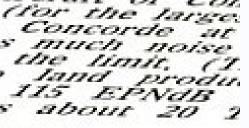
the manes have crossed Cornwall, WINC OF IL. WINC OF EPNdB (for the large 12 compensation payments exceed 29,000-1411-144012 EPNdB). average of more than 150 per mile per flight. produce as much noise -1212 the insurance industry has introforming to the limit, approach to land mang exclusion clauses " into V21110118 Class Concorde at 115 EPNdB policy to remove the com-Hability. Presumably Hability to much noise as about 20 2 compensation for sonic bang damage would simultaneously). upon the airline whose SST resident of the Airpo damage The advocates of super-International wrote t nave r of State for Transpe 4.500 Identity in "A major concern is that there are no not. supersonic aircraft at this ti. e this coise standards for sup of the sonic 1.soured identical to the DO Varies which are in effect for subsonic airplane on the ground ; the same weight category. We believe to heard Concorde's the issuance of these standards, at this time ense levels have said sudest noise they have is imperative. " On 13 October 1972 the U.S. Senate voted 61 to 17 in favour of SSTs having to comply owing superwith the same noise standards as subsonic allectatt. adjournment occurred before action occasion be taken, but no doubt the proposal will be made again. Exclusion of Concorde from U.S. ould deny to Concorde the field of operaairports on-the north Atlantic-which andard subvital to its commercial pretensions, and for by a factor most Which it Was designed. ncorde's onsors Upper Atmosphere Pollution 1 be There is scientific support 1111the hypoth 10 destruction spheric ozonk strat in harmful ultra-violet Tellists. resu rating to ground fer confirmed this \$ 15 1111 uments surround t of such serious risks s of SSTS could DOE De 's makers claim lice to sui EITE. sturb the 1112 tratospheric balance liet First an orders 19 Dev appear 20 De Case Serious, SCI chairman of the even MUST iel. taken Very predicted " ctober 1972). Mr roposed ed the talks to lead Ene. Council of countries Concorde and the CLEACH Idon-Mocco.





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House could El1e Brin ning deals dors " the U.S lenge " justificati SST projec Most of th urchasers o. poor ecor. airlines a ironmental in this field British Airwe discussions concerning service spann d jointly invo. Union 21. ould force Un. supersonic i (The

National Level Strategies and Policy Frameworks for International **Carbon Markets**

06 July 2022





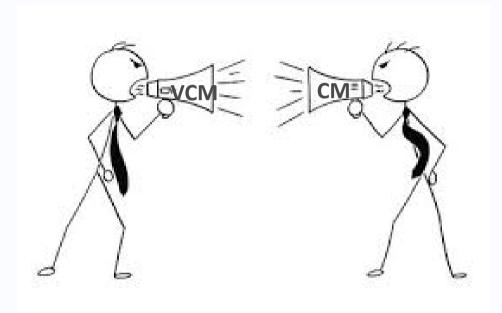
















What.. I am not at fault

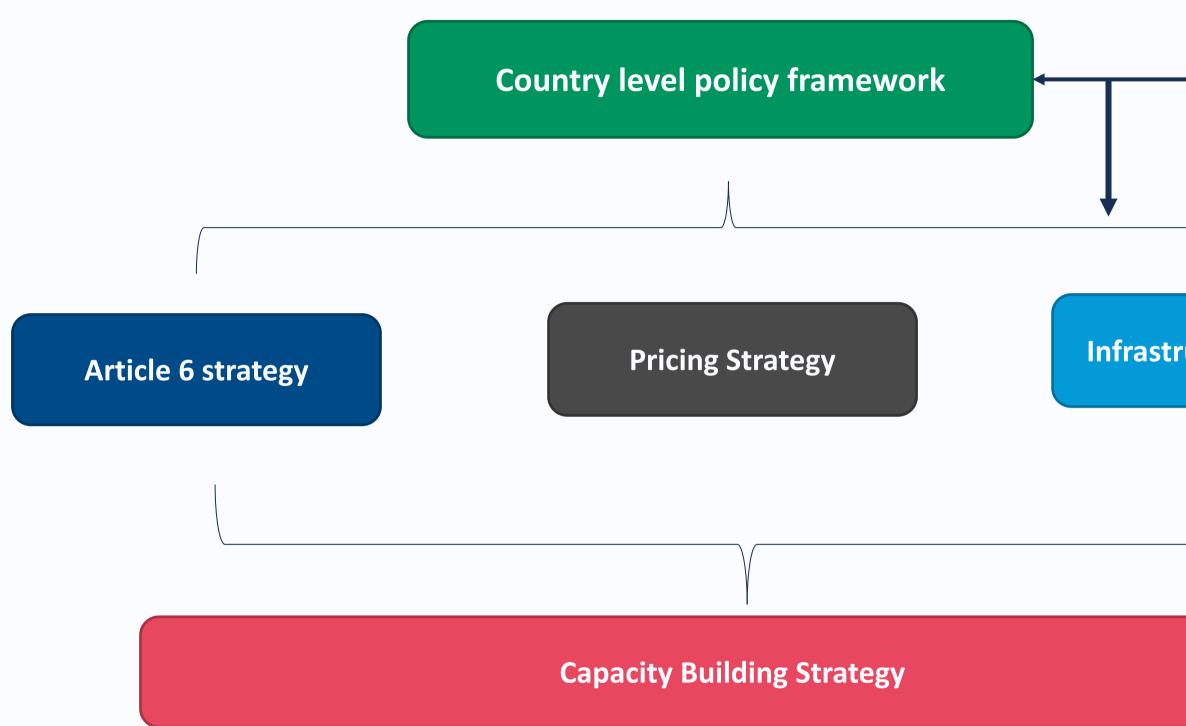


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Country's participation in carbon markets depends on clear understanding of requirements and establishing clear strategies supported by a national framework





- NDC Target prioritization
- Understanding potential for carbon markets and processes to be followed
- Inter-ministerial coordination
- Linkages bt compliance and voluntary markets



"They say that I need multiple strategies to prepare the carbon market recipe, so we invited an expert"

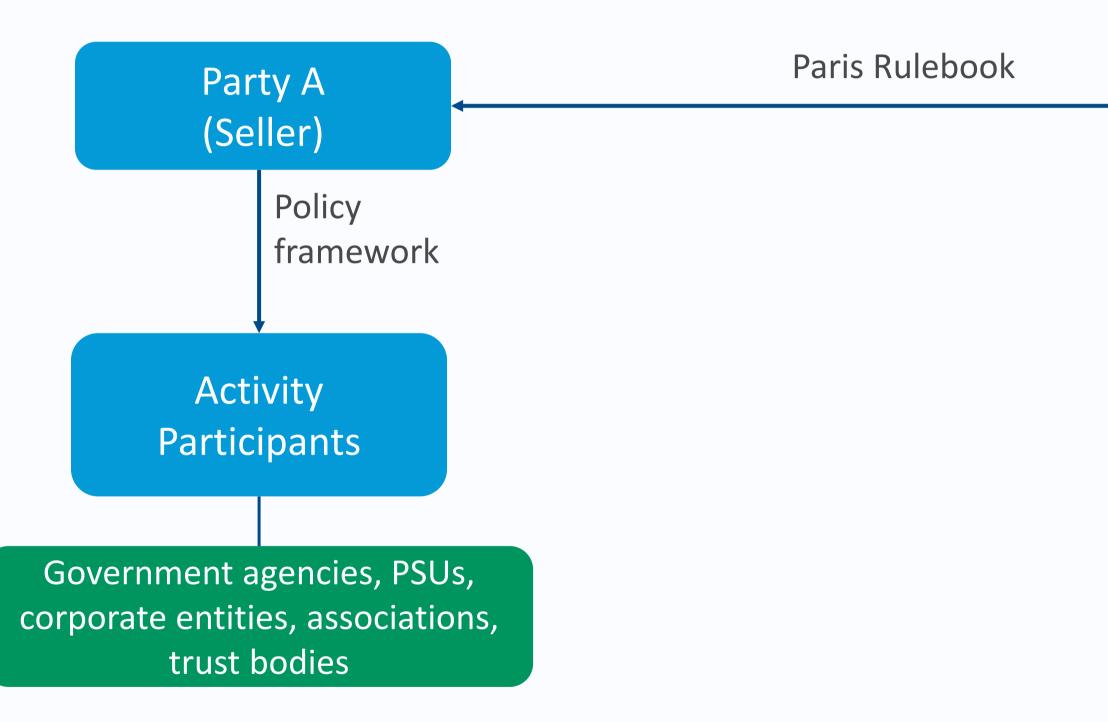




Infrastructure Strategy

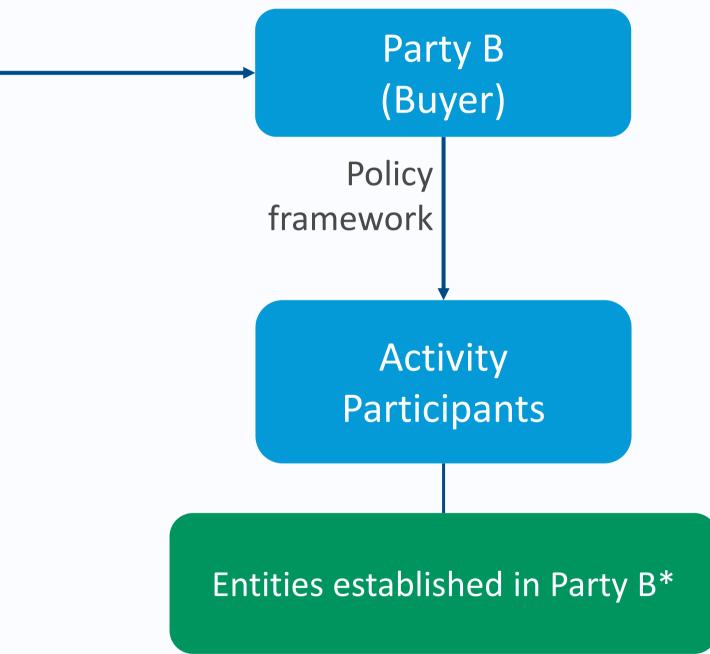
The policy framework provides a basis for participation by domestic entities and confidence/trust to market players to enter transactions

Clarifies rights and obligations of Activity Participants for participation in a Cooperative Approach



*A Party may decide whether to permit applicants established outside its jurisdiction to participate in Mitigation Outcome Activities in the country.



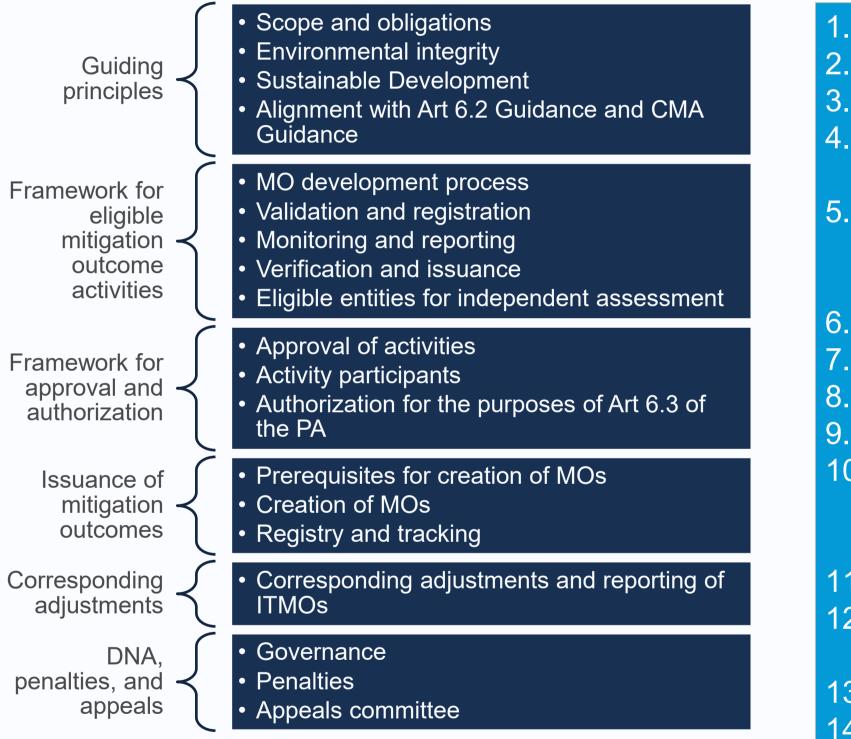






The structure and content of policy framework depends on needs identified and the role the country would like to play

Contents - Framework



Schedules - Specifics

- Definitions
- **El requirements**
- 3. SD criteria
- Eligible activity types and sectoral 4. scopes
- Eligible methodologies and standards for ex-ante estimation & the process for approval of new methodologies MO development process
- 5. 6.
- Validation, MRV
- Requirements for activity participants 8.
- 9. Issuance
- 10. Eligibility criteria and/or approval/accreditation process for independent entities
- 11. Authorization requirements 12. Prerequisites for MOs (vintage,
- metrics, etc.)
- **Registry procedures**
- 14. Reporting procedures
- 15. Functions of the DNA and relevant ministry



Inputs for Schedules

- **Approach Papers and** associated discussions with the Climate Market Club
- **Experience** with pilots, PMR, etc.
- National circumstances
- **Domestic requirements**
- **National climate strategies**
- **Final Article 6.2 Guidance**





Article 6 strategy is expected to help countries to make needed decisions at different levels

Decisions for host countries on Article 6 engagement happen on three levels:

Strategic issues for decision on *whether* to participate: Under what conditions would it be beneficial to participate in Art 6?

- Understanding risks and opportunities: Overselling risks vs Opportunities for additional financing for low carbon development, sustainable development "co-benefits", technology transfer, and capacity building
 - Analysis of options to address overselling risks: strategies for choosing sectors, project types, technologies for Article 6; pricing strategy to ensure sufficient revenue to cover high mitigation costs in the event of overselling; quantity restrictions, etc.
 - Explanation on how Article 6 can support the country's NDC, long-term strategies, and net-zero targets
- **Tactical issues** for decision on *how* to participate: Possible models for engagement and implementation of Art 6
 - Identification of the relationship between domestic carbon pricing instruments and Article 6
 - Use of international and domestic programs and standards
 - Bilateral vs multilateral cooperation
 - Creation of a mitigation fund based on Art 6 levies
- > Operational issues for choices on implementing the various strategic and tactical decisions: to be addressed in individual approach papers







Clarity on cost of meeting NDC target helps countries to avoid overselling risks and meeting its NDC target with potentially expensive mitigation measures

MOs: Cost Pricing

Stay in host countries, applied toward \bullet host country NDC compliance;

Payment for MOs:

- Concessional climate finance (RBCF); \bullet
- Private climate donations.

Minimum payment principle:

- Minimum payment to enable program implementation;
- Financial analysis to determine cost gap; \bullet
- Breakdown of cost gap to MO unit. \bullet

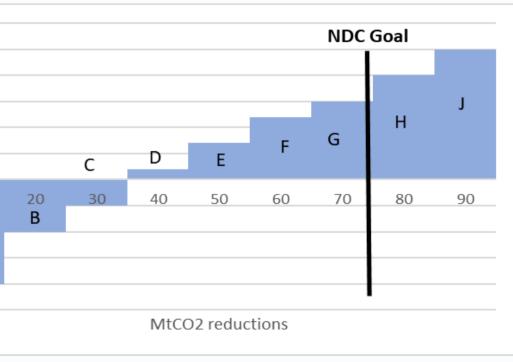
ITMOs: Opportunity cost pricing

	30	
/tco2	25	
	20	
	15	
	10	
	5	
	0	
VF	-5	10
	-10	
	-15	A
	-20	
	-25	

ITMO cost = c(ITMO) = c(MO) + OC



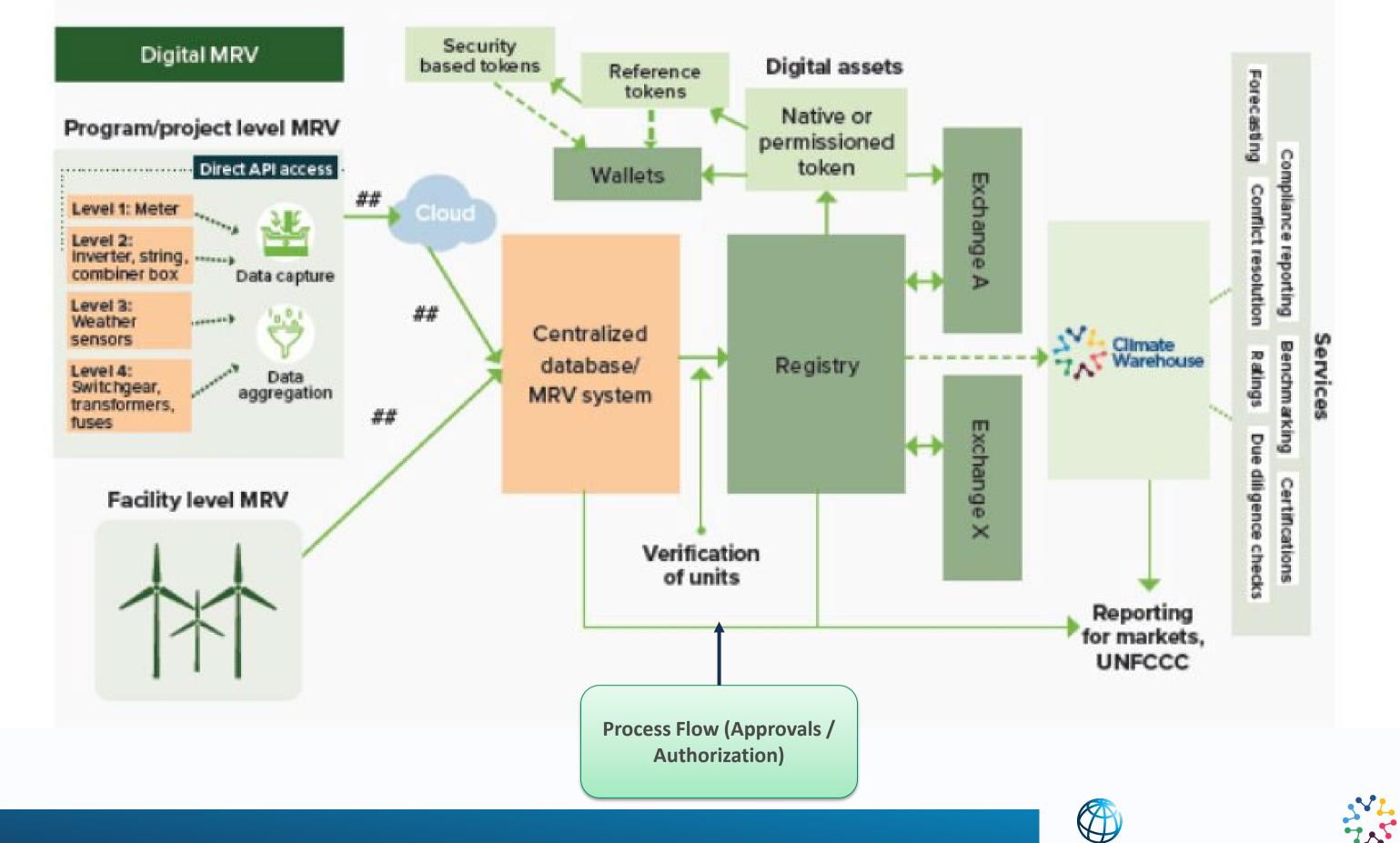
• Transferred out of host country; • No longer available for host country NDC compliance: corresponding adjustments; • Host country has opportunity cost of transferring ITMOs.







Infrastructure needs at country level depends on the market potential, institutional capacity, existing systems and their linkages and resources available







The 'What' and 'How' of capacity building is critical for making stakeholders ready for international carbon markets

- > Target a range of actors; make the process as inclusive as possible
- > A lot of lessons to be learned from the Kyoto period
- > Learning by doing
- > Raise awareness of the opportunities and benefits of carbon markets
- > Build and strengthen the national institutions
- > Coordinate with multiple development partners, international organizations and donors
- > Tailor technical assistance; sustainability is key
- Develop a 'toolkit'









Many countries, regional actors, donors and development partners are already helping several countries on multiple aspects of carbon markets



Countries with policy/ legislation / decree that mentions 'carbon market'

Open source, offthe-shelf MRV and **Registry systems**

> World Bank **EBRD** UNFCCC UNDP Several private players like IHS, GEM etc

*list is not exhaustive



Training, e-courses, tools, blueprints, capacity building

> World Bank UNFCCC ADB Switzerland Sweden Japan UNDP GGGI West Africa Alliance East Africa Alliance





The World Bank is supporting countries their efforts to deploy CPIs & participate in international carbon markets

Our program	Carbon tax	Compliance market (ETS)	International carbon markets (Compliance for NDC)	International carbon markets (Compliance for OP)	International carbon markets (domestic buyers)	International carbo markets (for intl buyers)
1. Partnership for	Technical infrastructu	re: GHG inventories, MF	RV system, data collection	on & management syste	m	
market readiness (2016-2020)	Stakeholder engageme	ent process & roadmaps	of implementation			
2. Partnership for market		Legal & technical foundation	Readiness/conceptual design	Legal foundation	Technical foundation	
implementation (PMI) (ongoing)		Support the implementation	Pilot program		Pilot & full domestic offsetting scheme	

3. Enabling carbon markets: PMIF (Climate Warehouse); CERF/TCAF/Ci-Dev (ongoing)

Policy, Legal & Technical foundation; Capacity building



Develop programs & help implement

ARTICLE 6 - Key Papers, Reports & Tools





Ensuring Environmental Integrity under Article 6 Mechanisms

Ensuring environmental integrity is recognized as an important goal under Article 6. This paper examines factors that affect environmental integrity under Article 6 of the Paris Agreement, and identifies practical approaches for implementing the concept based on lessons learned from the World Bank's pilot activities and feedback from stakeholders in pilot countries.



Carbon Asset Development Process

This paper seeks to identify processes for the generation and transfer of carbon assets in post-2020 international climate markets and suggest standard terminology in the carbon asset development cycle across key independent standards. The paper reflects inputs from the informal working group on carbon assets, pilot transactions under different initiatives, as well as knowledge produced in relevant platforms.





Country Processes and Institutional Arrangements for Article 6 Transactions

This paper provides options on how host countries can design institutions and approval procedures at the domestic level to manage Article 6.2 activities and transactions. It identifies functions required at the national level and discusses different options to allocate these functions to existing or new institutions.





Country Policy Framework for Cooperative Approaches Under Article 6.2

This paper suggests a need for a national policy framework specifying a country's preferred approach towards implementing a Cooperative Approach under Article 6.2. The policy framework is intended to provide the minimum legal foundation required to give Parties (including the private sector entities) the necessary certainty regarding their rights and obligations as participants to the Cooperative Approach.



The MAAP-Carbon Pricing Instrument (MAAP-CPI) and the MAAP-International Transfer Readiness (MAAP-ITR)

The Mitigation Action Assessment Protocol developed to measure, compare and benchmark the relative performance and risks of climate actions at the project/program level, now has two additional assessment frameworks for jurisdiction-level assessments. The MAAP-CPI and the MAAP-ITR are to help countries assess, prepare, and participate in domestic carbon pricing instruments and international carbon markets respectively.



lune 2022





Digital Monitoring, Reporting, and Verification Systems and Their Application in Future Carbon Markets



Upcoming Report

Climate Warehouse Simulation II Final Report

The World Bank has developed the Climate Warehouse, a metadata layer that uses blockchain technology to connect heterogeneous carbon registries and improve transparency in global carbon markets. This report details the scope, design and outcomes of simulation II of the Climate Warehouse, which tested an operational prototype with more than 40 carbon market stakeholders, including country registries, independent standard registries and multilateral organizations.





Additional Slides

The framework allows a Party to present its preferred approach

Minimum legal foundation to facilitate discussion and agreement between Parties

		1. Announces approach thr framework (d	ough policy
	Party A		
2. Meets prescribed	3a. Clarifies ownership of MOs, Grants Approval if applicable	6. Recognizes participants, authorizes transfer	etter of Authorization*
requirements, submits documentation	Activity Particip	oant	

*Separate from commercial agreement

**Framework prioritizes elements that MUST be established at domestic level (minimum requirements)

5. Negotiates and accepts elements under the policy framework**

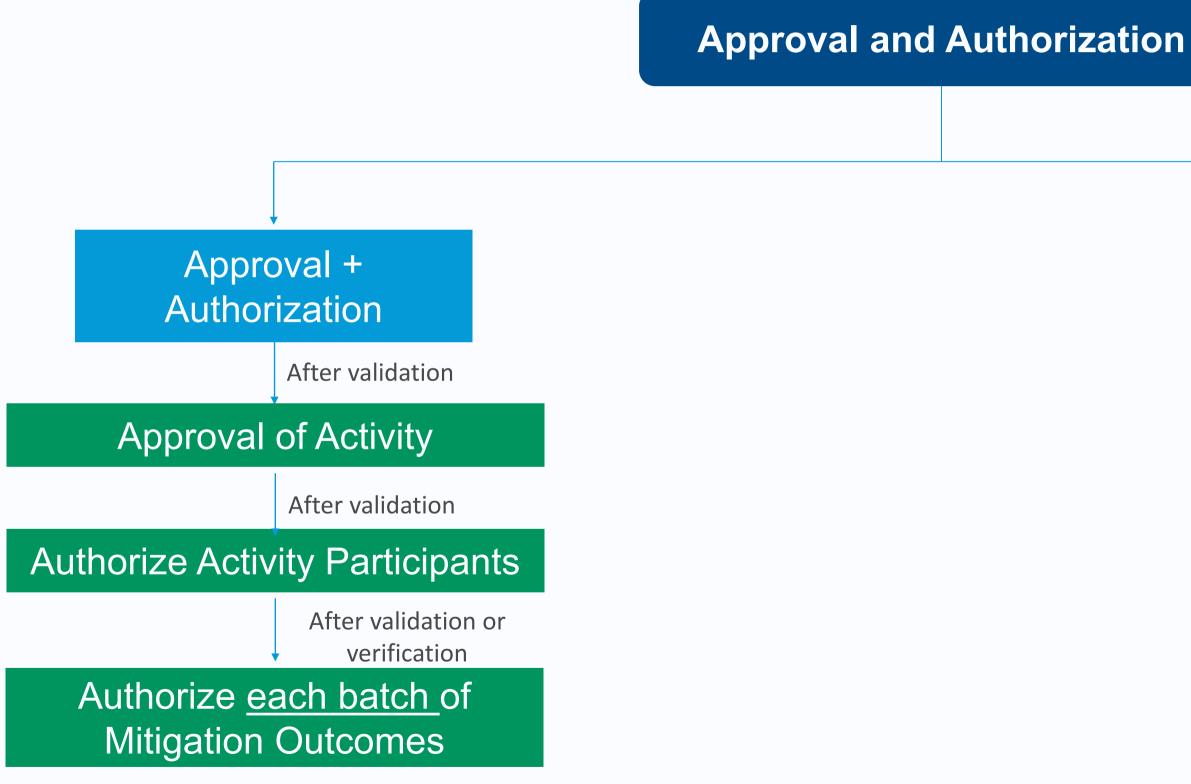
		Party B	
			4. Grants Approval if applicable (and needed)
7. Recognize participants agrees to purchase		3b. Meets prescribed requirements, submits documentation	
	Act	ivity Participant	
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The framework considers two possible modes for authorization

Depending on level of comfort, types of activities and their impact on NDC



One-step Approval

Any time after validation

Approve Activity + Authorize specified volume of Mitigation Outcomes over a specified time period





Details of implementation to be defined through <u>Schedules</u>

Schedules can be customized to meet country requirements

Schedule	Description	References
Functions of DNA/ Relevant Ministry (Schedule 15)	Roles and responsibilities of different entities	Approach paper on country processes and institutional framework
Environmental Integrity & Sustainable Development (Schedules 2 and 3)	Minimum requirements for environmental integrity/ demonstrating unit quality	Approach paper on Environmental Integrity, SDGs, UNFCCC SD Co-Benefits Tool
Eligible Mitigation Outcome Activities (Schedule 4)	Could include positive list of technologies [for automatic approval]	Country-specific
Eligible Methodologies, MRV, Validation (Schedules 5 and 7)	Party may list eligible methodologies and process for developing new methodologies	Existing internationally reviewed standards and methodologies may be pre-approved
Mitigation Outcome Development Process (Schedule 6)	Steps for generating a mitigation outcome	Approach paper on carbon asset development process
Requirements for Activity Participants, Independent Entities, MOs (Schedules 8, 10, 12)	Conditions to be met, accreditation process, vintage/metric of MOs that can be transferred	To be defined at country level
Issuance and Authorization (Schedules 9 and 11)	Process for issuance and authorization of MOs	Draft Letter of Authorization
Registry Procedures (Schedule 13)	How MOs will be created and recorded. Reconciliation and transfer	Generic registry specifications; lessons learned from Climate Warehouse simulation



