Scaling Carbon Markets in CAREC: Lessons, Opportunities and Regional Cooperation

Accelerating National Readiness for Article 6 Operationalization

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United Nations
Climate Change

Article 6 of the Paris Agreement

United Nations
Climate Change Secretariat

Article 6 of the Paris Agreement

- Tool to implement NDCs and LT-LEDS under voluntary cooperation between Parties.

Article 6

Article 6.2

Cooperative approaches that involves **transfers of mitigation outcomes** from one country to another towards achieving NDC targets.

Article 6.4

A **centralized crediting mechanism** under the purview of the UNFCCC which **issues units (A6.4ERs).**

Article 6.8

Other types of cooperation that contribute to mitigation and adaptation goals, but **do not involve transfer of units** among cooperating parties.

NDCs and LT-LEDS

9 Years Journey to full operationalization

United Nations
Climate Change Secretariat

PARIS2015 COP21·CMP11

UN CLIMATE CHANGE CONFERENCE UK 2021

COP27 SHARM EL-SHEIKH EGYPT 2022

COP29 Baku Azerbaijan

	2015	2021	2022	2024
	Adoption of the Paris Agreement	Completion of the Paris Rulebook	Adoption of further rules	Completion of further guidance
A6.2 Cooperative approaches		**Adopt the Guidance**: ITMOs, Participation requirements, CA methods, Reporting, Review, Infra for recording and tracking ITMOs	**Further guidance on**: Infra for recording and tracking ITMOs, Review guideline and rules and training programme for review team, Outline for reports incl. draft version of agreed electronic format	**Further guidance on**: Authorization, First transfer, Reporting format and additional elements, Inconsistencies of reported information and their consequences, Function of registries
A6.4 The mechanism		**Adopt the RMP:** Supervisory Body, Host Party requirements, Activity cycle, Registry, SOP & OMGE, CDM transition	**Further guidance on:** Procedure for transition of CDM activities and CERs, Reporting by Host Parties, Operation of the registry, Processes for SOP & OMGE, Rules of procedure of SB	**Further guidance on:** Standards for methodologies and removals, SD tools, Appeals and grievance process, Procedures for SB's decision making, Interoperability of the registry, authorization
A6.8 Non-market approaches		**Adopt the Work Programme:** Principles, Non-market approaches, Governance, Modalities, Activities, Reporting	**Further decisions on:** Schedule for implementing activities, Non-market platform, Additional focus areas for the activities	**Completion of Work Programme Phase 1:** Assessment of phase 1, recommendations, NMA platform and capacity building for phase 2

Building blocks of Article 6 readiness

Article 6 Readiness

1
NDC Integration

2
Art. 6 National Policy/Strategy

3
Institutional Arrangements

4
Monitoring, Tracking and Reporting

BUILDING BLOCK 1:

NDC INTEGRATION

Intention to use Article 6

- ✓ NDCs 2.0 (2030 targets): Even if fully implemented, a **2.1–2.8°C temperature rise** is expected.
- ✓ **Under NDC 2.0 78% of Parties** have indicated their **intention to use Article 6 cooperation** for implementation of their NDCs
- ✓ **91% of Parties** have provided **information on finance** as a means of NDC implementation

1 NDC Synthesis Report by the UNFCCC Secretariat (28 Oct. 2024)

NDCs 3.0

To date, **over 90% of Parties** have indicated their intention or potential to use Article 6.

Article 6 serves as an enabler **to bridge the emissions and finance gaps** critical for meeting the **1.5°C and 2°C goals of the Paris Agreement**.

BUILDING BLOCK 2:

NATIONAL POLICIES

What does national policy/strategy entail?

- Several countries have developed national regulations or guidelines to operationalize carbon markets. These typically include high-level criteria, approval and authorization processes, governance structures, infrastructure, safeguards against overselling, and fees on Article 6 transactions.

  Some examples are as follows:

Region	Examples
Africa	Ghana, Kenya, Tanzania, Uganda, Zambia, Zimbabwe
Asia	Bhutan, Cambodia, Pakistan, Thailand, Sri Lanka
Latin America and the Caribbean	The Bahamas, Paraguay

Source: https://cmo.epa.gov.gh/wp-content/uploads/2022/12/Ghana-Carbon-Market-Framework-For-Public-Release_15122022.pdf
Note: The examples listed here are provided for informational purposes only and are intended as illustrative examples. This is not an exhaustive list.

Positive list

Example #1: Bhutan

Positive List of Eligible Carbon Market Projects under Article 6

1. Development of **renewable energy projects**
2. Development and installation **of renewable and energy-efficient technology systems** (e.g. energy efficient cookstoves, thermal and electrical efficient systems in buildings), and process improvement (in industry sectors)
3. Development of **green infrastructure**
4. Development of **integrated waste management projects**, such as waste-to-energy, material recovery facilities, sanitary landfill, waste water management and other activities
5. Development and promotion of **low carbon transport** (alternative fuel, electric and hydrogen-based) and related activities
6. Development and use of **alternative fuels** such as biofuels, and green hydrogen and derivatives
7. Mitigation Projects related to **agroforestry and sustainable agriculture**
8. Mitigation Projects related to **afforestation, reforestation and restoration** (wetlands and rangeland included) projects
9. Mitigation projects related to **livestock management**

Example #2: India

List of activities has been finalized to be considered for trading of carbon credits under bilateral/ cooperative approaches under Article 6.2 mechanism

I. GHG Mitigation Activities:

1. Renewable energy with storage (only stored component)
2. Solar thermal power
3. Off- shore wind
4. Green Hydrogen
5. Compressed bio-gas
6. Emerging mobility solutions like fuel cells
7. High end technology for energy efficiency
8. Sustainable Aviation Fuel
9. Best available technologies for process improvement in hard to abate sectors
10. Tidal energy, Ocean Thermal Energy, Ocean Salt Gradient Energy, Ocean Wave Energy and Ocean Current Energy
11. High Voltage Direct Current Transmission in conjunction with the renewal energy projects

II. Alternate Materials:

12. Green Ammonia

III. Removal Activities:

13. Carbon Capture Utilization and Storage

Source: https://www.moenr.gov.bt/?p=14563, https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1900216

BUILDING BLOCK 3:

INSTITUTIONAL FRAMEWORK

Designation of national authorities

- Several countries have identified national authorities to facilitate national engagements under Article 6.
- Under Article 6.4, countries need to identify a **Designated National Authority** for the Article 6.4 (Paris Agreement Crediting Mechanism) to the UNFCCC secretariat – which is a critical requirement to engage in PACM.

- A **Designated National Authority (DNA)** for the Paris Agreement's Article 6.4 mechanism approves and authorizes participation in Article 6.4 projects, ensuring they align with the host country's sustainable development goals, and submits the **Host Party Participation Requirements Form**.

- DNAs assess projects, provide authorization letters, and communicate information to the UNFCCC secretariat. They also facilitate the smooth implementation of projects by providing guidance, approving methodologies, and ensuring compliance with Article 6.4 rules.

List of Parties that have appointed **Designated National Authorities** are posted on the website of the Supervisory Body: https://unfccc.int/process-and-meetings/the-paris-agreement/article-64-mechanism/national-authorities

A6.4 DNA Stats

114 Countries nominated A6.4 DNAs till date

Azerbaijan
China
Georgia
Kazakhstan
Kyrgyzstan
Mongolia
Pakistan
Turkmenistan
Uzbekistan

Afghanistan
Tajikistan
Turkmenistan

Awaited

Assessing Eligible Sectors And Technologies

TOP-DOWN APPROACH

- The country specifies what type of activities, sectors, gases, and for which time frame it will authorize Art. 6.4 activities (Based on the Art. 6 strategy)
- Identification of preferred sectors and technologies e.g., use of **positive lists** and **negative lists**.
- Robust technical capabilities are required to specify the activity types, a thorough understanding of domestic and international market opportunities, and continuous stakeholder involvement.

BOTTOM-UP APPROACH

- Activity developers (government agencies, ministries, private sector) and interested acquiring countries approach the government, who will decide on authorizations as proposals come in.
- This approach could mean engaging in cooperative approaches based on interest expressed by domestic actors or an international partner.
- Host country waits for requests for authorization of Article 6.4 activities and, at the point of the request, assesses eligibility.

BUILDING BLOCK 4

MONITORING, TRACKING AND REPORTING

DAY 2
Session 1

Reporting requirements for Articles 6.2 and 6.4

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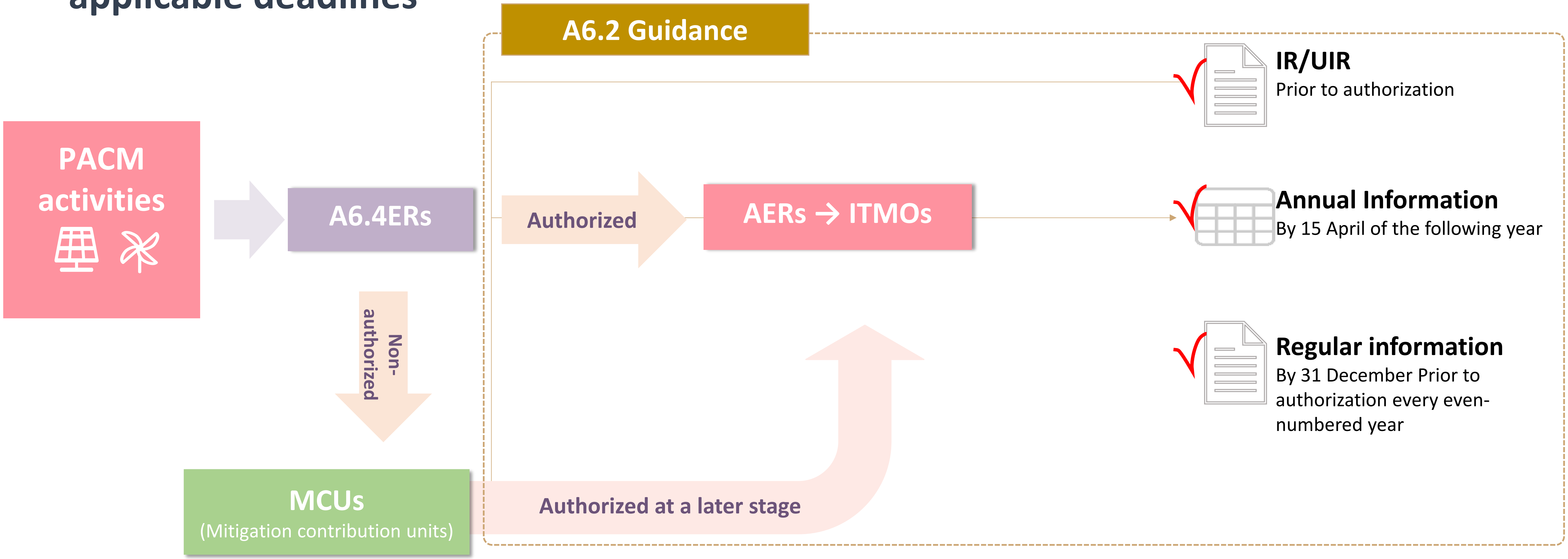
- "Authorization" of an Article 6.4 ER triggers the A6.2 reporting obligation, and the host Party must submit the Initial Report, AEF, and Regular Information in sequence by the applicable deadlines



MOVING FORWARD

DAY 2
Session 1

Next steps for countries

Positioning, Required Actions to Fast-track Integration of A6 in NDC targets

Generic Needs	Countries consider carbon markets but need technical, institutional, and financial support
Article 6 Readiness	Capacity-building & technical support are needed to progress Article 6 implementation
Carbon Markets & NDCs	Carbon markets as tool for NDC but need institutional capacity and implementation support
Article 6 Mechanisms	Understanding 6.2 and 6.4 mechanisms interplay, reporting linked with Corresponding Adjustments
Frameworks & Digital Solutions	MRV Frameworks - Standards, digital registry/transaction systems
Private Sector Needs	Targeted capacity-building is required for private sector involvement in cooperative approaches
Collaboration	Focus on frameworks, positive lists, supports towards enhanced market mechanisms
Article 6 Implementation	Countries require support in developing baselines - Conditional vs Unconditional NDCs

Immediate next steps for all stakeholders

Government	• Establish National Frameworks • MRV Systems • Engage the Private Sector • Monitor Global Trends • Strengthen Institutional Readiness • Operationalize Article 6 Mechanisms
Private Sector	• Develop High-Quality Carbon Projects • Engage in Carbon Markets • Build Partnerships • Risk Management
Other Non-party Stakeholders	• Financial Sector Innovative Products • NGO/ IGO, etc, Advocacy and Policy Alignment • Capacity Building

Immediate next steps for Governments

Key Actions for Article 6 Implementation

1

Identify Eligible Mitigation Activities

Select qualifying activities for cooperative approaches (e.g., carbon markets, ITMOs)

2

Build Capacity

Develop tailored capacity-building programs to avoid duplication and ensure effective technical assistance

3

Establish a Dedicated Office

office to oversee Article 6 implementation and stakeholder engagement

4

Submit Participation Forms

Complete required forms for participation in cooperative mechanisms like PACM

5

Engage the Private Sector

Collaborate with the private sector to implement on-the-ground mitigation activities

6

Develop Non-Market Approaches (Article 6.8)

Focus on non-market climate action like capacity-building and NDC support.

Immediate next steps for Private Sector

Develop High-Quality Carbon Projects

- Familiarizing with Article 6.4 mechanism processes **Forms & Tools**, as available on the UNFCCC website[1]
- Invest projects, generate **high-integrity carbon credits,** ensuring adherence to methodologies approved under Article 6
- Identify and develop mitigation projects that **align with host countries' NDCs**

Engage in Carbon Markets

- Understand **sectoral priorities and baselines** for eligible activities
- Leverage cooperative approaches **(Article 6.2)** and participate in Article 6.4 / **PACM**

Build Partnerships

- **Collaborating** with Governments and MDBs - host countries in developing operational frameworks for Article 6 transactions **(Co-Develop Capacity Building Programs)**

- Accessing **Climate Finance:** Secure funding for eligible projects through blended finance models (green bonds, sustainability-linked loans)

Risk Management

- Addressing **Double Counting Risks**. (Work closely with governments to develop and align with Article 6 rules)
- Maintaining Integrity in Carbon Markets. Avoid reputational risks by prioritizing high-integrity projects.

>>> Significant Opportunities & Responsibilities for Private Sector <<<

THANK YOU