



Article 6 Explainer

QUESTIONS AND ANSWERS ABOUT THE COP DECISIONS
ON CARBON MARKETS AND WHAT THEY MEAN FOR NDCS,
NATURE, AND THE VOLUNTARY CARBON MARKETS

By: Beatriz Granziera, Kelley Hamrick, and John Verdick



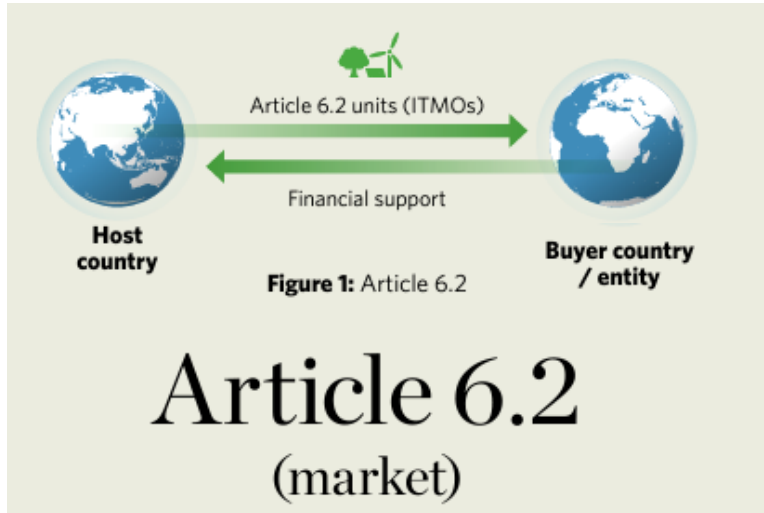
ARTICLE 6 Paris Agreement

NUS – Centre for International Law

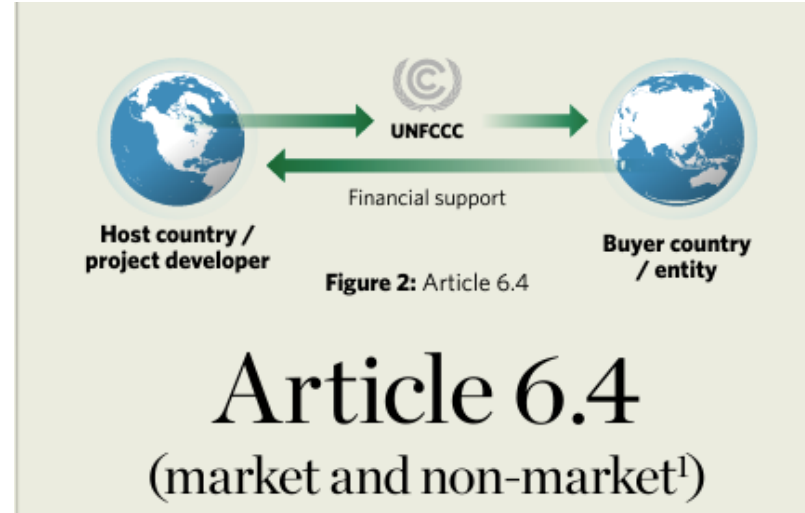
October 2024



WHAT IS ARTICLE 6?



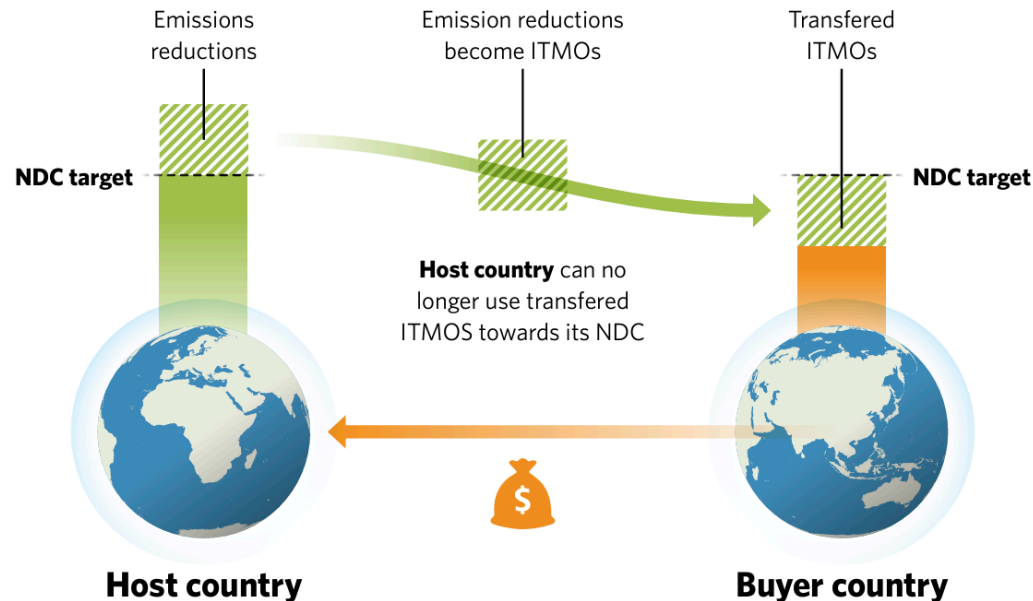
- Bilateral or multilateral agreements
- May include links with the private sector and regulated markets



- Centralized UNFCCC Mechanism
- Similar to CDM (Kyoto)
- Supervisory Body

HOW IS DOUBLE COUNTING ADDRESSED?

Figure 4: How is double counting addressed?



- **Corresponding Adjustments:** an accounting measure to avoid double counting
- **Authorization:** a “signal” that countries commit to export a unit and apply a corresponding adjustment, and report these trades

IS ARTICLE 6 OPERATIONAL?

ARTICLE 6.2

- **Yes:** Since 2021
- **Momentum:** Many bilateral deals. Only one trade. Challenges include domestic implementation.
- **To watch for at COP29:** Mostly technical issues but key for the market: Can countries change or revoke authorization? Key for market credibility. Also: Registries, Reporting, Inconsistencies

ARTICLE 6.4

- **No:** And it will need more time.
- **Supervisory Body:** Important steps: safeguards. Adopted “**standards**” on methodologies and activities involving removals. No longer going back to COP29 (endorsement needed).
- **Next steps for Article 6.4:** Methodologies need to be approved. Registry is not yet operational. Guidance on additionality and setting baselines.
- **To watch for at COP29:** Will the CMA endorse the new approach from the SB?

IS NATURE INCLUDED IN ARTICLE 6?

- Is nature included in Article 6?
YES (COP26)
- NbS and REDD+ activities fall under the definition of **emission reductions** or **removals**
- Wasn't REDD+ excluded from the text? **NO. But REDD+ projects need to follow Article 6 rules**
- Article 6 could be a source of finance for nature-based solutions

Emission reductions

- 1 Reducing emissions from deforestation
- 2 Reducing emissions from forest degradation
- 3 Conservation of forest carbon stocks
- 4 Sustainable management of forests

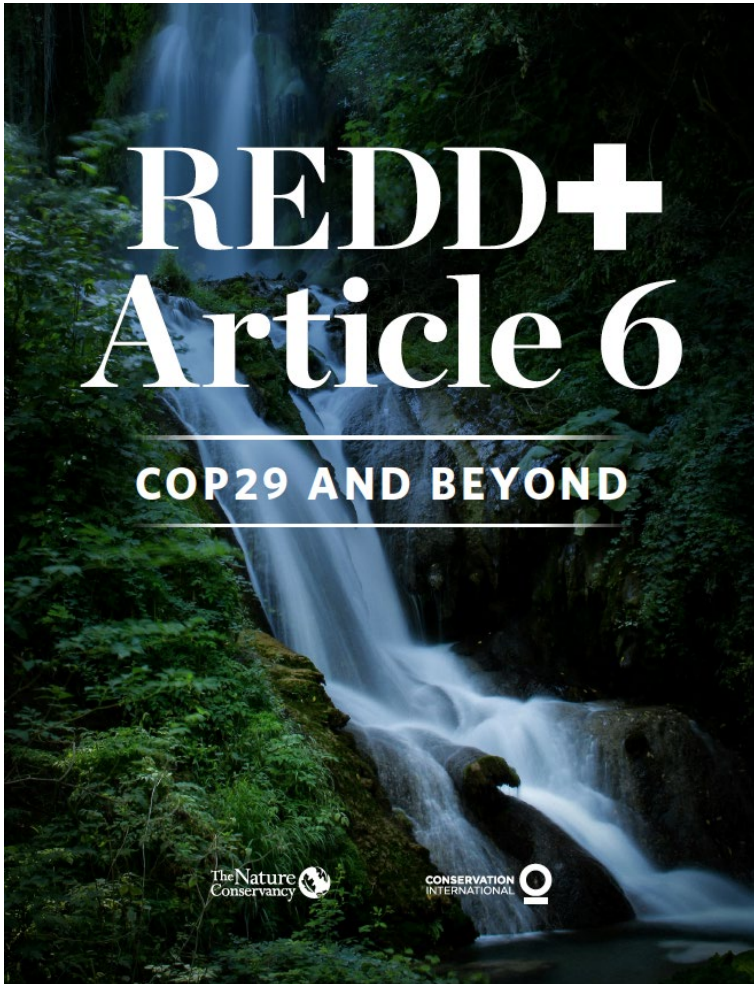


Emission removals

- 5 Enhancement of forest carbon stocks (afforestation, reforestation)



IS NATURE INCLUDED IN ARTICLE 6?



Article 6.4 and Nature

- **Conditions for REDD+ activities:** limiting REDD+ activities to countries that already have REDD+ requirements (REDD+ Strategy, FREL, etc.)
- Ensure better coordination, avoid double counting, while still allow REDD+ to benefit from finance under Article 6.4.
- In practice, countries need to align projects with national REDD+, which is known as nesting

THANK YOU!



Art. 6 Explainer: What to Expect in COP 29

National University of Singapore Centre for International Law Webinar

28 October 2024

Presented by: Mock Yi Jun, Senior Manager (Global Partnerships), National Climate Change Secretariat

Overview



1. Singapore's Approach to Carbon Markets
2. Outstanding Article 6 Issues



1. Singapore's Approach to Carbon Markets

Alternate Energy Disadvantage

Singapore's decarbonisation is challenging, with solar power as our only viable renewable energy.



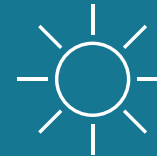
Average wind speed in SG is 2m/s, well below the 4.5m/s needed for commercial wind turbines



Narrow tidal range, no river system with fast flowing water



Small size constrains safe deployment of nuclear energy and limits domestic biomass growth

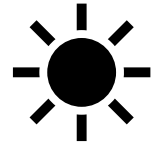


Our technical potential for solar deployment by 2050 is no more than 10% of electricity demand

but it is also the least land efficient

Four Energy Switches

Despite our limited options, we are pursuing ambitious measures to decarbonise our grid.



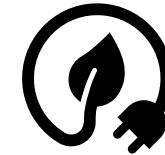
Solar

- Deploy at least 2 GWp by 2030
- Deploy energy storage solutions



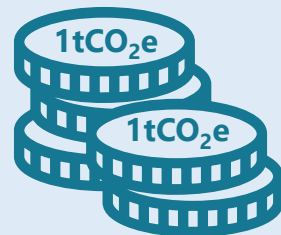
Clean Energy Imports

- Import 6 GW of low-carbon energy by 2035



Low-Carbon Alternatives

- National Hydrogen Strategy
- 2 Mt of Carbon Capture and Storage by 2030

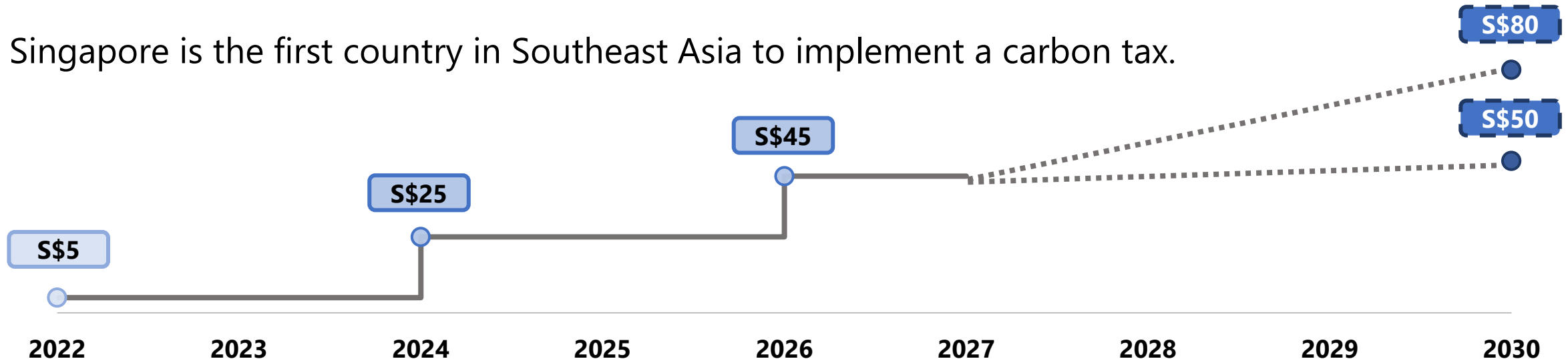


Carbon Credits

Help us to meet the remainder of our climate targets, by channelling investment to additional mitigation outcomes internationally.

Carbon Tax

Singapore is the first country in Southeast Asia to implement a carbon tax.



Early Tax Level

S\$5/t from 2019-2023 to allow firms to adjust to carbon tax introduction

Progressive Increases

Give businesses time for low-carbon transition

Further Reviews

Ensure appropriate carbon price signal and calibrate pace of low-carbon transition

Companies can use Article 6-aligned carbon credits to offset 5% of their taxable emissions.

Agreements

Singapore works with partner countries in three stages.

1

Non-legally binding Memorandum of Understanding (MOU) or Letter of Intent (LOI)

- Expression of interest to collaborate
- Defines scope of cooperation and sets out workplan

2

Legally binding Implementation Agreement (IA)

- Overarching G2G framework for Article 6 carbon credit cooperation
- Includes (i) roles and responsibilities of relevant government agencies; (ii) rules and processes for issuance of ITMOs corresponding adjustment, and (iii) guidelines for environmental integrity criteria and project types



3

Legally binding project contracts under the IA framework

- Specific to project, and include detailed commercial terms of transactions
- Terms and conditions within the IA shall apply
- Can be signed between non-government entities

Agreements

Singapore is working with a wide range of partners.

-  Signed Implementation Agreement (IA)
-  Substantively Concluded IA
-  Memorandum of Understanding



LATIN AMERICA

-  Paraguay
-  Chile
-  Colombia
-  Costa Rica
-  Dominican Republic
-  Peru

AFRICA

-  Ghana
-  Kenya
-  Morocco
-  Rwanda
-  Senegal

OCEANIA

-  Papua New Guinea
-  Fiji

ASIA

-  Bhutan
-  Viet Nam
-  Cambodia
-  Indonesia
-  Lao PDR
-  Mongolia
-  Philippines
-  Sri Lanka

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Methodologies

To avoid re-inventing the wheel, Singapore utilises existing methodologies from the voluntary carbon market in our Article 6 approaches.

- The National Environment Agency has signed MOUs with Gold Standard for the Global Goals (GS4GG), the Verified Carbon Standard (VCS), the Global Carbon Council (GCC), the American Carbon Registry (ACR), and the Architecture for REDD+ Transactions (ART).
- Singapore is open to working with partner countries to develop new methodologies, if gaps exist.


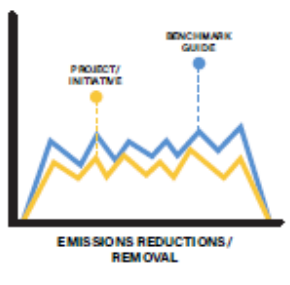

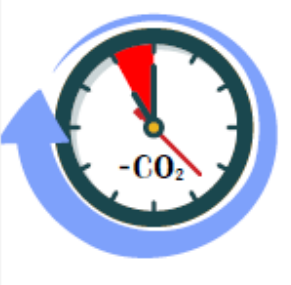



**Gold
Standard**[®]



Eligibility Criteria

On 4 October 2023, MSE and NEA published the **Eligibility Criteria** under Singapore's International Carbon Credit (ICC) Framework.

This lays out a clear set of principles of what constitutes high environmental integrity, which determines what carbon credits Singapore is willing to purchase.

01 ADDITIONAL	02 REAL	03 QUANTIFIED & VERIFIED	04 PERMANENT	05 NO NET HARM	06 DO NOT CAUSE LEAKAGE	07 ARE NOT DOUBLE-COUNTED
						
Emissions reductions/removals were only made possible with the financing from the International Carbon Credit.	Emissions reductions/removals were quantified based on a realistic, defensible, and conservative estimate of what would be emitted in the absence of the project.	Emissions reductions/removals were calculated conservatively and transparently, and measured and verified by an accredited and independent third party.	Emissions reductions/removal are not reversible . If there is risk of reversal, there must be measures to monitor, mitigate and compensate such occurrences.	The project that generated the emissions reductions/removals do not violate any laws, regulatory requirements or international obligations of the host country.	The project that generated the emissions reductions/removals do not cause an increase in emissions elsewhere . If there is risk of leakage, there must be measures to monitor, mitigate and compensate such occurrences.	The emissions/removals are only counted once, and not double counted between the host country and Singapore.

Eligibility Lists

- As of 2024, NEA has published **Eligibility Lists** under Singapore’s International Carbon Credit (ICC) Framework, to facilitate the IAs with Ghana and Papua New Guinea.
- The Eligibility List includes methodologies that are accepted by Singapore and the Host Country, with exceptions listed.

Offset programmes	Methodologies
Gold Standard for the Global Goals (GS4GG)	All active methodologies published before 31 March 2023 except those under the “Land Use and Forestry & Agriculture” category of GS4GG.
Verified Carbon Standard (VCS)	All active methodologies published before 31 March 2023 except those that are under the "Sectoral Scope 14" category of VCS, with these allowable exceptions: <ul style="list-style-type: none">• Scenario 2a and 3 of VCS Jurisdictional and Nested REDD+ (JNR) framework• VM0012• VM0017• VM0021• VM0022• VM0024• VM0026 (and VMD0040)• VM0032• VM0033• VM0036• VM0041• VM0042

High-Level Advice

Singapore has convened an **International Advisory Panel on Carbon Credits** to advise us on our policies, including in environmental integrity and market development.

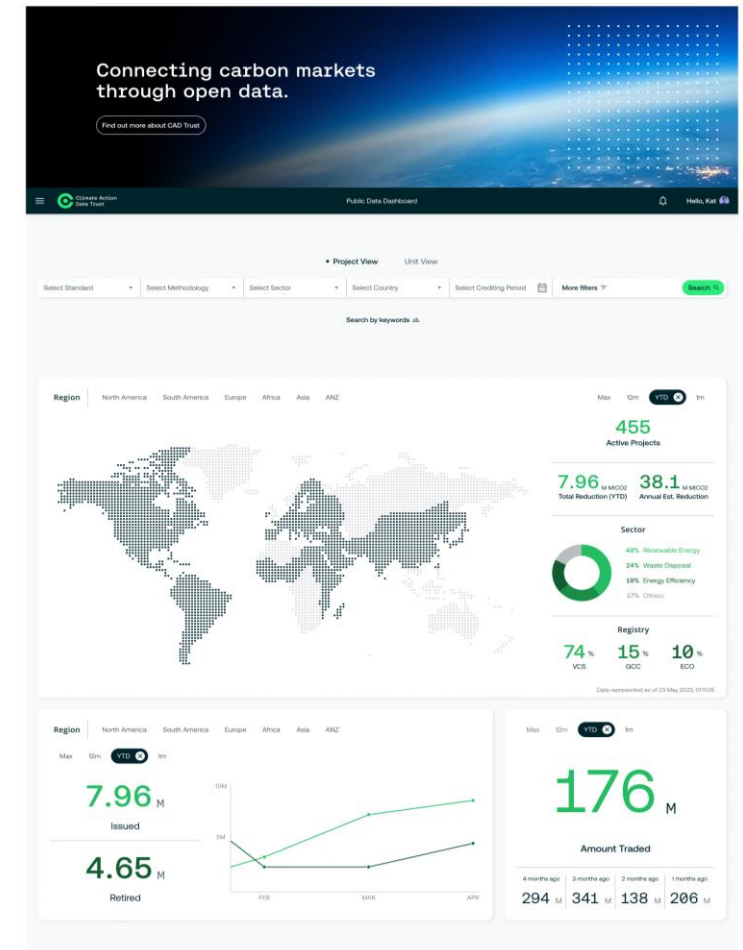
Member	Designation
Professor Bertil Anderson (Chair)	President Emeritus, Nanyang Technological University
Ms Catherine McKenna (Member)	Chair, United Nations High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities
Professor Jos Delbeke (Member)	European Investment Bank Chair on Climate Change Policy and International Carbon Markets, European University Institute
Professor Koh Lian Pin (Member)	Associate Vice President and Chief Sustainability Scientist, National University of Singapore
Mr Ousmane Fall Sarr (Member)	Coordinator, West African Alliance on Carbon Markets and Climate Finance
Ms Patricia Espinosa (Member)	Chief Executive Officer and Founding Partner, Onepoint5
Mr Ravi Menon (Member)	Ambassador for Climate Action and Senior Adviser, National Climate Change Secretariat
Ms Usha Rao-Monari (Member)	Former Under-Secretary-General and Associate Administrator, UNDP
Ms Yuki Yasui (Member)	Regional Director of Asia Pacific, GFANZ

Climate Action Data Trust

To **improve transparency** in global carbon markets and **prevent double counting**, Singapore worked with the World Bank Group and IETA to establish CAD Trust.

- A **public data dashboard** that syncs up carbon credit registries, allowing for access to information on carbon credit transfers between registries.
- Represents 85% of all carbon market transactions.
- In 2024, CAD Trust signed a 2-year funding partnership with Quantedge Advancement Initiative

[CLIMATEACTIONDATA.ORG](https://climateactiondata.org)



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Article 6 Playbook

To improve countries' ability to participate in Article 6, Singapore is developing an **Article 6 Playbook** with Verra and Gold Standard, to guide countries that want to **use voluntary carbon market methodologies in their Article 6 approaches**.

- First draft presented for feedback at UNFCCC SB-60 in Bonn, June 2024.
- Ongoing consultations with countries, companies, and carbon market ecosystem to refine the work.
- Finalised Playbook to be launched at UNFCCC COP-29 in Baku, December 2024.

Supported by:



The background of the slide features a photograph of several Supertrees in Singapore, which are tall, tree-like structures with intricate, lattice-like canopies. The image is overlaid with a semi-transparent blue filter. The text '2. Outstanding Article 6 Issues' is centered in a white, bold, sans-serif font.

2. Outstanding Article 6 Issues

Rule-Making

Singapore has been actively involved in finalising the rule-making for Article 6.



Minister for Sustainability and the Environment and Minister-in-Charge of Trade Relations Grace Fu will co-facilitate Ministerial Consultations at COP29, and did so at COP26 and COP27.



Director-General (Climate Change) Benedict Chia serves as a Member of the Article 6.4 Supervisory Body.



The Article 6.4 Supervisory Body Meeting in Singapore.

Registries

A key outstanding issue is whether the **Article 6.2 International Registry** should be a **transaction** registry – that can issue, transact, and hold ITMOs – or an **accounting** registry.

VI. Recording and tracking

A. Tracking

29. Each participating Party shall have, or have access to, a registry for the purpose of tracking and shall ensure that such registry records, including through unique identifiers, as applicable, authorization, first transfer, transfer, acquisition, use towards NDCs,

authorization for use towards other international mitigation purposes, and voluntary cancellation (including for overall mitigation in global emissions, if applicable), and shall have accounts as necessary.

30. The secretariat shall implement an international registry for participating Parties that do not have or do not have access to a registry. The international registry shall be able to perform the functions set out in paragraph 29 above. Any Party may request an account in the international registry.

31. The international registry shall be part of the centralized accounting and reporting platform referred to in chapter VI.C below (Centralized accounting and reporting platform).

Authorisation

Another outstanding issue is whether authorisation is:

- A single, consolidated process (authorisation of the ITMO); or
- A sequential, three-step process (authorisation of a cooperative approach, entities, and ITMO use).

If there can be flexibility to accept both approaches to authorisation, what is the required upfront information that should be reported by Parties, and at which junctures?



Questions?

www.carbonmarkets-cooperation.gov.sg

Mock_Yi_Jun@pmo.gov.sg

Importance of Art 6 Mechanisms, Needs and Challenges and Priorities for COP 29

Presented by :

Albert A. Magalang

Climate Change Service

Department of Environment and Natural Resources

Importance of Art. 6 mechanisms to Philippines including its role in the country's upcoming NDC

Under Article 6, the Philippines will be able to transfer carbon credits earned from the avoidance or reduction of GHG emissions to help one or more countries meet climate targets.

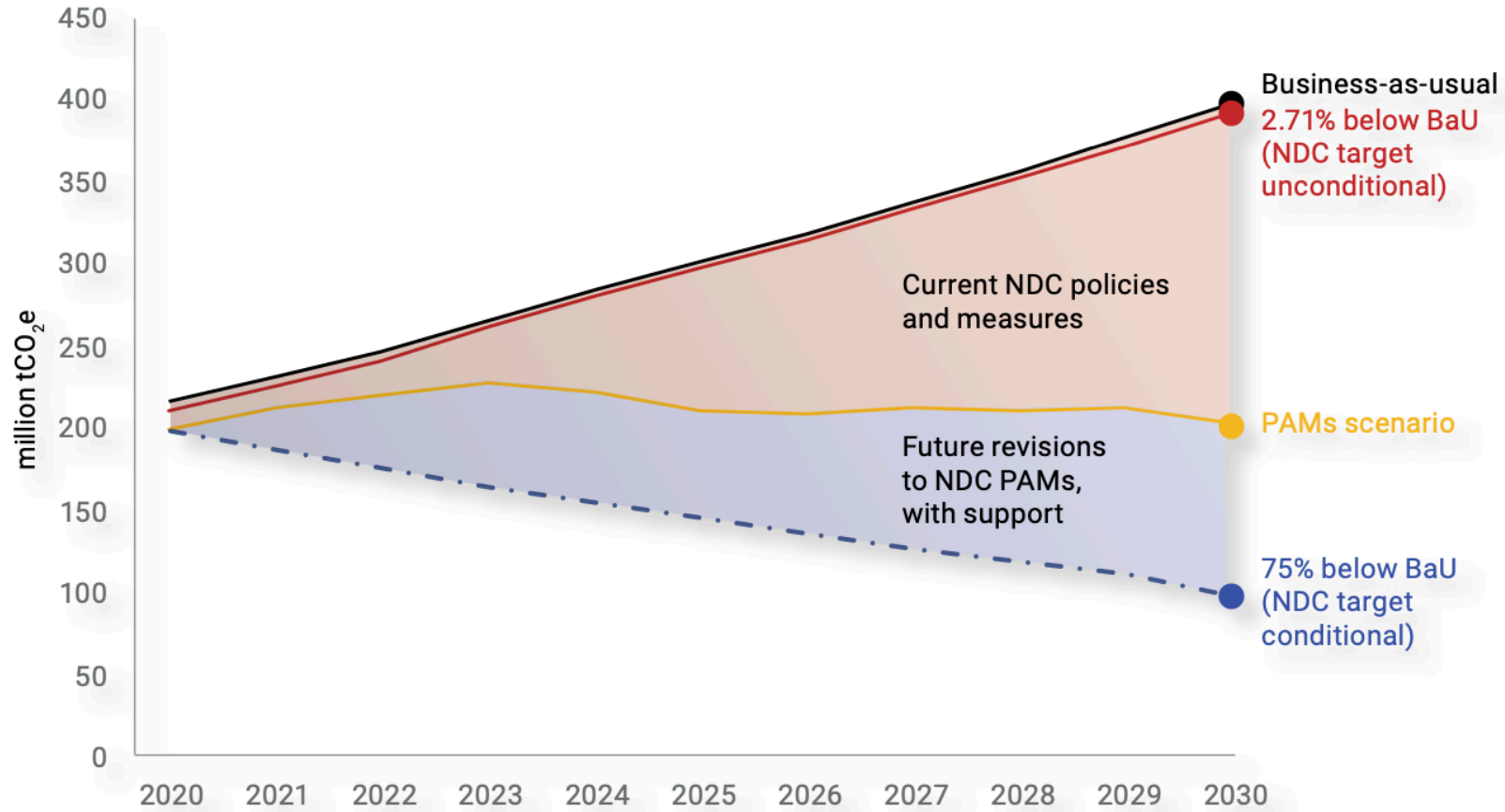
- Article 6.2 creates the basis for trading in GHG emission reductions (or ITMOs, “internationally transferred mitigation outcomes”) across countries.
- Article 6.4 is expected to be similar to Clean Development Mechanism of the Kyoto Protocol that establishes a mechanism for trading GHG emission reductions between countries under the supervision of the COP/CMA.
- Article 6.8 recognizes non-market approaches to promote mitigation and adaptation; and introduces cooperation through finance, technology transfer, and capacity building, where no trading of emission reductions is involved.

Importance of Art. 6 mechanisms to Philippines including its role in the country's upcoming NDC

- Article 6 of the Paris Agreement allow the Philippines to voluntarily cooperate with each other to achieve emission reduction targets set out in the NDCs.
- Article 6 as an international cooperative approach can attract both public and private finance particularly the transfer of carbon credits earned from emissions reductions and avoidance.
- Article 6 can provide additional funding for climate action in the Philippines as a host of mitigation activities.

Achieving the Philippine NDC Targets

Delivery of the PHL NDC1 under an accelerated BAU scenario



BaU = business-as-usual, NDC = nationally determined contribution, PAMs = policies and measures. tCO₂e = ton of carbon dioxide equivalent.
Source: Government of the Philippines.



A phased approach is being followed to allow for alignment with the evolving requirements for Art. 6 and alignment with updated NDC targets

2024

2025



COP 30

Phase 1

Phase 2

Phase 3

Stakeholder Engagement/ Consensus Building

Implementation

- I. Economic modelling, Diagnostic study, gap analysis and filtering solutions for the Philippines
- II. Develop blueprints for each aspect of the carbon market
- III. Development of the registry (phased)
- IV. Drafting bilateral agreement(s)

- Finalize blueprints for each aspect of the carbon market
- Workshops and discussions to ensure collaborative decision making.
- Stakeholders include other GoP departments, private sector reps, development partners.

- Putting the recommendations into action
- Legal, technical, commercial & institutional arrangements
 - Progress pilot projects to test the framework
 - Finalize first bilateral agreement w/ Singapore

Source: ADB

Implementation Agreement to set out G2G Article 6 framework

To enable the implementation of Article 6 projects, an overarching G2G framework is required

Legally binding Implementation Agreement (IA)

- Overarching G2G framework for Article 6 carbon credit cooperation
- Includes (i) roles and responsibilities of relevant government agencies; (ii) rules and processes for issuance of ITMOs corresponding adjustment, and (iii) guidelines for environmental integrity criteria and project types

Legally binding project contracts under the IA framework

- Specific to project, and include detailed commercial terms of transactions
- Terms and conditions within the IA shall apply
- Can be signed between non-government entities

The IA will (i) build confidence for companies; and (ii) provide assurance to both the host country and user country

Article 6 pipeline development potential across multiple sectors



Earl retirement of CFPPs

Transition credit pilots being explored:
ACEN, ADB ETM (Mindanao)



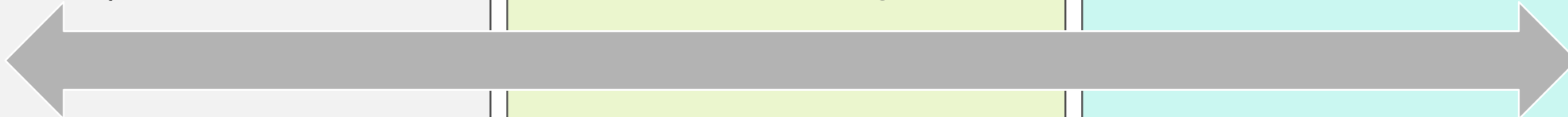
Nature based solutions & Blue Carbon

Mangrove restoration, Afforestation,
Improved Forest Management



Waste sector – landfills and wastewater

Methane capture through land fill gas
recovery or waste to energy projects



The Needed Guidance for the Operationalization of Article 6.2

In particular, the bilateral framework for the authorization of mitigation activities under Article 6.2 should include:

- Procedures for bilateral arrangements on the authorization and tracking of the transfer or trading of ITMOS;
- Operational guidelines for authorization arrangements, particularly:
 - a. Arrangements to ensure that designated national authorities are given sufficient mandate to issue authorization for Article 6.2;
 - b. Authorization criteria, terms and provisions, Procedures for request, review and approval of Authorization, and other relevant procedures;
 - c. Authority to collect, collection structures, and procedures for collection of authorization fee and shares of proceeds; and
 - d. Other related mandates on managing ITMOs tracking arrangements, such as functional requirements and operational procedures of a registry and reporting to ensure avoidance of double counting.

Best practices and Lessons Learned from CDM

- Ensure environmental integrity of project activities: needs real GHG emission reductions
- More emphasis must be given to fulfilling its other equally important objective of assisting host countries in achieving sustainable development (SD): DNA initiating monitoring of registered CDM projects' contribution to SD
- Ensure public participation in the development and implementation of CDM projects
- Strengthen intergovernmental collaboration and public-private partnerships on CDM investment promotion
- Map GHG emission reduction potential and expand the portfolio of CDM project activities

Best practices and Lessons Learned from CDM

- Since more than a decade, lessons learned, approaches adjusted, and new tools launched under the CDM.
- Institutional arrangements and the support structure were set-up to ensure governance, support and operation to the CDM.
- Stakeholders became familiar with mitigation activities, methodologies, assessment and validation/verification, SD criteria establishment, project approval and interacting with DNAs and DOEs.
- Many argue that the CDM and/or its components should be brought into the future.
- A lot of good elements, tools and infrastructure of the well established CDM would inspire any new mechanism or support its implementation, without the need of reinventing the wheel.

PH Priorities at COP29

- finalization of Article 6 decisions which are material to convergence between Annex 1 and non-Annex 1 countries to enable to work together on mitigation solutions
- mitigation measures could be in a cost-effective manner through specific market mechanism and non-market mechanisms
- a fully operationalized Article 6 to start delivering the UNFCCC objectives
- details of the modalities for how Parties are to implement cooperative actions on mitigation
- specific and concrete ways for the Philippines of working together and along with the rest of the developing countries
- to obtain access to non-GHG emitting technologies, capacity development and financial resources

PH Priorities at COP29

- Optimism for reaching a positive outcome in Baku
 - as complex administrative issues are delegated to the secretariat, and a technical workshop is in place to improve understanding of technically complex matters.
- Priorities for the market mechanism:
 - Reporting, Sequencing and Timing of Authorization
 - Inconsistencies and last chance for revocations
 - First transfer: party or parties
 - Registry: UN-led or private sector driven
 - Introduction of new Options and Brackets

Thank you.