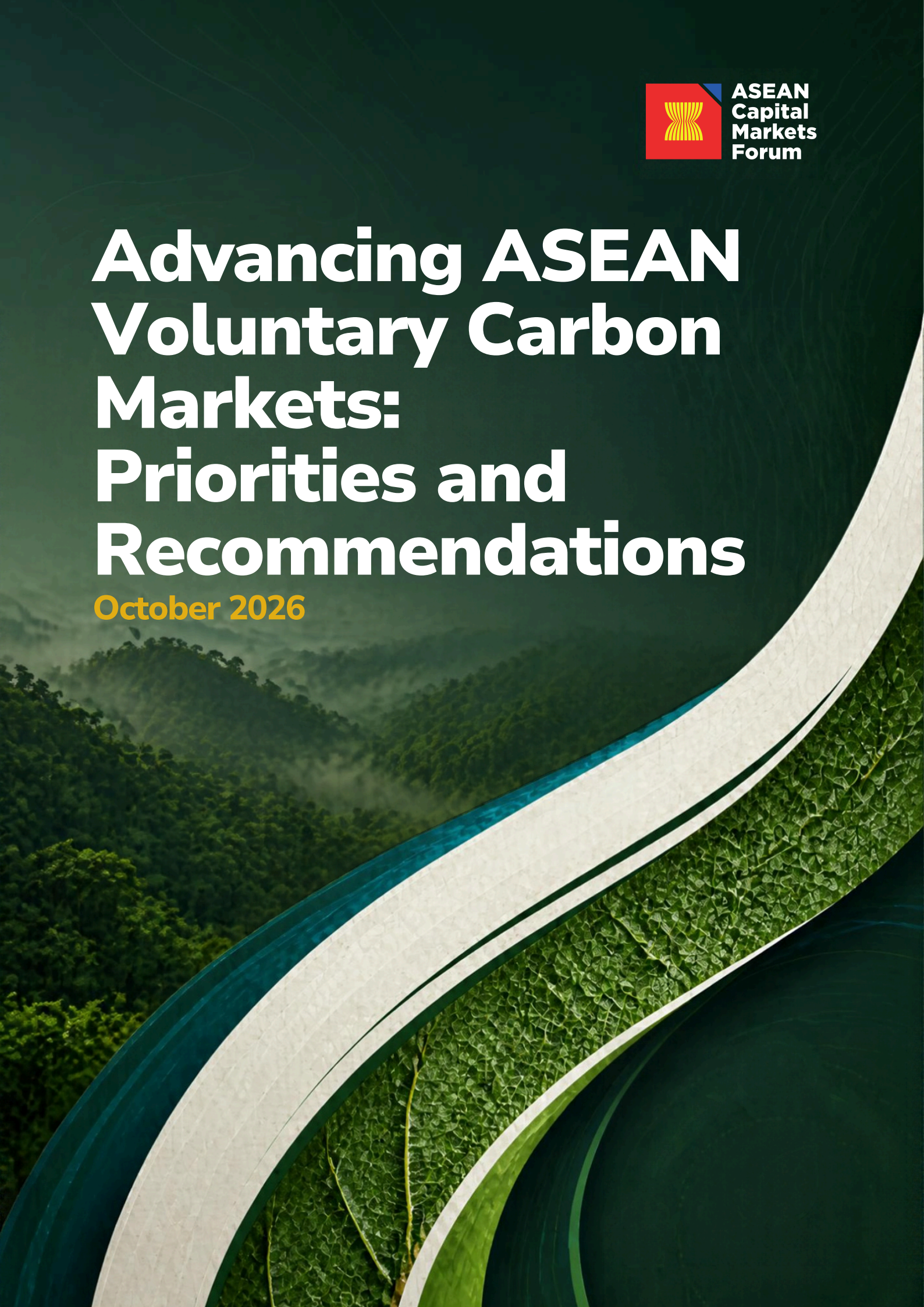
ASEAN Capital Markets Forum

Advancing ASEAN Voluntary Carbon Markets: Priorities and Recommendations

October 2026



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OCTOBER 2026

ASEAN Capital Markets Forum

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Foreword

High-integrity voluntary carbon markets can support the global transition to net zero by mobilising private finance for verified emissions reductions and removals, particularly where climate action might otherwise struggle to attract investment. ASEAN has considerable potential to benefit from these markets—channelling finance towards credible climate action, supporting sustainable development and strengthening the region's wider economic transition. Across ASEAN, voluntary carbon markets are already taking shape through national policies, crediting activities, registries, trading platforms and emerging regulatory arrangements.

As voluntary carbon markets develop, market participants are increasingly looking beyond the integrity of individual projects and credits. Confidence also depends on the wider landscape in which projects operate and the institutional and market systems through which credits are issued, traded, purchased, used and disclosed. Effective governance, transparent infrastructure, responsible buyer conduct and clear legal and regulatory treatment can provide important signals of integrity, helping to build trust and support greater participation.

The UK is pleased to support the development of this report through the ASEAN-UK Green Transition Fund. Building on the ASEAN Capital Markets Forum's VCM Development Plan and ASEAN VCM Guidance, the report highlights three areas for further action: market infrastructure, buyer market conduct, and the legal and regulatory treatment of carbon credits. These provide practical building blocks for credible, transparent and increasingly connected carbon markets across the region.

There is no single pathway for voluntary carbon market development across ASEAN. Member States have different market circumstances, legal frameworks and policy objectives. Regional cooperation can nevertheless help establish common reference points, strengthen interoperability and enable markets to develop with confidence while retaining the flexibility needed at national level.

I would like to thank the ASEAN Capital Markets Forum, Palladium and KPMG Malaysia, alongside regulators, market participants and other stakeholders whose expertise and contributions have informed this report. The UK looks forward to continuing to work with ASEAN institutions and Member States to support credible carbon markets towards meaningful climate action across the region.

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

As ASEAN develops voluntary carbon markets, we have an opportunity to build confidence in their contribution to climate action. Reliable information, responsible conduct, and clear rules are essential to that confidence. Regional cooperation can help our markets strengthen these foundations as they grow.

The ASEAN VCM Priority Areas report identifies three areas for cooperation: market infrastructure to improve transparency and connectivity; buyer market conduct to promote responsible use and disclosure of carbon credits; and legal and regulatory treatment to clarify rules and support effective oversight. Together, they provide a basis for stronger market integrity.

Advancing these priorities requires us to understand the circumstances of each Member State. Legal, institutional, and regulatory arrangements differ, as do stages of VCM development. ACMF can help bring our approaches closer together while respecting these differences and the mandates of environmental, climate, and other relevant authorities.

The report's proposals offer practical ways to pursue this cooperation. They include common minimum information standards, greater interoperability among venues and registries, and a regional register of accredited verifiers. References for responsible sourcing and disclosure, alongside regional guidance on market conduct and environmental claims, seek to reduce unnecessary fragmentation while preserving each jurisdiction's flexibility.

This approach supports the ACMF Action Plan 2026–2030 and our R.I.S.E. priorities of Regional Integration, Inclusivity, Sustainable Finance, and collaborative Enforcement. It gives our members a shared reference for dialogue and action, while offering regional experience the Philippines can draw on as its VCM ecosystem develops.

We thank the ASEAN-UK Green Transition Fund for supporting this work through the Carbon Pricing Readiness & Integration for Strategic Mitigation (Carbon PRISM) initiative. We also acknowledge KPMG PLT, the technical consultant, for facilitating stakeholder engagement and consolidating insights, and our ASEAN colleagues, partners, and public and private sector stakeholders for sharing their expertise.

On behalf of the ACMF and the Securities and Exchange Commission Philippines, we commend this report to our members and stakeholders. As we navigate our future together, may its findings guide cooperation that earns confidence through sound practice. The foundations we strengthen today can help these markets develop with integrity and support the climate action our region needs.

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

Acknowledgement

This report, “Advancing ASEAN Voluntary Carbon Markets: Priorities and Recommendations” was jointly developed through close collaboration between the ASEAN Capital Markets Forum (ACMF) and the Carbon PRISM consortium. Its completion was made possible through the dedicated efforts, expert contributions and steadfast support of numerous individuals and institutions.

We acknowledge the ASEAN-UK Green Transition Fund (GTF) for funding this engagement as their support made this work possible and reflects a continued commitment to strengthening the sustainable finance and voluntary carbon market development across the region.

Additionally, we extend our sincere gratitude to the ACMF, particularly the Sustainable Finance Working Group (SFWG) Co-Chairs; Securities Commission Malaysia and Securities and Exchange Commission Philippines, as well as SFWG members, for their strategic guidance and constructive feedback throughout the consultation period. Their valuable contributions significantly strengthened the calibre and applicability of this report.

This work has greatly benefited from the cooperation and insights of a wide range of stakeholders, including government agencies, carbon exchanges, registries, project developers, and market participants across ASEAN. Consultations conducted as part of the study involved representatives from carbon exchanges, standard-setting bodies, financial institutions, as well as private-sector actors and validation and verification bodies (VVBs), whose perspectives helped strengthen the analytical foundation and regional applicability of the report.

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III. List of Abbreviations

ACCC	Australian Competition and Consumer Commission
ACMF	ASEAN Capital Markets Forum
AIM	Alternative Investment Market
AML	Anti-Money Laundering
AMS	ASEAN Member States
ART	Architecture for REDD+ Transactions
ASEAN	Association of Southeast Asian Nations
ASIC	Australian Securities and Investments Commission
BCX	Bursa Carbon Exchange
CCP	Core Carbon Principles
CDM	Clean Development Mechanism
CEA	Commodity Exchange Act
CEV	Carbon Economic Value
CFTC	Commodity Futures Trading Commission
CIX	Climate Impact X
CO2	Carbon dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
C-PRISM	Carbon Pricing Readiness & Integration for Strategic Mitigation
CSRD	Corporate Sustainability Reporting Directive
DCM	Designated contract market
DNA	Designated National Authority
DOJ	Department of Justice
EFRAG	European Financial Reporting Advisory Group
ESG	Environmental, Social, and Governance
ESRS	European Sustainability Reporting Standards
ETS	Emissions Trading System
EU	European Union
EUAs	EU emission allowances
FTSE	Financial Times Stock Exchange
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GTF	Green Transition Fund
HKEX	Hong Kong Exchanges and Clearing Limited
ICC	International Carbon Credit
ICVCM	Integrity Council for the Voluntary Carbon Market
IDX	Indonesia Stock Exchange
IFRS	International Financial Reporting Standard

IFRS S1	International Financial Reporting Standard S1: General Requirements for Disclosure of Sustainability-related Financial Information
IFRS S2	International Financial Reporting Standard S2: Climate-related Disclosures.
IOSCO	International Organization of Securities Commissions
ISSB	International Sustainability Standards Board
ITMO	Internationally Transferred Mitigation Outcome
JCM	Joint Crediting Mechanism
KYC	Know Your Customer
LSE	London Stock Exchange
MAR	Market Abuse Regulation
MiFIR	Markets in Financial Instruments Regulation
MRV	Monitoring, Reporting and Verification
MTI	Ministry of Trade and Industry
NCCS	National Climate Change Secretariat
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
OJK	Otoritas Jasa Keuangan
OTC	Over-the-Counter
P2SK	Pengembangan dan Penguatan Sektor Keuangan
PA	Priority Area
PACT	Partnering for Accelerated Climate Transition
PDD	Project Design Document
PDR	People's Democratic Republic
POJK	Peraturan Otoritas Jasa Keuangan
REDD+	Reducing Emissions from Deforestation and Forest Degradation, with the "+" indicating additional activities
SD Vista	Sustainable Development Verified Impact Standard
SDG	Sustainable Development Goal
SEC	Securities and Exchange Commission
SPE-GRK	Sertifikat Pengurangan Emisi Gas Rumah Kaca
SRN PPI	Sistem Registri Nasional Pengendalian Perubahan Iklim
SRUK	Sistem Registri Unit Karbon
tCO_2e	tonnes of carbon dioxide equivalent
TGO	Thailand Greenhouse Gas Management Organization
T-VER	Thailand Voluntary Emission Reduction
UK	United Kingdom
UNCITRAL	United Nations Commission on International Trade Law

1 Executive Summary

Building on the ASEAN Capital Markets Forum (ACMF) Voluntary Carbon Market (VCM) Development Plan and ASEAN VCM Guidance[1], this report examines how capital market regulators can support the development of a credible, transparent and liquid VCM in ASEAN. It focuses on the practical regulatory considerations falling within the capital market regulatory lens, particularly secondary market activity where carbon credits are traded, used and disclosed.

A regional assessment was undertaken across the 11 ASEAN Member States (AMS) against three foundational pillars: the regulatory and policy environment, market activity, and market integrity and credibility. The assessment indicates considerable variation in maturity across the region, with three structural patterns emerging. Legal and regulatory frameworks are still developing in many AMS, with capital market regulators engaged principally where a carbon exchange exists or credits are classified as financial instruments. Market infrastructure, comprising registries and trading venues, is at an early stage, and participation varies across supply and demand, constraining liquidity. Integrity of issuance remains anchored largely in independent crediting standards, while national guidance on procurement, retirement and credit quality is still taking shape.

Each pattern points to a corresponding priority area for capital market regulators' consideration: market infrastructure, buyer market conduct, and the legal and regulatory treatment of carbon credits. However, these do not replace the role of environmental authorities, carbon standards or project-level governance in safeguarding environmental integrity. They complement those arrangements by strengthening the market-facing rules, systems and disclosures that support transaction integrity, market confidence and regulatory visibility once credits enter the secondary market.

- **Market infrastructure** provides the operational foundation, through three connected functions: registries as the system of record for issuance, ownership, transfer and retirement; marketplaces and exchanges as organised trading channels supporting access, price discovery and oversight; and trade reporting as a transparency layer across both exchange-traded and over-the-counter activity. The objective is not a single ASEAN market architecture, but minimum infrastructure functions and common data standards allowing national systems, international standards registries and trading venues to connect over time.
- **Buyer market conduct** determines whether the demand side of the market can be relied upon. Responsible sourcing guidance sets out how credits should fit within a credible decarbonisation strategy and how they should be screened and selected. Disclosure guidance and, where appropriate, mandatory requirements make credit use visible to investors, regulators and the wider market. Together these reduce greenwashing risks, improve comparability across buyers and create demand signals rewarding higher-integrity credits, consistent with the region's convergence towards ISSB-aligned disclosure frameworks.
- **Legal and regulatory treatment** underpins both. Clear legal recognition of carbon credits, clarification of the rights attached to issuance, ownership, transfer and retirement, and defined regulatory perimeters reduce legal uncertainty and determine what infrastructure can support and what conduct can be required. It also enables regulators to extend market conduct, disclosure and enforcement requirements to VCM activity, which matters because many existing integrity initiatives are voluntary and require legal mechanisms to become enforceable.

For market participants, these interventions improve confidence across the value chain: stronger demand for high-integrity credits for project developers, clearer expectations for corporate buyers, more reliable information and reduced legal uncertainty for investors, and clearer standards for intermediaries and venues. Stronger governance of the secondary market can also support future links with compliance markets and Article 6 mechanisms.

At the regional level, ACMF's contribution lies in providing common reference points members can draw on when developing national arrangements, across all three priority areas. This matters because participants increasingly operate across more than one AMS market, and a common starting point prevents divergent expectations while helping the region standardise as markets mature. The recommendations adopt a building-block approach that recognises different levels of market maturity, supporting national flexibility while encouraging convergence towards a more interoperable ASEAN VCM ecosystem.

[1] Hereinafter referred to as the ACMF VCM Development Plan and Guidance

2 Introduction

VCM ecosystem in ASEAN is emerging and taking its shape. Across the region, countries are at varying stages of establishing the regulatory frameworks, institutional capacities, and market mechanisms needed to enable credible carbon trading. Some AMS have established meaningful regulatory, infrastructure, and integrity foundations, while the rest remain at an early stage of policy development or market formation.

Following the release of the ACMF VCM Development Plan and Guidance in November 2025, a comprehensive regional assessment was undertaken across the ten AMS except Timor-Leste (prior to Timor-Leste's accession to ASEAN). The Development Plan and Guidance set out the key components required to support the development of a credible and liquid VCM. Building upon the key components identified under the Development Plan and Guidance, this report further identifies the three foundational pillars to form the basis of a needs assessment framework. This framework was applied to conduct current assessment at regional level across all 11 AMS, including the Timor Leste, to identify the VCM landscape and the latest progress within the region. The detailed assessment can be found in the Annex Report: *ASEAN VCM Assessment Report*.

The assessment evaluates each market across three core pillars: i) regulatory and policy environment, ii) market activity, as well as iii) market integrity and credibility. Each market was assessed through a desktop review of regulatory instruments, policy documents, and market data, with country-level findings subsequently synthesised into a regional gap analysis. The areas of development identified in this report should be understood as regional patterns rather than conditions uniformly applicable to all markets.

Three structural areas of development observed across the region, as per the pillars:

- **Regulatory and Policy Environment:** In many AMS, legal and regulatory frameworks for VCM and institutional governance structures are still developing. Capital market regulators mainly participate in regions where a carbon exchange has been set up, or carbon credits are classified as financial instruments.
- **Market Activity:** Trading exchanges and transaction registries are at an early stage across the region, and where they exist are often built under separate mandates and only partially interconnected. As these systems are often established under separate mandates and remain only partially interconnected, trading activity and liquidity are still developing across the region.
- **Market Integrity and Credibility:** The integrity of credit issuance remains anchored largely in independent crediting standards, while national guidance on procurement, retirement, and credit quality is still being developed.

3 VCM Landscape in ASEAN

Market maturity varies considerably across the three assessment pillars and the 11 markets assessed. Indonesia, Malaysia, Singapore, and Thailand have established comparatively more developed foundations, although their strengths differ across regulatory readiness, market infrastructure, market activity, and integrity arrangements. Viet Nam stands out among the emerging markets for the pace and coherence of its regulatory reforms, even though its domestic market infrastructure is not yet fully operational. Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and the Philippines remain at relatively earlier stages of VCM development across most pillars, with market activity generally driven by international standards, donor-supported initiatives, or project-specific activity rather than deep domestic market infrastructure. Timor-Leste remains at the early stage of VCM development, with foundational regulatory and institutional arrangements still emerging. The table below captures the defining characteristics of each market across the three pillars and is intended as a high-level reference rather than a comprehensive assessment.

Table 1: Key Insights of Current State Assessment

Country	Regulatory and Policy Environment	Market Activity	Market Integrity and Credibility
Brunei Darussalam	Early-stage policy environment; no VCM-specific regulation or market regulator.	Domestic exchange, registry and project pipeline remain at an exploratory stage. Feasibility-stage initiatives especially on nature-based are under development.	No domestic crediting, MRV, procurement, or retirement framework; dependent on international standards.
Cambodia	Emerging policy environment; VCM regulatory framework and market oversight arrangements remain under development.	No domestic exchange; REDD+ and forestry project activity relatively visible; domestic registry in place.	International standards and domestic registry support issuance; procurement and Article 6 arrangements evolving.
Indonesia	Carbon credits are classified as securities; integrated oversight by government and capital market regulators.	Operational exchange; introducing national registry (SRN PPI and SRUK) for NDC commitments and carbon unit administration; participation and liquidity remain concentrated.	Domestic framework supported by MRV and registry tracking at a national level; Article 6 authorisation in place; buyer-side procurement and claims guidance less developed.
Lao PDR	Early-stage policy environment; dedicated VCM market oversight remains limited.	Activity project-led and externally oriented through forestry and donor programmes; no domestic trading infrastructure.	Credibility supported by international standards; domestic crediting, registry, and double-counting systems are not in place.
Malaysia	Carbon governance is distributed across federal and state levels; some states have developed their own legislation on carbon markets; capital market regulator oversight limited to exchange (i.e. Bursa Malaysia) activity.	Operational exchange through BCX; no standalone national registry; market activity early-stage.	Credits rely on international standards and subnational regulations; buyer-side guidance limited.
Myanmar	Early-stage environment; a dedicated VCM framework and institutional arrangements are not yet in place.	No domestic exchange or registry; activity limited and externally driven.	No domestic Article 6, MRV, procurement, or disclosure framework; integrity

Country	Regulatory and Policy Environment	Market Activity	Market Integrity and Credibility
			dependent on international standards.
Philippines	Enabling policy direction emerging; VCM-specific regulatory arrangements continue to evolve.	No domestic exchange or registry; activity project-led and tracked through international standards.	Credibility anchored in international standards; domestic initiatives and Article 6 arrangements still developing.
Singapore	Clear carbon pricing and Article 6 architecture; dedicated VCM regulation limited.	Compliance-linked demand for eligible international carbon credits; limited domestic project potential.	Most advanced regional guidance on responsible credit use and Article 6 operationalisation.
Thailand	Well-developed institutional architecture across environmental authorities and emerging role of capital market regulators, with a maturing enabling framework.	Functional registry and active domestic supply through T-VER; exchange pathway under development.	Domestic framework (T-VER and Premium T-VER established); Article 6 advancing; buyer-side procurement and retirement guidance limited.
Timor-Leste	Climate governance in place; no dedicated VCM policy or regulatory framework.	Highly nascent; no exchange, registry, or active pipeline beyond limited donor-supported activity.	No domestic crediting, MRV, or disclosure framework; future credibility dependent on international standards.
Viet Nam	Rapidly evolving regulatory framework and institutional arrangements.	Exchange scheduled for 2028; current activity project-based and linked to international standards.	Integrity currently reliant on international standards; Article 6 arrangements are still under development.

Source: KPMG Malaysia under C-PRISM under Pillar II of ASEAN-UK Green Transition Fund

The detailed findings across the three pillars are set out in the following chapters, covering the regulatory and policy environment, market activity, and market integrity and credibility. Each chapter presents the key findings from the current state and gap assessments, which are subsequently synthesised to identify the priority areas and implications for VCM development across ASEAN.

3.1 Regulatory and Policy Environment

Institutional oversight of VCM activity in ASEAN varies across AMS, and where it exists, it is not yet commonly VCM-specific. Most AMS have identified an environmental or climate authority that addresses carbon-related matters as part of their broader climate policy, carbon pricing or compliance carbon market mandate. However, this government-level function is distinct from, and does not automatically translate into, market regulatory oversight in VCM. Only Indonesia, and at the sub-national level Sabah and Sarawak in Malaysia, have established institutional arrangements clearly designed around VCM governance specifically, rather than carbon issues being addressed as a subset of general environmental policy. Because institutional responsibilities are often shared across climate, environmental and financial authorities rather than held within a single dedicated framework, arrangements naturally vary from one AMS to another. Building greater consistency across these arrangements would support regional coherence, helping to establish common standards and interoperable infrastructure over time and this may be facilitated by clearer and more coordinated institutional arrangements with well-defined responsibilities at both the government and market-regulation levels.

At the market regulation level, the involvement of capital market regulators in VCM oversight remains at an early stage across AMS. In many jurisdictions, VCM activity is not yet explicitly defined as a financial or capital market activity, and legislation has yet to clearly empower capital market regulators to oversee carbon credit transactions or market conduct. Where capital market regulators have become involved, this has typically been triggered by the establishment of a national carbon exchange. As markets develop, areas such as trading conduct, disclosure and market integrity may

become relevant considerations for capital market regulators, subject to each jurisdiction's legal and regulatory perimeter.

This institutional fragmentation is compounded by the legal treatment of market activity in VCM which remains at early stage. Most AMS have not yet classified carbon credits under domestic law, whether as a property right, a security, or a commodity, which leaves questions of ownership, transferability, and treatment in insolvency or dispute without a clear domestic legal basis. Without this classification, the jurisdiction of any given authority over carbon credit transactions may not be clearly established. In practice, integrity safeguards for carbon credit issuance and retirement also continue to rely on the frameworks of crediting standards, while guidance on the procurement, disclosure, and utilisation of carbon credits remains at an early stage of development. A related area for development is the extent to which climate ambition has translated into practical enabling conditions for VCM participation. Operational carbon pricing or compliance market mechanisms are currently in place in a few AMS, so demand for voluntary credits is at present supported primarily by voluntary corporate buyers rather than by more predictable compliance-driven signals; Article 6 operational readiness continues to develop at different paces; and national decarbonisation targets are still maturing into clear domestic demand for voluntary credits. The governing-regulation dimension therefore has two aspects: the legal classification of carbon credits is still being defined in most jurisdictions, and dedicated market-integrity regulations covering buyer conduct, disclosure, anti-greenwashing, and the responsible use of credits in claims are still emerging. Governing regulations are consequently more established on the project and standards side, with room to develop further on the buyer, transaction, and claims side.

Addressing these areas, however, requires coordination across multiple authorities, as VCM development spans across climate policy, financial regulation, and legal frameworks that do not sit within any single regulator's mandate. However, the capital market regulators are nonetheless well positioned to intervene at specific points within this broader ecosystem. While VCMs have largely developed outside the capital markets regulatory framework, ensuring a credible and well-functioning market requires effective oversight of trading conduct, disclosure standards, and market integrity, all of which fall within the mandate and expertise of capital market regulators. As domestic carbon markets mature and trading infrastructure develops across the region, the involvement of capital market regulators will become increasingly important in establishing the governance standards and investor confidence necessary to support a liquid and credible VCM.

The legal classification of carbon credits, whether as a security, commodity, or other instrument, would provide greater legal certainty and potentially expand this regulatory remit, providing a stronger basis for oversight and enforcement. Clarity of regulation, however, extends beyond how credits are generated to how they are traded, used, and disclosed. Guidance on market conduct and disclosure is therefore central to a credible market, and ACMF may wish to consider developing regional guidance on market conduct and disclosure, facilitating consistent regulatory approaches across member jurisdictions, and working alongside government authorities and crediting standards to support a more coherent and credible VCM across ASEAN.

Highlight: Indonesia's Integrated Regulatory Model

Indonesia is one of the exceptions to the regional pattern, having addressed institutional and legal considerations through a nationally led and relatively integrated regulatory model. Institutionally, Indonesia operates a dual governance structure. The Ministry of Environment leads climate policy and administers the Carbon Economic Value (CEV) framework, including the registration of mitigation actions, oversight of carbon credit issuance through the domestic carbon credit instrument, SPE-GRK, operation of national registry (SRN PPI and SRUK) functions, and authorisation of carbon units for international transfer under Article 6. In parallel, the Financial Services Authority (Otoritas Jasa Keuangan, OJK), as Indonesia's integrated financial regulator, holds direct licensing and supervisory authority over carbon trading through the carbon exchange.

Legally, Law No. 4/2023 resolves the regulatory classification question by designating carbon units as securities, while POJK 10/2026 (as an amendment of POJK 14/2023) operationalises this mandate by giving OJK explicit regulatory, licensing, supervisory, and reporting powers over Indonesia's domestic carbon exchange, IDXCarbon, and its participants. Beyond exchange oversight, POJK also regulates the carbon unit as an instrument itself, setting its classification as a security, defining its scope to cover both emissions trading and voluntary units, governing trading conduct and enabling enforcement against misconduct under capital market law. As a result, the oversight of VCM trading activity and market infrastructure in Indonesia sits clearly within the capital markets regulatory perimeter. This model is also relatively centralised by regional standards, with a national regulatory framework, a clear legal classification and an evolving national registry architecture supporting market governance. Regulatory clarity is strongest for exchange-based, nationally recorded activity; while the instrument and market-conduct rules are now

defined under capital market law, buyer-side use, including procurement, retirement, claims, and disclosure, is still maturing

Highlight: Malaysia's Sub-National Governance

In Malaysia, as forestry and land matters sit constitutionally with state governments, Sabah and Sarawak have each legislated their own carbon governance frameworks: Sabah's Climate Change and Carbon Governance Enactment 2025 establishes mandatory project licensing, a state carbon registry, and carbon-rights registration under the Sabah Climate Action Council, while Sarawak has legislated the Environment (Reduction of Greenhouse Gases Emission) Ordinance 2023 as its overarching framework for emissions reduction and carbon activity, with the Forests (Forest Carbon Activity) Rules 2022 embedding additionality and MRV requirements directly into project licensing under the Natural Resources and Environment Board, alongside separate rules governing geological carbon storage. These frameworks illustrate varying approaches in designing VCM governance by defining carbon rights, project-level licensing, and considerations for registry-based tracking.

3.2 Market Activity

Core market infrastructure, including a formalised exchange and a domestic transaction registry, is still taking shape. Most AMS continue to rely on OTC transactions, or registries of carbon crediting standards, with several markets having neither a domestic exchange nor a domestic registry. In these markets, carbon project activities are generally tracked through the registries of crediting standards rather than through nationally controlled infrastructure. Market infrastructure development spans three interdependent components: a formalised carbon exchange, a domestic transaction registry, and data interoperability between them. Progress on each supports the effectiveness of the others. A domestic exchange helps establish a formal, supervised trading environment and improves the visibility of market activity to regulators, while a nationally administered registry gives national authorities clearer sight of domestic carbon credit activity, supporting their ability to monitor integrity, guard against double counting, and maintain a sovereign record of transfers.

This does not prevent VCM activity from taking place, as transactions can occur without domestic infrastructure where relevant systems have already been established by the crediting standards. However, where domestic market infrastructure is still developing, regulatory visibility over VCM activity remains at a formative stage. Even where such infrastructure exists, it does not in itself guarantee full regulatory visibility, as exchanges and registries do not always develop together. Without a supervised trading venue, whether a domestic exchange or a regulated commercial exchange, opportunities to strengthen monitoring of market conduct remain, and without access to a registry record, be it a nationally operated registry or held by a recognised commercial provider, an independent record of issuance, ownership, transfer or retirement within their jurisdiction may not yet be available to authorities.

Highlight: Indonesia and Malaysia's Exchanges and Registries

Indonesia and Malaysia have established live, formalised domestic carbon exchanges, and the comparison between them shows that an exchange alone does not close the wider market infrastructure gap. Indonesia has paired IDXCarbon with an evolving national registry architecture with SRN PPI supports NDC and mitigation-action tracking, while SRUK serves as the registry for carbon credit issuance (domestic and international units) and administers transfer and retirement. This provides a clearer pathway for integrated oversight across the credit lifecycle. The evolving registry architecture is also intended to differentiate domestic voluntary or compliance use from international mitigation outcomes, supporting Article 6 accounting and environmental integrity.

Malaysia's BCX, by contrast, performs registry-like functions within its exchange ecosystem, including the recording, transfer, and retirement of credits traded on the platform, but these functions remain linked to the underlying Verra and Gold Standard registries rather than a nationally controlled registry system. As a result, national authorities' direct and independent visibility over credit ownership, transfer, and retirement remains mediated through international standards infrastructure.

The contrast between Indonesia and Malaysia illustrates the presence of a carbon exchange does not in itself guarantee the sovereign registry infrastructure needed for full regulatory visibility. Indonesia's top-down approach of developing registry architecture alongside its exchange provides a stronger foundation for end-to-end oversight, while Malaysia's experience demonstrates that a functional trading venue can operate without a sovereign registry, but at the cost of national authorities' direct and independent access to credit ownership and retirement records. For

capital market regulators and policymakers across the region, this distinction is important, an exchange governs trading conduct, but a sovereign registry governs the underlying record of what exists, who owns it, and what has been retired, functions that are fundamental to market integrity and credibility.

Highlight: Viet Nam's Integration of VCM Activity into Securities Market Infrastructure

Viet Nam has yet to launch a domestic carbon exchange, with pilot trading currently scheduled for 2028. However, its proposed market design is notable for embedding carbon market governance within existing capital market infrastructure. Rather than developing carbon market institutions, Viet Nam has designated the Hanoi Stock Exchange as the trading platform operator, the Vietnam Securities Depository and Clearing Corporation as the custodian and settlement provider, and the State Securities Commission as the market conduct supervisor. The design also anticipates registry-exchange interoperability from the outset, including real-time synchronisation between the national registry, the exchange matching system, and the custody infrastructure.

The key insight from Viet Nam's approach lies in its sequencing. Viet Nam is seeking to establish the legal, institutional, and technical foundations for market governance before the exchange becomes operational. By treating carbon market oversight as an extension of existing capital market regulatory competence, Viet Nam provides a practical reference point for AMS that have yet to establish domestic carbon market infrastructure and demonstrates how capital market regulators can be embedded into VCM governance from the outset.

Beyond exchange and registry, the assessment finds that even where VCM infrastructure exists, it tends to be only partially interconnected, typically linked to international standards registries but rarely integrated end-to-end across domestic registry, domestic exchange, and cross-border systems simultaneously. Primary market supply is emerging across the region but remains concentrated in a narrow set of sectors, especially forestry, renewable energy, and waste, and in several markets is dependent on a small number of large or state-linked developers. Where infrastructure is in place, most AMS currently show partial interoperability, typically connectivity with international standards registries, with integration between domestic registries and exchanges and broader cross-border alignment still developing. As this integration matures, credit data can become more consistently synchronised across issuance, trading, and international transfer, an area that will grow in importance as more AMS build domestic infrastructure while linking to international markets.

On the demand-side, VCM remains at an earlier stage; even where trading platforms exist, secondary market activity is still developing, with most transactions concluded through private bilateral agreements rather than open and transparent market trading. Because supply pipelines and demand conditions are rarely developing at the same pace, the result across most of ASEAN is a market that is structurally more supply-driven than demand-driven, a pattern that constrains price discovery and does not yet support the stable and liquid trading environment in which that capital market regulators would typically expect to intervene. This partly reflects ASEAN's position as a supply region, with a significant share of demand currently originating from corporates outside the region seeking to meet their voluntary climate commitments. Some degree of asymmetry may continue, and cultivating domestic and regional demand remains a valuable area for AMS to develop. Market participation is characterised not by an absence of activity but by scope to build further breadth, depth, and balance. Primary supply is currently focused in a few sectors and concentrated among nature-based projects, state-supported initiatives, or a small number of developers, with some AMS drawing on donor-supported programmes. On the secondary side, domestic demand is still emerging, trading volumes are developing, and price signals remain modest, with stable price discovery yet to establish. Where supply and demand develop at different paces, this can leave market liquidity and confidence still building.

These market activity areas for development are directly relevant to the role of capital market regulators. Where formalised domestic exchanges are not yet in place in most AMS, the primary mechanism through which capital market regulators would typically exercise oversight, being a supervised trading venue, is not yet available across much of the region. Where exchanges have been established, the limited connection between trading infrastructure and registry systems may limit the regulatory visibility required to monitor conduct, enforce standards, and maintain market integrity. On the demand side, developing secondary market activity suggests that clearer market conduct frameworks, disclosure expectations, and responsible participation standards may be needed to build the confidence required to deepen liquidity. As carbon exchanges develop and participation broadens across the region, capital market regulators are likely to play an increasingly important role in providing the oversight framework needed to support credible, transparent, and well-functioning carbon markets.

3.3 Market Integrity and Credibility

Credit issuance across ASEAN remains predominantly anchored in independent standards such as Verra, Gold Standard, Architecture for REDD+ Transactions (ART), and Joint Crediting Mechanism (JCM), which provide widely recognised methodologies, registries, and third-party assurance frameworks that underpin credit integrity and market confidence across the region. These independent standards are increasingly benchmarked against the Integrity Council for the Voluntary Carbon Market's (ICVCM) Core Carbon Principles (CCP), which have emerged as a leading supply-side reference for assessing the integrity of crediting methodologies and programmes. Domestic crediting standards are emerging in several markets, including Thailand's T-VER, Indonesia's SPE-GRK, and Malaysia's Forest Carbon Offset framework, although their market recognition, technical capacity, and international interoperability remain at varying stages of development. As these domestic standards build out their MRV systems, registry functions and verification capacity, their credibility will depend heavily on how closely they align with international integrity benchmarks such as the ICVCM CCP and Article 6 requirements. These benchmarks provide a common baseline on which jurisdictions can build their own capability and through which ASEAN-generated credits can earn international recognition.

At the same time, limited local validation and verification capacity have led to more dependence on independent crediting programmes and foreign verifiers, thereby raising transaction costs. Strengthening accredited local capability that remains interoperable with these international benchmarks would help lower those costs over time while preserving credibility. A further area for development is greater harmonisation in the standards recognised across the region. AMS currently accept a range of international standards and crediting frameworks, and moving toward greater alignment would improve the comparability of credits, support more consistent quality benchmarks, and help develop a more integrated regional market. Verification capacity also continues to develop, with accredited validation and verification bodies still growing in several jurisdictions; expanding this local capacity would complement international expertise and donor-supported MRV systems while supporting the growth of domestic technical capacity.

Overall, the supply-side integrity of carbon credit issuance across ASEAN is comparatively better supported where credits are issued under independent standards or where domestic standards are progressively aligned with international practices. Carbon markets are inherently global and the international community has increasingly rallied around a common set of integrity standards for ASEAN markets to be seen as credible, a concerted effort to align with these standards is essential. However, continued efforts are therefore required to strengthen domestic technical capacity, including through the adoption of digital MRV systems and the development of accredited local verification bodies. The objective is not to reduce reliance on international standards but to build domestic capability that meets them, so that locally issued credits achieve international recognition and interoperability while lowering transaction costs over time. The primary market integrity area for development, however, lies not in credit issuance but in the buyer-side use of credits, where procurement standards, retirement practices, disclosure requirements, and claims guidance are not yet widely established in most jurisdictions.

Across most AMS, national guidance on responsible procurement or retirement of carbon credits has yet to be developed, as have domestic reference points for assessing credit quality or the credibility of offsetting claims. Credibility in a voluntary market is not solely a function of how credits are issued, but also of how they are used. Without procurement guidance, buyers have few reference points for assessing credit quality, additionality, alignment with climate strategies, and the appropriate role of offsets in corporate decarbonisation efforts. Without retirement and disclosure requirements, there is limited public visibility over whether corporate emission claims are supported by verifiable credit retirements. Retirement is typically recorded either through domestic market infrastructure, where available, or through the registries of independent carbon crediting standards, further underscoring the importance of registry infrastructure. The route also carries different accounting implications, such as retirements recorded through a national registry must be rationalised against the country's NDC to avoid double counting, whereas retirements through independent standard registries generally sit outside NDC accounting and are not fully tracked by national authorities.

Singapore is the only AMS to have established guidance in this area. As this guidance addresses the voluntary use of carbon credits rather than a compliance obligation, it is necessarily non-binding by design. Across the rest of the region, procurement, disclosure, and retirement practices are governed largely by individual corporate discretion and the internal rules of the crediting standards, rather than by any domestic reference point. The Voluntary Carbon Market Integrity Initiative (VCMI) Claims Code of Practice has emerged as a leading international reference for the credible use of carbon credits and associated claims, complementing supply-side integrity work under the ICVCM. Rather than developing a competing standard, ACMF's opportunity lies in helping members apply references such as VCMI to their own market context and capacity. As a practical next step, ACMF could map existing references, such as VCMI and Singapore's guidance, and identify where regional adaptation or common baselines would add value. Where a jurisdiction prefers to rely on existing international frameworks rather than develop its own domestic guidance,

capacity-building support would help ensure those frameworks are applied credibly. This positions VCMI as the anchor reference for contextualisation and adoption.

A related and increasingly material market integrity area of development concerns Article 6 alignment and double-counting avoidance. Corresponding adjustment mechanisms, which are intended to ensure that an emission reduction is not counted by a host country towards its NDC while also being counted by a buyer country towards its own NDC, have yet to be fully operationalised across much of ASEAN. Corresponding adjustments apply to internationally transferred outcomes counted toward national targets, where credits used by corporates for their own account fall outside UNFCCC accounting and do not require the same treatment. This area is closely linked to the maturity of national registry, MRV, and authorisation systems. Where sovereign registry infrastructure and clear procedures for authorising international transfers are still in development, national authorities may face challenges in tracking ITMOs, applying corresponding adjustments, and verifying the final use of authorised credits. A further area for development is greater clarity in distinguishing voluntary carbon credit use from Article 6-authorised transfers. Many AMS are still developing rules on whether voluntary credits require authorisation or corresponding adjustments, particularly for cross-border offsetting, and clearer treatment here would provide greater certainty over accounting and help ensure that each emission reduction is claimed by a single party. This is most effective where national registries, integrated MRV systems, and linkages to national greenhouse gas inventories are in place, as these provide the mechanism to support that each mitigation outcome is counted only once.

A small number of markets, including Indonesia, Malaysia, Singapore, Thailand, and increasingly Viet Nam, have begun to address this through bilateral implementation agreements, authorisation procedures, and registry development. However, across much of the region, the institutional, regulatory, and technical systems required to provide assurance that each mitigation outcome is counted once and only once at the national level, across host and buyer country accounts, remain under development. Bilateral Article 6 cooperation is also emerging as an important channel for regional integration, with Singapore's implementation agreements with the Philippines, Thailand and Viet Nam illustrating how cross-border carbon market linkages are beginning to form ahead of a unified ASEAN-wide framework.

For capital market regulators, this carries important implications. As carbon credits become increasingly tradable across borders and potentially integrated into domestic exchanges or financial market infrastructure, the credibility of these instruments will depend not only on project-level quality, but also on the robustness of accounting, registry, and disclosure systems that prevent double counting. Strengthening Article 6 readiness, registry interoperability, and transparency around authorisation and retirement therefore represents a critical priority for improving market integrity and supporting confidence in ASEAN's carbon markets.

Highlight: Voluntary Guidance and Disclosure Requirements in Singapore and Hong Kong

Singapore and Hong Kong have both introduced buyer-side guidance to promote responsible market practices in the procurement, use and retirement of voluntary carbon credits. In Singapore, the Guidance on the Role of Carbon Credits in Corporate Decarbonisation, jointly issued by NCCS, MTI and Enterprise Singapore, provides non-binding guidance on the responsible use of carbon credits as part of corporate decarbonisation strategies. Similarly, the HKEX Carbon Credits Buyer's Guide provides non-binding guidance to support responsible procurement and use of carbon credits in Hong Kong.

These buyer-side measures complement the broader sustainability reporting frameworks in both jurisdictions. Singapore and Hong Kong have progressively incorporated climate-related disclosure requirements aligned with IFRS S2 into their respective listing and sustainability reporting frameworks. Under IFRS S2, where an entity has a net greenhouse gas emissions target and plans to use carbon credits to achieve that target, it is required to disclose relevant information on the planned use of those credits, including the extent of reliance, the crediting scheme and credit type, and factors relevant to their credibility and integrity.

Accordingly, the current disclosure requirements do not constitute standalone VCM-specific reporting regimes and are primarily triggered where an entity intends to use carbon credits in achieving its emissions target. Nevertheless, they provide an existing regulatory foundation through which transparency over corporate carbon credit use can be strengthened. Together with non-binding buyer-side guidance, these measures represent emerging market conduct and market integrity mechanisms that support more responsible procurement, use and disclosure of carbon credits. As carbon markets continue to develop, existing sustainability reporting frameworks may also provide a basis for further strengthening carbon credit-related disclosure expectations where appropriate.

Source: Appendix C2 Environmental, Social and Governance Reporting Code, HKEX, 2025; Guidance on Role of Carbon Credits in Corporate Decarbonisation, NCCS; MTI of Singapore; Enterprise Singapore, 28 Oct 2025; SGX

Listing Rules 711A and 711B and Practice Note 7.6 Sustainability Reporting Guide; HKEX Carbon Credits: A Buyer's Guide, September 2025.

4 VCM Priority Areas

The assessment pillars set out in the previous chapter evaluate current market maturity. This chapter outlines the priority areas representing the interventions most directly relevant to capital market regulators: market infrastructure, buyer market conduct, and the legal and regulatory treatment of carbon credits.

The three are connected rather than independent. Market infrastructure determines what is recorded, where transactions occur and what is visible to regulators. Buyer market conduct addresses how participants source credits and disclose their use of them, which determines whether the demand side of the market can be relied upon. Legal and regulatory treatment underpins both, since the certainty with which a credit can be held, transferred and evidenced shapes what infrastructure can support and what conduct can be required.

Each priority area follows the same structure: a definition of the function concerned, the reasons it matters, and the considerations relevant to jurisdictions developing arrangements in that area. The considerations are not prescriptive. AMS are at different stages of market development, and the arrangements appropriate to each will differ, consistent with the building-block approach of the ACMF VCM Development Plan and Guidance.

These priority areas sit within the areas where capital market regulators can contribute directly. They complement, rather than replace, the functions of environmental and climate authorities and crediting standards, which govern project-level issuance, measurement, reporting and verification. Where the arrangements described involve authorities beyond the capital market regulator, this is identified in the relevant section.

4.1 Priority Area 1: Market Infrastructure

Market infrastructure is the operational layer that allows VCM activity to become traceable, visible and scalable. For Priority Area 1, market infrastructure should be understood as three connected functions: a registry or system of record; a marketplace or exchange for organised trading; and a trade reporting layer for activity that occurs both on and off organised venues.

AMS are progressing from different starting points. The practical objective is to define the minimum functions that credible market infrastructure should perform, then promote interoperability so that national systems, international standards registries and trading venues can connect over time.

This framing is important for ACMF because market infrastructure sits within the area where capital market regulators can add practical value: market conduct, transaction transparency, price discovery, market surveillance, participant onboarding, disclosure and investor confidence. These areas complement, rather than replace, the role of environmental authorities and crediting standards in project-level issuance and MRV.

Why this Priority Area?

The key insight is that infrastructure should cover the full transaction lifecycle. A VCM may have active bilateral transactions even without a domestic exchange, but regulatory visibility remains limited if transaction records, registry records and retirement records are not connected. Conversely, an exchange without robust registry linkage may improve trading access but still leave questions around ownership transfer, settlement and retirement recognition.

The ASEAN assessment identified three key infrastructure components that underpin a functional VCM ecosystem:

1. Registry as the system of record;
2. Marketplace or exchange as the organised trading channel; and
3. Trade reporting as the transparency layer.

These infrastructure components support five broader market objectives:

1. Ownership certainty
2. Price discovery
3. Regulatory visibility
4. Regional interoperability

Why this Priority Area?

5 Investor and buyer confidence

Ownership certainty - A carbon credit is only useful as a market instrument if participants can identify the credit, determine who holds it, and know whether it remains active or has been retired. Registry records play this role. They allow market participants to verify the existence of a credit and provide the basis for transfer and retirement records. If registry records are incomplete, fragmented or not linked to trading systems, the market may face uncertainty over settlement, duplicate transfers, or post-trade reconciliation.

Price discovery - VCM prices are shaped by project type, geography, vintage, methodology, certification, co-benefits, corresponding adjustment status, buyer preferences and perceived quality. Bilateral markets can accommodate this complexity, but they provide limited visibility to other participants. A structured marketplace or exchange can improve price discovery by aggregating bids and offers, publishing market information and applying common trading rules. This does not eliminate the need for bilateral transactions, but it provides a reference point that is otherwise difficult to obtain.

Regulatory oversight and visibility - Capital market regulators cannot supervise what they cannot see. If activity occurs only through private contracts, and if there is no reporting requirement, regulators may have limited ability to monitor transaction volumes, detect disorderly conduct, understand market trends, or assess whether market development is aligned with policy objectives. Trade reporting therefore becomes important, especially where OTC activity remains significant. A reporting layer allows regulators to improve transparency without requiring all trades to migrate to an exchange.

Regional interoperability - ASEAN VCM development does not require every AMS to adopt the same infrastructure at the same time. However, it does require systems that can eventually communicate. Without common identifiers, data fields, retirement status recognition and reporting standards, national systems may develop in ways that are difficult to connect. This risks fragmenting the regional market and increasing the cost of cross-border participation. Thus, a common regional approach to minimum infrastructure principles can reduce this fragmentation while preserving national flexibility.

Investor and buyer confidence - Buyers are more likely to participate where there is a clear route to identify credits, transact efficiently, verify transfer, retire credits, and support credible disclosure. Project developers are more likely to invest where market access and price formation are visible. Regulators are more able to support growth where market activity can be observed and analysed. Market infrastructure therefore supports the broader objective of developing a VCM that is credible, transparent, scalable and able to mobilise climate finance across the region.

Objective	Implication for ASEAN VCM Development
Ownership certainty	Establishes clear and verifiable records of issuance, ownership, transfer and retirement.
Efficient price formation	Improves market transparency and supports more effective price discovery mechanisms.
Regulatory oversight and visibility	Enables monitoring of market activity, conduct risks and development trends across trading channels.
Regional interoperability	Facilitates connectivity between national systems through common data and reporting standards.
Market confidence and participation	Strengthens trust in market infrastructure, supporting liquidity, investment and wider market adoption.

4.1.1 Registry as the System of Record

An early question in developing VCM infrastructure is which record the market treats as authoritative. Credits are already recorded somewhere, whether in a domestic registry or in one operated by an international crediting standard.

Where a jurisdiction has not identified which arrangements it recognises, participants may lack a common reference point for what has been issued, transferred and retired.

Registry

A registry records the lifecycle of carbon credits and serves as the system of record for issuance, ownership, transfer and retirement. The primary objective is to support market traceability and transaction integrity within the VCM. Where Article 6 mechanisms are relevant, recognised registry arrangements and related tracking systems should be capable of exchanging information with national Article 6 processes and other authorised systems to support transparency and double-counting avoidance. In this regard, registry arrangements should be viewed as an information and traceability layer that supports, but does not replace, the policy, authorisation and accounting functions performed by competent national authorities.

AMS do not need to adopt the same registry model, as some markets rely on the registries operated by international crediting standards, while others have established or are developing national registry infrastructure to support domestic crediting programmes, national carbon market infrastructure or Article 6 implementation. Where credits are issued under international standards and traded voluntarily, the registries of those standards may serve as the recognised system of record. These approaches are not mutually exclusive and may operate alongside one another. The priority is therefore not uniformity of registry design, but clarity on the recognised system of record and the minimum information required to support traceability, regulatory visibility and market confidence.

Importance of a Recognised System of Record

Recognised registry arrangements underpin other functions of market infrastructure. An exchange settles against the registry record, and a buyer's disclosure of credit use is verifiable only if the underlying retirement can be traced. Where multiple registries are used without clear recognition or coordination between them, there is a risk that the same credit may be recorded as available in one registry even though it has already been transferred or retired in another.

Considerations: Governance and Recognition

One of the key considerations in establishing registry arrangements is determining which registries are recognised within the jurisdiction and the governance arrangements that support their operation. A carbon registry functions as the system of record for carbon credits and therefore provides the basis upon which ownership, transfers and retirement can be evidenced. Where multiple registry arrangements are recognised, consideration may be given to the conditions under which registry records can be relied upon for market transactions, disclosure purposes and regulatory reporting.

Where a jurisdiction oversees registry operators directly, the governance framework may clarify the responsibilities of registry operators, oversight arrangements, accountability mechanisms and requirements relating to record maintenance and auditability. Effective governance is important because registry records frequently serve as the primary evidence of issuance, ownership and retirement within the carbon market ecosystem. Clear governance arrangements can therefore strengthen transaction integrity, ownership certainty and market confidence.

Some jurisdictions rely on registries run by international crediting standards or other commercial operators, which they may have no mandate or practical way to regulate. Governance in these cases does not need to involve regulating the operator. Governance may instead operate through recognition: the jurisdiction determines which registries it treats as the system of record and the conditions a registry must meet to be relied upon, while the operator remains responsible for running it. Such conditions may include public availability of serial numbers and retirement status, access to registry data for the relevant authorities, auditability of records, and safeguards against the same credit being recorded in more than one registry. Jurisdictions taking this approach may also set eligibility criteria for the underlying credits, such as approved crediting standards and methodologies. These complement registry recognition but do not replace it, since they address the quality of the credit rather than the reliability of its record.

Responsibility for these arrangements will vary by jurisdiction. Decisions on which registries are recognised, and the obligations placed on registry operators, generally rest with the authority responsible for the national carbon market policy, which in most AMS is the environmental or climate authority. Where governance operates through recognition, the conditions applied to registries, and any eligibility criteria for credits, may also be set by market operators or capital market regulators, for example through exchange rules on which credits may be listed or traded. Capital market regulators nonetheless have a direct interest in the reliability of registry information where carbon credits intersect with capital market activities. This may include, for example, market surveillance of secondary trading in carbon credits, oversight of intermediaries facilitating such transactions, and review of disclosures in prospectuses or other regulated offerings relating to carbon projects or issuance of carbon credits. Their involvement may therefore lie in contributing to the reliability, auditability and access standards that recognised registries are expected to meet, rather than in

administering registry arrangements themselves. This is consistent with IOSCO's Good Practice 3, which encourages regulators and other relevant authorities to seek domestic consistency between various domestic authorities where possible, and helps ensure that registry information is fit for the supervisory purposes for which it is subsequently used.

From the capital markets perspective, a further consideration is the extent to which registry arrangements support transparency and traceability of carbon credits throughout the transaction lifecycle. Reliable registry information enables market participants to verify ownership, confirm the status of carbon credits and establish whether a credit has been transferred or retired. These records contribute to the transparency necessary for orderly market activity and can support confidence in market transactions and disclosures.

As carbon market participation broadens beyond project developers and corporate buyers to include investors, financial institutions and intermediaries, reliable registry information may become increasingly important in supporting informed decision-making and reducing information asymmetries between market participants.

Reliable registry information may also support functions commonly exercised by capital market regulators, including transaction verification, disclosure oversight, market surveillance and the investigation of potential market misconduct. As carbon credits increasingly become traded, held and disclosed within regulated market environments, registry information may form an important source of evidence supporting broader market integrity objectives.

Considerations: Common Data Standards

As registry arrangements develop across ASEAN, consideration may also be given to the adoption of common data standards that facilitate interoperability between domestic and international systems. While individual AMS may adopt different registry models, greater consistency in the information recorded and exchanged can reduce fragmentation and improve market transparency. Consideration may be given to aligning with existing international work on common data structures for carbon markets, including the G20-initiated Common Carbon Credit Data Model, the Carbon Data Open Protocol, and the data model maintained by the Climate Action Data Trust. These initiatives are also contributing to an ISO technical specification on data models for carbon credit markets currently under development (ISO/AWI TS 32214), which is open to participation through national standards bodies. Alignment may reduce the cost of subsequent adaptation and support recognition of ASEAN market data in buyer jurisdictions outside the region.

Common data standards may include standardising key data fields relating to issuance, ownership, transfers and retirement, as well as promoting the use of common project identifiers and transaction identifiers. Alignment in data structures does not require uniform infrastructure, but it can improve compatibility between systems and support future connectivity across jurisdictions. Such alignment may also facilitate more consistent disclosures and improve the comparability of market information.

Considerations: Connectivity with Trading Infrastructure

Where marketplaces, exchanges or intermediaries fall within the regulatory perimeter, consideration may also be given to how these market infrastructures interact with recognised registry arrangements. Efficient connectivity between registries and trading infrastructure can support more seamless transaction processing, facilitate ownership transfers and improve the consistency of information across the market.

Connectivity between trading venues and registries may be achieved through different arrangements, principally direct integration with a domestic registry or a custodian arrangement at an external registry. Existing arrangements across ASEAN illustrate both approaches.

Highlight: Exchange and Registry Connectivity Arrangements in ASEAN

Carbon trading platforms across ASEAN have adopted different approaches to registry connectivity, reflecting whether the relevant credits are recorded domestically or with international standards bodies.

- **IDX Carbon** is connected to Indonesia's national registry SRUK, operated by the environment ministry, to support the transfer of carbon units. Only units recorded in those arrangements are eligible for trading on the exchange.
- **Bursa Carbon Exchange (BCX)** operates a nominee custody model. Units admitted for trading are transferred into custodian accounts held by Bursa Malaysia Carbon Market Nominees Sdn. Bhd. at the Verra and Gold Standard registries. Following settlement, participants may transfer the underlying credits to their own registry accounts or retire them. Registry transfer costs are passed through to participants as a separate per-unit fee.
- **Climate Impact X (CIX)** provides custody spanning multiple registries, removing the need for participants to hold accounts at each. In July 2026 CIX acted as an eligible custodian in a multi-party physical settlement of carbon futures involving units held across two registries.

Highlight: Exchange and Registry Connectivity Arrangements in ASEAN

Source: IDX Carbon, Frequently Asked Questions; Bursa Carbon Exchange, Operating Procedures and Fee Schedule (Version 2.0, November 2025); Climate Impact X and Abaxx Exchange announcements, July 2026.

These arrangements are not mutually exclusive, and a venue may combine integration with a domestic registry alongside custodian arrangements at international registries. The choice of arrangement carries consequences beyond operational efficiency, such as:

- **Market Accessibility:** Registries operate on an account basis, so participants ordinarily require their own registry account in order to hold credits. Custodian arrangements remove that requirement, which bears on the accessibility of the market to smaller buyers, particularly where credits are held across several registries.
- **Operational Dependency:** Connectivity creates dependency on registry operators that typically sit outside the regulators' supervisory perimeter, such that registry outages, migrations and system changes can affect the continuity of trading and settlement.
- **Cost:** Costs comprise venue transaction fees, per-unit registry transfer costs, account maintenance costs and currency exposure where registry fees are charged in a foreign currency.
- **Authorisation status:** Consideration may be given to whether authorisation status travels with the unit across connected systems, so that participants can determine whether a credit has been authorised for international transfer and whether a corresponding adjustment has been applied.

Considerations: Cross Border Connectivity

Given the international nature of voluntary carbon markets, a further consideration is how registry arrangements interact with external systems. Carbon credits are frequently transferred across jurisdictions and may be issued, traded and retired through different market infrastructures. The ability of registries to exchange information efficiently therefore becomes increasingly important as markets mature.

This may include interoperability with recognised independent and international standards registries, compatibility with domestic trading and reporting infrastructure, and future readiness to interact with Article 6 tracking arrangements where relevant. While ASEAN may not require a single regional registry at this juncture, improving connectivity between systems can help reduce transactional friction, support market transparency, strengthen double-counting safeguards and facilitate broader regional participation in carbon markets. The nature of this connectivity differs by credit type. For cross border trading of internationally transferred or compliance credits, connectivity must support corresponding adjustment tracking and interoperability with Article 6 and host country NDC registries, since these transfers carry direct NDC implications. For voluntary units, which carry no NDC implication, the priority is registry to registry transparency and safeguards against double issuance and double retirement, rather than integration with NDC accounting systems.

Registry arrangements are developing along different pathways across the region, and connectivity considerations should apply to each of them.

Highlight: Different Registry Pathways Emerging Across ASEAN

ASEAN experience illustrates that there is no single registry pathway for VCM development.

- In Indonesia, the national carbon market architecture incorporates both the Sistem Registri Unit Karbon (SRUK) as the national registry and IDX Carbon as the exchange, creating an ecosystem that links registry functions, market infrastructure and regulatory oversight.
- In Thailand, the Thailand Voluntary Emission Reduction Program (T-VER) administered by the Thailand Greenhouse Gas Management Organization (TGO) provides a domestic crediting mechanism supported by dedicated registry arrangements.

Meanwhile, several jurisdictions globally continue to rely on internationally recognised registries operated by standards bodies such as Verra and Gold Standard to record the issuance, transfer and retirement of carbon credits.

These different registry pathways suggest that the key policy question is not whether all AMS should adopt the same registry model, but whether recognised registry arrangements provide sufficient traceability, transparency and interoperability to support ownership certainty, retirement verification, regulatory visibility and market confidence, including where carbon credits move between systems. Different registry pathways may be appropriate depending on market maturity, institutional capacity and policy objectives, provided that the underlying information

Highlight: Different Registry Pathways Emerging Across ASEAN

infrastructure supports high-integrity carbon market outcomes. This is consistent with the ACMF VCM Development Plan and Guidance's building-block approach, which recognises that AMS are at different stages of market development and may adopt different pathways towards a credible and functional VCM ecosystem.

Source: Indonesia Ministry of Environment and Forestry – National Registry System for Climate Change Control (SRN-PPI); Indonesia Stock Exchange – IDX Carbon; Thailand Greenhouse Gas Management Organization (TGO) – Thailand Voluntary Emission Reduction Program (T-VER).

4.1.2 Marketplace / Exchange as the Organised Trading Channel

A marketplace or exchange can help a VCM move from purely bilateral activity to a more visible and structured market. Where transactions occur bilaterally, terms are agreed privately and neither participants nor regulators have a consistent view of what is trading or at what price. An organised channel concentrates that activity into a setting where common rules and observable outcomes apply.

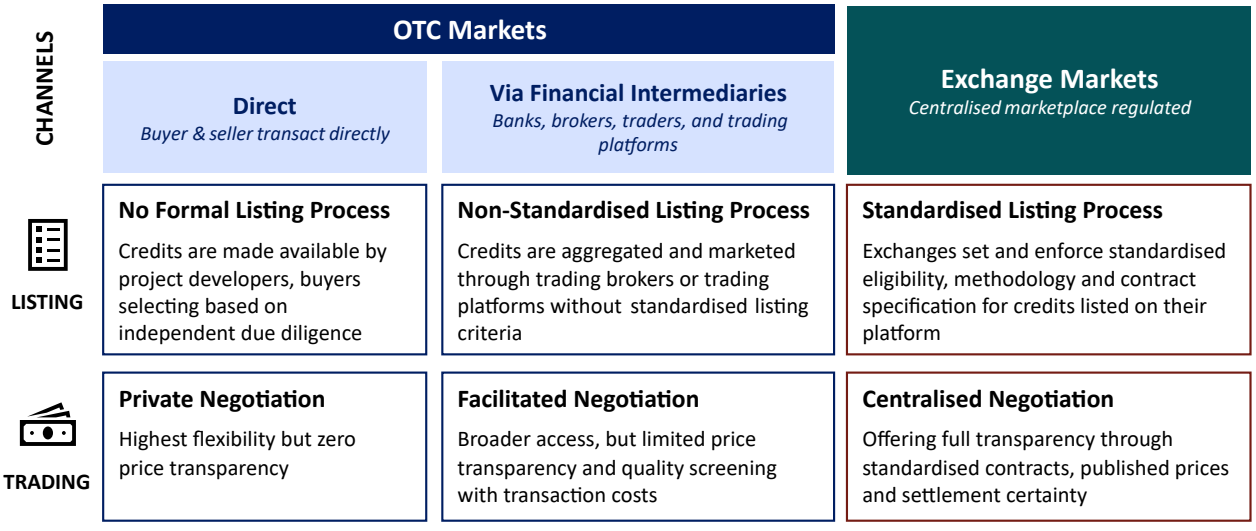
Marketplace and Exchange

There are different pathways towards having organised trading channels. AMS market with limited supply or demand may begin with auctions, a bulletin-board model, an exchange-supported procurement window, or improved OTC reporting. The appropriate model should reflect market readiness, legal authority and expected liquidity.

Rather than prescribing a single model, organised trading arrangements may range from dedicated carbon exchanges to auction mechanisms, electronic trading platforms or other structured transaction channels, depending on market maturity, liquidity and policy objectives.

As illustrated in Figure 1, organised trading infrastructure may be viewed as a spectrum ranging from bilateral OTC transactions to progressively more standardised and transparent trading channels.

Figure 1: Carbon Credits Listing and Trading Mechanism



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

Importance of Organised Trading Channels

The exchange function is relevant because it can support price discovery, participant onboarding, standardised market rules, market surveillance and a clearer supervisory perimeter. The development of organised trading arrangements can enhance transparency, efficiency and market accessibility while recognising that different market structures may be appropriate at different stages of market development. As market activity develops, organised trading arrangements can provide greater visibility over transaction activity, more consistent participation requirements and enhanced price discovery mechanisms.

Considerations: Market Structure and Market Development

One of the key considerations in developing organised trading arrangements is determining the form of infrastructure most appropriate for the jurisdiction's level of market maturity. Organised trading infrastructure may take different forms, including carbon exchanges, auction mechanisms, electronic trading platforms or other structured trading arrangements. The appropriate approach depends on factors such as market participation, expected transaction volumes, domestic supply and demand dynamics, and the broader policy objectives of the jurisdiction.

The development of organised trading arrangements should not be viewed solely as the establishment of a trading venue. Rather, such arrangements serve as a mechanism for improving market accessibility, facilitating market participation and supporting greater visibility of transaction activity. As carbon markets evolve, organised trading arrangements can contribute to the development of more transparent and efficient market structures while providing participants with a clearer framework through which transactions can occur.

From a market development perspective, organised trading arrangements may also contribute to more efficient price formation and improved market accessibility. Carbon credits exhibit varying characteristics, including project type, methodology, geography, vintage and certification status, which can make bilateral price discovery challenging. Structured trading environments can help aggregate supply and demand while providing greater visibility over prevailing market conditions. Figure 1 illustrates how the degree of standardisation, transparency and market accessibility generally increases as transactions move from bilateral OTC channels towards more organised trading arrangements.

To further support market accessibility and participation, jurisdictions may also consider appropriate enabling measures, such as tax incentives across market participants. For example, appropriately designed tax incentives associated with the purchase, investment or trading of carbon credits could make participation more attractive to buyers and investors and encourage greater transaction activity through transparent and organised trading arrangements. Greater concentration of transaction activity within such arrangements could, in turn, support market liquidity, price discovery and overall market transparency.

One of the distinguishing features of organised carbon trading is that many of the governance and operational considerations are not unique to carbon markets. Capital market regulators have extensive experience overseeing trading venues, exchanges, intermediaries and other market infrastructure that support transparent and orderly market activity.

This experience may be particularly relevant in areas such as exchange governance, market infrastructure oversight, participant onboarding, market surveillance, operational resilience, transaction transparency and the management of market misconduct risks. As carbon trading increasingly takes place through organised venues, existing regulatory approaches applied to exchanges and other trading infrastructure may provide useful reference points for the development of carbon trading arrangements. Accordingly, organised carbon trading represents an area where the expertise of capital market regulators may complement broader climate policy and carbon market objectives.

Considerations: Market Integrity and Governance

Another consideration relates to the governance arrangements that underpin organised trading activities. A centralised trading environment may provide greater transparency than purely bilateral transactions by establishing common participation standards, transaction procedures and operational rules.

In considering the development of organised trading infrastructure, attention may be given to participant onboarding requirements, operational governance arrangements, transaction transparency, market oversight mechanisms and the management of conduct-related risks. These considerations become increasingly important as participation expands beyond project developers and corporate buyers to include intermediaries, investors and financial institutions.

A further consideration concerns the role organised trading infrastructure can play in improving regulatory visibility over market activity. Compared to purely bilateral transactions, organised trading venues can provide a more structured environment through which transaction activity may be observed, recorded and monitored.

IOSCO observes that making more uniform carbon credits available on centralised trading platforms would widen access to a broader pool of market participants and deepen liquidity, and that broader access in turn tends to improve price transparency and market efficiency, reduce information asymmetry and support price discovery through greater competition. Organised venues also provide a point at which participation standards, listing criteria, market surveillance and public reporting of trading data can be applied. Most carbon credit trading is nevertheless currently executed bilaterally, which IOSCO attributes to the relatively small size of the market, the limited standardisation of credits, transaction complexity arising from the variety of project types, standards and methodologies, buyers' preference for direct relationships with projects, and varying levels of buyer sophistication.

Greater visibility over transaction activity can assist regulators in understanding market trends, identifying potential conduct risks and supporting broader market integrity objectives. While organised trading infrastructure cannot provide complete visibility over OTC transactions, it can provide an additional layer of transparency that contributes to market confidence and supervisory effectiveness. To the extent that OTC activity remains significant, greater transparency may depend on information available through registries, disclosure mechanisms and other elements of the wider carbon market ecosystem. Capital market regulators may consider measures such as registry-based information, post-trade reporting and aggregated disclosures that facilitate greater use of organised trading venues where standardisation and market conditions permit, while recognising that OTC transactions may remain appropriate for credits or transactions.

Considerations: Infrastructure Integration

The effectiveness of organised trading arrangements is also influenced by their interaction with other components of market infrastructure. Trading venues operate as one component of a broader ecosystem comprising registries, settlement arrangements and reporting frameworks.

Consideration may therefore be given to how organised trading infrastructure facilitates ownership transfers, settlement processes and information flows with recognised registries. Greater interoperability between these infrastructure components can improve operational efficiency, reduce reconciliation challenges and provide a more seamless participant experience throughout the transaction lifecycle.

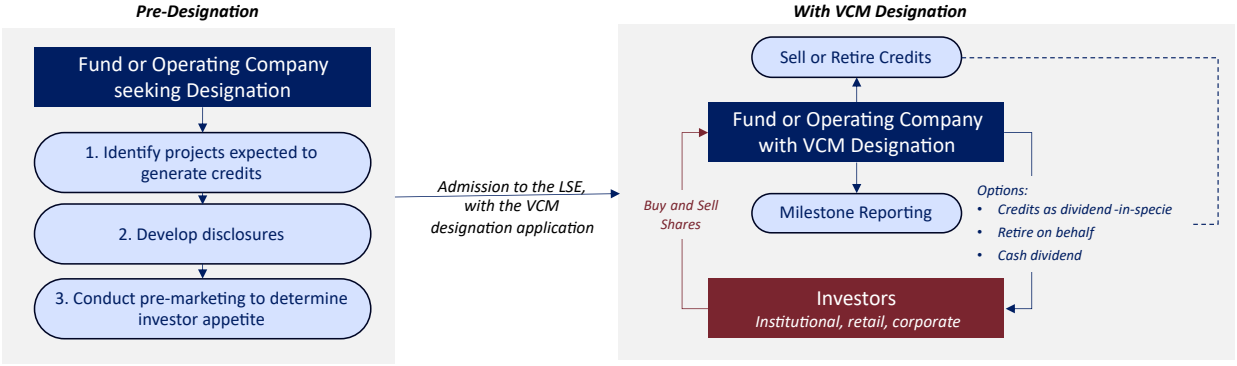
The interaction between trading infrastructure and other market infrastructure is also relevant from a supervisory perspective. Organised trading arrangements become more effective when transaction execution, ownership transfer and transaction reporting operate as part of an integrated infrastructure ecosystem.

Consideration may therefore be given to how trading venues interface with recognised registries and future trade reporting arrangements. Consistent transaction identifiers, interoperable data structures and efficient information exchange mechanisms can strengthen transparency, improve transaction traceability and support future market supervision.

An exchange may also apply its current frameworks to listed entities whose activities generate carbon credits which direct capital towards project development and improving visibility over that activity. The London Stock Exchange's Voluntary Carbon Market designation is an example of this approach.

Highlight: The London Stock Exchange VCM Designation

The London Stock Exchange (LSE) introduced its VCM Designation to support the scaling of the global VCM through the provision of capital and increased visibility through disclosure. The Designation identifies funds and operating companies admitted to the Main Market or AIM that invest, or intend to invest, in climate change mitigation projects expected to generate carbon credits. It applies to the issuer rather than to carbon credits themselves, and its requirements are set out in the LSE's Admission and Disclosure Standards.



To obtain the Designation, an issuer must i) invest in eligible projects; ii) demonstrate relevant expertise; and iii) make additional disclosures (including project types, expected carbon credit yield, implementation milestones achieved, and details of any claims on the projects' environmental and social co-benefits).

The Designation does not require an issuer to invest exclusively in carbon projects. Designated issuers may also invest in or generate revenues from activities outside the VCM, provided all investments map to FTSE Russell's Green Revenues Classification System (Tier 1 and Tier 2 microsectors), which identifies products and services contributing to the green economy.

Where a designated issuer's projects generate carbon credits, the issuer may distribute those credits to shareholders as a dividend in specie, retire them on shareholders' behalf, or sell them onwards. Distribution or retirement may be offered instead of, or in addition to, a cash dividend. The applicable policy, terms and conditions are defined at admission and must be made clear to investors.

Source: The Voluntary Carbon Market Designation, London Stock Exchange

4.1.3 Trade Reporting as the Transparency Layer

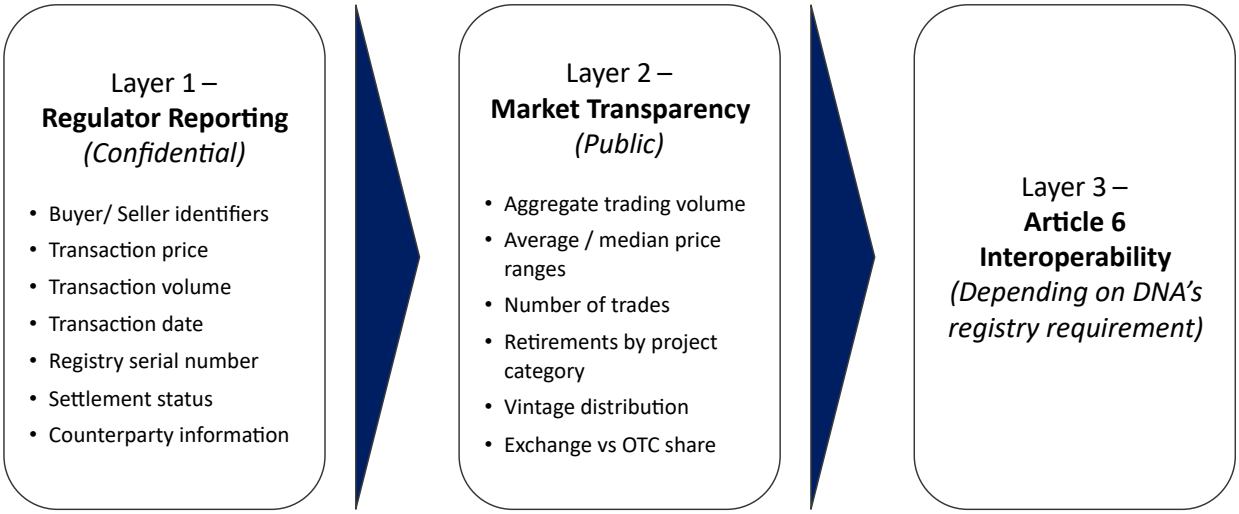
Trade reporting is important because a substantial share of VCM activity may continue to occur OTC, even where exchanges exist. Reporting can improve regulatory visibility without requiring every transaction to be moved onto an organised venue.

Trade Reporting

Trade reporting is the submission of transaction information to a regulator or designated body following execution, covering activity conducted both on organised venues and bilaterally. It does not govern how transactions are executed, but establishes what is recorded about them and to whom that record is made available.

A proportionate reporting framework can distinguish between regulator-only fields and public transparency metrics. This enables supervisors to monitor market activity while allowing commercially sensitive information, such as individual counterparty pricing, to be protected where appropriate.

Figure 2: Trade Reporting Considerations



Source: Adapted based on IOSCO (2024) Voluntary Carbon Markets Final Report

Trade reporting arrangements can improve transparency and regulatory visibility across both exchange-traded and OTC transactions without requiring all trading activity to be conducted through organised venues. As illustrated in Figure 2: Trade Reporting Considerations, trade reporting can be designed as a layered framework that supports regulatory oversight, public transparency and, where relevant, future interoperability with Article 6-related tracking arrangements.

The design of trade reporting frameworks should balance transparency and market monitoring objectives against the need to avoid imposing disproportionate compliance burdens on emerging markets and smaller market participants.

Importance of Trade Reporting

While registries provide records of ownership and retirement, and organised trading venues provide visibility over transactions executed on-platform, a significant proportion of VCM activity may continue to occur through OTC channels. Trade reporting can therefore provide additional transparency and regulatory visibility across market activity that may not otherwise be observable through registries or exchanges alone.

Considerations: Scope and Objectives of Trade Reporting

One of the key considerations in developing trade reporting arrangements is determining the objectives that the reporting framework is intended to achieve. Unlike more mature financial markets, VCM often comprise a combination of exchange-traded and OTC transactions. Consequently, market activity may remain fragmented across multiple channels, reducing visibility over transaction volumes, participant activity and market trends.

Greater transparency may be achieved through a combination of organised trading venues and reporting or disclosure arrangements for OTC transactions. While transaction information can be captured directly through exchange infrastructure for exchange-traded activity, additional reporting or disclosure mechanisms may be needed where OTC transactions continue to constitute a significant proportion of market activity. The scope of any transparency framework should therefore reflect the characteristics of the domestic market, the prevalence of OTC transactions, the availability of market infrastructure and broader market development objectives.

For OTC transactions, transparency may be supported through disclosures by buyers, intermediaries or other market participants, including information relating to carbon credit procurement, usage, retirement and associated claims. By consolidating information across both exchange-traded and OTC activity, such arrangements can provide regulators and market participants with a more comprehensive view of market developments, support market surveillance and risk identification, and complement the transaction visibility available through organised trading venues and registry records discussed in Sections 4.1.1 and 4.1.2.

Highlight: VCMI Demonstrates a Disclosure-Based Approach to Market Transparency

The VCMI Claims Code and Monitoring, Reporting and Assurance (MRA) Framework require companies making VCMI claims to publicly disclose information relating to carbon credit use and provide supporting evidence and assurance. While VCMI is not a transaction reporting framework, it demonstrates how transparency over carbon credit procurement, use, retirement and associated claims can be enhanced even where transactions occur through bilateral OTC arrangements. Such disclosure-based approaches may complement information available through exchanges and registries, helping improve visibility and confidence in voluntary carbon market activity.

Source: VCMI Claims Code of Practice

Considerations: Proportionality and Market Development

Another consideration concerns the balance between transparency and market accessibility. Reporting obligations that are disproportionate to the scale or maturity of the market may increase compliance costs and create barriers to participation, particularly for smaller market participants and emerging markets.

The design of reporting arrangements may therefore take into account the level of market development, transaction volumes and regulatory objectives. Different approaches may be adopted in relation to reporting frequency, transaction thresholds and the categories of information collected, allowing transparency objectives to be pursued while preserving flexibility for market growth.

Transaction information can also support broader market integrity objectives. One of the distinguishing features of trade reporting is that many of the principles underpinning reporting frameworks are not unique to carbon markets. Capital market regulators have extensive experience using transaction reporting to support market surveillance, detect misconduct, identify unusual trading patterns and monitor evolving market risks. As participation in VCM expands to include intermediaries, investors and financial institutions, similar reporting mechanisms may contribute to market integrity and confidence in carbon credit transactions.

Considerations: Cross-Border Consistency

Given the increasingly international nature of VCM, consideration may also be given to the level of consistency between reporting arrangements adopted by different jurisdictions. Carbon credits frequently move across borders and may be traded through participants operating in multiple markets.

Greater alignment in reporting fields, data structures and reporting taxonomies can improve the quality and comparability of information across jurisdictions and facilitate future interoperability between market systems. As voluntary carbon markets continue to evolve, such interoperability can help strengthen connectivity between registries, organised trading arrangements and reporting frameworks, contributing to a more transparent and integrated market ecosystem across ASEAN.

The effectiveness of trade reporting is influenced not only by the information collected but also by the consistency and interoperability of that information across market infrastructure. Consideration may therefore be given to the use of

standardised reporting fields, transaction identifiers and common taxonomies that support information exchange between registries, trading platforms and reporting systems.

While a region-wide trade reporting framework does not currently exist, some jurisdictions have already begun publishing transaction and market activity information through organised trading platforms. These developments illustrate potential building blocks that could inform future reporting standards and transparency arrangements across ASEAN.

Highlight: Emerging Exchange-Level Transparency in ASEAN

Several ASEAN jurisdictions have begun introducing transaction transparency through organised carbon trading venues.

- IDX Carbon publishes transaction statistics and market activity information for carbon units traded through the exchange.
- BCX publishes market information relating to exchange-based auctions and trading activity.

While these disclosures are exchange-specific and do not constitute a comprehensive trade reporting framework, they demonstrate that elements of transaction reporting and market transparency are already emerging within ASEAN carbon market infrastructure. As markets develop, these experiences may provide useful reference points when considering broader reporting standards, common data fields and market transparency arrangements across the region.

Source: Indonesia Stock Exchange – IDX Carbon, Monthly Data; Bursa Carbon Exchange – BCX Market Activity

4.2 Priority Area 2: Buyer Market Conduct

Buyer market conduct concerns how entities that purchase carbon credits plan to use them within their decarbonisation strategy, source and select them, and disclose that use. It is a demand-side priority area situated within the secondary carbon market, addressing the conduct of buyers rather than the operation of trading venues or the issuance of carbon credits.

Buyer market conduct is not a foundational precondition for a functioning market. It is, nevertheless, necessary for a market that is both credible and liquid: sound infrastructure alone does not produce a credible market if there is no oversight of buyer conduct. Transparent conduct is what allows buyers to trust the quality of what they purchase and the conduct of others in the market.

Why this Priority Area?

Demand-side integrity extends the integrity of the supply side through the rest of the value chain, to the point where credits are purchased, used, and claimed. Integrity established upstream, at issuance, is only preserved if buyers purchase and use credits with the same rigour. Without it, the coherence of the market breaks at the demand end: claims, accounting treatment, and use diverge from the quality of the underlying credit. Governing buyer conduct is therefore what carries integrity across the whole system rather than leaving it to be established upstream and lost downstream.

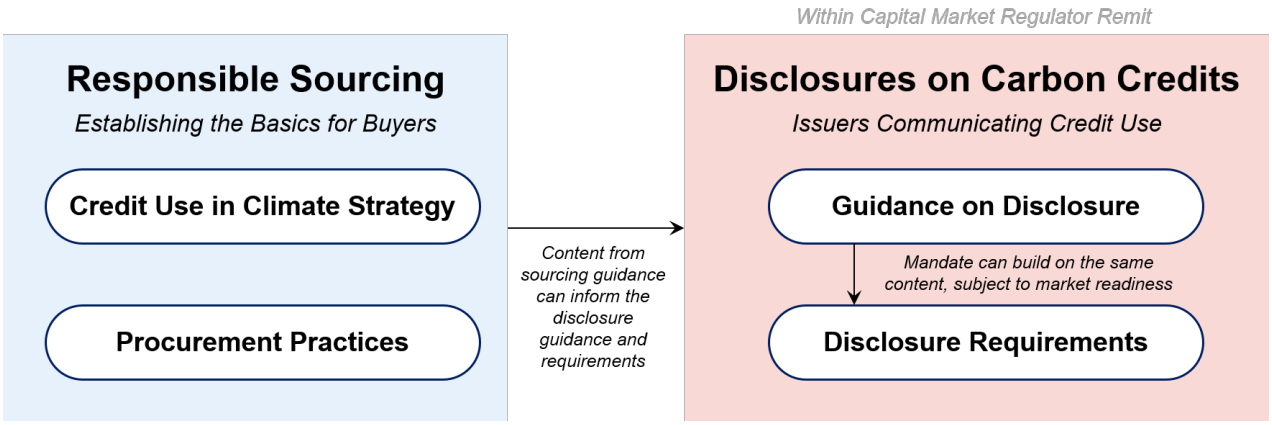
Buyer market conduct also rests on the relationship between demand and supply quality. Supply pipelines respond to what buyers screen for, and demand that fails to distinguish high- from low-quality credits rewards volume over quality, which gives little incentive for the development of high-integrity credits. Buyer-side screening is therefore a supply-side intervention: by defining what they will purchase, buyers shape the quality of the credits brought to market.

Standardised disclosure of credit use, and in time its mandating, is a lever available to strengthen demand and market liquidity, allowing the market to distinguish credible buyers and supporting convergence of practice across the region.

This priority area is addressed in two parts, following the order in which a buyer acts and reflecting how far each falls within a capital market regulator's reach. The first is responsible sourcing: how a buyer plans to use credits within a credible decarbonisation strategy, and how it screens and selects what it buys. This is the foundation, and the entry point for buyers new to the market, and because sourcing decisions sit largely outside the regulators' direct authority, it is addressed through guidance. The second is disclosure: how a buyer reports that use once the base is set. Disclosure falls squarely within capital market regulators' remit, since a regulator has authority over what its listed issuers disclose

even where it has limited authority over the underlying transactions. It is addressed first through guidance and, as a market matures, through mandatory requirements.

Figure 3: Buyer Market Conduct Across Sourcing and Disclosure



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

The progression runs in one direction: a buyer establishes sound conduct through sourcing, then communicates it through disclosure, which moves over time from voluntary to required.

4.2.1 Guidance on Responsible Sourcing

Responsible sourcing concerns the decisions a buyer makes before and around the purchase of carbon credits: how credits fit within its decarbonisation strategy, and how it screens and selects the credits it buys. It is the entry point of buyer market conduct, since buyers new to the market most need direction at the point of deciding whether to use credits and which to purchase.

These decisions sit largely outside a capital market regulator's direct authority, since sourcing is not itself a regulated market activity. They are therefore addressed through guidance rather than binding requirements. Guidance carries a low regulatory cost, can be introduced without amendment to existing legislation, and suits jurisdictions at any stage of market development. By setting out clear expectations of what sound sourcing looks like, it gives prospective buyers the confidence to begin transacting and signals the standard of integrity the market is working towards, providing a starting framework for less developed markets and a common reference point for more advanced ones.

Responsibility for issuing sourcing guidance will vary by jurisdiction. Because credit use relates to decarbonisation strategy, transition planning and national emissions pathways, this guidance in jurisdictions falls to climate and environmental authorities, with capital market regulators contributing in support. The capital market regulator has a direct interest in sourcing guidance, as the due diligence conducted during sourcing and the records maintained during procurement provide the evidential basis for disclosures that fall within the regulator's regulatory oversight. Where sourcing guidance falls within the jurisdiction of another authority, the capital market regulator's role would focus on coordination rather than issuance. This may include contributing to the development of guidance to ensure that sourcing criteria can be adequately evidenced through disclosures, aligning key terminology, such as claim types and quality thresholds, with existing disclosure requirements, and cross-referencing the sourcing guidance in its own disclosure guidelines to avoid duplication. Such coordination may be facilitated through existing inter-agency arrangements. Accordingly, the considerations outlined below are relevant to the authority having jurisdiction over the matter, and references to regulators in this section should be interpreted in this context.

4.2.1.1 Credit Use in Climate Strategy

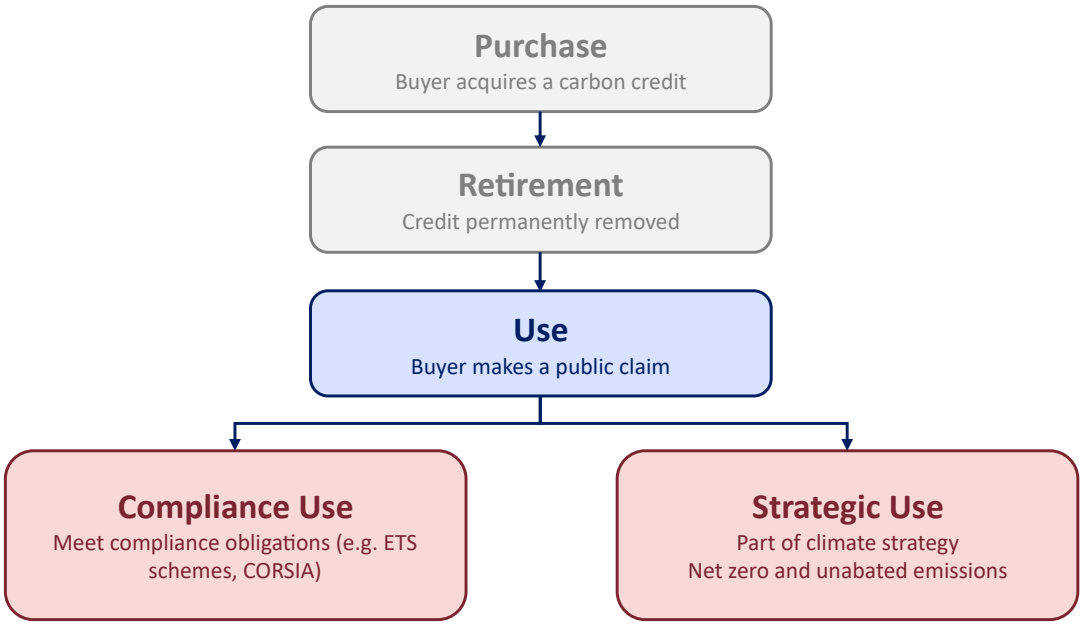
One of the key considerations under establishing guidelines is how buyers use carbon credits as part of their climate commitments. Without clear guidance on what constitutes appropriate use, buyers may retire credits against emissions targets without any corresponding reduction effort, undermining both the credibility of the claim and the integrity of the market. Establishing guidance on carbon credit use sets a clear expectation for how credits should function within a buyer's broader decarbonisation strategy.

Credit Use

Credit use occurs when a buyer retires a carbon credit and makes a public claim on the basis of that retirement. A buyer can retire a credit to offset its own emissions or to promote its contribution to climate change mitigation and once a credit has been retired, it cannot be traded again. Final buyers are typically private companies or NGOs whose decision to purchase and use credits is driven by commitments to objectives such as net zero or carbon neutrality. In this context, credit use is not simply a transactional act but carries a direct relationship to the buyer's climate strategy and the emissions targets that underpin it.

Credit purchases made within a jurisdiction should be anchored to a disclosed transition pathway that is consistent with the jurisdiction's NDC and the long-term temperature goal of the Paris Agreement. This means that credits are used to support a credible decarbonisation pathway rather than to substitute for emission reductions and removals within a buyer's own value chain. As the VCMI recognises, the true potential of carbon finance can only be realised if the use of carbon credits by companies increases overall greenhouse gas (GHG) reductions or removals rather than substituting for existing actions.

Figure 4: How Carbon Credits are Used



Source: Adapted from IOSCO, Voluntary Carbon Markets Consultation Report (2023)

Importance of Guidance on Credit Use

Guidance on credit use are highly recommended because integrity established at the point of issuance can only be preserved if buyers use credits with the same level of accountability and scrutiny when making their climate claims. Without guidance, a buyer can retire a credit and make a climate claim without any corresponding reduction of its own emissions, disconnecting the claim from the underlying credit quality at precisely the point where the market is most visible to investors, regulators and public. Two buyers can make claims of identical form, one backed by a science-aligned transition plan and one backed by nothing, and the market has no basis to distinguish them. This is the condition that enables greenwashing and when incidents occur, they tend to damage market credibility broadly.

Guidance closes this gap by specifying what a buyer must have in place before using credits to support a claim. A claim then carries information: the buyer that meets the conditions can be told apart from the buyer that does not, and a failure to meet them attaches to the buyer concerned rather than to the market as a whole. Guidance also serves buyers directly, since a buyer that cannot tell whether its intended use of credits will be regarded as legitimate has limited basis on which to proceed in the market. Demand established on this basis is one of several conditions for a liquid market, operating alongside integrity at issuance, sufficient standardisation for credits to be compared, infrastructure capable of recording and reporting transactions, and legal certainty as to what a credit is and how it transfers.

Considerations: Developing a Guidance on Credit Use

Guidance on credit use should cover what counts as responsible credit use, what buyers need to have in place before they can use credits, what they must disclose when they retire credits, and what claims they are permitted to make on that basis.

A document structured in this way gives buyers a clear and actionable framework and gives investors and regulators a consistent basis for evaluating disclosures across the market.

The following principles draw on the VCMI Claims Code of Practice, described below, and are anchored to the reporting requirements of IFRS S2. In designing the guidance, regulators should observe the following principles:

Principle	Description
Precondition-based	The guidance must establish what a buyer must demonstrate before it can use credits to make a climate claim. A buyer that has not disclosed a GHG emissions inventory, has not set a science-aligned near-term emissions reduction target, and has not made demonstrable progress toward that target should not be in a position to claim environmental benefit on the basis of a retired credit. Guidance that only addresses the retirement step while leaving the pathway conditions unaddressed leaves the most significant accountability gap open.
Proportionate	The guidance should make clear that the volume of credits used is proportionate to a buyer's remaining emissions after demonstrated reductions, not to its total emissions before any reduction effort has been made. This is the governing principle behind the VCMI Carbon Integrity Claims tiers, Silver, Gold and Platinum, which define how many credits a company retires relative to what it has already reduced in the reporting year. The guidance should be explicit that credit use becomes less necessary as direct reduction progresses, and that reliance on credits must decrease over time. Credits are to be positioned as a complement to direct emission reductions and/or removals within the buyer's own operations and value chain, and not as a primary means of meeting an emissions target.
Claim-defined	The guidance should specify what types of claims a buyer is permitted to make on the basis of a retired credit and the conditions that must be satisfied for each type. Retiring a credit does not entitle a buyer to make any claim it chooses. A claim of carbon neutrality represents a different standard from a claim of climate contribution, and each should be tied to defined conditions the buyer must meet before the claim can be made. Without this clarity, buyers make inconsistent and sometimes misleading claims, and the market cannot distinguish between them. The guidance should therefore establish clear boundaries on what credit use permits a buyer to assert, using internationally recognised frameworks such as the VCMI Claims Code as the reference for permissible claim types and their conditions.
Framework-aligned	The guidance should build on existing sustainability reporting obligations within the jurisdiction rather than creating parallel requirements. Where national sustainability disclosure standards are in place, the guidance should anchor credit use disclosure within those frameworks directly. Where IFRS S2 is applicable, the guidance can build on it as the standard already requires entities to disclose information necessary for users of financial reports to understand the credibility and integrity of the carbon credits they plan to use. Beyond reporting standards, the guidance should also reference the VCMI Claims Code of Practice as a complementary framework governing the nature and conditions of the claims companies may make on the basis of retired credits. Together, these frameworks cover both the reporting dimension, which is what must be disclosed and where, and the claims dimension, which is what a company is permitted to assert and under what conditions. The guidance does not replace any of these requirements. It gives them operational meaning by specifying what credibility and integrity actually require in practice, filling the gap that existing standards leave open on credit use specifically.
Independently assured	The guidance should establish that credit use claims are subject to independent third-party assurance. This does not require assurance of the full sustainability report. It applies specifically to the information underpinning the credit use claim, including the GHG emissions inventory, the near-term reduction targets, the credits retired and the nature of the claim made on that basis, consistent with the VCMI Monitoring, Reporting and Assurance Framework. In

Principle	Description
	jurisdictions where sustainability report assurance is not yet mandated, the expectation should be applied proportionately, with assurance focused on the credit use claim itself as a minimum. Without independent assurance at this level, there is no mechanism for a regulator, investor or member of the public to verify whether the disclosed pathway and credit use genuinely meet the stated conditions.

The principles outlined above are not exhaustive. Regulators may adapt the design of the guidance to suit the level of market readiness and regulatory capacity within their jurisdiction. However, grounding the guidance in these principles is strongly recommended as a minimum foundation for ensuring the guidance produces disclosures that are credible, comparable and actionable across the market.

Highlight: VCMI Claims Code of Practice

The Voluntary Carbon Markets Integrity Initiative (VCMI) Claims Code is an internationally recognised framework that addresses integrity on the demand side of voluntary carbon markets. Its primary purpose is to provide companies and other non-state actors with clear requirements on when and how they can credibly make voluntary use of carbon credits as part of their climate commitments, and how they should communicate that use. The Claims Code was explicitly designed for adoption and endorsement by governments and regulatory agencies, making it a directly relevant benchmark for authorities developing guidance on credit use.

The Claims Code is structured around a four-step process. The first step requires companies to satisfy the Foundational Criteria before any claim can be made: maintaining and publicly disclosing an annual GHG emissions inventory, setting science-aligned near-term emissions reduction targets consistent with reaching net zero no later than 2050, demonstrating progress on financial allocation, governance and strategy toward those targets, and ensuring that public policy advocacy supports the goals of the Paris Agreement. These Foundational Criteria function as a gate, giving operational meaning to the principle that credit use must be anchored to a credible transition pathway. The second step requires companies to select a claim tier proportionate to their remaining emissions once reductions have been demonstrated, across three levels: Carbon Integrity Silver, Gold and Platinum. The third step sets the credit quality floor, requiring credits to meet the ICVCM CCP. The fourth step requires independent third-party verification of all reported information through the VCMI Monitoring, Reporting and Assurance Framework.

Together, the four steps reflect the same design principles that regulators should observe when developing guidance on credit use: that guidance must be precondition-based, proportionate, disclosure-specific, framework-aligned and independently assured. The Claims Code offers regulators a ready-made reference that reduces the need to develop credit use guidance from scratch and ensures that any guidance issued is compatible with international best practice. Certain matters may be considered locally, such as how the Foundational Criteria relate to the national transition pathway and NDC, which domestic sustainability reporting standard the disclosure requirements anchor to, and the extent to which assurance is applied proportionately where sustainability report assurance is not yet mandated.

Source: VCMI Claims Code of Practice

Highlight: Singapore's Guidance on Role of Carbon Credits in Corporate Decarbonisation

Singapore's Guidance on the Role of Carbon Credits in Corporate Decarbonisation, illustrates how guidance can be built on existing international frameworks.

The guidance conditions credit use on prior decarbonisation effort. A company first measures and reports baseline emissions, then develops a credible decarbonisation plan, then implements it, prioritising all feasible emissions reductions and removals before considering the use of carbon credits to address remaining emissions. Credit use should be complementary to, and should not substitute, internal emissions abatement measures.

- On credit quality, companies are encouraged to take reference from global meta-standards, namely the Paris Agreement Crediting Mechanism, the ICVCM CCP and the CORSIA eligibility criteria, and to conduct project-level due diligence, since quality and risk can differ across projects assessed under the same programme.
- On claims, the guidance identifies the VCMI Claims Code of Practice as an example of a claims standard.
- On disclosure, the guidance builds on the IFRS Sustainability Disclosure Standards and recommends disclosures relating to carbon credit use, including project identifying information, crediting programme, project type and methodology, location, registry, third-party ratings, vintage, volume and purpose of use. It notes that these

recommended disclosures go beyond what the IFRS Standards require, and encourages companies to apply them to both planned and actual use of credits.

Source: Guidance on the Role of Carbon Credits in Corporate Decarbonisation, NCCS, MTI and EnterpriseSG, 28 October 2025.

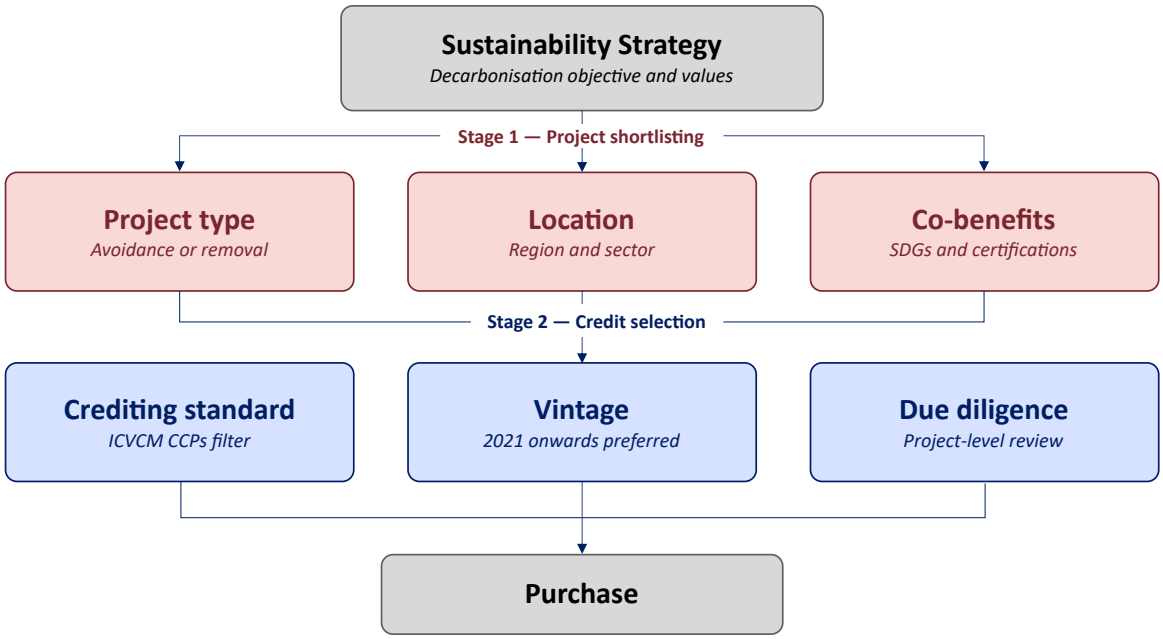
4.2.1.2 Procurement Practices

Establishing guidance on procurement practices matters for market integrity, as the quality of what circulates in the secondary market is determined at the point of purchase rather than at the point of retirement. Without clear guidance on procurement practices, buyers are left to apply their own criteria, which in the absence of a structured framework defaults to price as the primary selection factor. This rewards volume over quality and creates the conditions for low-integrity credits to circulate widely in the secondary market.

Procurement Practice

Procurement practices refer to the process by which a buyer identifies, evaluates and selects carbon credits for purchase. It covers three elements: the criteria used to screen and shortlist projects, the due diligence conducted on credit quality, project developers and intermediaries, and the internal governance processes that govern purchasing decisions within an organisation. The HKEX Carbon Credits Buyer's Guide (2025) frames this as a two-stage process rooted in the buyer's sustainability strategy: project shortlisting based on project type, location and co-benefits, followed by credit selection based on crediting standard, vintage and project-level due diligence. Procurement is not a single decision but a structured sequence of evaluations that connects the buyer's climate commitments to the specific credits they retire.

Figure 5: Two Stage Carbon Credit Procurement Framework



Source: Adapted from HKEX Carbon Credits Buyer's Guide (2025)

Importance of Guidance on Procurement Practices

Procurement practices matter for market integrity and liquidity for the same reason that supply-side quality standards matter: the quality of what circulates in the secondary market is determined at the point of purchase, not at the point of retirement. A buyer who applies no screening criteria at procurement can retire a low-quality credit and make the same public claim as one who conducted thorough due diligence. Without guidance that sets a minimum quality floor for procurement, there is no market mechanism to distinguish the two, and price signals cannot reflect genuine quality differences. This suppresses price differentiation, which is a precondition for efficient price discovery in the secondary market. Guidance on procurement practices addresses this by directing demand toward credits that meet a minimum quality standard, creating a demand signal that rewards high-integrity supply and over time deepens the pool of credible credits available for trade.

Considerations: Procurement Practices Guidelines

Guidance on procurement practices should tell buyers what minimum quality criteria to apply when selecting credits, what due diligence is expected at the project and what internal governance should govern purchasing decisions. In designing the guidance, regulators should observe the following principles:

1. **Criteria-Based**

The guidance should specify the minimum quality criteria buyers must apply when screening credits for purchase. Without a defined quality floor, buyers have no common reference point and procurement decisions remain inconsistent across the market. The most direct and internationally recognised reference for credit quality criteria is the ICVCM's CCP, which set out ten fundamental principles covering additionality, permanence, quantification, governance, transparency, no double counting, and contribution to the net-zero transition. Directing buyers to the CCP label as the minimum quality threshold avoids the need for regulators to develop their own assessment criteria and ensures alignment with international best practice. It is important to note that the CCP label establishes a floor rather than a ceiling. Buyers with more specific sustainability objectives may need to apply additional screening criteria, including the vintage of the credit and, where credits are not CCP-labelled, the crediting standard under which the credit was issued and whether it meets an equivalent level of integrity.

2. **Strategy-Aligned**

The guidance should make clear that procurement decisions must flow from the buyer's sustainability strategy and decarbonisation objective rather than being made in isolation. The type of credit selected, whether avoidance or removal, nature-based or technology-based, should reflect where the buyer sits in its transition journey. A buyer in the early stages of decarbonisation and purchasing credits to accelerate the net-zero transition has different needs from one approaching its target date who requires permanent removal credits to neutralise residual emissions. Guidance that connects procurement to strategy prevents misaligned purchasing and reinforces the principle that credits are a tool within a broader climate plan.

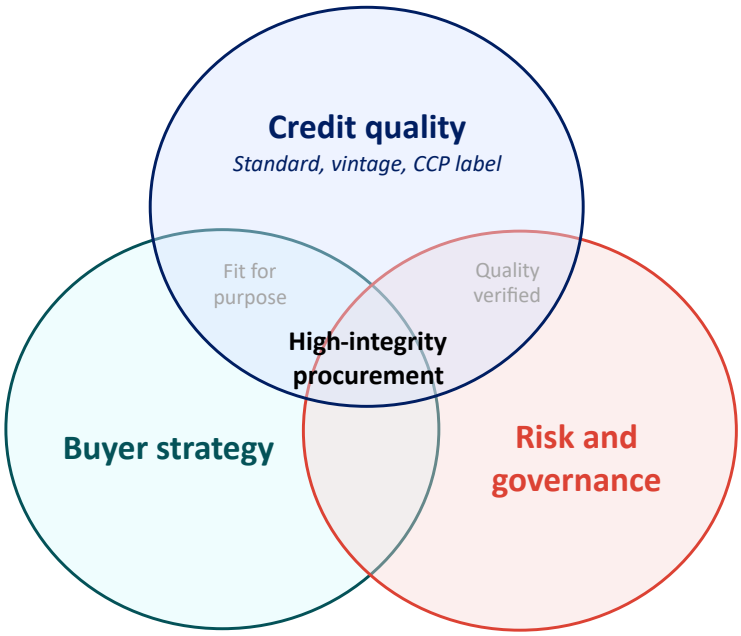
3. **Due Diligence Driven**

The guidance should require buyers to identify and assess project-specific risks before purchase. These include reversal risk for nature-based projects, methodological risk from outdated crediting methodologies, and counterparty risk from project developers or intermediaries who may not deliver the credits contracted. Guidance that incorporates risk awareness at the procurement stage reduces the likelihood of buyers holding credits that are later challenged on quality and, by extension, reduces the reputational risk that deters institutional participation in the secondary market. Buyers may also draw on independent carbon credit ratings as an input to project-level due diligence. Rating agencies assess project-specific risks such as over-crediting, permanence and delivery performance, and can help buyers differentiate between credits that meet the same minimum quality threshold. Guidance should position ratings as a supporting input rather than a substitute for the buyer's own assessment, given that rating methodologies differ across providers and are not subject to a common standard.

4. **Documented and Governed**

The guidance should set out expectations for internal governance over purchasing decisions. Procurement should not be a discretionary or unrecorded act. Buyers should be expected to maintain records of the screening criteria applied, the due diligence conducted, and the rationale for credit selection. These records form the evidential basis for any subsequent disclosure of credit use and are essential for third-party assurance. Governance expectations should be proportionate to the size and capacity of the buyer, but the principle that procurement decisions are recorded and subject to internal oversight should apply across all categories of buyer.

Figure 6: Interrelation of a High-integrity Procurement



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

The principles outlined above are not exhaustive. Regulators may adapt the design of the guidance to suit the level of market readiness and regulatory capacity within their jurisdiction. However, grounding the guidance in these principles is strongly recommended as a minimum foundation for ensuring that procurement practices produce a consistent quality floor across the market.

Highlight: HKEX Carbon Credits Buyer's Guide (2025)

The Hong Kong Exchanges and Clearing Limited (HKEX) Carbon Credits Buyer's Guide, published in September 2025, is one of the most comprehensive practical references available to buyers navigating procurement decisions in the voluntary carbon market. Developed with input from the Hong Kong International Carbon Market Council, whose members include leading banks, asset managers, airlines and industrial corporates, the guide was designed to help companies make informed decisions that align with their corporate values and sustainability objectives. It covers the full procurement journey from understanding what carbon credits are and why companies buy them, through to project shortlisting, credit selection, pricing considerations and post-retirement disclosure.

The guide structures procurement as a two-stage process rooted in the buyer's sustainability strategy. In the first stage, buyers shortlist carbon projects based on three considerations: project type, project location, and co-benefits. On project type, the guide distinguishes between avoidance projects, which prevent future emissions, and removal projects, which eliminate existing CO2 from the atmosphere, and notes that the appropriate balance between the two depends on where the buyer sits in its transition journey. Buyers focused on accelerating the net-zero transition can consider both avoidance and removal projects, while buyers approaching their net-zero target date must prioritise removal credits to neutralise residual emissions. On location, the guide notes that buyers may align credit purchases with the regions where they have operational or supply chain presence, or direct investment toward climate-vulnerable or low-income countries. On co-benefits, the guide highlights that, additional social and environmental certifications, such as Verra's SD Vista or the Climate, Community and Biodiversity standard, allow buyers to select projects that align with broader sustainability commitments beyond emissions reduction alone.

In the second stage, buyers select credits from the shortlisted projects based on crediting standard and vintage. On crediting standard, the guide identifies meta-standards such as the ICVCM's CCP as a practical filter, noting that credits assessed against the CCPs have met a consistent and rigorous quality threshold regardless of which programme issued them. On vintage, the guide notes that the market generally favours newer vintages, and references the Science Based Targets initiative's guidance that vintages from 2021 onward should be selected to align with Article 6 of the Paris Agreement. Buyers may also conduct additional project-level due diligence by reviewing project documents, considering ratings from carbon rating agencies, and in some cases conducting project site visits.

Highlight: HKEX Carbon Credits Buyer's Guide (2025)

For regulators developing procurement guidance, the HKEX Buyer's Guide offers a directly usable framework. Its two-stage structure, the criteria it identifies for screening and selection, and its grounding of procurement decisions in the buyer's sustainability strategy and decarbonisation objective collectively illustrate what a well-designed procurement guidance document should enable buyers to do. The guide also reinforces the core principle that credits should complement, not replace, corporate emission reduction efforts, and that procurement must be understood as part of a broader climate strategy rather than a standalone purchasing decision. Matters such as which crediting programmes and methodologies may be recognised in the specific jurisdiction, how the guidance interacts with any domestic crediting programme, and how the criteria are maintained as international benchmarks develop would fall to be considered locally.

Source: HKEX Carbon Credits: A Buyer's Guide, September 2025.

4.2.2 Disclosure of Carbon Credits

Disclosure is the point at which a buyer's conduct becomes visible to the market. Where sourcing concerns the decisions a buyer makes, disclosure concerns how it reports them: what credits it has used, how they relate to its emissions target, and on what basis it claims an environmental benefit. Reported consistently, this information allows the market to compare buyers, hold them to the standard the sourcing guidance sets, and distinguish credible conduct from unsupported claims.

Disclosure is also where buyer conduct falls within a capital market regulator's established remit, since a regulator has authority over what its listed issuers disclose. It is here that the relevant actors are issuers rather than buyers at large: disclosure reaches those buyers who are listed issuers, and it is through their reporting that credit use becomes visible. This makes it the component the regulator can most directly act on, and it is addressed in two stages: guidance that sets out recommended practice, and, as a market matures, mandatory requirements that give that practice binding effect, building on the reporting standards a jurisdiction already applies.

4.2.2.1 Guidance on Disclosure

One of the key considerations in bringing buyer conduct into view is how buyers disclose their use of carbon credits. Without clear guidance on what and how to disclose, buyers report inconsistently or incompletely, leaving the market unable to compare claims or assess the credibility behind them. Establishing a disclosure guide sets a clear expectation for what a buyer should disclose and the form that disclosure should take, giving issuers a ready structure to work from before any requirement applies.

Disclosure Guide

A disclosure guide is a recommended-practice resource that capital market regulators issue to help issuers disclose their use of carbon credits. Regulators may anchor the guide to IFRS S2, the framework the ASEAN region is converging on. IFRS S2 sets out what an issuer must disclose about its planned use of carbon credits, giving the guide an established basis to build its fields on.

Highlight: IFRS S2 and the Disclosure of Carbon Credit Use

IFRS S2 is the operative framework for climate-related disclosure. Where an issuer's emissions target relies on carbon credits, it must disclose its planned use of them: the extent to which the target relies on credits, the third-party scheme verifying them, the credit type, including whether the credit is nature-based or technology-based and whether it represents an emission reduction or removal, and factors relevant to credibility such as permanence. The requirement attaches to a net emissions target rather than a gross target, and to planned use rather than credits already retired.

Its standing as the appropriate anchor is reinforced by IOSCO's 2023 endorsement of the ISSB Standards as a global basis for sustainability-related financial disclosure.

Because IFRS S2 specifies the disclosure fields themselves, a regulator developing a guide may adopt them directly as its content: the extent to which the target relies on credits, the verifying scheme, the credit type, and the factors relevant to credibility. Matters that would fall to be considered locally include whether and when the jurisdiction

Highlight: IFRS S2 and the Disclosure of Carbon Credit Use

adopts the ISSB Standards, and whether the guide addresses credits already retired, given that the requirement attaches to planned use.

Source: IFRS S2 Climate-related Disclosures, IFRS Foundation, 2026, Introduction to the ISSB and IFRS Sustainability Disclosure Standards. IFRS Foundation

Importance of Guidance on Disclosure

Credits are a relatively unfamiliar instrument, the fields that describe them are technical, and few issuers have an established practice to draw on. This is compounded by a general feature of reporting frameworks: they specify what must be disclosed but rarely how it should be presented or structured. A guide closes both gaps, supplying the structure the framework does not and a starting point for issuers without one. It also allows issuers to build disclosure capability while it is still voluntary, and it lets regulators observe and gather feedback on what works before disclosure requirements are set.

Considerations: Designing the Guide

Capital market regulators should design a guide that shapes not only what to disclose, but how they are disclosed. A guide that explains and structures the reporting fields produces disclosures that are consistent and usable across the market. In designing the guide, regulators should observe the following principles.

- **Explained:** For every field, regulators should ensure the guide sets out what it is, why it matters, and how it might be reported, so that an issuer new to the practice understands the disclosure rather than simply completing it.
- **Structured:** Regulators should direct issuers to set out disclosures in a consistent manner, so that credits can be read and compared across issuers. This can be done through a principles-based framework and illustrative examples of disclosures.
- **Integrated:** Regulators should direct that credit-use disclosure sits within the issuer's sustainability reporting, where it can be read against the emissions target and strategy it supports, rather than as a standalone annex.

Below is an illustration of the level of explanation a single field entry in the guide might carry. Not every field requires this depth; the purpose is to show the pattern of explaining what a field is, why it is disclosed, and how it should be reported.

Section: Additionality

IFRS S2: 36) e) iv)

For each greenhouse gas emissions target disclosed in accordance with paragraphs 33–35, an entity shall disclose:

...

e) the entity's planned use of carbon credits to offset greenhouse gas emissions to achieve any net greenhouse gas emissions target. In explaining its planned use of carbon credits, the entity shall disclose information including, and with reference to paragraphs B70–B71:

...

iv) any other factors necessary for users of general-purpose financial reports to understand the credibility and integrity of the carbon credits the entity plans to use (for example, assumptions regarding the permanence of the carbon offset).

Definition: Additionality is the principle that the emission reductions or removals a credit represents would not have occurred without the revenue from carbon credits. Additionality may be assessed in several ways, including regulatory, investment, and barrier analysis, and is often regarded as the foundational test of credit quality.

Source: Core Carbon Principles Assessment Framework and Assessment Procedure, ICVCM, January 2024

Disclosure Purpose: Additionality is an integrity component that ensures that carbon credits drive additional climate action. It demonstrates that credits are issued only to mitigation activities that would not have occurred without the incentives associated with the sale of carbon credits.

Source: Core Carbon Principles Assessment Framework and Assessment Procedure, ICVCM, January 2024

How to Report: State the type of additionality demonstrated and the basis for it: the methodology or standard under which additionality was assessed, the test applied (for example regulatory, investment, or barrier), and where available the verifier's conclusion.

Illustrative Disclosure of Additionality Determination:

Project: TerraClear Ceramic Water Purifier Project, Lao PDR

Baseline: Absent the project, households would have continued treating water by boiling with wood or charcoal. National survey data across 104,851 households indicates 33.4% boil water as their primary treatment and 62.2% do not treat their drinking water, of whom 86.3% are exposed to unsafe sources.

Additionality Basis:

Demonstrated using the UNFCCC CDM "Methodological Tool: Tool for the demonstration and assessment of additionality, Version 07.0.0" and the guidelines for additionality as per the Gold Standard methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption – 11/04/2011".

- Prevailing Barrier: National adoption of water filters is below 1.8%, and within the project's target market of approximately 290,000 households, ceramic water purifier penetration remains under 20%
- Not Common Practice: Only one comparable project exists nationally, small-scale and donor-dependent, indicating the activity is not common practice.

Conclusion: The project is additional: it shifts business-as-usual activity and is not financially viable without carbon credit revenues.

Adapted from: Project Design Document (PDD), TerraClear Ceramic Water Purifier Project in Lao PDR, 2014

The HKEX Implementation Guidance is a developed example of this approach. It takes each disclosure requirement in the HKEX ESG Code and maps it to the corresponding provision in IFRS S2 in one reference. It also pairs each requirement with a worked example that an issuer can populate with its own data and expand as its reporting matures.

Highlight: HKEX Implementation Guidance for Climate Disclosures

The Hong Kong Exchange's Implementation Guidance for Climate Disclosures was developed to provide practical guidance to help issuers understand the climate disclosure requirements under Part D of the ESG Code and prepare the relevant disclosures. Its distinguishing feature is how it integrates the local and the global. The Part D requirements are modelled on IFRS S2, and the Guidance builds in the conceptual foundations of IFRS S1 on top, so that a single reference carries both the exchange's own Code and the ISSB baseline. This reflects HKEX's aim of preparing issuers for the local sustainability standards being developed for Hong Kong, which are in turn based on the ISSB Standards.

The Guidance is organised into five chapters, opening with the key concepts and IFRS S1 foundations, then following the four pillars of IFRS S2: governance, strategy, risk management, and metrics and targets. Running across these chapters is a recommended eight-step workflow, a suggested sequence for identifying, monitoring, and reporting climate-related risks and opportunities, which issuers may adapt to their own circumstances. For each requirement, the Guidance provides an explanation, a mapping to the corresponding standard, and illustrative disclosures issuers can follow directly.

Source: Implementation Guidance for Climate Disclosures under HKEX ESG reporting framework. HKEX, April 2024

Considerations: Content of the Guide

The content of the guide follows directly from the two preceding guidelines. Carbon Credit Use sets out how an issuer should integrate credits into its decarbonisation strategy, and Procurement Practices sets out how it should screen and select high-quality credits; the disclosure guide is where that conduct is recorded and made visible. The categories below draw on IFRS S2, which specifies what an issuer must disclose at target level where its emissions target relies on carbon credits, and on the VCMI Claims Code of Practice, which specifies the information reported in support of a claim, including at the level of each credit retired. On this basis, regulators should ensure the guide covers the following categories of content:

Categories	Description
Targets & Strategy *How credits sit within the issuer's decarbonisation strategy and relate to its emissions target*	**Significance**: Demonstrates credits are used to support a pathway rather than substitute for reductions, and situates the disclosure within the wider strategy

Categories	Description
	Disclosure Details: Role of credits in the transition pathway; target on both a gross and net basis*; extent of reliance on credits to meet the target*; volume retired in tCO2e *This content should be specific to the issuer's own strategy and credits, not a restatement of general carbon market context*
Due Diligence *The screening and assessment the buyer conducted before purchase*	**Significance**: Demonstrates the credit was selected through a deliberate process, and lets the reader gauge the rigour behind the purchase **Disclosure Details**: Scope and depth of due diligence conducted; screening criteria applied
Credit Identity *The information that identifies each retired credit uniquely*	**Significance**: Allows readers to trace the specific credit to its registry record **Disclosure Details**: Serial number; vintage; project identifier
Project Characteristics *The nature of the underlying project the credit comes from*	**Significance**: Allows readers understand what activity the credit represents **Disclosure Details**: Nature-based or technology-based*; reduction or removal*; verifying third-party scheme*; methodology; location; Article 6 status; co-benefit details; rating from a carbon credit rating agency
Integrity Markers *The basis on which the quality of the credit can be assessed*	**Significance**: Outlines the key integrity criteria of the carbon projects **Disclosure Details**: Permanence*; additionality basis*; leakage* *These components do not require extended narrative explanation in the disclosure itself; rather key figures and a reference to the methodology under which it was determined.*

** Denotes a field required under IFRS S2. Permanence, additionality and leakage are not separately required but fall within the credibility and integrity factors IFRS S2 expects to be disclosed under paragraph 36(e)(iv).*

Across all four categories, regulators should emphasise data-driven disclosures that are grounded in figures and evidence rather than framed as intentions or ambitions. Disclosing these details allows readers to assess the quality of the underlying project independently, and in doing so substantiates the integrity of the credit.

4.2.2.2 Building on Disclosure Requirements

Guidance can establish what sound disclosure looks like, but on its own it cannot ensure the practice is followed. A mandate closes that gap, converting recommended practice into a condition of reporting once a jurisdiction is ready to require it. This is the second stage of disclosure, and the point at which buyer conduct becomes not only visible but enforceable.

This stage may be read in the context of IFRS S2 or any national reporting standard. For AMS that have adopted or are converging on ISSB-aligned standards, disclosure of planned credit use is already required where an issuer's net emissions target relies on credits, therefore, a mandate in those jurisdictions would not create a new requirement but give the existing one greater specificity. Many AMS are also not yet at the stage where a mandate would be appropriate. A mandate is therefore presented here as an option for members to consider as their markets mature, rather than a step every member is expected to take.

Disclosure Requirements

Sustainability disclosure is the reporting through which an issuer sets out its environmental and social performance alongside its financial reporting, increasingly under a defined standard such as IFRS S2 or a national equivalent. Carbon credit disclosure sits within this: where an issuer uses credits towards an emissions target, how it has done so forms part of what it reports on its climate position. A disclosure requirement gives that reporting mandatory force, making disclosure of credit use a condition of reporting rather than a matter of choice.

Highlight: Sustainability Disclosure Regimes in ASEAN

Sustainability disclosure regimes across the AMS reflect the different stages of market development within the region. Several member states, including Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam, have established mandatory regimes. Most are aligned with or converging on the ISSB Standards, whether already implemented, as in Malaysia and Singapore, or being introduced over the coming years, as in Indonesia's move to ISSB-based standards from 2027; Viet Nam, whose regime is based on national indicators, has announced that it is reviewing its rules to align with international standards. This convergence gives the region a common reference point to build on, even as individual timelines differ.

Other member states, including Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and Timor-Leste, are at earlier stages, with sustainability disclosure developing through regulatory consultation and voluntary practice.

Source: Vietnam to amend disclosure rules to align listed firms' ESG reports with global standards, The Investor, November 2025; SEC MEMORANDUM CIRCULAR NO. 16, SEC Philippines, 2025; Implementation of NSRF, SC Malaysia; SEC revises sustainability-related disclosure principles to align with ISSB standards, SEC Thailand, November 2025; Sustainability reporting and assurance requirements, ACRA; At a glance: PSPK 1 & PSPK 2, KPMG Indonesia, October 2025

The starting point differs across the region. Where a jurisdiction has adopted a sustainability reporting standard aligned with IFRS S2, an issuer whose emissions target relies on carbon credits is already required to disclose its planned use of them, so a baseline requirement is in place by operation of the standard already adopted. What a mandate adds in those jurisdictions is not the requirement itself but its specificity: the fields to be disclosed, the issuers to which they apply and the assurance attaching to them. Where no such standard is in place, the requirement would be established for the first time, and the sequencing considerations set out below carry greater weight.

Importance of Mandating Disclosures

Voluntary guidance shapes conduct but cannot ensure that it is reported consistently. Where some issuers disclose fully and others partially or not at all, the market is left unable to compare buyers or to rely on what is reported. A mandate addresses this by establishing disclosure of credit use across all issuers within scope, making integrity verifiable: mandatory disclosure renders adherence to the standard visible and comparable, allowing credible conduct to be identified and relied upon.

Considerations: Designing the Disclosure Mandate

Mandating disclosure carries a higher regulatory cost than guidance and is therefore a considered step rather than an automatic progression from it. In designing the mandate, a regulator settles three matters: the content to be disclosed, the scope of issuers to which the requirement applies, and the assurance of what is reported.

- **Content**: A requirement may specify its own disclosures, but it may also draw on the content established in the disclosure guide, which provides a ready and already-socialised basis and supports convergence across the region. The requirement should be given effect within whichever mandatory reporting regime a jurisdiction already maintains, whether IFRS S2 or an applicable national standard. The disclosures already required by the existing regime take effect first, with the fields on carbon credit phased in according to market readiness.
- **Scope**: The requirement should specify the issuers to which it applies. A mandate need not apply to all issuers simultaneously: scope may be determined by listing status, size, or sector, and extended over time, such that the requirement first captures the issuers for whom credit use is most material and broadens as the market matures.
- **Assurance**: The requirement should address whether disclosures are independently verified. Where assurance over sustainability reporting is required in a jurisdiction, its scope should explicitly cover carbon credit disclosures and the level of assurance applied. This is conditional on a jurisdiction already requiring assurance; where it is not yet in place, it takes effect as and when assurance is introduced.

Mandating may be suited to jurisdictions at a more advanced stage of market development, and the point at which a jurisdiction moves from guidance to mandate is for each member to determine, consistent with the ACMF's opt-in approach.

The timing of a mandate typically follows a sequence. A regulator first completes the groundwork, issuing disclosure guidance, refining it against feedback, and resolving any material issues such as reconciliation with adjacent frameworks, so that a mandate formalises an established practice rather than introducing a new one. It then assesses readiness against the market signals that indicate a mandate is worthwhile, for example: whether enough issuers are

active in the market to make disclosure meaningful, whether a reporting regime exists to anchor the mandate in, and whether the assurance capacity is available to verify what is reported. No single signal is decisive; a jurisdiction weighs them together and may consider movingto mandate once the groundwork is done and the market is ready.

Figure 7: Moving from Disclosure Guidance to a Mandate



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

A mature example of a mandatory regime that has settled these matters is the EU's Corporate Sustainability Reporting Directive (CSRD) and its reporting standards.

Highlight: The EU's CSRD and ESRS

The European Sustainability Reporting Standards (ESRS) are the disclosure standards through which companies report under the EU's CSRD. They are a mandatory regime, developed by EFRAG for the European Commission, and take a double-materiality approach, requiring companies to report both their impact on people and the environment and how sustainability issues create financial risks and opportunities for the company.

The standards are undergoing revision to simplify reporting. The revised (2026) standards are not yet legally effective, as they have not yet been published in the Official Journal of the European Union (EU), pending completion of the scrutiny period later this year.

- **Content:** The ESRS integrate the ISSB Standards to a high degree and draw on the GRI as a reference point, rather than being built on any single framework; on climate, companies reporting under ESRS report largely the same information as under the ISSB standard. Carbon credit disclosure sits in a dedicated requirement, ESRS E1-9 in the revised 2026 standards, covering GHG removal projects, credits purchased and cancelled, the share sourced from removal projects, and, where a company makes GHG-neutrality claims, how those claims relate to its emission-reduction targets and the credibility of the credits used.
- **Scope**: Reporting obligations apply to large undertakings and to listed small and medium-sized undertakings, other than micro undertakings, rather than to all companies at once. Following the Omnibus I revision, the obligation to report was limited to undertakings that both employ more than 1,000 people and exceed EUR 450 million in net turnover, on the basis that the largest undertakings are the most consequential for ESG impact and best able to absorb reporting costs. Undertakings below the threshold may still report voluntarily. To support this, the Commission has recommended a voluntary sustainability reporting standard for smaller companies outside the mandatory scope, giving them a simplified basis on which to respond to sustainability information requests.
- **Assurance:** Sustainability disclosures are subject to external assurance under the framework: the undertaking's materiality assessment process, which determines what information must be disclosed, is itself subject to external assurance in accordance with the Accounting Directive.
- **Timing:** The revised, simplified standards apply from financial year 2027, with early adoption permitted for financial year 2026. Application dates for certain undertakings had earlier been postponed.

The ESRS have since been simplified, with mandatory datapoints reduced by around 61% while retaining their core objectives, illustrating how a mandatory framework is calibrated after implementation to reduce burden.

Source: Questions and Answers on the Adoption of European Sustainability Reporting Standards, European Commission, July 2023; Commission Delegated Regulation (EU) .../... of 3.7.2026 amending Delegated Regulation (EU) 2023/2772, European Commission July 2026; Directive (EU) 2026/470 Of The European Parliament and of the Council of 24 February 2026 amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760. European Union. February 2026; 2026 Revised ESRS, EFRAG, July 2026; Questions and answers on the Recommendation on a voluntary sustainability reporting standard for small and medium-sized undertakings, European Commission, July 2025

The EU regime illustrates the design of such a mandate in developed form: per-credit content, scope set by threshold and adjusted over time, assurance of what is reported, and phased application rather than a single start date. It reflects the same progression this section describes, carbon credit disclosure brought within a mandatory framework rather than left to voluntary practice, though the EU moved directly to a mandatory standard rather than through the guidance stage recommended here.

4.3 Priority Area 3: Legal and Regulatory Treatment for VCM

As highlighted in the previous section, market infrastructure and guidelines for procurement and disclosures are priority areas that capital market regulators should prioritise to support the development of VCM, as these are the principal mechanisms that enhance market transparency and integrity which lay out the foundation for market development. However, the ability of a capital market regulator to develop, oversee, and enforce these mechanisms is contingent upon the legal and regulatory treatment of VCM within its jurisdiction. These regulatory functions are not unique to VCMs but are well established within financial and capital markets; capital market regulators are responsible for overseeing market infrastructure, regulating market transactions conducted, and supervising the conduct of market participants.

This section therefore examines how those existing regulatory functions may be extended or applied to VCM through different legal and regulatory approaches. It focuses on how those existing legal and regulatory frameworks establish, confer, or enable the authority of capital market regulators to regulate, oversee, and enforce market mechanisms, while recognising that new or amended legislative and regulatory provisions may be required to support effective regulatory oversight. It should be noted that this section is not intended to provide a comprehensive analysis of the legal and regulatory treatment of VCMs. Rather, it is deliberately limited to the perspective of capital market regulators and the legal authorities relevant to their regulatory mandate.

Why this Priority Area?

The legal and regulatory treatment of VCMs should be regarded as a priority area alongside the establishment of market infrastructure and market conduct and disclosure guidelines, as it provides the legal foundation upon which these regulatory mechanisms operate. Without an appropriate legal and regulatory framework, capital market regulators may lack the statutory authority to regulate market infrastructure, impose legally binding obligations on market participants, or take enforcement action against misconduct. Moreover, many initiatives supporting voluntary carbon markets, including procurement principles, integrity initiatives and disclosure guidelines, are voluntary in nature and do not create legally enforceable obligations. Establishing an appropriate legal and regulatory framework enables jurisdictions to incorporate these principles into legislation or regulatory requirements, transforming voluntary standards into legally binding obligations and empowering regulators to supervise compliance, investigate misconduct and enforce regulatory requirements, thereby strengthening the integrity, credibility and long-term development of VCM.

4.3.1 Market Transactions in VCM

Capital market regulators can establish comprehensive oversight over VCM by adopting a legal framework that regulates both the trading instruments and the trading venues through which carbon credits are issued, traded and intermediated. Defining the regulatory scope of trading venues and carbon credit instruments is fundamental to enabling capital market regulators to exercise comprehensive oversight over transactions within the voluntary carbon market.

Regulatory Scope of Carbon Credit Instruments	a) The legal classification of carbon credits under applicable legislation, including whether they are recognised as securities, capital market products, or other regulated financial instruments, or whether their regulatory status depends on the venue or manner in which they are traded. b) The categories and types of carbon credits that fall within the regulatory framework. c) The scope of the regulatory framework in relation to carbon-related financial products and claims, including derivatives, structured products, tokenised carbon credits, and other investment products referencing carbon credits.

Regulatory Scope of Trading Venues	a) The trading venues and channels that fall within the regulators' supervisory purview, including whether oversight extends only to licensed exchanges or also to OTC transactions conducted through licensed intermediaries. b) The licensing requirements for market participants involved in dealing, broking, arranging, or advising on carbon credit transactions, together with the applicable conduct and prudential requirements. c) The disclosure, reporting, and record-keeping obligations imposed on exchanges and licensed intermediaries to facilitate regulatory oversight, market surveillance, and market transparency.

Defining the regulatory scope of carbon credit instruments establishes which instruments are subject to capital market regulation and the legal basis upon which regulatory oversight may be exercised. This includes determining whether a carbon credit is classified as a security, capital market product, or other regulated financial instrument in its own right, or whether its regulated status depends on the venue or manner in which it is traded. The distinction is significant because it determines whether carbon credits are subject to regulatory requirements regardless of where they are issued or traded, or only when transactions occur through regulated trading venues.

The regulatory treatment of exchange-traded and OTC carbon-credit transactions depends on each jurisdiction's legal and institutional framework. While licensing OTC intermediaries by itself does not provide regulators with complete visibility over the OTC market, it enables oversight of market transactions facilitated through regulated entities. A significant proportion of OTC transactions may continue to occur through direct bilateral agreements between counterparties without the involvement of licensed intermediaries and would therefore remain outside the regulator's supervisory reach regardless of how comprehensive the intermediary licensing regime may be. Nevertheless, licensing intermediaries remains an important regulatory measure, as it establishes supervised and accountable channels for a substantial portion of OTC trading, enhances market transparency, and strengthens regulatory oversight, even if it cannot capture the OTC market in its entirety.

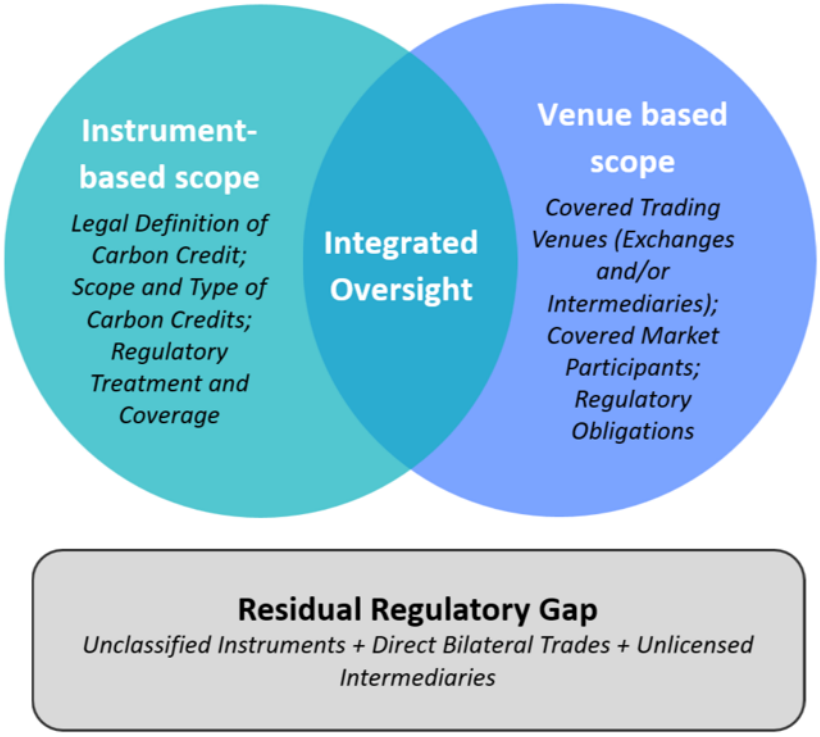
Highlight: ASEAN Comparative – Indonesia, Malaysia and Thailand

A. **Indonesia** adopts a **venue-based approach** under the P2SK Law, with OJK's authority applying to carbon units traded the carbon exchange. OJK further regulates the classification and scope of carbon units traded through the exchange and enables OJK to address misconduct within that regulated perimeter. Bilateral OTC transactions outside the carbon exchange do not fall within OJK's stated authority, highlighting the importance of coordination with relevant authorities where broader market visibility is required.
B. **Malaysia** has established a regulated exchange infrastructure through BCX, but the publicly available legal framework **does not expressly classify carbon credits as capital market products nor establish a dedicated licensing regime for intermediaries** conducting carbon credit transactions outside BCX. This raises policy consideration of whether the existing regulatory framework provides sufficient oversight of OTC carbon credit transactions or whether further legislative clarification is required.
C. **Thailand** adopts a broader **intermediary-based regulatory approach for tokenised carbon credits** by permitting licensed digital asset exchanges, brokers and dealers to provide services in relation to those instruments, in addition to investment tokens related to carbon credit projects. Regulatory obligations therefore attach to licensed intermediaries rather than solely to a trading venue, extending regulatory oversight to provide services related to tokenised carbon credits. This illustrates how intermediary licensing can broaden regulatory oversight beyond a centralised exchange, although the current framework is limited to tokenised carbon credits.

Source: SEC amends regulations to allow trading of digital tokens supporting carbon emission reduction through digital asset exchanges, brokers, and dealers, SEC Thailand, September 2025

The extent to which regulatory oversight is attached to the instrument itself or to the venue through which it is traded ultimately depends on the jurisdiction's policy objectives and legislative framework. Nevertheless, an instrument-based approach generally provides broader regulatory coverage because the regulatory status of the carbon credit is determined by its legal nature rather than the trading venue. Consequently, transactions involving the same carbon credit can be subject to a consistent regulatory framework regardless of whether they occur on a regulated exchange or through OTC channels, subject to the applicable legislation. This reduces regulatory gaps, promotes consistency in regulatory treatment, and limits opportunities for regulatory arbitrage.

Figure 8: Regulatory Scopes - Market Transaction in VCM



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

Accordingly, both the regulatory scope of carbon credit instruments and trading venues should be clearly defined, as each addresses different aspects of regulatory oversight. Together, they reduce regulatory gaps, improve market transparency, and support a more comprehensive and consistent regulatory framework for VCM transactions.

Highlight: Comparative Regulatory Example – Classification of Carbon Instruments under MiFID I and MiFID II in the EU

Although the EU emission allowances (EUAs) arise from a compliance carbon market rather than the VCM, the evolution of their regulatory treatment provides a useful illustration of how the legal classification of carbon instruments determines the scope of capital market regulation. While the example does not concern voluntary carbon credits, it demonstrates a regulatory approach that may be considered when defining the regulatory scope of carbon credit instruments.

Prior to January 2018, under the Markets in Financial Instruments Directive (MiFID I), EUAs were not classified as financial instruments in their own right. Instead, only derivatives referencing EUAs, such as futures, forwards and options contracts, fell within the scope of financial services regulation. Consequently, while relevant derivatives were regulated as financial instruments, spot transactions in EUAs generally remained outside the EU financial-market regulatory framework, although they continued to be governed by the EU ETS framework. **Regulatory oversight under financial-market legislation is therefore attached primarily to derivative transactions rather than to the underlying allowances**. This created a regulatory gap whereby transactions involving the same underlying allowance could receive different regulatory treatment depending on whether they were structured as spot transactions or derivatives.

This position changed with the implementation of MiFID II in January 2018, which reclassified EUAs as financial instruments in their own right. The reclassification brought spot trading in EUAs within the financial-market regulatory perimeter and subjected relevant market activities and participants to the applicable requirements under MiFID II, the Markets in Financial Instruments Regulation (MiFIR), and the Market Abuse Regulation (MAR). According to the recital of Commission Delegated Regulation (EU) 2019/1868, the amendment was introduced to reinforce the integrity of the carbon market by extending financial market regulation to the underlying instrument rather than limiting regulation to derivatives alone. This demonstrates how defining the regulatory scope by reference to the instrument itself can broaden the regulatory perimeter and enable a more consistent regulatory oversight.

The EU experience demonstrates that defining the **regulatory scope of carbon credit instruments is not limited to determining their legal classification but also requires clearly specifying the categories of carbon instruments**

captured by the legislative framework. This is illustrated by the fact that, even following the MiFID II reclassification, only emission allowances recognised under the EU ETS Directive are deemed financial instruments for the purposes of the EU financial services framework. Accordingly, an **instrument-based approach only extends to the categories of carbon instruments expressly brought within the legislative definitio**n. This demonstrates that the effectiveness of an instrument-based approach depends not only on the legal classification adopted but also on the breadth of the legislative scope. A **failure to define that scope** comprehensively may **create regulatory gaps and opportunities for regulatory arbitrage**, as market participants may transact in carbon instruments that fall outside the regulatory perimeter and are therefore subject to a different, or no equivalent, regulatory regime.

Source: Commission Delegated Regulation (EU) 2019 /1868, European Commission, August 2019; EU carbon emission allowances as environmental and financial instruments – is it possible to kill two birds with one stone?, Przybojewska & Pyka, 2022

Highlight: Commodity Classification of Voluntary Carbon Credits under the Commodity Exchange Act in the United States

Unlike EU case, which illustrates how the legislative definition of carbon instruments determines the scope of regulatory coverage, the United States demonstrates how the legal classification of voluntary carbon credits determines the nature and extent of the regulator's supervisory powers. Under the Commodity Exchange Act (CEA), voluntary carbon credits are treated as commodities rather than financial instruments. Consequently, the Commodity Futures Trading Commission's (CFTC) regulatory authority is principally directed towards derivatives referencing voluntary carbon credits, including futures, options and swaps, while the spot market remains largely outside its ongoing supervisory framework.

Although the CFTC possesses anti-fraud and anti-manipulation authority over spot commodity markets, allowing it to investigate and take enforcement action against fraudulent or manipulative conduct, it does not have general statutory authority to regulate or supervise spot transactions involving voluntary carbon credits. This distinction was reflected in the CFTC's 2024 Final Guidance on the Listing of Voluntary Carbon Credit Derivative Contracts, which establishes considerations for designated contract markets (DCMs) when listing voluntary carbon credit derivative contracts to comply with the Core Principles under the Commodity Exchange Act and the contract submission requirements under Part 40 of the CFTC Regulations. The guidance, however, applies only to derivative contracts traded on regulated derivatives markets and does not extend to spot market transactions.

As many voluntary carbon credit transactions are conducted through spot or bilateral OTC arrangements rather than regulated derivatives markets, those transactions generally fall outside the CFTC's ongoing supervisory framework. The United States therefore illustrates that the **legal classification of carbon credit instruments determines not only the applicable regulatory framework but also the scope of regulatory powers available to the regulator**. Where voluntary carbon credits are treated as commodities, the CFTC exercises comprehensive supervisory authority over derivatives markets while its authority over the spot market is primarily limited to anti-fraud and anti-manipulation enforcement. Consequently, spot market transactions are not subject to the same level of ongoing regulatory supervision as derivatives transactions.

Source: Legal Implications of Voluntary Carbon Credits, International Swaps and Derivatives Association, December 2021

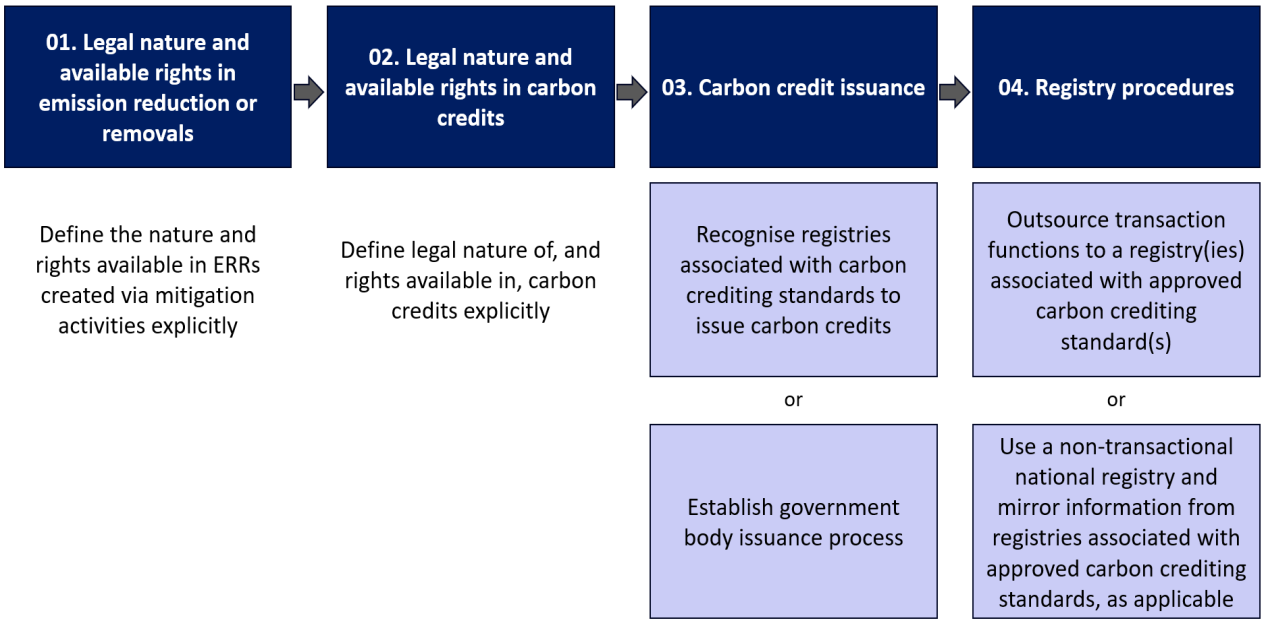
4.3.1.1 Legal and Regulatory Treatment of Carbon Credits

Legal Foundations

Before determining the regulatory treatment of carbon credit transactions, regulators must first establish the legal nature of carbon credits as the underlying instruments subject to regulation. This extends beyond defining the legal status of carbon credits themselves and requires a legal framework that:

(i) Recognises the legal nature and associated rights in verified emissions reductions or removals.
(ii) Defines the legal nature and rights embodied in carbon credits issued in respect of those environmental outcomes.
(iii) Establishes the legal basis for the issuance of carbon credits through recognised carbon crediting programmes or registries.
(iv) Prescribes the governance and operational requirements applicable to carbon registries responsible for recording, transferring and retiring carbon credits.

Figure 9: Decision Tree for Developing a Legal Framework in VCM

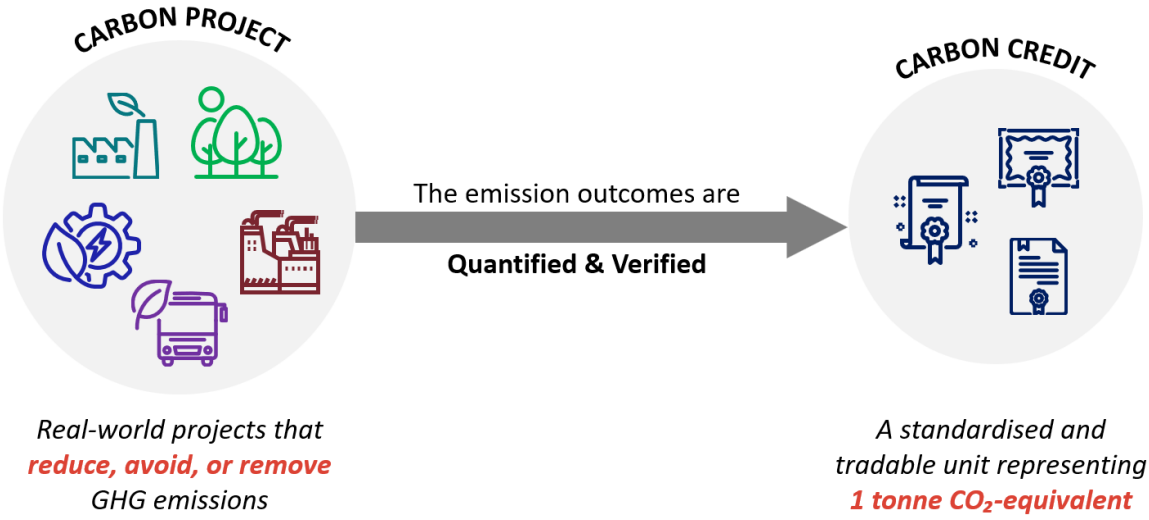


Source: Legal and Regulatory Reform Toolkit for High-Integrity Carbon Markets, World Bank, September 2025

Legal Recognition of Carbon Credits

Carbon credits originate from verified emissions reductions or removals generated through eligible mitigation activities. Following verification under an approved methodology, the resulting environmental outcome may be issued as a carbon credit and recorded in a recognised carbon registry. The issuance of a carbon credit creates a transferable instrument capable of being held, transferred and retired in market transactions, distinct from the underlying mitigation activity or environmental outcome from which it is derived. However, issuance itself does not determine the legal nature of a carbon credit or the rights attached to it. Those matters are determined by the applicable legal framework.

Figure 10: Carbon Credits



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

The legal framework should establish the conditions under which carbon credits are legally recognised. This includes identifying the recognised mitigation activities, recognised carbon crediting programmes, approved methodologies and verification standards, recognised carbon registries through which carbon credits may be issued, and the categories of carbon credits falling within its regulatory scope. Collectively, these elements establish the legal basis for the issuance and legal recognition of carbon credits, define the regulatory perimeter of eligible instruments, and provide legal certainty as to the carbon credits capable of being regulated under the applicable legal framework. Only carbon credits

recognised under this legal framework are capable of giving rise to legally enforceable rights and becoming subject to regulatory oversight under the applicable legislation.

Importance of Defining the Legal Nature of Carbon Credits

Establishing the legal nature of carbon credits is fundamental to the development of transparent, orderly and efficient VCM. A clearly defined legal framework enables the recognition and enforcement of legal rights, supports contractual certainty, reduces legal uncertainty, and provides the legal foundation for the subsequent regulatory treatment of carbon credits under capital market legislation. Determining the legal nature of carbon credits therefore requires the legal framework to define the rights embodied in the instrument and the legal consequences arising from those rights.

Considerations: Legal Rights Associated with Carbon Credits

The legal significance of a carbon credit extends beyond evidencing a verified environmental outcome. It determines the legal rights embodied in the instrument and the legal consequences arising from its ownership, transfer and retirement. Once the legal framework has established the conditions under which carbon credits are legally recognised, it should define the legal rights embodied in those recognised carbon credits and the legal consequences arising from their ownership, transfer and retirement. At a minimum, the legal framework should determine whether carbon credits constitute property or another recognised legal asset, identify the persons capable of holding legal title, prescribe the legal requirements governing transfers of ownership, determine the treatment of competing proprietary claims, and clarify the legal effect of retirement. Depending on the applicable legal system, carbon credits may also form part of insolvency proceedings, pass through succession, serve as collateral for secured transactions or otherwise participate in commercial and financial arrangements. In the absence of legal certainty in relation to these matters, market participants face uncertainty regarding ownership, enforceability and the priority of competing claims, increasing both legal and transactional risk.

Considerations: Governance of Carbon Registries

As carbon credits are issued, recorded and transacted through recognised registry systems, the legal framework should also establish an appropriate governance framework for carbon registries. This should include requirements relating to the recognition of registries, issuance procedures, recording of ownership, transfer and retirement processes, maintenance of registry records, and safeguards against duplicated issuances and double counting. Effective registry governance provides the legal and operational infrastructure necessary to support ownership certainty, transaction integrity and market confidence. It also provides the evidentiary basis for establishing ownership, recording transfers and demonstrating retirement, thereby supporting the legal enforceability of the rights embodied in carbon credits.

Considerations: Allocation of Regulatory Responsibilities

However, the legal nature of carbon credits should be distinguished from their regulatory classification. The recognition of eligible mitigation activities, the verification of resulting emissions reductions or removals, the issuance of carbon credits and the operation of carbon registries are generally governed by environmental authorities, recognised carbon crediting programmes or carbon registries. These entities determine whether the underlying environmental outcomes satisfy the applicable methodologies, standards and programme rules necessary for the issuance of carbon credits, and oversee the underlying mitigation activities and carbon projects from which those carbon credits are generated. Capital market regulators, by contrast, do not determine the validity of the underlying environmental outcomes or regulate the underlying mitigation activities. Rather, they rely upon these upstream legal and institutional determinations when assessing whether carbon credits fall within the scope of securities, commodities, capital market products or other regulated instruments under the applicable legislation, thereby determining the appropriate regulatory treatment applicable to carbon credit transactions.

4.3.2 Market Conduct and Disclosure

Following the establishment of the regulatory scope of carbon credit instruments and trading venues, the legal framework should prescribe market conduct and disclosure requirements applicable to market participants. While the regulation of carbon credit instruments and trading venues determines what falls within the regulators' supervisory perimeter, market conduct and disclosure requirements determine how market participants must behave and what information they must provide when conducting regulated activities. Together, these requirements provide the legal and regulatory mechanisms through which capital market regulators promote market integrity, transparency and investor confidence, while enabling supervisory oversight, regulatory intervention and enforcement against fraud and market misconducts.

Legal Foundations

To effectively regulate market conduct and disclosure, jurisdictions should establish a legal framework that empowers capital market regulators to prescribe, supervise and enforce conduct and disclosure obligations applicable to carbon market participants. Depending on the jurisdiction's existing legal and regulatory framework, this may be achieved by extending existing capital market legislation governing matters such as fraud, market manipulation, misleading or deceptive conduct, disclosure obligations and licensing requirements to carbon market activities. Alternatively, jurisdictions may establish dedicated legislation or regulatory frameworks for carbon markets that prescribe market conduct and disclosure requirements tailored to the unique characteristics and risks of domestic VCM. Regardless of the legislative approach adopted, the legal framework should clearly establish the legal basis for imposing market conduct and disclosure obligations, the categories of regulated market participants and activities to which they apply, and the supervisory and enforcement powers available to capital market regulators.

Highlight: Extending Existing Market Conduct Frameworks to VCM – the United States and Australia

The United States and Australia demonstrate how existing market conduct and consumer protection legislation can be extended to address integrity risks in VCM without introducing dedicated market conduct legislations.

In the United States, the CFTC relies on the Commodity Exchange Act to exercise anti-fraud and anti-manipulation authority over VCM, covering both voluntary carbon credits derivative contracts listed on DCMs and fraudulent conduct affecting the underlying spot market. This approach was demonstrated in the first coordinated federal enforcement action against VCM fraud in October 2024, where the CFTC, together with the Department of Justice (DOJ) and the Securities and Exchange Commission (SEC), alleged that a carbon project developer and its former executives manipulated project data and submitted false information to carbon registries, resulting in the fraudulent generation of approximately six million carbon credits. The case demonstrates that existing anti-fraud and market conduct provisions can be applied to address misconduct throughout the carbon credit lifecycle, including project-level activities that undermine the integrity of carbon credits entering the market.

Similarly, Australia relies on existing consumer protection and financial market legislation rather than carbon-specific regulation. The Australian Competition and Consumer Commission (ACCC) applies the Australian Consumer Law to address misleading or deceptive environmental claims relating to carbon credits and carbon neutrality, while the Australian Securities and Investments Commission (ASIC) oversees greenwashing and misleading sustainability-related disclosures in connection with financial products and services. This approach was illustrated in the EnergyAustralia "Go Neutral" proceedings, where claims that electricity supplied under the programme was "carbon neutral" through the purchase of carbon offsets were challenged under the Australian Consumer Law. Although the proceedings concluded by settlement, the case demonstrates that existing consumer protection legislation can be used to address misleading claims relating to the procurement and use of carbon credits without the need for dedicated VCM legislation.

These examples illustrate that jurisdictions may strengthen market integrity by extending existing anti-fraud, anti-manipulation and consumer protection frameworks to VCM activities, allowing regulators to address fraudulent conduct and misleading environmental claims without fundamentally altering the legal classification of carbon credits.

Source: Commission Guidance Regarding the Listing of Voluntary Carbon Credit Derivative Contracts, CFTC, October 2024; CFTC, DOJ and SEC Announce First Coordinated Action Aimed at Voluntary Carbon Market Fraud, Holland & Knight, October 2024; Environmental and Sustainability Claim, ACCC, n.d.; Carbon Upsetting: Parents for Climate and EnergyAustralia Settlement, Commercial Bar Association, June 2025

Highlight: International Harmonisation of the Private Law Treatment of Carbon Credits

The comparative examples above illustrate that carbon credits are classified differently across jurisdictions. Work is underway at the international level to address this divergence. The International Institute for the Unification of Private Law (UNIDROIT) established a Working Group on the Legal Nature of Verified Carbon Credits in 2023, and is developing draft Principles addressing the private law treatment of carbon credits, with the aim of fostering clarity and uniformity so as to provide legal certainty and support the scaling of primary and secondary markets. The draft Principles recommend that States adopt legislation consistent with them, on the basis that greater consistency between States increases predictability in cross-border transactions. They draw on an earlier joint study with the United Nations Commission on International Trade Law (UNCITRAL), which mapped the options available to States in addressing the legal nature of carbon credits.

Matters addressed include the creation, transfer and cancellation of credits, the relationship between the registered holder and the beneficial owner, obligations of registry operators, and treatment on insolvency. The draft Principles are the subject of a public consultation, with feedback to be considered at the Working Group's tenth session in October 2026 and adoption anticipated thereafter. Jurisdictions developing or reviewing the legal treatment of carbon credits may wish to monitor this work, and to consider the extent to which domestic classification decisions can be taken consistently with an emerging international position rather than requiring subsequent amendment.

Source: UNIDROIT, Study LXXXVI, Working Group on the Legal Nature of Verified Carbon Credits.

Importance of Legal Framework for Market Conduct and Disclosure

Establishing a legal framework for market conduct and disclosure enables capital market regulators to address misconduct that may undermine the integrity, credibility and orderly functioning of VCM. Carbon credit transactions are susceptible to conduct risks commonly addressed under existing capital market legislation, including fraud, market manipulation and misleading or deceptive conduct, as well as market-specific risks such as greenwashing, false environmental claims, double selling and double claiming. Without an appropriate legal basis, regulators may lack the statutory authority to supervise market participants, investigate suspected misconduct and take enforcement action against non-compliance. Furthermore, while voluntary procurement principles, integrity initiatives and disclosure guidelines promote good market practices, they are generally not legally binding and cannot be enforced unless incorporated into legislation or regulatory requirements. Establishing a legal framework transforms these voluntary principles into legally enforceable obligations, enabling regulators to require compliance, impose sanctions or penalties for breaches, and uphold the integrity and credibility of VCM.

Highlight: Voluntary Guidance and Binding Disclosure Requirements in Singapore and Hong Kong

Singapore and Hong Kong both address buyer conduct through two layers: non-binding guidance on how carbon credits should be procured and used, and binding disclosure obligations placed within the listing framework.

In Singapore, the Guidance on the Role of Carbon Credits in Corporate Decarbonisation, issued jointly by the NCCS, MTI and EnterpriseSG, encourages the responsible use of carbon credits and is non-binding. Disclosure is treated separately: Listing Rule 711A requires every issuer to prepare an annual sustainability report, and SGX-listed issuers must report climate-related disclosures in accordance with all applicable requirements of IFRS S2, applying in phases from FY2025.

Hong Kong follows the same structure where the HKEX Carbon Credits Buyer's Guide described in Section 4.2.1.2 is non-binding while climate-related disclosure requirements developed with reference to IFRS S2 sit in Part D of Appendix C2 of the Main Board Listing Rules applying in phases from financial years commencing on or after 1 January 2025 and supported by the implementation guidance described in Section 4.2.2.1.

Neither jurisdiction has enacted dedicated carbon market legislation to achieve this. In both countries, the disclosure obligation arises because the listing rules align to IFRS S2, which requires an issuer whose emissions target relies on carbon credits to disclose its planned use of them. The routes differ but the standard does not: Singapore requires issuers to report in accordance with IFRS S2 directly, while Hong Kong sets out its requirements in Part D and provides that reports prepared in compliance with IFRS S1 and IFRS S2 are treated as complying with the Code. Enforceability follows from the listing framework, since compliance with listing rules is a condition of continued listing, whereas the procurement and use guidance in each jurisdiction depends on voluntary adoption.

Source: Appendix C2 Environmental, Social and Governance Reporting Code, HKEX, 2025; Guidance on Role of Carbon Credits in Corporate Decarbonisation, NCCS; MTI of Singapore; Enterprise Singapore, 28 Oct 2025; SGX Listing Rules 711A and 711B and Practice Note 7.6 Sustainability Reporting Guide; HKEX Carbon Credits: A Buyer's Guide, September 2025.

Considerations: Scope of Application

In establishing the legal framework, jurisdictions should determine how extensively market conduct and disclosure requirements should apply across the different participants involved in carbon credit transactions. Market conduct provisions, particularly those relating to fraud, manipulation, misleading or deceptive conduct and false environmental claims, may need to apply broadly to any person undertaking relevant activities under VCM. This is because misconduct may arise not only from licensed intermediaries or organised trading venues, but also from buyers, sellers, brokers and other participants involved in exchange-based or OTC transactions.

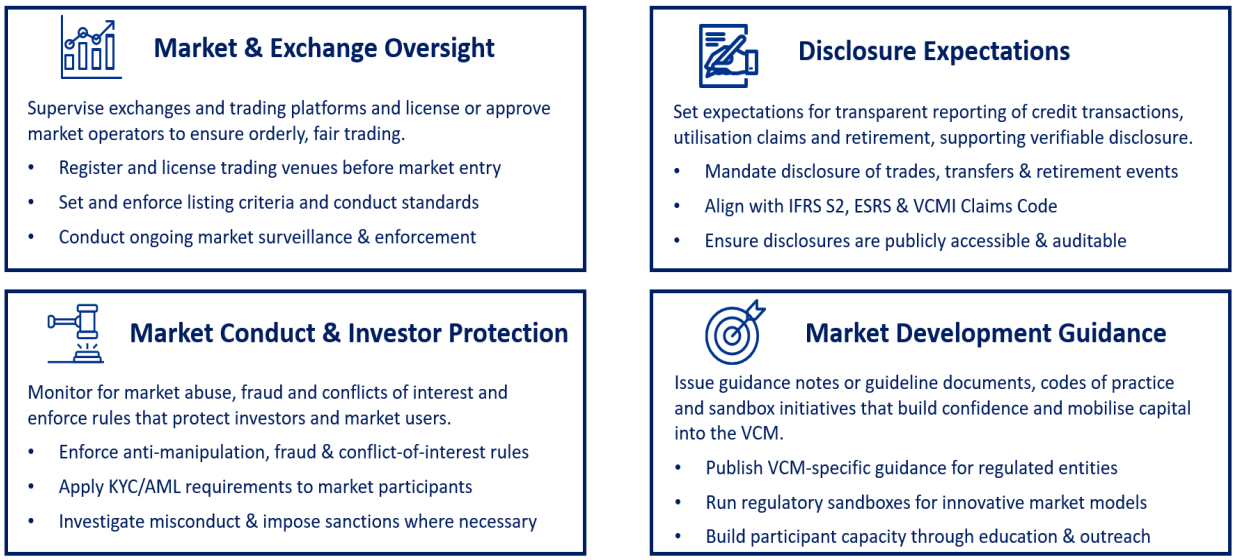
Disclosure and reporting obligations, however, may require a differentiated approach. Applying the same requirements to all market participants may create disproportionate compliance costs, particularly for smaller entities, occasional market participants or end-buyers that do not perform an intermediary or market-making function. Jurisdictions should therefore determine which participants should be subject to disclosure obligations, the information each category of participant should provide, and whether the requirements should apply on a transaction-specific, periodic or ongoing basis. The nature and extent of these obligations may be calibrated according to the participant's role, the nature and scale of its activities, the risks it introduces to the market and the information reasonably available to it.

For example, exchanges and regulated intermediaries may be subject to more extensive obligations relating to transaction reporting, record-keeping, client disclosures and conflicts of interest, while buyers and sellers may be required to provide information concerning the representations and environmental claims made in connection with a transaction. This risk-based and proportionate approach allows the legal framework to provide sufficiently broad protection against market misconduct without imposing unnecessary reporting burdens that could discourage participation or increase transaction costs.

5 Translating the Priority Areas into a Credible, Transparent and Liquid VCM

The priority areas presented in this report focus on regulatory interventions that capital market regulators may consider in strengthening governance of the secondary market. These measures establish the regulatory foundations necessary to support a credible, transparent, and liquid market while complementing the existing governance arrangements that underpin carbon credit generation and issuance in the primary market. Robust market infrastructure and disclosure practices improve transparency and transaction certainty, market conduct standards safeguard against abusive market practices, and clear legal and regulatory treatment provides the basis for effective supervision and enforcement. While these interventions are primarily intended to guide capital market regulators, their effectiveness ultimately depends on their ability to address the needs and concerns of the broader market ecosystem.

Figure 11: Potential Role of Capital Market Regulators in VCM



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

Accordingly, the following section considers these priority areas from the perspectives of different market participants and how they contribute to confidence, participation, and the orderly development of the secondary market.

5.1 Project Developers

Although project developers are primarily governed through independent carbon standards, registry requirements, and applicable domestic regulatory frameworks, the commercial success of carbon projects ultimately depends on the confidence of secondary market participants in the quality and credibility of the carbon credits generated. Where buyers are unable to distinguish between high-integrity and low-integrity carbon credits, market confidence may deteriorate, resulting in reduced willingness to pay and weaker investment incentives across the market. This creates a risk that high-quality projects compete on the same commercial terms as lower-quality projects despite incurring significantly higher costs to achieve robust environmental outcomes.

The priority areas presented in this report seek to address this market challenge by improving transparency, strengthening market integrity, and enhancing confidence throughout secondary market transactions. Robust disclosure requirements provide buyers with more reliable information regarding the characteristics and provenance of carbon credits, while effective market conduct standards reduce fraudulent, manipulative, and misleading market practices that may undermine confidence. Clear legal and regulatory treatment further provides certainty regarding ownership, transferability, and the rights associated with carbon credits, reducing transactional and legal risks for market participants.

Collectively, these measures reduce information asymmetry within the market and enable buyers, investors, and intermediaries to make more informed purchasing and investment decisions based on the quality and integrity of carbon credits rather than price alone. As confidence in the market increases, demand is more likely to shift towards higher-integrity projects that demonstrate robust governance, credible environmental outcomes, and transparent disclosures.

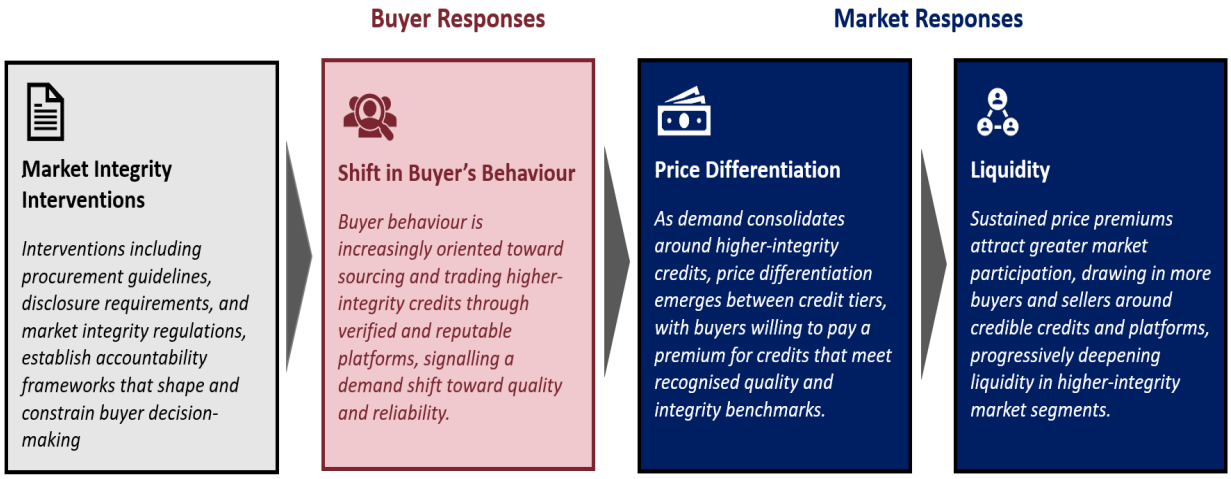
From a market development perspective, these regulatory interventions help create stronger commercial incentives for project developers to invest in project quality, rigorous monitoring, and transparent reporting. Rather than imposing additional regulatory obligations on project developers, the priority areas strengthen the functioning of the secondary market in a manner that rewards higher-quality carbon credits through improved market access, stronger buyer confidence, and the potential for price differentiation were supported by market demand. Over time, this reinforces a virtuous cycle in which market confidence encourages investment in higher-quality projects, further improving the credibility and resilience of the VCM.

5.2 Corporate Buyers

Corporate buyers rely on carbon credits to support decarbonisation strategies, voluntary climate commitments, and sustainability objectives. Effective market infrastructure, including transparent registry systems and trading platforms, improves the availability and comparability of information relating to carbon credits, enabling buyers to assess credit characteristics, project quality, and transaction history more efficiently. This reduces information asymmetry between buyers and sellers, allowing purchasing decisions to be based on more informed assessments of quality and integrity rather than limited or inconsistent market information.

Complementing market infrastructure, disclosure requirements, responsible buyer guidance, and clear legal and regulatory frameworks establish safeguards that promote responsible market participation. These measures reduce the risk of purchasing low-integrity or misrepresented carbon credits, strengthen the credibility of corporate climate claims, and provide greater assurance that transactions are conducted within a fair, transparent, and well-governed market. Collectively, they protect buyers from reputational and legal risks while encouraging greater demand for high-integrity carbon credits, reinforcing market incentives for quality and transparency.

Figure 12: Market Benefits of Secondary Market Integrity



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

5.3 Investors and Financial Institutions

Investors and financial institutions play a critical role in scaling VCM by providing financing, facilitating transactions, and developing financial products that improve market participation and liquidity. Their willingness to deploy capital depends not only on legal certainty, but also on confidence that carbon credits represent credible environmental assets capable of attracting sustained market demand. A transparent and well-governed secondary market improves the availability, comparability, and reliability of market information, enabling both buyers and investors to better distinguish

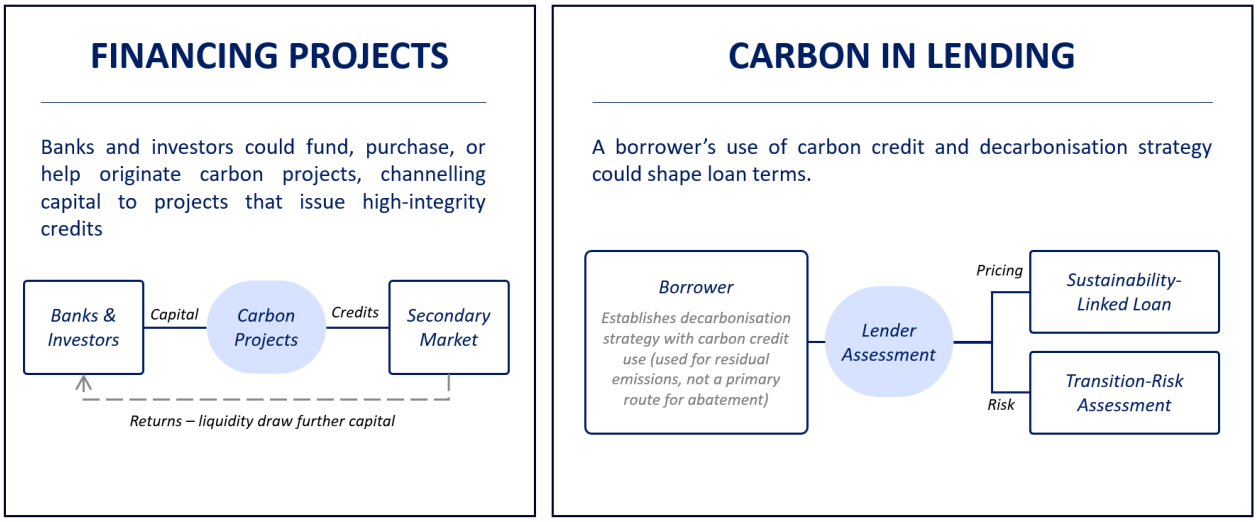
between higher-integrity and lower-integrity carbon credits. Enhanced disclosure, robust market infrastructure, and clear legal and regulatory treatment reduce information asymmetry and strengthen confidence that carbon credits accurately reflect their underlying environmental attributes.

As corporate buyers increasingly incorporate integrity considerations into their procurement decisions, demand is more likely to concentrate on higher-quality carbon credits. These market signals provide financial institutions and investors with greater confidence that projects producing high-integrity credits are more likely to remain commercially viable and generate sustained demand. Consequently, capital can be allocated more efficiently towards projects demonstrating stronger environmental performance and governance, while lower-integrity projects face greater market discipline.

Over time, this positive feedback loop strengthens both demand and investment within VCM. Buyers reward quality through purchasing decisions, while financial institutions and investors reinforce these signals through financing and capital allocation. Together, these dynamics encourage continued investment in high-integrity carbon projects, facilitate the mobilisation of private capital, and support the integration of VCMs within broader sustainable finance and transition finance ecosystems.

Moreover, enhanced disclosure and greater transparency regarding the procurement and use of carbon credits enable financial institutions and investors to better assess the credibility of corporate climate strategies and transition plans. Where corporate buyers transparently disclose the use of high-integrity carbon credits as part of broader decarbonisation efforts, financial institutions, investors, and other market participants are better positioned to distinguish credible climate action from unsupported or lower-integrity claims. This improves the quality of information available for investment and financing decisions, allowing environmental integrity to be considered alongside broader climate-related risks and opportunities. Over time, as sustainable finance frameworks continue to evolve, greater transparency in carbon credit use may further strengthen the integration of high-integrity carbon credits into sustainable finance assessments, reinforcing market incentives for companies to procure higher-quality credits and supporting the mobilisation of private capital towards credible climate transition activities.

Figure 13: Financial System Integration



Source: KPMG Malaysia under C-PRISM under Green Finance Pillar of ASEAN-UK Green Transition Fund

With clear legal and regulatory treatment for VCM, together with robust market conduct legal requirements, investors are better positioned to participate with greater market confidence. Together with the clear market conduct rules, legal certainty reduces ambiguity regarding the legal nature of carbon credits, ownership rights over emissions reductions or removals, transferability, and the enforceability of transactions, thereby reducing the risk of disputes, invalid ownership claims, or financial losses arising from defective titles or fraudulent transactions, protecting the investors while strengthening the market integrity in VCM. Greater legal and regulatory clarity can also help investors better assess the potential accounting and tax implications of carbon credit transactions, thereby reducing uncertainty over their financial treatment and supporting more informed investment decisions. Collectively, these measures improve investor confidence, facilitate more informed investment decisions, lower legal and transaction risks, and encourage greater capital allocation into high-integrity carbon projects.

Beyond these regulatory and market safeguards, facilitating investor protection mechanisms through risk-mitigation solutions, such as carbon insurance for carbon projects, could provide an additional layer of protection for investors. For instance, carbon insurance products could cover losses arising from carbon credit reversals, such as those caused by

wildfires or other natural disasters, by financing the replacement of affected credits or providing financial compensation. Such products could potentially complement or, where permitted under the relevant crediting standards, partially substitute for traditional buffer-credit mechanisms used to manage reversal and permanence risks. The relevant regulators and local insurance providers could explore tailored products to address risks associated with underlying assets and project implementation, reducing uncertainties particularly for longer-term projects such as nature-based projects and encouraging greater investment in the market. In turn, this supports deeper market liquidity and strengthens the long-term credibility and scalability of VCM.

5.4 Market Intermediaries, Marketplaces, and Exchanges

Market intermediaries, marketplaces, and exchanges play a central role in determining which carbon credits and carbon-related products gain access to organised trading venues. As gatekeepers of the secondary market, they establish listing standards, conduct due diligence on listed products, facilitate trading, and provide market infrastructure that supports transparent and orderly transactions. Clear legal and regulatory treatment of carbon credits, together with proportionate licensing, market conduct, and disclosure requirements, provides greater certainty regarding the obligations of marketplaces and intermediaries throughout the listing and trading process. Regulatory expectations also support the development of consistent listing criteria and due diligence processes, enabling marketplaces and exchanges to assess the eligibility, integrity, and transparency of carbon credits or carbon-related products before admission to trading.

Consistent listing standards enhance confidence that products admitted to regulated trading venues satisfy minimum governance and transparency expectations, reducing information asymmetry for market participants. This strengthens the credibility of organised trading venues, improves price discovery and market transparency, and encourages broader participation by buyers, investors, and financial institutions. At the same time, clear regulatory expectations promote fair competition among marketplaces and intermediaries by ensuring that competition is driven by the quality of market infrastructure, services, and innovation, rather than differences in governance or regulatory standards.

5.5 Broader Carbon Market Governance Ecosystem

The benefits of stronger regulatory governance extend beyond the operation of VCM and contribute to the broader carbon market ecosystem. Clearly defining the legal treatment of carbon credits, together with robust transaction recording and traceability throughout the credit lifecycle, enhances transparency and reduces information asymmetry across different carbon market segments. This enables regulators and market participants to better identify the origin, characteristics, ownership, and status of carbon credits, facilitating more informed interactions between VCM, compliance carbon market, and emerging international carbon market mechanisms.

As international carbon markets continue to evolve, these governance arrangements may also support the implementation of Article 6 of the Paris Agreement by improving the ability to distinguish between different categories of carbon credits. For example, transparent governance and reliable transaction records can assist in differentiating Article 6-authorised credits from voluntary carbon credits that have not been authorised for international transfer, reducing the risk of market confusion and supporting the appropriate application of different legal and regulatory requirements.

Beyond facilitating market transparency, these governance arrangements generate reliable market information that can support future regulatory and policy development. Improved data on carbon credit issuance, transfers, holdings, and retirements enables regulators to identify regulatory gaps, monitor market developments, and assess whether existing frameworks remain fit for purpose as carbon markets evolve. This provides a stronger evidence base for future policy decisions, including the potential interaction between voluntary and compliance carbon markets and the implementation of emerging international carbon market mechanisms.

6 Recommendations for ACMF

The preceding chapter set out three priority areas for VCM development across ASEAN, addressed to capital market regulators acting within their own jurisdictions. This chapter turns to what ACMF can do at the regional level to support that work.

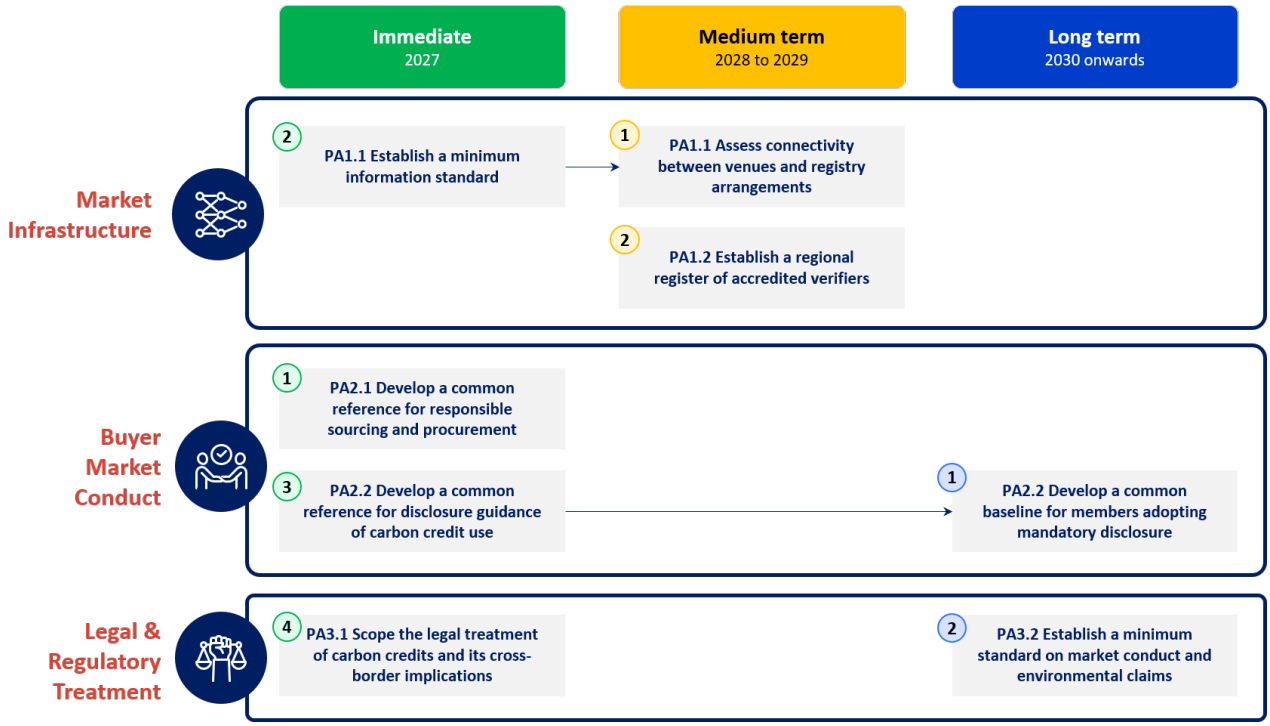
ACMF's contribution is to establish common reference points that members draw on when acting domestically, so that members are not each building the same reference from the beginning. This allows practice to converge through shared content rather than through uniform obligation. The recommendations follow the same three priority areas.

Priority Areas	Recommendations	
Market Infrastructure	*PA1.1*	Establish a minimum information standard and assess connectivity between venues and registry arrangements
	PA1.2	Establish a regional register of accredited verifiers
Buyer Market Conduct	*PA2.1*	Develop a common reference for responsible sourcing and procurement
	PA2.2	Develop a common reference for disclosure of carbon credit use
Legal and Regulatory Treatment	*PA3.1*	Scope the legal treatment of carbon credits and its cross-border implications
	PA3.2	Establish a minimum standard on market conduct and environmental claims

The recommendations are sequenced below, with the basis for each placement set out in the relevant recommendation, and the years indicated are illustrative. Those in the immediate timeframe require no legislation or market development and can begin now. Medium-term recommendations require sustained coordination between members, or become more relevant as domestic infrastructure and market activity develop. Long-term recommendations depend on transaction volumes, market maturity or legal authority not yet clearly established.

Most recommendations are independent of one another, the exceptions being PA1.1 and PA2.2, each delivered in two stages with the later stage building on the earlier. Within each timeframe, recommendations are numbered in an indicative order of initiation, taking account of these links, how readily each recommendation can begin and how widely it applies across market participants. The numbering is not a strict sequence, and recommendations in the same timeline may proceed in parallel depending on the resources available.

Figure 14: Proposed Timeline of Recommendations



Each recommendation is set out below in the same form: the recommendation, the steps to implement it, the considerations and constraints that bear on it, and the references ACMF and members can draw on.

6.1 Recommendations on Market Infrastructure

The recommendations below address what activity should be recorded, who verifies and oversees it, and how systems connect, directed at interoperability between national arrangements rather than uniformity of design.

6.1.1 Minimum Information Standard and Connectivity Models Assessment

ACMF to establish a common minimum data-field and identifier set covering issuance, ownership, transfer, retirement, and project and transaction identifiers, and to assess the arrangements available for connecting venues, being exchanges, trading platforms and OTC channels, to recognised registries.

Proposed Timing

- Immediate (2027) for the minimum information standard: The minimum information standard is applicable irrespective of registry model and may support greater consistency in record-keeping across ASEAN. Early agreement may help reduce future interoperability challenges as national systems and market infrastructure continue to develop.
- Medium term (2028 to 2029) for the connectivity assessment: The connectivity assessment may draw on arrangements already operating in selected markets and can be undertaken even where domestic trading infrastructure remains under development. Its relevance is expected to increase as more AMS establish trading venues and supporting market infrastructure. It can also draw on the minimum information standard agreed in the immediate tier, since connectivity depends on records being exchanged in a consistent form.

Key Considerations

- Registry arrangements vary across ASEAN. While some AMS operate domestic registries, others rely on international crediting-standard registries. Accordingly, the minimum information standard would serve as a common reference framework that may be adopted across domestic registries and international crediting-standard registries recognised by the relevant AMS authorities, rather than prescribing specific registry requirements.

- The objective is to support transparency and interoperability rather than establish a single registry model. Consistent with the principles outlined in Section 4.1.1, AMS may continue to adopt registry arrangements appropriate to their domestic circumstances, provided there is clarity regarding the recognised system of record.
- In many jurisdictions, registry operators may operate outside the direct supervisory perimeter of capital market regulators. Connectivity arrangements may therefore require consideration of operational dependencies, including system availability, data integrity and continuity of market operations.
- Registry connectivity arrangements remain at an early stage of development globally and within ASEAN. Existing examples may therefore be regarded as illustrative rather than exhaustive. Different approaches may also be combined, including domestic registry integration, nominee custody models and connections to international registries, depending on market needs and infrastructure design.

References

ASEAN and Regional

- Indonesia's national registry architecture, being SRN PPI and SRUK, and IDX Carbon's connection to it
- Bursa Carbon Exchange operating procedures and fee schedule, for the nominee custody model and treatment of registry transfer costs
- Climate Impact X, for custody spanning multiple registries

International

- Verra and Gold Standard registry data structures, which already hold records for much of the region's activity
- IOSCO Voluntary Carbon Markets Final Report (2024), on data consistency and market transparency
- Climate Action Data Trust that has public metadata platform that links, aggregates and harmonises major carbon registry data

6.1.2 Register of Accredited Verifiers

ACMF to establish a consolidated register of validation and verification bodies accredited by recognised international crediting programmes, providing a regional reference point.

Proposed Timing

Medium term (2028 to 2029): The register does not depend on the development of domestic market infrastructure and may be established at any stage. However, maintaining an up-to-date register would require ongoing coordination and periodic updates. Priority may therefore initially be placed on other measures that address more immediate market development needs.

Key Considerations

- ACMF compiles rather than accredits. Accreditation of validation and verification bodies remains the responsibility of recognised crediting programmes and relevant accreditation bodies. The proposed register would serve as a consolidated reference source and would not create any additional accreditation status or approval framework.
- Visibility does not create capacity. Section 3.3 identifies nascent local validation and verification capacity as the underlying constraint. A register makes existing capacity easier to find but does not expand it, and should be positioned alongside, not instead of, work to develop domestic capability.
- Currency is the principal risk. Accreditation is granted, suspended and withdrawn over time, and a register that lags those changes may mislead the buyers and developers it is meant to assist.

References

ASEAN and Regional

- Accreditation arrangements under domestic crediting standards, including Thailand's T-VER and Indonesia's SPE-GRK

International

- Validation and verification body lists maintained by Verra, Gold Standard and ART
- Relevant ISO standards for validation and verification bodies and personnel, including ISO 14065 and ISO 14066
- ICVCM CCP Assessment Framework, for the assurance expectations underpinning accreditation

6.2 Recommendations on Buyer Market Conduct

The recommendations below follow the order in which a buyer acts, addressing first how credits are sourced and selected, then how that use is disclosed, as common references members draw on when issuing their own guidance.

6.2.1 Sourcing and Procurement Guidance

ACMF to develop a guidance framework on credit use within a buyer's decarbonisation strategy and on the approach to credit screening and selection, as a reference members draw on.

Proposed Timing

Immediate (2027): Guidance carries a low regulatory cost, can be introduced without amendment to existing legislation, and suits jurisdictions at any stage of market development. It gives prospective buyers the confidence to begin transacting and signals the standard of integrity the market is working towards, which makes it a starting framework for less developed markets and a common reference point for more advanced ones.

Key Considerations

- The lead authority varies by jurisdiction. Because credit use relates to decarbonisation strategy and national emissions pathways, this guidance falls to climate and environmental authorities in many AMS, with capital market regulators contributing in support. The framework is drafted to serve whichever authority leads.
- The CCP label is a floor rather than a ceiling. Buyers with more specific objectives may apply additional criteria, including vintage and, where credits are not CCP-labelled, the crediting standard under which they were issued.
- ICVCM approves programmes and credit categories, not individual credits. Guidance referring to the CCP label should be worded to reflect that distinction.
- Credits complement rather than substitute for direct reduction. The framework should be explicit that credit use becomes less necessary as direct reduction progresses.

References

ASEAN and Regional

- Singapore Guidance on the Role of Carbon Credits in Corporate Decarbonisation, for its three-step approach and treatment of retirement
- HKEX Carbon Credits Buyer's Guide (2025), for the two-stage procurement structure of project shortlisting and credit selection

International

- VCMI Claims Code of Practice, for the Foundational Criteria and permissible claim tiers
- ICVCM CCP Assessment Framework, as the credit quality reference

6.2.2 Disclosure Guidance and Mandate

ACMF to develop a guidance framework on the disclosure of carbon credits by issuers, together with a common minimum disclosure baseline for members moving to a mandate.

Proposed Timing

- Immediate (2027) for the guidance framework: It carries no dependency on market development, anchors to IFRS S2 which the region is already converging on and requires no member to legislate. Developing it early also lets issuers build disclosure capability while the practice is still voluntary.
- Long term (2030 onwards) for the mandate baseline: It becomes operative only as members move from guidance to mandate, which is for each member to determine. The placement reflects when the baseline is used rather than when ACMF must deliver it.

Key Considerations

- National reporting regimes differ in form and timing. Most AMS regimes are aligned with or converging on the ISSB Standards, though implementation dates differ and at least one is based on national indicators. The guidance is drafted to sit within whichever regime a jurisdiction maintains rather than alongside it.
- The scope of IFRS S2 is narrower than the subject, as set out in Section 4.2.2.1. Where the guidance goes beyond it, this should be presented as recommended practice rather than an existing obligation.
- Assurance may not yet be available. Where assurance over sustainability reporting is not required in a jurisdiction, the guidance cannot assume it.
- Guidance reaches listed issuers, not buyers at large. The wider buyer population is addressed through PA2.1.

References

ASEAN and Regional

- Existing AMS sustainability disclosure regimes, particularly those already applying the ISSB Standards, which indicate the regimes the guidance must sit within
- Singapore Guidance on the Role of Carbon Credits in Corporate Decarbonisation, for the treatment of retirement and corresponding adjustment disclosure
- HKEX Implementation Guidance for Climate Disclosures, which maps each ESG Code requirement to the corresponding IFRS S2 provision and pairs it with a worked example

International

- IFRS S2 Climate-related Disclosures, paragraph 36(e) and paragraphs B70 to B71
- ICVCM CCP Assessment Framework, for the definitions underpinning integrity fields such as additionality and permanence
- VCMI Claims Code of Practice, for the claims dimension alongside the reporting dimension
- ESRS, for carbon credit disclosure within a mature mandatory regime, noting the revised 2026 standards are not yet legally effective

6.3 Recommendations on Legal and Regulatory Treatment

Legislation remains a matter for national authorities. The legal and regulatory treatment of carbon credits may also have implications for the accounting and tax treatment, making greater clarity and consistency across these frameworks important for reducing investor uncertainty and facilitating investment flows. The recommendations below therefore examine the implications of divergent legal classification and set a common baseline for conduct that members implement through their own frameworks.

6.3.1 Scope of Legal Treatment and Implications

ACMF to work with the authorities responsible for legal and financial policy across member jurisdictions to define the questions warranting examination and to establish how they should be taken forward.

Proposed Timing

Immediate (2027): Scoping may begin without immediate legislative action by any AMS. Questions concerning classification of carbon credits, definition of carbon rights and the legal nature of credits are progressively discussed on a regional and international platform, e.g. UNIDROIT.

Key Considerations

- Legal classification sits outside ACMF's mandate, determined upon jurisdiction's legal system and policy objectives, and extends into property, insolvency and succession law.
- Nonetheless, capital market regulators would have a direct interest as denoted in Section 3.1 that without classification, the jurisdiction of any given authority over carbon credit transactions may not be clearly established, which bears directly on what members can supervise.
- The outcome is not predetermined. The scoping may establish that further examination is warranted, that it is already underway elsewhere, or that it is premature. Any of these is a legitimate result.

- International discussions (i.e., UNIDROIT Draft Principles) on the legal nature and treatment of carbon credits continue to evolve. Any regional scoping exercise may therefore benefit from monitoring and drawing upon relevant international initiatives and emerging good practices, while taking into account ASEAN's diverse legal and market contexts.

References

ASEAN and Regional

- Indonesia Law No. 4/2023, designating carbon units as securities, and POJK 10/2026 operationalising that mandate
- Sabah and Sarawak carbon governance frameworks, for carbon rights definition at sub-national level

International

- UNIDROIT Draft Principles on the Legal Nature of Verified Carbon Credits
- World Bank Legal and Regulatory Reform Toolkit for High-Integrity Carbon Markets (2025)

6.3.2 Minimum Market Conduct Standard

ACMF to establish a minimum standard on market conduct risks in VCM, to be adopted by members within their domestic frameworks. The standard would set out the conduct risks members should be able to address, covering greenwashing, false environmental claims, double selling and double claiming, and how these interact with existing legislation. Members may go beyond the minimum, but adoption establishes a common floor across the region.

Proposed Timing

Long term (2030 onwards): Adopting the standard may require rule or legislative change where existing provisions do not reach the conduct concerned. It may be informed by PA3.1, since regulatory authority over carbon credit transactions may not be clearly established until members have acted on legal treatment domestically. In the meantime, several of these risks can already be reached under existing capital market or consumer protection provisions, as the United States and Australian experience demonstrates.

Key Considerations

- Legal bases differ across members. Some risks are reached through capital market legislation, others through consumer protection law, and the standard should map to both rather than assume a single route.
- Conduct prohibitions may need to apply broadly. Misconduct can arise from buyers, sellers and brokers as well as from licensed intermediaries and venues, so the scope of application is a design question for each member.
- The floor must be one all members can meet. Set too high, the standard either delays adoption or produces uneven implementation across members.
- The standard has no binding effect at regional level. Its effect depends on each member's adoption, and where a member lacks a legal basis to act, adoption may first require legislative change.

References

ASEAN and Regional

- Existing capital market and consumer protection provisions across AMS, as the frameworks the standard maps onto

International

- ACCC application of the Australian Consumer Law to environmental claims, and ASIC oversight of greenwashing in sustainability-related disclosures
- CFTC, DOJ and SEC coordinated enforcement action on VCM fraud (October 2024)
- IOSCO Voluntary Carbon Markets Final Report (2024), on conduct and market integrity

