Key Takeaways from International Seminar on

"Connectivity of Asian Voluntary Carbon Markets"

The International Seminar on "Connectivity of Asian Voluntary Carbon Markets (VCMs)" took place on August 26th and 27th 2024 in Hong Kong. Initiated by Dr. Ma Jun, this seminar was co-hosted by Hong Kong Green Finance Association (HKGFA), Capacity-building Alliance of Sustainable Investment (CASI), and MVGX Holdings (MGVX), with support from the Institute of Finance and Sustainability (IFS). The event brought together over 50 VCM specialists from regions including Mainland China, Hong Kong SAR, India, Indonesia, Malaysia, Singapore and Vietnam. Participants included policy advisors, regulators, and senior representatives from standard setting bodies, market exchanges, Multilateral Development Banks, private sector financial institutions, NGOs and service providers involved in the voluntary carbon markets. The seminar's objective was to establish mutual understanding of challenges and to exchange knowledge and best practices of developing VCMs in Asia and globally, identifying barriers to VCM development in the region, and exploring pathways for enhancing the quality and interoperability across Asia's voluntary carbon markets.

This note summarizes the key conclusions from the seminar, which include a few recommendations for policy coordination and capacity building.

1. Current State of the Asian Voluntary Carbon Market Development

As Asia's economies step up in the mission to decarbonize and advance sustainable development, carbon markets have emerged as an important tool for mobilizing finance and incentivizing climate actions. During the seminar, delegates shared updates on the varying stages of VCM development in their respective countries and jurisdictions as well as related developments within their organizations, showcasing diverse efforts to expand these markets as key components of national climate policies. They also shed light on the reality of siloed carbon market development, with each country designing and deploying domestic standards, some of which are not fully aligned with international best practices. Geopolitical and national interests also came to the front while ideating on possibilities of interconnectivity between VCMs in the region.

- **Mainland China:** The National VCM (CCER) was officially launched in January 2024, linking to the national ETS through an offset mechanism. Administrative rules are in place and project categories continue to expand, with the first batch of methodologies including afforestation, mangrove cultivation, grid-connected solar and grid-connect off-shore wind power.

- **India:** India is expected to see its VCM launch in 2025 in continuation of current PAT (Perform Achieve and Trade) scheme and the country has already initiated policy formations. The country already features prominently in the global credit origination space, yet regulations are still under deliberation.
- **Indonesia:** Indonesia Carbon Exchange (IDX Carbon) was officially launched as a market trading platform in September 2023, trading both allowances and carbon credits. IDX Carbon currently trades emission allowances for compliance purposes and may facilitate the trading of internationally verified carbon credits. The new government plans to issue rules on cross-border carbon trading, starting from VCM, accompanied by (a) the development of a national carbon market that will be integrated with the international carbon market, (b) the harmonization of local standards for carbon credits and international standards, and (c) the jurisdictional powers by the Ministry of Environment and Ministry of Land.
- **Hong Kong**: Hong Kong Exchanges and Clearing Limited (HKEX) launched Core-Climate, a VCM trading platform in 2022. Core-Climate aims to be a new marketplace that connects capital with climate-related products and opportunities in Hong Kong, Mainland China, Asia and beyond. It is currently the only carbon marketplace that offers HKD and RMB settlement for the trading of international carbon credits. Whilst Core Climate has facilitated the trading of GS-VER carbon credits, it has not developed its own VCM standards yet.
- **Singapore:** The Singapore carbon tax was implemented in 2024 and is planned for a gradual hike to $80/tons by 2030. Singapore Economic Development Board (EDB) and IETA jointly established Singapore Carbon Market Alliance as a platform focused on Article 6 aligned carbon credits. Singapore has signed implementation agreement of international transfer of credit aligned with Article 6 with multiple countries since 2023.
- **Malaysia:** Bursa Carbon Exchange was launched in December 2022 as the world's first Sharia-compliant carbon exchange. The first auction on Bursa Carbon Exchange involving local carbon credits from Sabah took place in July. Malaysia's Sarawak state has enacted legislation related to carbon trading and is in the process of establishing a carbon registry and state-level carbon trading exchange. In Malaysia, there is an emerging trend of federated states taking the lead in shaping credit mechanisms.
- **Vietnam:** Vietnam is developing a legal framework for the carbon market that includes quota emission trading system and carbon credits. The trading platform is expected to launch into pilot operation during 2025-2027 and officially launched in 2028.
- **Integrity Council for the Voluntary Carbon Market (ICVCM):** ICVCM introduced its core mission to provide the market with a set of principles to identify high-quality carbon credits, the Core Carbon Principles, and its assessment, labelling and oversight scheme to instill confidence in international carbon markets.

- **AIIB**: AIIB introduced its strong commitment in climate finance, underpinned by target to channel cumulative USD50 billion by 2030 in climate finance. In June 2024, AIIB approved the Climate-Focused Policy-Based Financing as part of the Bank's suite of Sovereign-Based Financing instruments.
- **IETA**: IETA mission is to address carbon market development issues facing each region through supporting identifying challenges and solutions. IETA presented its global study on Article 6, denoting the power of international market cooperation in terms of financial advantage and incremental emission reduction potentials.
- **Financial institutions**: FI representatives highlighted the challenges to VCM market transactions owing to confusing policy stances and regulatory uncertainty, as well as growing green washing risks – due to the lack of universally recognized standards and data transparency – that undermine investor confidence.

Several consensuses emerged among participants on the need to enhance connectivity of VCMs in the region:

First, delegates shared a common interest in exploring pathways to enhance connectivity amongst Asian VCMs, and setting clear guardrails to ensure quality, integrity, and transparency. Regional markets would benefit from more efficient matching of supply and demand by greater interoperability between markets and across jurisdictions. If implemented effectively, Asia's carbon markets can potentially see increased total transaction volume, a more efficient price discovery of carbon credits, and greater amount of emission reductions to support NDC targets. This is further supported by IETA's Article 6 Climate Modelling result presented in the seminar, pointing to a potential USD250 billion saving in cost annually by 2030 that can be achieved when implementing NDC using Article 6, allowing for countries to engage in voluntary cooperation involving cross-border transactions of carbon credits to meet respective NDC targets.

Second, participants recognized that Asian VCMs hold a unique position due to the region's dual role as both the supplier and buyer of carbon credits. This dynamic makes Asia suitable to exploring the interconnecting mechanism across different crediting regimes, and potentially providing exemplar pathways for future development of international carbon market. Delegates from multiple countries emphasized the critical role of governments in shaping demand and ensuring regulatory frameworks to support VCM growth.

Third, delegates highlighted the need for knowledge dissemination and capacity-building support for regulatory framework formulation. This will be relevant not only for countries early in their journey of establishing domestic VCMs, but also for all Asian VCM regimes to understand international standards while establishing measures to safeguard the integrity of carbon credits throughout the life cycle. Delegates called for neutral tech backed data sharing mechanisms to be established for ensuring compliance with standards and credibility from project origination to transaction.

2. Challenges Facing Asian Voluntary Carbon Markets

Despite the progress in various countries, several major challenges hinder the growth of voluntary carbon markets in Asia. During the seminar, participants identified several key barriers that need to be addressed to ensure healthy market growth and establish connectivity between Asian carbon markets.

First, on a global scale, there is a lack of clear policy signals from governments and international organizations regarding the role of carbon credit as a key tool for achieving global climate goals, especially as a tool to facilitate green/sustainable finance. Both public and private sector delegates expressed concerns on conflicting policy signals from different government agencies and international organizations on the usefulness of VCMs to the global climate agenda. Delegates believe that this ambiguity could slow the development of voluntary carbon markets by creating uncertainty around the legitimacy of the purchase and usage of carbon credits, especially those used for commercial and voluntary purposes. If left unaddressed, this lack of clarity risks further diminishing demand for voluntary carbon credits, ultimately missing a critical opportunity to channel global climate capital into the regions and sectors that need it most.

Second, Asian voluntary carbon markets are developing rapidly without sufficient consideration for interoperability of standards and market connectivity. From the top-down market design level, there is lack of bilateral or multilateral communication and coordination among governments on voluntary carbon markets. On the market level, there is a dearth of collaborative initiatives to improve alignment for standards and administrative rules that govern different markets' operations, project methodologies, and data transparency. Key market infrastructures including registry of inventory credits and cross-market trading platform is not yet available.

Although no formal gap analysis has been conducted to assess the extent of divergences, it is anticipated that differences in aforementioned features will lead to market fragmentation, and may create complexity for global buyers to assess the quality of carbon credits in different Asian markets, and thus undermine their confidence in sourcing credits from Asia. This is especially important for institutional investors who prefer more standardized credits that warrant higher degree of fungibility and scale.

Third, there is a need to explore mechanisms to link compliance emission control regime—such as carbon taxes or emissions trading systems (ETS)—with voluntary markets to stimulate domestic demand for voluntary credits, but many Asian voluntary carbon markets currently lack such arrangements. Drawing from the experience of markets including Singapore, allowing compliance scheme participants to use voluntary credits to offset a portion of their tax obligations could create a stable demand for carbon credits and enhance liquidity across both compliance and voluntary systems, in addition to voluntary commitments from the private sector.

Fourth, the lack of clear policies in Asian countries regarding cross-border transactions of carbon credits poses a significant barrier to unlocking the region's potential. A key influencing factor is countries' varying interpretations of Article 6 of the Paris Agreement, which has yet to enter implementation. As countries announced NDC targets are expected to scale up further, incremental emission reduction incentivized by voluntary carbon markets can potentially count towards mitigation outcome and warrants more regulatory control. Exporting carbon credits with corresponding adjustment (CA), a key measure in Article 6 to ensure no double counting of emission reductions when carbon credits are traded internationally, means that countries hosting those projects cannot count the represented emission reductions towards their NDC. Both transacting parties can also agree on a purchase of credits without CA, in which the represented emission reductions can count toward hosts' NDC. Asian countries' attitude facing this trade-off between opening up for foreign investment and regulatory control over emission credits is unclear, and some countries are considering a blanket ban or a tax on cross-border transactions. Such "insulation" policies can create serious barriers to the growth and effectiveness of VCMs, by limiting the pool of potential buyers.

Fifth, the high costs associated with the development, verification, validation, and registration of carbon credits represent a significant barrier to VCM market development across Asia, particularly in developing regions. These processes often require substantial financial resources and technical expertise, which smaller entities, such as farmers or local project developers, may not have access to. This situation further restricts participation from those in rural or economically disadvantaged areas, effectively excluding them from the carbon economy and limiting their ability to contribute to emissions reductions. As a result, these barriers exacerbate inequality in market access and stifle the growth of diverse and impactful projects in the Asian voluntary carbon markets. In addition, owing partly to the diversity in standards, no clear mechanisms for hedging or insuring projects are in place, further preventing effective development of the market.

Discussion also involved other issues that have influence over the scalability and connectivity of Asian voluntary carbon markets. **Transparency in credit pricing and data sharing were highlighted as significant challenges faced by voluntary carbon markets in Asia and globally.**

Regarding the pricing of carbon credits, delegates noted that the wide variation in carbon credit prices across different projects raised concerns about market efficiency and predictability. This price disparity may be due to the diverse nature of project types and regional market conditions. For market regulators, this variability may signal inconsistencies in market standards across jurisdictions. Drawing on the mechanism between the European Union and Switzerland, harmonized standards across Asian VCMs could improve market coherence, while allowing individual markets to set their own prices that better reflect local conditions.

Data sharing and transparency were also discussed as long-standing issues that have recently drawn significant attention due to controversies such as "phantom credits," where carbon credits were issued without the emission reductions being fully realized. While delegates recognized the difficulty of tracking carbon credits throughout the full life-cycle, this lack of transparency has undermined the confidence of market participants. Delegates further agreed that data sharing mechanisms, especially for cross-border transactions, is fundamental to cross-country VCM collaboration and effective carbon credit pricing, but such a mechanism is not in place yet.

3. Proposed Solutions and Options for Collaboration

Delegates agreed on the need for ongoing dialogue, potentially facilitated by AIIB and other regional bodies, to foster collaboration among Asian VCMs and encourage knowledge-sharing across governments, institutions, and private stakeholders. The following recommendations emerged as potential pathways to address challenges and to enhance the quality, scale, interoperability, and interconnectivity of voluntary carbon markets in Asia.

1) Clarification of VCM's role in decarbonization

In light of the growing confusion and policy inconsistency around the use of carbon credits in corporate net-zero strategies, delegates agreed that it is crucial for governments and leading international bodies such as the G20, COP, and UNFCCC to issue clear statements reinforcing the importance of VCMs in global climate efforts and as a tool to channel international capital towards climate projects. Such clarifications could enhance demand for carbon credits, given that voluntary climate targets from the corporate world remain a major force driving the increasing demand for carbon credits. For example, a unified framework should be explored to recognize the use of carbon credits in addressing Scope 3 emissions or in cases where direct emission reductions are not immediately feasible. These actions could help align corporate climate commitments with market standards, allowing companies and investors to effectively leverage VCMs to meet their sustainability goals, while also supporting climate projects in developing regions.

2) Enhanced capacity building

Delegates emphasized the need for capacity-building services for Asian VCMs' regulators and key participants. These initiatives would aim to educate policy makers, regulators, and market participants on the importance of high-quality carbon credits, ways to align with international standards and best practices, and options for improving market connectivity, and to foster joint thinking and research on how Asia as a region can contribute to achieving the goals set out in the Paris Agreement within the global context.

The involvement of established international organizations and initiatives was proposed as key to this effort. ICVCM and IETA were encouraged to work with NGOs and regional organizations to enhance the design and implementation of high-quality VCMs in Asia. ICVCM and IETA already have extensive resources that could be valuable to Asian markets, but these resources may not be well known in the region. A concerted effort should be made to better integrate these organizations' educational materials and programs into Asia's regional context.

3) Developing operational rules for implementing Article 6

To address the complexities surrounding cross-border transactions between VCMs, the seminar highlighted several guiding principles and proposed actions. It was called for governments to clarify rules on carbon credit transactions and adoption of CA, particularly distinguishing cross-border transactions used for offsetting purpose (for compliance market or tax obligations) from other voluntary purposes. Participants noted the importance of not waiting for the finalization of Article 6 of the Paris Agreement as the timeline remains highly uncertain. Instead, regional markets should move forward to find solutions that work for them while ensuring compatibility with future global standards.

Two possible approaches were proposed, which may be implemented individually or in combination, to facilitate efforts of continued dialogue for this issue. The first approach suggests bilateral agreements between countries to establish shared actions and principles. The second approach begins with bilateral discussions and allows other countries to join as observers, including those that are in the process of developing domestic markets. This method could create a scalable structure that progressively expands as more countries express interest in joining the dialogue.

Some delegates discussed the possibility of adopt blockchain technologies and legal contracts to enable the separation of legal and beneficial rights of voluntary credits. The former refers to the CA attached to voluntary credits which cross border transfers impacts the host countries' NDC. The latter only transfers the commercial offsets of voluntary credits by private sector, without CA. Such separation of legal and beneficial rights could allow immediate flow and trade of voluntary credits between corporate buyers and project developers, while waiting for governments to finalize Article 6.

4) Establishment of a cross-border transaction monitoring system

Delegates agreed in principle that rather than implementing a blanket ban on cross-border transactions, it is beneficial for Asian VCMs to stay connected. A differentiated approach tailored to various transaction types could be considered. Experts suggest that national authorities might require CA for foreign credits used for offsetting purposes of domestic carbon tax system or ETS, following examples such as Singapore's practices, while allowing transactions without CA for those private sector usage of voluntary offsetting.

This approach could be complemented by a sovereign monitoring system to track all cross-border transactions. While not necessarily linked to CA, this monitoring system can serve as the basis for a flow-based control mechanism activated when cross-border net flows (net selling/buying of carbon credits) are too large and threaten NDC achievement. Drawing insights from China’s Qualified Foreign Institutional Investor (QFII) mechanism, such control measures can include delaying transaction approvals once the flow of carbon credits exceeds predetermined thresholds.

5) Harmonization of standards

Discussion highlighted the necessity for Asian VCMs to move towards a unified set of principles to bolster market quality and integrity and to attract international investment. These shared principles could also serve as a foundational framework for countries without existing VCMs, aiding the development of their respective markets.

Delegates agreed that Asian VCM standards should avoid overcomplication and redundant criteria and adhere to the core purpose of creating a clear and harmonized foundation for effective market operation. The Asian VCMs could align their standards with ICVCM's Core Carbon Principles (CCPs) to ensure interoperability, while ensuring that national contexts are respected. Furthermore, delegates discussed the potential of developing and deploying of a cross-market registry, which would involve settling standardized frameworks, consistent terminologies, and delineated duties of stakeholders between Asian VCMs.

6) Establishment of regional cooperation mechanism

Delegates agreed that in order to achieve the goals stated above, it would be necessary to establish a regional cooperation mechanism, tentatively named as “Asia VCM Working Group”. The aim of this working group is to facilitate collaboration and dialogue, provide technical assistance and capacity building services, and promote initiatives that enhance the quality, transparency and connectivity of the region's VCMs. These initiatives would include regional data-sharing practices and harmonization of standards among Asian VCMs. On an international level, this working group could represent Asian region in global standard-setting bodies and other high-level policy dialogues including the G20 and COP and discussions on Article 6 of the Paris Agreement. Given that most Asia VCMs are administered by sovereign authorities, AIIB, as a regional MDB with most Asian countries as members, is in an ideal position to host such a working group. The ICVCM and IETA could provide important technical support.

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