



Sustainable finance in Singapore – Beyond the green labels

Execution with credibility and value

March 2026



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01



Credible, value-focused sustainable finance takes centre stage:

The focus of sustainable finance has shifted towards execution of credible taxonomy-aligned projects, supported with clear business case for value preservation, resilience and growth.

Shifting momentum: From labels to execution

The ESG momentum continues with a shift in focus from labels to execution – and the value is moving with it

Despite global ESG headwinds and softening public commitments, sustainable finance momentum continues, marked by a clear shift from ambition to execution. Markets now follow clearer definitions, stronger disclosure standards and common taxonomies that bring consistency to sustainable activity. Meanwhile, demand for capital to decarbonise the real economy continues to rise, particularly in growth sectors such as digital infrastructure and transition assets with clear commercial viability. Rather than in the proliferation of new ESG labels, capital is now chasing credible, taxonomy-aligned projects with clear business outcomes and bankable cash flows.

Across Asia Pacific, the focus has evolved from defining what is green to identifying what is credibly transitioning, as policymakers and financial institutions work to fund decarbonisation in harder-to-abate sectors. Singapore's approach mirrors and amplifies global progress in sustainable finance. Anchored by the Singapore-Asia Taxonomy (SAT) and the Monetary Authority of Singapore's (MAS) sustainable finance grant schemes, it places credibility at the heart of market development.

Singapore's sustainable finance journey has evolved from early incentives to an ecosystem approach to catalyse financing. The Green Bond Grant Scheme (2017) laid the foundation for transparency, followed by the Sustainable Bond Grant Scheme (2019) and Sustainable Loan Grant Scheme (2020), which expanded market participation. In 2023, the Finance for Net Zero (FiNZ) Action Plan consolidated these programmes under a unified vision to scale both green and transition finance. It also introduced sustainable financing platforms to bring together capital from various sources. An example is the Financing Asia's Transition Partnerships (FAST-P) blended finance initiative launched in 2023 to mobilise and deploy capital into green and sustainable infrastructure opportunities across South and Southeast Asia.

Against this backdrop, market data suggests a steady expansion of the sustainable finance market in Singapore. In 2024, issuance of green, social, sustainability and sustainability-linked bonds (SLBs) in Singapore reached S\$13.3 billion, almost 80% higher than 2023 levels.¹ Green and sustainability-linked loans (SLLs) arranged from Singapore exceeded S\$48 billion, marking a seventh consecutive annual increase.² Well-defined taxonomies and targeted policy incentives could continue to reinforce market confidence and scale as Singapore establishes itself as a credible sustainable finance hub.

¹ Singapore sustainable bond issuances jump 80 per cent to S\$13.3 billion in 2024: MAS, Singapore Economic Development Board, 9 July 2025

² Ibid

Public sector leadership

Public sector leadership has anchored this credibility and set the reference point for the market. In addition to the MAS-led initiatives, the Singapore government led by example through the Singapore Green Bond Framework, which introduced rigorous governance, eligibility and reporting standards for sovereign green debt. Under this framework, the Ministry of Finance (MOF) issued Singapore's inaugural sovereign green bond in August 2022, a S\$2.4 billion 50-year Green SGS (Infrastructure) bond,³ to finance long-term low-carbon infrastructure such as the Jurong Region Line and Cross Island Line. A further S\$2.5 billion 30-year tranche in June 2024 extended the sovereign curve, establishing benchmark pricing for Singapore dollar green instruments.⁴

Building on MOF's lead, various government agencies have followed suit. The Housing & Development Board (HDB) established its Green Finance Framework in January 2022. Under the framework,⁵ HDB issued three green bonds totalling approximately S\$3.3 billion⁶ in 2022, with proceeds used to finance or refinance energy-efficient and sustainable public housing developments. The Public Utilities Board (PUB) issued an S\$800 million 30-year green bond⁷ in 2022 and a S\$325 million⁸ follow-on in 2024 to fund water sustainability projects such as the Tuas Water Reclamation Plant. The Land Transport Authority (LTA) launched its own Green Bond Framework⁹ in 2024 to finance clean mobility infrastructure.

This public sector leadership has catalysed private sector adoption. In October 2024, OUE Limited issued the first corporate green bond aligned with the SAT,⁹ and in February 2025, Singtel's Nxera DCT secured a S\$643 million,¹⁰ five-year green loan for its DC Tuas data centre, the first in the information and communications technology (ICT) sector aligned with the taxonomy. In October 2025, DBS, OCBC, and Maybank jointly extended a S\$500 million transition loan to YTL Power Seraya for its hydrogen-ready combined-cycle power plant, Singapore's first financing aligned with the SAT's Amber (transition) category.

These transactions illustrate how clear frameworks and credible leadership have amplified the effect across the ecosystem, setting transparent benchmarks, deepening market liquidity and providing models that corporates and financial institutions have since adopted in structuring green and transition financing.

Taken together, these developments tell a clear story of how Singapore moved from setting ambitions to building the architecture for credible and scalable sustainable finance. The result is a market grounded in standards, transparency and trust. The following section looks at how the SAT is helping to anchor this progress and chart the next chapter of the region's sustainable finance journey.

³ 2023 Singapore Green Bond Report, Ministry of Finance, 29 September 2023

⁴ Syndication: Green SGS (Infrastructure) Bonds, Monetary Authority of Singapore, 28 May 2024

⁵ Green finance framework, Housing & Development Board, 13 January 2022

⁶ Green second party opinion – Housing & Development Board, S&P Global Ratings, 16 September 2024

⁷ Green Bond Report FY2024, PUB, Singapore's National Water Agency, 30 September 2025

⁸ Ibid.

⁹ Application of the Singapore-Asia taxonomy in the financial and corporate sectors: Information note, Monetary Authority of Singapore, March 2025

¹⁰ Singtel secures S\$643 million green loan for DC Tuas, Singtel, 7 February 2025

02

The Singapore-Asia taxonomy: A benchmark for credibility

Launched in December 2023, the SAT established science-based thresholds for green and transition activities across eight priority sectors that account for about 90% of regional emissions. It is the world's first taxonomy to introduce a dedicated transition, or Amber category, recognising Asia's need for practical decarbonisation pathways.

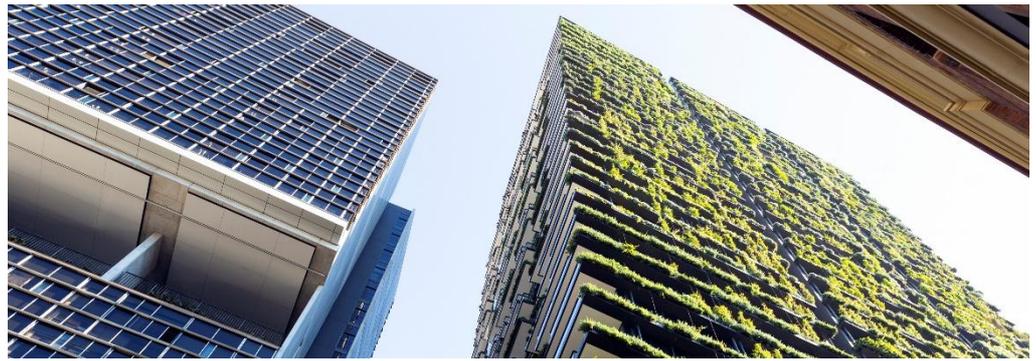
Beyond classification, the SAT provides a common language for financial institutions and issuers to evaluate whether an activity is green today or credibly transitioning over time. It defines what good looks like, setting emissions-intensity benchmarks and time-bound criteria that reflect both scientific rigour and economic realities. By defining clear, measurable thresholds, the SAT enables financiers to structure products confidently and direct capital towards credible transition opportunities.





A transition-focused taxonomy designed to interoperate across jurisdictions and evolve with science

The SAT is an important framework that reflects Asia's transition realities. Its Amber category supports time-bound, science-based decarbonisation pathways for hard-to-abate sectors, while discouraging new high-emitting assets. It also aims for interoperability with other taxonomies. However, it remains voluntary and work-in-progress: its technical criteria must keep pace with emerging climate science, and its practical interoperability will be tested as more jurisdictional taxonomies and market applications develop.



Key feature of the SAT: A dedicated transition or Amber category

The Amber category in the taxonomy reflects Asia's decarbonisation realities, where many high-emitting but essential industries require a phased (but time-bound) pathway to sustainability. Its measures-based approach recognises interim improvements, such as retrofits and efficiency upgrades, that support hard-to-abate sectors in moving from Amber to Green. By setting transparent thresholds, the SAT enables financing for credible transition pathways rather than excluding these industries from access to capital.

Activities must meet interim emissions thresholds and sunset by around 2030, with limited extensions for certain hard-to-abate subsectors. At that point, activities must either progress to Green status or become ineligible. The SAT discourages the financing of new high-emitting assets and restricts Amber status to existing assets. In some cases, Amber activities must be supported by an entity-level transition plan to ensure consistency with an organisation's overall decarbonisation pathway.

Interoperability and market uptake

A core feature of the SAT is its focus on interoperability as a design principle. With the proliferation of various regional and domestic taxonomies globally, this is key to reduce fragmentation and complexity in application, especially for corporates and financial institutions with interests in multiple jurisdictions. While differences in taxonomies are inevitable, the alignment of the SAT's design with global norms, including the use of internationally recognised scientific benchmarks and sector/activity structures that are compatible with major taxonomies, makes it easier for multinational institutions to compare across different jurisdictional taxonomies with minimal remapping.

As a voluntary framework, its impact will depend on market adoption as well. Encouragingly, Singapore-based institutions have begun applying the SAT, including local banks which are integrating the SAT into their lending frameworks. The second edition of the Singapore Green Bond Framework (2025) has also mapped sovereign green spending to SAT criteria. In 2025, the Singapore Sustainable Finance Association (SSFA) issued a practical guidance¹¹ to support further adoption across financial institutions and corporates.

¹¹ [Guidance for Leveraging the Singapore-Asia Taxonomy in Green and Transition Financing](#), Singapore Sustainable Finance Association (SSFA), 9 July 2025

Sector implications

The SAT translates principles to practice by establishing measurable thresholds that define eligibility. It sets out technical screening criteria for climate change mitigation across eight focus sectors, including Energy, Real Estate, Transportation, Agriculture and Forestry or Land Use, Industrial, Information and Communication Technology, Waste or Circular Economy, Carbon Capture and Sequestration.¹² For example:

1. **Buildings:** Eligible projects must achieve top-tier BCA Green Mark Platinum or Super Low Energy ratings or meet quantitative energy-performance thresholds aligned with SAT benchmarks for efficiency and embodied carbon reduction.
2. **Power generation:** Abated natural gas may qualify as Amber under strict emissions-intensity limits and credible abatement or carbon-capture plans. Coal is eligible only for managed early phase-out under frameworks that specify retirement timelines, one-for-one clean-energy replacement and just-transition measures.
3. **Shipping:** Amber activities must align with the International Maritime Organisation's 2030 carbon-intensity reduction target, demonstrating measurable progress toward decarbonisation.
4. **Information and communications technology (ICT):** Data-centre projects must demonstrate best-in-class energy efficiency, high-efficiency cooling and substantial renewable-energy sourcing to qualify as Green.

In practice, hard-to-abate sectors such as shipping and aviation face complex transition pathways due to dependencies on evolving technologies, fuel availability, infrastructure and policy developments, making the application of taxonomy criteria more challenging and complex in practice.

It should be noted that in many cases, these criteria are expected to be refined from time to time based on emerging technologies and science. Therefore, the application of the SAT should be seen as an ongoing, dynamic exercise where transition alignment is assessed over time, anchored upon credible, sector-specific pathways with clear benchmarks and time-bound milestones.



¹² MAS Launches World's First Multi-Sector Transition Taxonomy, Monetary Authority of Singapore (MAS), 3 December 2023



Using the taxonomy to strengthen frameworks and instruments

For new issuers, the SAT offers a clear blueprint for what constitutes eligible green or transition activity. However, many existing labels and frameworks pre-date the SAT. Instead of replacing them, issuers are using the taxonomy as a benchmark to refine definitions, enhance disclosures and ensure comparability. Regional banks such as United Overseas Bank (UOB) have incorporated SAT-aligned screening criteria into their sustainable financing frameworks to differentiate green activities from those that are transition-aligned.¹³ This progressive alignment is raising the overall integrity of sustainable finance in the ecosystem, while potentially unlocking opportunities for FIs and corporates to broaden the scope of their sustainable financing activities based on new sectors and activities identified by the SAT.

The SAT's introduction of an Amber category provides essential guidance for financing transition activities in harder-to-abate sectors such as the power, transport and heavy industry sectors. By defining emissions-intensity thresholds, performance milestones and time-bound criteria, the taxonomy enables companies and financiers to structure transition and sustainability-linked loans that support measurable decarbonisation while maintaining scientific rigour.

Verification as the backbone of trust

Independent verification is critical for reinforcing the credibility of sustainability-linked and transition finance instruments. It builds confidence in measuring, tracking and disclosing sustainability targets, enhancing transparency and comparability across transactions. In this context, verification complements the SAT's role in strengthening frameworks and instruments by anchoring taxonomy-based structures in credible and trusted implementation.

¹³ UOB enhances sustainable financing frameworks, United Overseas Bank, 15 April 2025



SAT as a strategic compass:

SAT evolving beyond a reference document into a practical framework that connects policy intent, technology readiness and investment decisions. By embedding taxonomy criteria into regulations, incentives and market standards, Singapore is turning high-level net-zero commitments into clearer, sector-specific capital signals that investors and businesses can act on.

Charting the next frontier: Integrating policy, technology and markets

The SAT is more than a classification system; it acts as Singapore's compass for navigating the complex journey toward a net-zero economy. Its distinguishing feature is the integration of technical screening criteria with an explicit transition pathway, guiding capital toward credible decarbonisation where near-term green options remain constrained. This approach is increasingly evident in how SAT-relevant sectors are paired with implemented policy and market mechanisms, allowing taxonomy classifications to translate into clearer market signals, including the following examples.

In power and energy, hydrogen plays a distinctive role within the SAT, reflecting Singapore's view of hydrogen as a potential long-term decarbonisation vector despite current constraints. From 2024, new and repowered natural gas power plants are required to be at least 30 percent hydrogen compatible by volume.¹⁴ While these assets would not qualify as green today, the SAT's transition category accommodates activities aligned with a credible pathway toward low or zero carbon fuels, anchoring eligibility in forward-compatible design and limits on long-term carbon lock-in.

In digital infrastructure, Singapore's re-entry into data centre development is explicitly conditioned on sustainability performance. Under the recent launch of the second Data Centre – Call for Application by the EDB and IMDA, approved projects must meet BCA IMDA Green Mark for Data Centres 2024 Platinum standards and achieve a power usage effectiveness of 1.25 or better at full load.¹⁵ While more stringent than the SAT criteria of PUE 1.35 (at full capacity), it establishes Singapore's leadership and ambition in steering capital towards sustainable digital growth while recognising the current level of development in Southeast Asia through the more realistic SAT threshold.

The SAT also recognises that classification alone is insufficient where transition technologies face persistent cost and demand barriers. This is most clearly illustrated in aviation, which the SAT treats as a hard-to-abate sector requiring fuel substitution. Singapore has operationalised this through a mandated uptake of sustainable fuel for outbound flights from 2026. This mandate is supported by a sustainable fuel levy on outbound passenger tickets and cargo, with proceeds earmarked to support fuel procurement, providing greater certainty for investment in sustainable fuel supply chains and infrastructure.

These developments illustrate how the taxonomy serves as more than a classification reference, providing a framework through which policy intent can be more clearly linked to capital allocation in sectors where decarbonisation is sequential, capital intensive and policy dependent.

¹⁴ 10 Things You Should Know About Singapore's Energy Story, Energy Market Authority, 17 October 2024

¹⁵ Launch of second data centre – Call for application, Infocomm Media Development Authority (IMDA), 1 December 2025

03

Grants and incentives

The Singapore Government and public agencies have been proactively supporting the green transition financially by providing a comprehensive framework of grants, incentives, and R&D investment to lower technical and financial barriers for enterprises. During the Budget 2026, the Energy Efficiency Grant (EEG)¹⁶ was extended to 31 March 2027, co-funding investments in energy-efficient equipment across sectors such as manufacturing, food services, construction, and maritime. Complementing this, support for green loans under the Enterprise Financing Scheme – Green (EFS-Green)¹⁷ has been extended to 31 March 2031, with financing available up to SGD 50 million for eligible loan types/borrower group exposures. This is aimed at enabling better access to green financing for Project Developers, System Integrators and Technology & Solution Enablers which develop enabling technologies and solutions to reduce waste, resource use or greenhouse gas emissions, especially in sectors of Clean Energy, Circular Economy, Green Infrastructure and Clean Transportation. These measures are reinforced by longstanding schemes such as the Resource Efficiency Grant for Emissions (REG(E)), which supports industrial facilities undertaking deeper emissions-reduction projects,¹⁸ introduced in previous Budgets.

Furthermore, in the recently announced S\$37 billion Research, Innovation, and Enterprise (RIE) 2030 plan,¹⁹ research and development in decarbonisation technologies was included as one of the key national priorities to be funded as part of this budget.

Alongside these, capital market incentives also play a complementary role in mobilising financing at scale.



¹⁶ Budget 2026: Singapore extends Energy Efficiency Grant; green loans under Enterprise Financing Scheme. The Business Times, 12 February 2026

¹⁷ Ibid.

¹⁸ Resource Efficiency Grant for Emissions (REG(E)), Economic Development Board (EDB)

¹⁹ Singapore invests S\$37 billion in RIE2030 research plan; semiconductors, ageing among focus areas, Economic Development Board (EDB), 5 December 2025



Transition support schemes

Sustainable financing, in the form of government grants and incentives, is available to support corporates in their green transition, subject to eligibility criteria being met. This includes the MAS grant schemes which extends support to transition bonds and loans through 2028, tying eligibility to recognised standards and taxonomies. This lowers issuance costs without diluting credibility, enabling scale while maintaining clear guardrails around what qualifies.

MAS grant schemes driving green and transition finance

The Monetary Authority of Singapore (MAS) administers the Sustainable Bond Grant Scheme (SBGS) and Sustainable Loan Grant Scheme (SLGS) to defray issuance costs. In 2023, both schemes were expanded to include transition bonds and loans and extended through 31 December 2028. To qualify, instruments must align with recognised standards and taxonomies, ensuring that grants support credible sustainable and transition financing.

Timeline	MAS schemes and regulations
2017	MAS launches the Green Bond Grant Scheme (GBGS)
Feb 2019	GBGS broadened to become SBGS
Nov 2020	MAS launches Green & Sustainability-Linked Loan Grant Scheme (GSLS) (Track A: borrowers, Track B: bank frameworks). SBGS expanded to include SLBs
Apr 2023	MAS unveils FiNZ Action Plan: rebrands GSLS to SLGS, expands SLGS/SBGS to transition instruments, extends both to 2028 with S\$15 million funding
Oct 2023	SBGS/SLGS expanded to transition instruments
Jan 2024	SLGS Track B expires (bank frameworks)
Jan 2025	MAS updates SBGS page (valid through 2028; S\$125,000 cap; SLB post-issuance review requirement)

Feature	SLGS	SBGS
Scope	Green, social, sustainability, sustainability-linked, and transition loans	Green, social, sustainability, sustainability-linked, and transition bonds
Qualifying criteria	Loan size ≥ S\$20 million; Tenor ≥ 3 years; external review aligned to Green Loan Principles (GLP), Sustainability-Linked Loan Principles (SLLP), ICMA, or SAT	External review aligned to ICMA or SAT
Funding coverage	Reimburses eligible external review/advisory costs	Covers eligible external review costs
Funding cap	Up to S\$125,000 per qualifying loan	100% of eligible costs, capped at S\$125,000 per issuance
Eligible costs	Pre-issuance: Second-Party Opinion (SPOs) Post-issuance: Assurance, impact/ Sustainability Performance Targets (SPTs) reporting	Pre-issuance: SPOs Post-issuance: Verification of allocation and impact reports
Special requirements	—	SLBs: Annual post-issuance external reviews for first 3 years or until maturity
Other notes	Track B discontinued in December 2023; borrower-level focus only	—
Validity	Until 31 December 2028	

Forms of sustainable finance instruments

Accessing the SLGS and SBGS requires borrowers and issuers to align with globally recognised market standards and, where applicable, the SAT, ensuring comparability with international norms and strengthening market acceptance.

Type	Purpose	Financial instruments (eligible under MAS grants)	Key standards and frameworks
Type I – Performance-linked	Incentivise achievement of pre-defined SPTs; proceeds are not ring-fenced	<ul style="list-style-type: none"> SLLs (SLGS) SLBs (SBGS) 	<ul style="list-style-type: none"> SLLP – LMA/APLMA/LSTA (March 2025) SLBP – ICMA (June 2024) The Principles – Guidance Handbook – ICMA (June 2025)
Type II – Use-of-proceeds	Finance/refinance eligible green, social, sustainability or transition projects/ expenditures	<ul style="list-style-type: none"> Green Bonds (SBGS) Social Bonds (SBGS) Sustainability Bonds (SBGS) Green Loans (SLGS) Social Loans (SLGS) Transition Bonds (SBGS, added 2023) Transition Loans (SLGS, added 2023) 	<ul style="list-style-type: none"> Taxonomy (where applicable): <ul style="list-style-type: none"> SAT (2023 Edition) Use-of-proceeds bond principles: <ul style="list-style-type: none"> Green Bond Principles (GBP) - ICMA (June 2025) Social Bond Principles (SBP) - ICMA (June 2025) Sustainability Bond Guidelines (SBG) - ICMA (June 2021; latest update) Use-of-proceeds loan principles: <ul style="list-style-type: none"> Green Loan Principles (GLP) - LMA / APLMA / LSTA (March 2025) Social Loan Principles (SLP) - LMA / APLMA / LSTA (March 2025) Transition guidance (optional): <ul style="list-style-type: none"> Climate Transition Bond Guidelines (CTBG) - June 2023 (latest edition) Transition Loans Guide April 2023 (LMA / APLMA / LSTA)

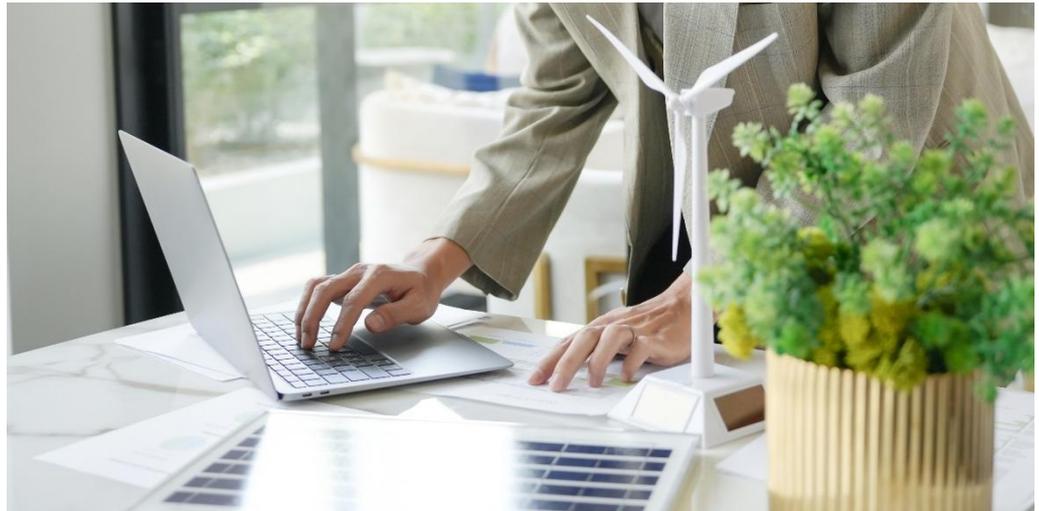
04

New instruments and evolving standards in sustainable finance



Strengthening consistency in sustainable finance frameworks:

As taxonomies gain prominence, sustainable-finance frameworks and standards are refined as well, with tighter requirements and expanded guidance for green, sustainability-linked, transition and nature-positive finance.



Evolving standards: Integrity in loans, credibility in transition and nature finance

2025 marked a significant year for standards-setting in sustainable finance. Key international market bodies such as the Loan Market Association (LMA), Asia Pacific Loan Market Association (APLMA), Loan Syndications and Trading Association (LSTA), International Capital Market Association (ICMA) have tightened loan expectations, advanced transition-specific frameworks and published the first global guidance for nature-positive bonds. These developments enhance clarity, comparability and credibility, aligning with Singapore's ambition to scale green and transition financing.

In March 2025, LMA, APLMA and LSTA released updated green, social and sustainability-linked loan principles and guidance. The revisions introduced distinctions between mandatory and recommended provisions, raised expectations for material and ambitious Key Performance Indicators (KPIs) by reinforcing requirements for KPIs to be consistent with a borrower's overall sustainability strategy and for SPT ambition to be evidenced against appropriate benchmarks where possible. The revisions strengthened the requirement for post-signing independent external verification. It also remove the prior grandfathering language for pre-existing or in-flight transactions. Collectively these changes address greenwashing concerns and reinforce the integrity of sustainability-linked and thematic loans. For Singapore, this underscores the need to update loan documentation, KPIs baselines and verification practices to align with the 2025 standards and strengthen the credibility of transition financing.

Building on this, APLMA, LMA and LSTA published the **Guide to Transition Loans** in October 2025, setting out an Exposure Draft of the Transition Loan Principles (TLP). The TLP provides a framework for financing transition strategies in sectors critical to the global net-zero pathway, yet not fully “green”. It clarifies the distinctions between financing transitions and labelled transition finance, outlines parameters for what qualifies as transition finance, and introduces a voluntary cross-jurisdictional framework for activity-level, use-of-proceeds transition loans. The TLP are particularly relevant for Singapore given the ongoing focus on transition – a key feature of the SAT and the type of financing it seeks to enable.

Nature finance comes to market

In June 2025, the ICMA published the **Sustainable Bonds for Nature: A Practitioner’s Guide**, the first global framework for nature-positive financing. The guide defines credible use-of-proceeds categories such as biodiversity conservation, sustainable oceans and ecosystem restoration, introduces an optional “Nature Bond” designation under ICMA’s Principles and encourages issuers to embed nature-related KPIs in SLBs. This development closes a long-standing gap in sustainable finance by giving issuers, investors and reviewers a shared reference for structuring credible nature-positive instruments. For Singapore, the guidance enables statutory boards, government-linked companies and financial institutions to issue bonds for mangrove protection, coastal resilience, blue-carbon and urban biodiversity projects.

In September 2025, the City of Nagoya issued Japan’s first municipal bond explicitly labelled a “Nature Bond,” valued at JPY50 billion (about US\$340 million).²⁰ While biodiversity and nature-related expenditures have previously been financed through green bonds in other jurisdictions, this issuance is notable for its explicit nature designation and alignment with guidance from the ICMA under its Bonds for Nature initiative. Proceeds are earmarked for biodiversity restoration, urban climate adaptation, and the protection of rare species, with external review by Japan Credit Rating Agency. The transaction’s significance lies not in being the first instance of biodiversity financing, but in signalling a more explicit articulation of nature finance as an investable segment within sustainable finance markets.

Closer to home, City Developments Limited (CDL) offers a relevant local example. In 2024, CDL secured a sustainability-linked loan with performance targets aligned to the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations, as disclosed in its public announcements.²¹ While the loan is not linked to a single biodiversity outcome, the sustainability performance targets incorporate nature-related considerations relevant to the real estate sector, including biodiversity conservation, water efficiency and waste management. This development signals how nature-related risks and dependencies are beginning to be reflected in financing structures within the Singapore market.

²⁰ Japan's Nagoya plans 'first' ICMA-aligned 'nature bond', Environmental Finance, 6 August 2025

²¹ CDL partners DBS on first-of-its-kind TNFD targets-aligned sustainability-linked loan, City Developments Limited, 10 June 2024



Closing the Adaptation Gap:

Adaptation finance is gaining prominence but remains underfunded relative to growing climate risks. Blended finance and risk-sharing mechanisms are essential to unlocking projects, enabling early movers to reduce climate risk, strengthen competitiveness and capture significant long-term growth.

Adaptation and resilience financing moves into focus

As climate risks accentuate, adaptation and resilience financing is growing in prominence. In Singapore, the Ministry of Sustainability and the Environment is developing the country's first National Adaptation Plan, alongside continued investment in heat resilience, coastal protection, food security and long-term water infrastructure.²²

Yet, current levels of adaptation financing globally remain well below estimated needs. COP30 has called for adaptation finance to be tripled to US\$120 billion by 2035²³ to support resilience projects. GIC has estimated that the global adaptation investment market could expand from around US\$2 trillion today to approximately US\$9 trillion by 2050.²⁴

One structural bottleneck is the commercial models of adaptation investments, which are often long-dated and generate returns primarily through avoided losses rather than new cash flows. This makes the business case less clear and more challenging to underwrite using conventional financing or credit approaches.

To this end, partnerships between commercial financiers and public and philanthropic capital providers to design blended finance vehicles, resilience bonds and insurance-linked instruments could unlock such projects. Financing, in turn, could spur innovation and scale in adaptation solutions - from climate-resilient infrastructure, buildings and agriculture, to analytics, early-warning systems and nature-based solutions. Those who move early to understand, structure and participate will not only strengthen their own climate resilience, but also capture a growing share of a multi-trillion-dollar adaptation economy.

Technology reinventing the bond market

In February 2023, the Hong Kong SAR government issued the world's first tokenised government green bond, raising HK\$800 million (US\$102 million). Recorded on blockchain, the bond enabled T+1 settlement and automated coupon payments via smart contracts, demonstrating how digital infrastructure can enhance transparency, efficiency and resilience in capital markets beyond conventional issuance models.

This example illustrates how technology can enhance the credibility and efficiency of sustainable finance markets. As Singapore continues to position itself as a leading hub for both financial innovation and sustainable finance, tokenisation and digital settlement solutions offer practical avenues to improve market transparency, reduce operational friction and strengthen investor confidence. Over time, integrating these technologies alongside robust sustainability frameworks can support Singapore's ambition to compete on both trust and innovation in global capital markets.

²² Ministry of Sustainability and the Environment's Addendum to the President's Address, Ministry of Sustainability and the Environment, 18 September 2025

²³ Adaptation financing to gain momentum in 2026: sustainability analysts, The Business Times, 22 January 2026

²⁴ Sizing the Inevitable Investment Opportunity: Climate Adaptation, GIC, April 2025

05

From ambition, action to accountability: Structuring, reporting and verifying high-integrity sustainable finance

Financing in action: Translating taxonomies into bankable structures

In practice, this involves mapping business activities and capital expenditure plans to taxonomy criteria (such as SAT thresholds), selecting eligible projects and key performance indicators (KPIs), and embedding these into the terms of the financial instruments. For more complex, capital-intensive projects, including those that matter for transition – grid upgrades, large-scale renewables, coastal protection and the likes – origination is as much about structuring the risk and capital stack as it is about meeting taxonomy thresholds. Getting this first step right – including the use of blended finance where necessary – is what ultimately turns policy ambition and taxonomies into investable opportunities that can be subsequently tracked, reported and held accountable for sustainable outcomes.

Allocation of proceeds: Tracking where every dollar goes

For green, social, sustainability and transition instruments, transparency in funds usage is critical. Issuers are expected to report at least once a year until proceeds are fully allocated, demonstrating that capital has been channelled to eligible projects under recognised frameworks. This is often accompanied by external reviews that confirm alignment with criteria and eligible categories. This visibility reassures investors that green and transition labels are supported by tangible evidence of deployment rather than mere intent.

Performance and KPIs: Showing progress, not just promises

For sustainability-linked and transition loans or bonds, accountability hinges on meeting KPIs and Sustainability Performance Targets (SPTs). Under the SLGS, borrowers must undergo annual verification for three years to qualify for grant support, while SLBs under the SBGS require annual post-issuance reviews for the first three years or until maturity. These checks transform stated goals into measurable progress, ensuring that performance-linked commitments are fulfilled in practice.

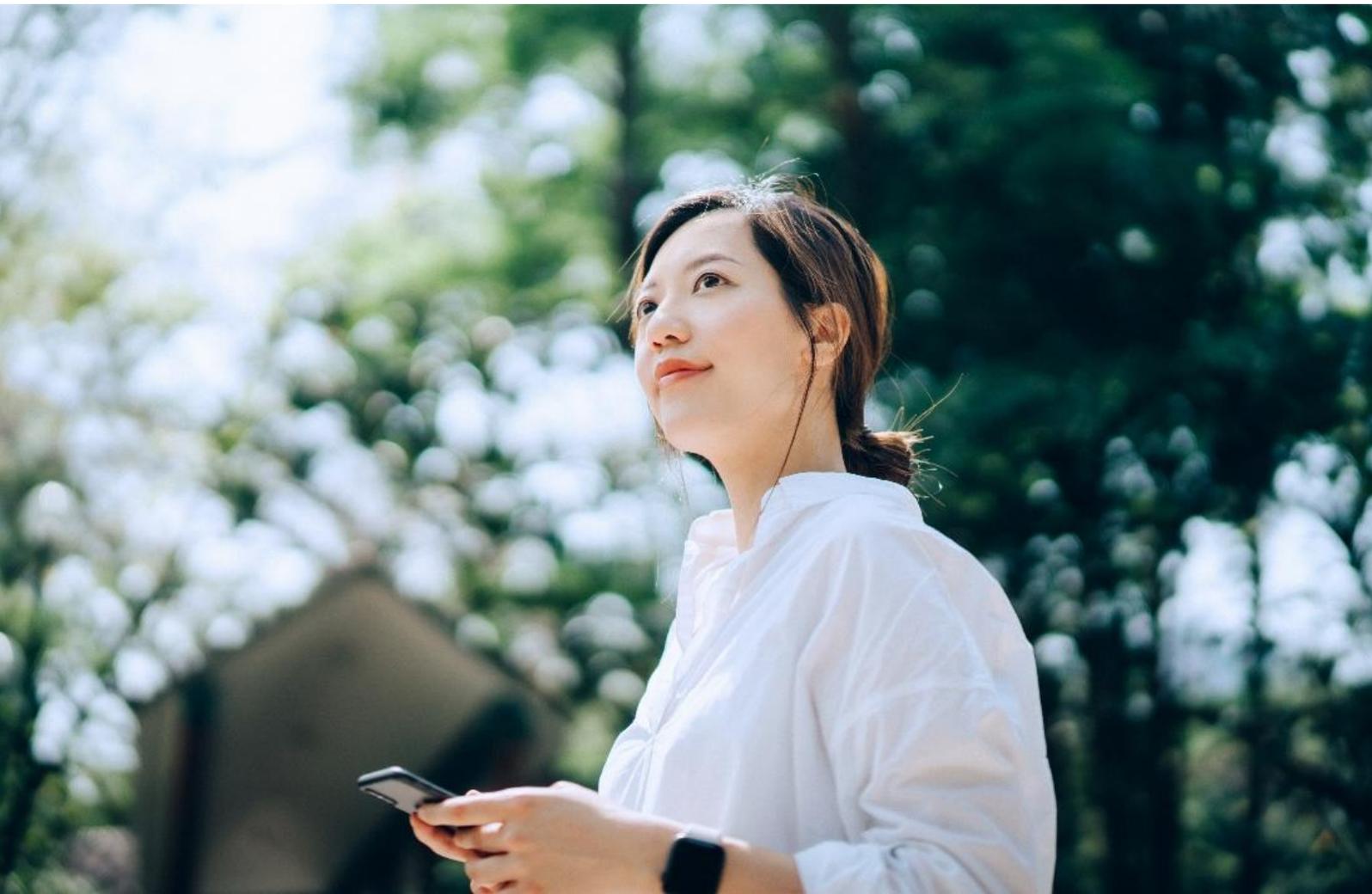
Impact reporting: Measuring outcomes and real-world benefits

Beyond proceeds and performance lies the question that ultimately matters: what real-world difference did the financing make? Increasingly, investors and other stakeholders are looking past labelled structures to the environmental and social outcomes they deliver, and the expectation for impact reporting are rising.

Market standards are emerging. The ICMA's Harmonised Framework for Impact Reporting sets out common impact metrics while the Impact Reporting and Investment Standards (IRIS+) system, developed by the Global Impact Investing Network (GIIN), provides a widely used catalogue of standardised metrics to support consistent impact measurement.

Yet, compared with taxonomies, impact reporting is still at an early stage. Methodologies vary widely, many issuers rely on proprietary metrics, and underlying assumptions (baselines, attribution, time horizons) are often opaque. This fragmentation weakens comparability and can erode trust.

In this context, issuers should err on the side of clarity and transparency. That means using metrics that are specific and measurable, grounding them where possible in recognised frameworks, and being explicit about methodologies, assumptions and limitations. Transparent, decision-useful impact reporting does not require perfection, but it does require enough rigour and openness for stakeholders to understand how – and how far – sustainable finance is moving the needle.



06

How PwC can help



A credible sustainable financing framework connects ambition to measurable outcomes. PwC supports clients on this journey, from designing taxonomy-aligned frameworks to providing independent assurance that builds trust.

We help clients:

1. Develop or refine sustainable-finance frameworks that define eligible green, sustainability-linked and transition activities aligned with sustainable finance principles and taxonomies.
2. Map projects and activities to taxonomy criteria, identify data gaps and embed credible transition pathways.
3. Set meaningful and robust KPIs and SPTs.
4. Strengthen reporting readiness, aligning allocation, KPI and impact reporting in line with industry standards and market practices.
5. Build trust and credibility and enhance investor confidence by verifying that financing outcomes are accurate and measurable, including post-issuance assurance over use-of-proceeds allocations, impact reporting or performance of sustainability-linked KPIs.

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Thank you

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