate Investment Funds board in June 2024, this government-led plan deploys USD 500m of concessional finance to retire up to 900 MW of coal by 2027 and add 1,500 MW of renewables by 2030, enabling co-financing exceeding USD 2.3bn. Just transition is set as an explicit target: 80% of affected employees are projected to gain access to sustainable income	▪ ASEAN sectoral bodies embedding social criteria in regional frameworks ▪ Governments and labour ministries, on reskilling and social protection ▪ MDBs and development partners financing just transition components ▪ Financial institutions, through SME and retail product design ▪ Civil society organisations and affected communities

Collectively, these areas highlight the importance of combining sustainable finance instruments with strong enabling environments, institutional capabilities and market mechanisms to scale capital mobilisation and achieve ASEAN's climate and sustainable development goals.

4.3 De-Risking Mechanisms: Enabling Mechanisms for Scaling Sustainable Finance

Many of the opportunities identified above, particularly the development of bankable project pipelines, scaling transition finance instruments and mobilising private capital, depend on effective de-risking mechanisms. These mechanisms help address real and perceived investment risks, improve project bankability and crowd-in commercial investors.

[76] IDX. (Jan, 2025). *Peresmian Perdagangan Karbon Luar Negeri.* https://www.idx.co.id/id/berita/siaran-pers/2304
[77] Climate Investment Fund. (Jun, 2024). Climate investment Funds Endorses $500M Philippines' Coal Transition Plan. https://www.cif.org/news/climate-investment-funds-endorses-500m-philippines-coal-transition-plan

De-Risking Mechanism	Definition and Example	Potential Implementing Actors
Currency Hedging	▪ **Definition:** Helps manage exposure to FX volatility when loan proceeds are denominated in foreign currencies;[78] typically provided by banks, specialised financial institutions such as The Currency Exchange Fund (TCX), and MDBs/DFIs ▪ **Example:** A collaboration between OCBC and RHB saw a USD150 million SLL paired with a cross-currency swap, allowing RHB to convert proceeds into USD while mitigating FX risk and accessing Singapore's deeper funding markets	▪ Commercial and investment banks, as swap counterparties ▪ MDBs and specialist currency facilities, where commercial hedging markets are shallow or tenors are too long ▪ Borrowing institutions, in setting hedging policy and tolerance
Credit Guarantees	▪ **Definition:** Mechanisms where a third-party (such as a dedicated guarantee facility, MDBs/DFIs, or export credit agencies) pledges to repay part or all of a loan to the lender if the borrower defaults – this reduces the lender's expected credit losses and acts a form of credit risk mitigation, thereby encouraging investment in sustainable projects[79] ▪ **Example:** A guarantee was provided by Credit Guarantee and Investment Facility (CGIF) for two tranches (~USD15 million and USD20 million) of a Cambodian green project bond, attracting insurers and international banks. The unguaranteed tranche offered higher returns, which supported broader investor participation	▪ Bilateral donors and climate funds, as grant providers ▪ MDBs and DFIs, as facility managers ▪ Specialist fund managers and asset managers ▪ Commercial banks acting as structuring advisers and arrangers ▪ Governments and project sponsors, as recipients
Technical Assistance Facility	▪ **Definition:** Grant-based mechanism that provides targeted assistance to improve the design and implementation of development projects[80] ▪ **Example:** The Tropical Landscapes Finance Facility (TLFF) combines a lending facility (with investors such as the &Green Fund and PG Impact Investments), with grant-funded technical assistance from Convergence and other donors. The TAF supports project preparation, monitoring and evaluation support which reduces risks and enhances bankability; this structure enabled TLFF to issue a USD95 million sustainability bond in 2018 to finance PT Royal Lestari Utama's sustainable natural rubber plantations on degraded lands in Indonesia	▪ Bilateral donors and climate funds, as grant providers ▪ MDBs and DFIs, as facility managers ▪ Specialist fund managers and asset managers ▪ Commercial banks acting as structuring advisers and arrangers ▪ Governments and project sponsors, as recipients

[78] StoneX. (n.d.). What is currency hedging? https://www.stonex.com/en/financial-glossary/currency-hedging/What%20is%20currency%20hedging
[79] NAP Global Network. (2024). Credit guarantees. https://napglobalnetwork.org/innovative-financing/credit-guarantees/
[80] Amundi Research Centre. (2025). A framework for structuring a blended finance fund. https://research-center.amundi.com/files/nuxeo/dl/4732bdf5-a6ad-4f73-8c3f-20828e2d65e9?inline=

De-Risking Mechanism	Definition and Example	Potential Implementing Actors
Concessional Capital	▪ **Definition:** Funds provided on below-market terms within the capital structure of a transaction to reduce the overall cost of capital for the borrower and/or provide additional downside protection to senior investors (e.g., in a first-loss position)[81]. It can be provided through various instruments, including debt, equity, grants, and mezzanine capital ▪ **Example:** The ASEAN Catalytic Green Finance Facility (ACGF) provides concessional loans to upscale green infrastructure projects in Southeast Asia. Compared to its regular loans lending terms, the concessional loan offers longer maturity of 25 years and lower interest rate, i.e. 1% for years 1 to 5, and 1.5% for years 6 to 25. These loans are offered as a blended finance instrument, as they also include a grant element	▪ MDBs and DFIs, through dedicated catalytic windows ▪ Philanthropic foundations and impact-first investors ▪ Climate and carbon funds providing forward purchase commitments ▪ Sovereign wealth funds and development finance vehicles ▪ Blended finance platforms and fund managers
Catalytic Capital	▪ **Definition:** Debt, equity, guarantees and other investments that accept disproportionate risk and/or concessionary returns relative to a conventional investment to generate positive impact and enable third-party investment that otherwise would not be possible[82] ▪ **Example:** The Carbon Market Programme (CMP) is an ADB initiative that helps developing member countries access carbon finance. Its core purpose is to bridge financing gaps for low-carbon projects by providing upfront payments for future carbon credits. CMP also offers technical assistance to strengthen policy and institutional capacity and operates a credit marketing facility to improve market access for projects. By reducing financing and regulatory barriers, CMP supports the bankability of low-carbon projects and helps to catalyse private investment	▪ MDBs and DFIs, through dedicated catalytic windows ▪ Philanthropic foundations and impact-first investors ▪ Climate and carbon funds providing forward purchase commitments ▪ Sovereign wealth funds and development finance vehicles ▪ Blended finance platforms and fund managers

To further progress in developing the ASEAN sustainable finance market, coordinated action amongst market participants and policymakers, supported by de-risking mechanisms will be required to expand investment flows and accelerate the region's climate and sustainable development ambitions.

[81] Convergence. (2024). The state of blended finance. https://ppp.worldbank.org/sites/default/files/2025-06/State%20of%20Blended%20Global%20Finance%202024_0.pdf

[82] Tideline. (2019). Catalytic capital: Unlocking more investment and impact. https://tideline.com/wp-content/uploads/2020/11/Tideline_Catalytic-Capital_Unlocking-More-Investment-and-Impact_March-2019.pdf

5 Conclusion and Way Forward

The ASEAN market has established a foundation for scaling sustainable finance through the continued development of sustainable finance tools, guidelines and instruments. However, the effectiveness of these resources will increasingly depend on the ability of financial institutions to apply them consistently and translate them into practical financing solutions that support climate mitigation, while delivering wider environmental and social co-benefits, including climate adaptation, biodiversity and social outcomes.

Stakeholder engagements undertaken in the development of this Compendium indicated that strengthening transaction-level capabilities remains a key priority, including practical expertise in sustainable finance instrument structuring, ESG risk assessments, applying sustainable finance tools and guidelines, and integrating sustainability considerations into financing, investment and risk management processes.

Alongside strengthening financial institution capabilities, scaling sustainable finance will also require a supportive enabling environment, including greater regional interoperability, stronger project pipelines and appropriate de-risking mechanisms, supported by coordinated action across relevant private and public sector stakeholders.

This Compendium seeks to support that transition by bringing together sustainable finance guidelines, tools and instruments in a single reference. By strengthening institutional capabilities and promoting greater consistency in implementation, it seeks to support more effective mobilisation of capital towards climate mitigation, alongside wider environmental and social co-benefits, and contribute to the continued development of sustainable finance across the ASEAN market.

Abbreviations and Acronyms

AAA	Highest (triple-A) credit rating
ACCEPT	All-Countries Common Equivalence Platform for Taxonomies
ACGF	ASEAN Catalytic Green Finance Facility
ACMF	ASEAN Capital Markets Forum
ADB	Asian Development Bank
ADRFI	ASEAN Disaster Risk Financing and Insurance
AFOLU	Agriculture, Forestry and Other Land Use
AI	Artificial Intelligence
AMS	ASEAN Member State(s)
APAEC	ASEAN Plan of Action for Energy Cooperation
APLMA	Asia Pacific Loan Market Association
ASEAN	Association of Southeast Asian Nations
ASEDG	ASEAN Simplified ESG Disclosure Guide
BAU	Business-as-Usual
BCX	Bursa Carbon Exchange
BEE	Business Emissions Evaluator (emissions-estimation platform)
BIDV	Bank for Investment and Development of Vietnam
B-INTACT	Biodiversity Integrated Assessment and Computation Tool
BPI	Bank of the Philippine Islands
bps	Basis points
BRIDGE	Building Resilient Investments for a Diverse Green Economy
CAGR	Compound Annual Growth Rate
CBI	Climate Bonds Initiative
CCP	Core Carbon Principles (of the ICVCM)
CCPT	Climate Change and Principle-based Taxonomy (Malaysia)
CGIF	Credit Guarantee and Investment Facility
CICERO	Centre for International Climate Research, Oslo (provider of "Shades of Green" reviews)
CIX	Climate Impact X
CMP	Carbon Market Program
COVID-19	Coronavirus Disease 2019
CSI	(National) Centralised Sustainability Intelligence
DBS	DBS Bank (Development Bank of Singapore)
DEI	Diversity, Equity and Inclusion

DETS	Domestic Emissions Trading Scheme
DNV	Global assurance and certification provider (formerly Det Norske Veritas)
EDB	Economic Development Board (Singapore)
ECs	Essential Criteria
EDGE	Excellence in Design for Greater Efficiencies (IFC green-building certification)
EO	Environmental Objective
ESG	Environmental, Social and Governance
ETS	Emissions Trading Scheme
EU	European Union
EV	Electric Vehicle
EX-ACT	EX-Ante Carbon-balance Tool (FAO)
EXIM	Export-Import Bank
FAO	Food and Agriculture Organisation (of the UN)
FI	Financial Institution
FSRSC	Financial and Sustainability Reporting Standards Council (Philippines)
FX	Foreign Exchange
GBS	Green Bond Standards
GFW	Global Forest Watch
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas
Gprnt	Singapore's regulator-led ESG disclosure/data platform ("Greenprint")
GSS / GSS+	Green, Social and Sustainability (+ Sustainability-Linked) bonds
GTF	(ASEAN-UK) Green Transition Fund
ICC	International Carbon Credits (Singapore)
ICMA	International Capital Market Association
ICVCM	Integrity Council for the Voluntary Carbon Market
IDX	Indonesia Stock Exchange
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
IIF	Indonesia Infrastructure Finance
ISE	(ASEAN) Interconnected Sustainability Ecosystem
ISSB	International Sustainability Standards Board
JC3	Joint Committee on Climate Change (Malaysia)
KPI(s)	Key Performance Indicator(s)
LMA	Loan Market Association
LSEG	London Stock Exchange Group

LSTA	Loan Syndications and Trading Association
LT-LEDS	Long-Term Low-Emissions Development Strategy
MARC	Malaysian Rating Corporation
MAS	Monetary Authority of Singapore
MDB	Multilateral Development Bank
MEASUR	Manufacturing Energy Assessment Software for Utility Reduction
MRA	Monitoring, Reporting & Assurance
MRV	Monitoring, Reporting and Verification
MW	Megawatt
NCS	Natural Climate Solutions
NDC(s)	Nationally Determined Contribution(s)
NGFS	Network for Greening the Financial System
OCBC	Oversea-Chinese Banking Corporation
OJK	Otoritas Jasa Keuangan (Indonesia Financial Services Authority)
PDMO	Public Debt Management Office (Thailand)
PFRS	Philippine Financial Reporting Standards
PSE	Philippine Stock Exchange
PSI	Principles for Sustainable Insurance (UNEP FI)
PSRC	Philippine Sustainability Reporting Committee
PT	Perseroan Terbatas (Indonesian limited liability company)
PUE	Power Usage Effectiveness
PV	Photovoltaic (solar)
RE	Renewable Energy
REC(s)	Renewable Energy Certificate(s)
RHB	RHB Bank (Malaysia)
RM	Malaysian Ringgit
SAFE	Single Access point For ESG (data)
SBS	Social Bond Standards
SDGs	Sustainable Development Goals
SEC	Securities and Exchange Commission (Philippines)
SET	Stock Exchange of Thailand
SGD	Singapore Dollar
SGX	Singapore Exchange
SLB(s)	Sustainability-Linked Bond(s)
SLBS	ASEAN Sustainability-Linked Bond Standards
SLL(s)	Sustainability-Linked Loan(s)

SME	Small and Medium-sized Enterprise
SPO(s)	Second Party Opinion(s)
SSFA	Singapore Sustainable Finance Association
SPT(s)	Sustainability Performance Target(s)
SRI	Sustainable and Responsible Investment
SUS	ASEAN Sustainability Bond Standards
TA	Technical Assistance
TKBI	Taksonomi untuk Keuangan Berkelanjutan Indonesia (Indonesia Taxonomy for Sustainable Finance)
TLFF	Tropical Landscapes Finance Facility
TPES	Total Primary Energy Supply
UK	United Kingdom
UK PACT	UK Partnering for Accelerated Climate Transition
UN	United Nations
UNEP FI	UN Environment Programme Finance Initiative
UOB	United Overseas Bank
UoP	Use of Proceeds
USD	United States Dollar
VCM	Voluntary Carbon Market
WWF	World Wide Fund for Nature

Glossary of Terms

Sustainable finance	Financing and investment activity that integrates environmental, social and governance considerations to support the transition to a low-carbon, resilient and inclusive economy
Use-of-proceeds bond	A debt instrument whose proceeds are ring-fenced to finance or refinance specific eligible projects. Repayment depends on the issuer's overall creditworthiness rather than project performance; green, social and sustainability bonds are all use-of-proceeds instruments
Nationally Determined Contribution (NDC)	A country's national climate pledge under the Paris Agreement, setting out its GHG emission-reduction targets and adaptation measures, updated on a five-year cycle with increasing ambition
Taxonomy	A classification system defining which economic activities qualify as environmentally sustainable (green) or transitional, giving the market a common language and reducing greenwashing (e.g., the ASEAN Taxonomy, EU Taxonomy)
Green bond	Voluntary A use-of-proceeds bond financing projects with clear environmental benefits, such as renewable energy or clean transport.
Social bond	A use-of-proceeds bond financing projects with positive social outcomes for a defined target population.
Sustainability bond	A use-of-proceeds bond financing a combination of green and social projects.
Sustainability-linked bond (SLB)	A performance-based bond whose financial terms (e.g., coupon) adjust according to whether the issuer meets predefined sustainability performance targets. Proceeds are used for general purposes, not ring-fenced.
Sustainability-linked loan (SLL)	The loan equivalent of an SLB, where pricing is tied to the borrower's achievement of sustainability performance targets.
Green loan	A loan whose proceeds are applied exclusively to eligible green projects.
Green sukuk	A Shariah-compliant bond (sukuk) whose proceeds finance eligible green projects.
Blue bond	A use-of-proceeds instrument financing ocean- and water-related projects, such as sustainable fisheries or marine conservation.
Transition finance	Financing that helps high-emitting or hard-to-abate activities credibly decarbonise toward net zero, rather than funding activities that are already green.
Key Performance Indicator (KPI)	A measurable metric (e.g., tCO_2e emissions) used to track sustainability performance; central to sustainability-linked instruments.
Sustainability Performance Target (SPT)	A predefined, time-bound level of a KPI that an issuer or borrower commits to achieve; missing it typically triggers a financial adjustment such as a coupon step-up.
Second Party Opinion (SPO)	An independent external assessment of whether a bond or loan framework aligns with recognised standards or principles, supporting credibility and reducing greenwashing risk.
External review / verification	Independent evaluation (via SPO, certification, verification or rating) of an instrument's sustainability credentials or of the issuer's performance against its targets.
Greenwashing	Conveying a misleading impression that a product, activity or entity is more environmentally sustainable than it actually is.

Voluntary Carbon Market (VCM)	A market where carbon credits are traded on a voluntary basis, outside mandatory compliance schemes, to offset or contribute to emission reductions.
Carbon credit	A tradable certificate representing one tonne of CO_2-equivalent emissions reduced, avoided or removed.
Greenhouse gas (GHG)	Gases that trap heat in the atmosphere (e.g., CO_2, methane), measured in tonnes of CO_2-equivalent (tCO_2e).
Business-as-usual (BAU)	A baseline scenario projecting emissions in the absence of new mitigation measures, against which many NDC targets are expressed.
Conditional vs. unconditional target	An unconditional NDC target is achieved using a country's own resources; a conditional target requires international finance, technology or capacity-building support.
Net zero	A state in which GHG emissions released are balanced by an equivalent amount removed from the atmosphere.
De-risking	Mechanisms (e.g., guarantees, first-loss capital, insurance) that reduce the risk of a project or investment to attract private capital.
Blended finance	The strategic use of concessional or public capital to mobilise additional private capital toward sustainable projects.
Credit enhancement / guarantee	Instruments that strengthen an issuer's credit profile (e.g., a partial guarantee), lowering financing costs and crowding in investors.
Technical assistance (TA)	Non-financial support (advisory, capacity-building) that helps issuers or borrowers prepare and implement sustainable finance transactions.
ESG	The environmental, social and governance factors used to assess the sustainability and broader impact of an entity or investment.
Materiality / double materiality	Materiality is the relevance of a sustainability issue to financial value; double materiality additionally considers the entity's own impact on people and the environment.
Sukuk	A Shariah-compliant financial certificate representing ownership in an underlying asset; the Islamic-finance equivalent of a bond.
Carbon pricing	Putting a price on GHG emissions, via a carbon tax or an emissions trading scheme, to internalise the cost of carbon.
Emissions Trading Scheme (ETS)	A cap-and-trade system that sets a ceiling on total emissions and lets covered entities trade allowances under that cap.
Transition bond / transition loan	Debt instruments financing an issuer's shift toward lower-carbon operations (especially in hard-to-abate sectors), distinct from green instruments that fund already-green activities.
Sustainability Disclosure Standards (ISSB / IFRS S1 & S2)	Global baseline standards for reporting sustainability- and climate-related financial information.
Taxonomy interoperability	The alignment or mutual recognition of different sustainability taxonomies (e.g. the Singapore-Asia Taxonomy and ASEAN Taxonomy) so instruments can qualify across jurisdictions.
Power Usage Effectiveness (PUE)	A data-centre energy-efficiency metric: total facility energy divided by the energy used by IT equipment (lower is better).

Appendix A: Catalogue of Sustainable Finance Guidelines

This Appendix provides a catalogue of sustainable finance guidelines, frameworks, standards and regulations at national, regional and global levels. For the purposes of this Compendium, "voluntary" refers to guidelines or requirements whose adoption is generally not mandated by applicable laws or regulations, while "binding" refers to requirements that are mandatory under applicable laws or regulations. Where adoption is voluntary, all applicable requirements are to be followed once the framework or guideline is adopted.

		National		Regional		Global	
Guidelines		Voluntary	Binding	Voluntary	Binding	Voluntary	Binding
Priority Regional Guidance for ACMF Stakeholders							
1	ASEAN Green Bond Standards	☐	☐	☒	☐	☐	☐
2	ASEAN Social Bond Standards (SBS)	☐	☐	☒	☐	☐	☐
3	ASEAN Sustainability Bond Standards (SUS)	☐	☐	☒	☐	☐	☐
4	ASEAN Sustainability-Linked Bond Standards (SLBS)	☐	☐	☒	☐	☐	☐
5	ASEAN Transition Finance Guidance	☐	☐	☒	☐	☐	☐
6	ACMF Voluntary Carbon Market Development Plan and ASEAN Voluntary Carbon Market Guidance	☐	☐	☒	☐	☐	☐
7	ASEAN Taxonomy for Sustainable Finance	☐	☐	☒	☐	☐	☐
8	ASEAN SDG Bond Toolkit	☐	☐	☒	☐	☐	☐
9	ASEAN Corporate Governance Scorecard v.2.0	☐	☐	☒	☐	☐	☐
10	ASEAN Simplified ESG Disclosure Guide for SMEs in Supply Chains	☐	☐	☒	☐	☐	☐

		National		Regional		Global	
11	Phase 1 White Paper on Key Principles and Methodological Approaches For the development of the mitigation co-benefit and Adaptation for Resilience (mARs) Guide in support of the ASEAN Taxonomy for Sustainable Finance	☐	☐	☒	☐	☐	☐
Indonesia-specific Guidelines							
12	Republic of Indonesia Green Bond & Green Sukuk Framework	☒	☐	☐	☐	☐	☐
13	SMF Social Funding Framework (Housing Social Bonds)	☒	☐	☐	☐	☐	☐
14	Taksonomi untuk Keuangan Berkelanjutan Indonesia (TKBI)	☒	☐	☐	☐	☐	☐
15	OJK Regulation No. 14/2023 on Carbon Trading via Carbon Exchange	☐	☒	☐	☐	☐	☐
16	IDXCarbon – Peraturan Pengguna Jasa Bursa Karbon (KEP-00148)	☐	☒	☐	☐	☐	☐
17	IDXCarbon – Peraturan Pendaftaran Unit Karbon (KEP-00295)	☐	☒	☐	☐	☐	☐
18	IDXCarbon – Peraturan Perdagangan Unit Karbon (KEP-00296)	☐	☒	☐	☐	☐	☐
19	IDXCarbon – Peraturan Pengawasan Perdagangan (KEP-00298)	☐	☒	☐	☐	☐	☐
20	Climate Risk Stress Testing Guide for Banking	☒	☐	☐	☐	☐	☐
Malaysia-specific Guidelines							
21	SRI Sukuk Framework (2014) and SRI-Linked Sukuk Framework (2022)	☒	☐	☐	☐	☐	☐
22	Waqf-Featured Fund Framework (2020)	☐	☒	☐	☐	☐	☐

		National		Regional		Global	
23	Bank Negara Malaysia – Climate Change and Principle-based Taxonomy (CCPT)	☒	☐	☐	☐	☐	☐
24	Climate Risk Management and Scenario Analysis	☐	☒	☐	☐	☐	☐
25	SC Guidelines on Sustainable and Responsible Funds (2017/2013)	☐	☒	☐	☐	☐	☐
26	National Sustainability Reporting Framework	☐	☒	☐	☐	☐	☐
27	Malaysia's Maqasid Al-Shariah Guidance for the Islamic Capital Market Malaysia	☒	☐	☐	☐	☐	☐
Singapore-specific Guidelines							
28	Singapore Green Bond Framework (Government / Statutory Boards)	☐	☒	☐	☐	☐	☐
29	Singapore-Asia Taxonomy (MAS/GFIT, Dec 2023)	☒	☐	☒	☐	☐	☐
30	Singapore International Carbon Credits (ICC) Framework	☐	☒	☐	☐	☐	☐
31	Singapore ICC Guidance Document (Surrendering ICC)	☐	☒	☐	☐	☐	☐
32	Guidelines on Environmental Risk Management (Banks)	☐	☒	☐	☐	☐	☐
33	Guidance on Role of Carbon Credits in Corporate Decarbonisation	☒	☐	☐	☐	☐	☐
Thailand-specific Guidelines							
34	Kingdom of Thailand – Sustainability Financing Framework (PDMO)	☒	☐	☐	☐	☐	☐
35	Thailand Taxonomy (Phase 2: Agriculture, , Construction and Real Estate, Manufacturing, Waste Management, Energy & Transport)	☒	☐	☐	☐	☐	☐

		National		Regional		Global	
36	Internalizing Environmental and Climate Change Aspects into Financial Institution Business	☐	☒	☐	☐	☐	☐
Philippines-specific Guidelines							
37	Philippine Sustainable Finance Guiding Principles (2021)	☒	☐	☐	☐	☐	☐
38	Philippine Financial Reporting Standards (PFRS) S1 & S2	☐	☒	☐	☐	☐	☐
39	Guidelines on the Issuance of Green Bonds under the ASEAN Green Bonds standards in the Philippines	☒	☐	☐	☐	☐	☐
40	Guidelines on the Issuance of Social Bonds Under the ASEAN Social Bonds Standards in the Philippines	☒	☐	☐	☐	☐	☐
41	Guidelines on the Issuance of Sustainability Bonds Under the ASEAN Sustainability Bond Standards in the Philippines	☒	☐	☐	☐	☐	☐
42	Guidelines on the Issuance of Sustainability-Linked Bonds under the ASEAN Sustainability-Linked Bond Standards in the Philippines	☒	☐	☐	☐	☐	☐
43	Guidelines on Eligible Blue Projects and Activities for the Issuance of Blue Bonds in the Philippines	☒	☐	☐	☐	☐	☐
44	Philippine Sustainable Finance Taxonomy Guidelines (SFTG)	☒	☐	☐	☐	☐	☐
45	SEC Guidelines on Philippine Green Equity	☒	☐	☐	☐	☐	☐
46	Guidelines on the Issuance and Disclosure of Sukuk	☒	☐	☐	☐	☐	☐
47	Bangko Sentral ng Pilipinas Circular no. 1085 series of 2020, Sustainable Finance Framework	☐	☒	☐	☐	☐	☐

		National		Regional		Global	
48	Bangko Sentral ng Pilipinas Circular no. 1128 series of 2021, Environmental and Social Risk Management Framework	☐	☒	☐	☐	☐	☐
49	Bangko Sentral ng Pilipinas Circular no. 1149 series of 2022, Guidelines on the Integration of Sustainability Principles in Investment Activities of Banks	☐	☒	☐	☐	☐	☐
50	Bangko Sentral ng Pilipinas (BSP) Circular No. 1159, Series of 2022, Implementing Rules and Regulations of the Mandatory Agriculture, Fisheries and Rural Development Financing under Republic Act No. 11901, or the "Agriculture, Fisheries and Rural Development Financing Enhancement Act of 2022."	☐	☒	☐	☐	☐	☐
Myanmar-specific Guidelines							
51	Myanmar Green Financing Guidebook (GFG, 2022)	☒	☐	☐	☐	☐	☐
Viet Nam-specific Guidelines							
52	Viet Nam Green Taxonomy – Decision 21/2025/QĐ-TTg	☐	☒	☐	☐	☐	☐
53	Viet Nam Law on Environmental Protection 2020 (effective 2022)	☐	☒	☐	☐	☐	☐
54	Viet Nam 95/2018/ND-CP	☐	☒	☐	☐	☐	☐
55	Viet Nam Decree 163/2018/ND-CP (corporate bonds)	☐	☒	☐	☐	☐	☐
56	Viet Nam Decree 153/2020/ND-CP (corporate bonds)	☐	☒	☐	☐	☐	☐
57	Viet Nam Decree 65/2022/ND-CP (amending 153/2020)	☐	☒	☐	☐	☐	☐

		National		Regional		Global	
58	Viet Nam Decree 08/2023/ND-CP (bond market measures)	☐	☒	☐	☐	☐	☐
Global Market Standards and Principles							
59	Green Bond Principles (ICMA)	☐	☐	☐	☐	☒	☐
60	Social Bond Principles (ICMA)	☐	☐	☐	☐	☒	☐
61	Sustainability Bond Guidelines (ICMA)	☐	☐	☐	☐	☒	☐
62	Sustainability-Linked Bond Principles (ICMA)	☐	☐	☐	☐	☒	☐
63	Green Loan Principles (LMA/APLMA/LSTA)	☐	☐	☐	☐	☒	☐
64	Sustainability-Linked Loan Principles (LMA/APLMA/LSTA)	☐	☐	☐	☐	☒	☐
65	Core Carbon Principles (ICVCM)	☐	☐	☐	☐	☒	☐
66	Bonds to Finance the Sustainable Blue Economy (ICMA/UNEP FI guidance)	☐	☐	☐	☐	☒	☐
67	Guidelines for Blue Finance / Sustainable Blue Economy Finance Principles	☐	☐	☐	☐	☒	☐
68	Orange Bond Principles	☐	☐	☐	☐	☒	☐
69	The WFE Green Equity Principles	☐	☐	☐	☐	☒	☐
70	VCMI Claims Code of Practice	☐	☐	☐	☐	☒	☐
71	UNEP FI Principles for Sustainable Insurance (PSI))	☐	☐	☐	☐	☒	☐
72	VCM Monitoring, Reporting & Assurance (MRA) Framework	☐	☐	☐	☐	☒	☐
73	Climate Bonds Standard & Certification (CBI)	☐	☐	☐	☐	☒	☐
International Reference Frameworks and Guidance							
74	NGFS scenarios: Institutional adaptations	☒	☐	☐	☐	☒	☐
75	NGFS Scenarios for central banks and supervisors	☒	☐	☐	☐	☒	☐

		National		Regional		Global	
76	Climate Bonds Taxonomy	☐	☐	☐	☐	☒	☐
77	IFRS S2 Climate-related Disclosures	☐	☒	☐	☐	☐	☒
Other Jurisdictional Frameworks of International Relevance							
78	EU Taxonomy Regulation (EU) 2020/852	☐	☐	☐	☒	☐	☐

Appendix B: Catalogue of Sustainable Finance Tools

Tools are categorised according to their function within the sustainable finance lifecycle, covering (i) Disclosure and Reporting, (ii) Financing and Incentive Platforms, (iii) Due Diligence and Risk Assessment, (iv) Information and Advisory, and (v) Monitoring, Reporting and Verification. The catalogue below presents an illustrative selection of tools identified through desktop-based research, considering their relevance and applicability to ASEAN financial institutions and sustainable finance activities. It is not intended to be exhaustive, given the rapidly evolving tools landscape.

		Disclosure and Reporting	Financing and Incentive	Due Diligence and Risk Assessment	Information and Advisory	Monitoring, Reporting and Verification
1	ESBN Asia-Pacific Green Deal for Businesses Programme (on ESGpedia)	☒	☐	☐	☐	☐
2	Centralised Sustainability Intelligence (CSI) Platform	☒	☐	☐	☐	☐
3	Envizi	☒	☐	☐	☐	☐
4	ESGpedia	☒	☐	☐	☐	☐
5	MVGX-BDO AI-powered sustainability reporting platform	☒	☐	☐	☐	☐
6	Single Accesspoint for ESG Data (SAFE)	☒	☐	☐	☐	☐
7	Workiva	☒	☐	☐	☐	☐
8	GHG Protocol Tools Suite	☒	☐	☐	☐	☐
9	GSF Impact reporting	☒	☐	☐	☐	☐
10	Gprnt	☒	☒	☐	☐	☐
11	Biodiversity Integrated Assessment and Computation Tool (B-INTACT)	☐	☐	☒	☐	☐
12	Trucost Environmental	☐	☐	☒	☐	☐
13	NREL PVWatts Calculator	☐	☐	☒	☒	☐
14	ENERGY STAR Target Finder	☐	☐	☒	☒	☐
15	System Advisor Model™ (SAM™)	☐	☐	☒	☒	☐
16	LSEG MarketPsych ESG Analytics	☐	☐	☒	☒	☐
17	Sustainalytics	☐	☐	☒	☐	☐

		Disclosure and Reporting	Financing and Incentive	Due Diligence and Risk Assessment	Information and Advisory	Monitoring, Reporting and Verification
18	IFC EDGE (Excellence in Design for Greater Efficiencies)	☐	☐	☒	☐	☐
19	Bursa Carbon Exchange (BCX)	☐	☒	☐	☐	☐
20	Climate Impact X (CIX)	☐	☒	☐	☐	☐
21	IDXCarbon	☐	☒	☐	☐	☐
22	Trucost Global Carbon Pricing Tool	☐	☐	☐	☒	☐
23	IFRS Sustainability Disclosure Standards Academy	☐	☐	☐	☒	☐
24	Manufacturing Energy Assessment Software for Utility Reduction (MEASUR)	☐	☐	☐	☒	☒
25	Bloomberg's Sustainable Finance Solutions	☐	☐	☐	☒	☐
26	Thailand SEC Sustainable Finance Information Platform	☐	☐	☐	☒	☐
27	CarbonFootprint.com	☐	☒	☐	☒	☒
28	SME Climate Hub Suite	☐	☒	☐	☒	☒
29	Ecovisea	☐	☐	☐	☐	☒
30	EX-Ante Carbon-balance Tool (EX-ACT)	☐	☐	☐	☐	☒
31	OpenStudio	☐	☐	☐	☐	☒
32	Business Emissions Evaluator (BEE)	☐	☐	☐	☐	☒
33	Carbon Footprint Calculator for SMEs	☐	☐	☐	☐	☒
34	Arbor	☒	☐	☐	☐	☒
35	Greenly	☒	☐	☐	☐	☒
36	Microsoft Sustainability Manager	☒	☐	☐	☐	☒
37	Watershed	☒	☐	☐	☐	☒
38	Persefoni Pro	☒	☐	☐	☐	☒
39	EX-ACT VC	☒	☐	☒	☐	☒
40	Verra Registry	☒	☐	☒	☐	☐

		Disclosure and Reporting	Financing and Incentive	Due Diligence and Risk Assessment	Information and Advisory	Monitoring, Reporting and Verification
41	ASEAN Disaster Risk Financing and Insurance (ADRFI) Platform 2.0	☐	☐	☒	☒	☐
42	NatCatDAX	☐	☐	☒	☒	☐
43	ThinkHazard!	☐	☐	☒	☒	☐
44	World Bank Climate and Disaster Risk Screening Tool	☐	☐	☒	☒	☐
45	Reprisk	☐	☐	☒	☐	☐
46	Global Forest Watch	☐	☐	☐	☒	☒
47	WWF Biodiversity Risk Filter	☒	☐	☐	☒	☐
48	ASEAN Interconnected Sustainability Ecosystem (ISE)	☐	☒	☐	☐	☐
49	WRI Aqueduct	☐	☐	☒	☐	☐
50	Ulula	☐	☐	☐	☐	☒
51	KoboToolbox	☐	☐	☐	☐	☒
52	Dimagi	☐	☐	☐	☐	☒
53	Aladdin, by BlackRock	☒	☒	☒	☐	☒
54	Apiday	☒	☒	☒	☐	☒
55	Clarity AI	☒	☐	☒	☐	☐
56	Gravity	☐	☒	☐	☒	☒
57	Greenscope	☒	☐	☐	☒	☐
58	Harvest by Dasseti	☒	☐	☐	☐	☒
59	Holtara	☐	☐	☒	☐	☒
60	Novata	☒	☒	☐	☒	☐
61	Pulsora	☒	☐	☐	☐	☒
62	Weefin	☐	☒	☒	☒	☐
63	Worldfavor	☐	☐	☐	☒	☐
64	PACE	☐	☐	☐	☒	☒
65	Climate Finance Innovation Lab (CIFL)	☐	☒	☒	☒	☐
66	SET Carbon, e-One Report and ESG Data Platform	☒	☐	☐	☐	☐
67	All-Countries Common Equivalence Platform for Taxonomies ACCEPT	☐	☐	☐	☒	☐

		Disclosure and Reporting	Financing and Incentive	Due Diligence and Risk Assessment	Information and Advisory	Monitoring, Reporting and Verification
68	BPAM Sustainable Taxonomy Platform	☒	☐	☐	☐	☐

Appendix C: Catalogue of Sustainable Finance Instruments

The examples presented in this Appendix are non-exhaustive. Up to five examples from AMS have been selected for each sustainable finance instrument to demonstrate its application across the region. The absence of an example from a particular AMS should not be interpreted as indicating that the instrument is not available, issued or used in that market.

Instrument	ASEAN Member States	Example *(Non-Exhaustive)*
Green Bonds	Viet Nam	BIDV's Green Bond – *refer to 3.1 for more information*
	Malaysia	UiTM Solar Power Green Sukuk – *refer to 3.1 for more information*
	Thailand	BTS Group Holdings Public Company Limited Green Bond
	Malaysia	Tadau Green Sukuk *(Malaysia's first green sukuk)*
	Malaysia	Sabah Energy maiden Green Sukuk
	Lao PDR	LOCA's green bond
	Indonesia	Indonesia's Sovereign Green Sukuk
Sustainability Bonds	Indonesia	IIF's sustainability bond – *refer to 3.2 for more information*
	Malaysia	Sukuk Wakalah Programme and Maiden Issuance of Sustainability Sukuk – *refer to 3.2 for more information*
	Malaysia	CIMB's SDG Bond *(aligned with Sustainability Bond Guidelines and ASEAN Sustainability Bond Standards)*
	Viet Nam	BIDV's USD 120 million sustainability bond
	Singapore	SMU's Inaugural Sustainability Bond
Sustainability-Linked Bonds (SLBs)	Thailand	Sovereign SLB – *refer to 3.3 for more information*
	Malaysia	Paramount's Sustainability-Linked Financing Framework – *refer to 3.3 for more information*
	Indonesia	PT Japfa Comfeed Indonesia Tbk's SLB
	Malaysia	DKSH's RM300 million SLB
	Malaysia	Paramount Berhad's SLS
	Singapore	Surbana Jurong – public Singapore-dollar SLB
	Philippines	Cebu Landmasters' SLB
Transition Finance	Philippines	ADB's Transition Loan – *refer to 3.4 for more information*
	Thailand	UOB's Transition Loan

Instrument	ASEAN Member States	Example *(Non-Exhaustive)*
	Singapore	YTL PowerSeraya (YTLPS): S$500 million transition finance loan
Carbon Credits	Singapore	Nature-based Carbon Credit Tender – *refer to 3.5 for more information*
	Timor-Leste	Rai Matak Carbon Credits
	Singapore	Climate Impact X (CIX) – CIX Exchange and Nature X carbon-credit contract
	Cambodia	Hydrologic's issued Carbon Credits
Sustainability-Linked Loans (SLLs)	Indonesia	IFC & OCBC Indonesia's SLL – *refer to 3.6 for more information*
	Cambodia	ACLEDA's Sustainability Loan *(includes SLLs, green loans and social loans)*
	Malaysia	Wasco's SLL
	Singapore	City Development Limited – S$400 million SLL from DBS
	Thailand	Minor International's SLL
Green Loans	Singapore	Air Trunk's green loan – *refer to 3.7 for more information*
	Indonesia	Bank DBS' and Bank UOB's green loan
	Singapore	AirTrunk's Green Loan
	Malaysia	Yinson Renewables' Green Loan
Blue Bonds	Thailand	EXIM – THB3B Blue Bond – *refer to 3.8 for more information*
	Malaysia	Air Selangor Blue Sukuk Issuance – *refer to 3.8 for more information*
	Philippines	Maynilad's Blue Bond
	Viet Nam	SeABank's Blue Bond
	Indonesia	Indonesia's Inaugural Blue Bonds
	Malaysia	Pengurusan Air Asset Berhad (PAAB) Blue Sukuk issuance
Sustainability-related Equity Instruments	Singapore	Keppel Corporation – *refer to 3.9 for more information*
	Thailand	Kasikorn Asset Management's Thai Equity Fund
	Malaysia	Saturna ASEAN Equity Fund
Green and Sustainability Deposits	Philippines	Land Bank of the Philippines - Green Growth Deposit – *refer to 3.10 for more information*
	Viet Nam	OCB's Green Deposit
	Singapore	UOB Green and Sustainable Deposits, piloted with GIC
	Thailand	EXIM Bank's Green Deposit Certificate

Instrument	ASEAN Member States	Example *(Non-Exhaustive)*
	Indonesia	Universal BPR's Green Deposit Scheme
Green Mortgages	Philippines	BPI-Helios Solar Mortgage – *refer to 3.11 for more information*
	Singapore	DBS' Green Home Loan
	Viet Nam	Standard Chartered's Green Mortgage Loan
	Indonesia	BTN's Green Mortgage

