



**WORLD BANK GROUP**  
Climate Change

# Carbon Crediting Under the Paris Agreement

## Corresponding Adjustment and registry/reporting requirements

Nuyi Tao

Senior Carbon Finance Specialist

World Bank Climate Change Group

Technical Workshop, Bonn

June 13-14 2019

# Agenda

- **Corresponding adjustment**
- **Implications on environmental integrity and NDC target achievement**
- **Challenges to operationalize CA**
- **Registry and reporting requirement**

# Corresponding Adjustments

---

- CA is required for carbon market mechanism under the Paris Agreement to exclude double counting and preserve environmental integrity.
- Basic principle is double bookkeeping: Seller country to add emission reduction transferred to its emission account, buyer country to subtract.
- **Example:**
  - Country A has a 2030 emission target of 10 and emits 9 in 2030;
  - Country B has a 2030 emission target of 5 and emits 6;
  - “A” transfers one emission reduction unit to “B”;
  - “A” adjusts its account to 10;
  - “B” correspondingly adjusts its account to 5.

# What makes it so complicated?

---

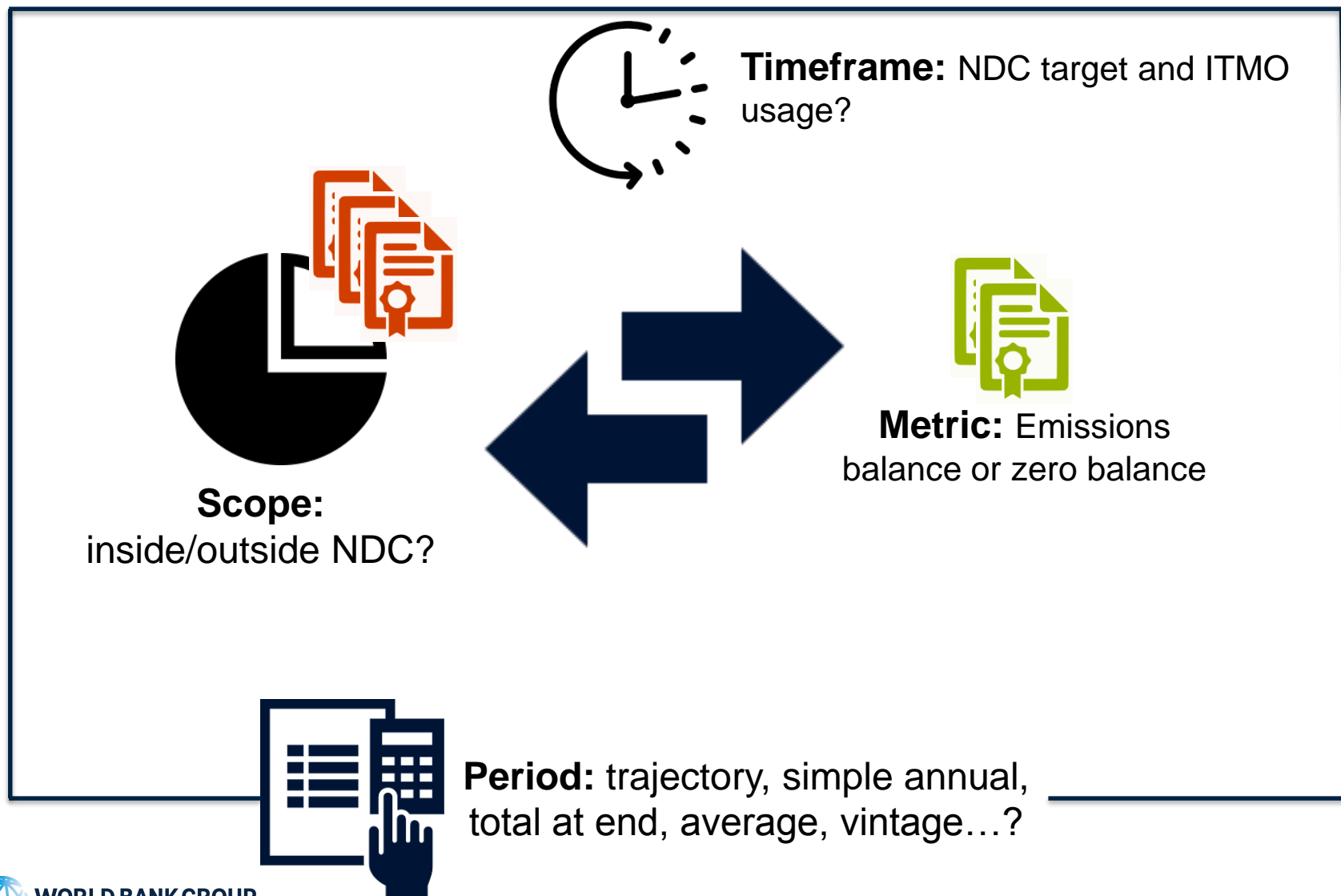
## No carbon budgets:

- Most NDCs define single year targets.  
152 countries have submitted single-year targets for 2025 or 2030. Only 6 countries have submitted multiyear targets

## NDC heterogeneity:

- Different target periods;
- Different metrics;
- Different expression of targets;  
Absolute reduction against base-year emission, reduction relative against BAU, intensity target, or peaking at certain year
- Unconditional/conditional;

# Many aspects of corresponding adjustments



# Options for corresponding adjustment

	2019	2020	2021	2022	2023	2030
<b>Emission reductions</b>	1	1	1	1	1	
<b>(i) Trajectory</b>	0-1	0-1	0-1	0-1	0-1	
<b>(ii) Simple annual</b>	1	1	1	1	1	
<b>(iii) Total at end</b>						5
<b>(iv) Average</b>						1
<b>(v) Vintage</b>						0

# Environmental integrity

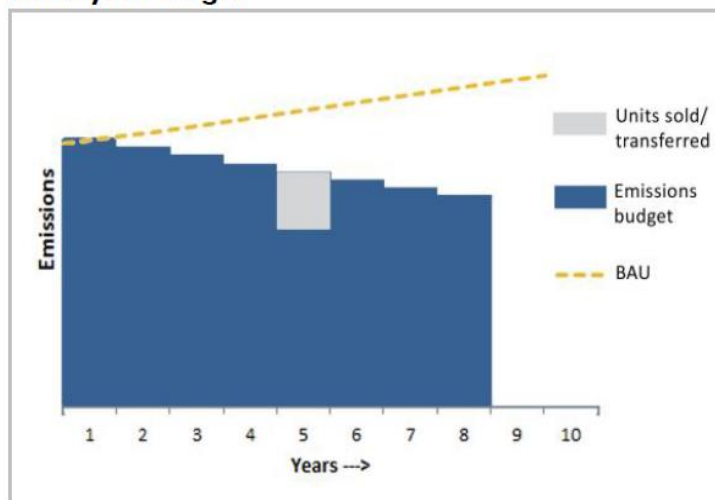
Uncertainty on CA requirements in non-target years for single-year targets

Single-year targets provide less certainty about global cumulative emissions and inability to track progress towards meeting targets

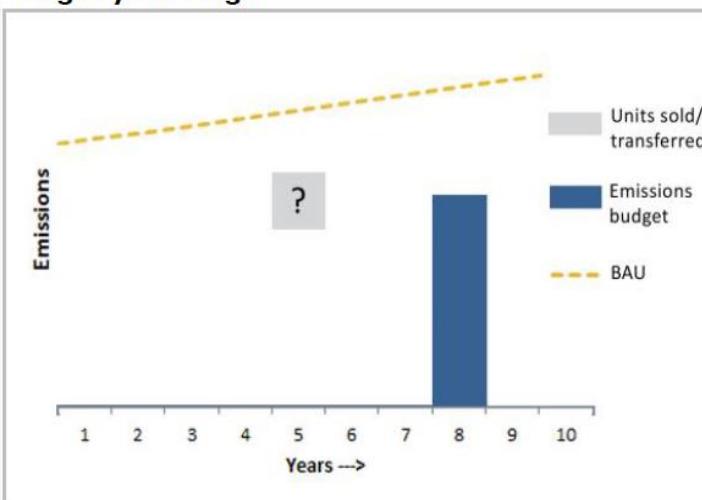
Single-year targets also provide fewer incentive to apply rigor to international transfers

**Figure 4: Implications of applying emission units from one year to another**

Multi-year target



Single-year target



# Implications on single-year NDC target

	2019	2020	2021	2022	2023	2030
Emission reductions	1	1	1	1	1	
(i) Trajectory	0-1	0-1	0-1	0-1	0-1	
(ii) Simple annual	1	1	1	1	1	
(iii) Total at end						5
(iv) Average						1
(v) Vintage						0

## Assuming both parties can only choose the same method

Option I and II: no CA in the target year therefore no impact on single-year NDC target

Option III: provides a snapshot not representing overall mitigation activity, the total adjusted ITMOs at the target year is difficult for the seller country to accept as it impacts the NDC target the most

Option IV: as there is only CA and reporting at the target year while the transfer happens several years before, the seller need to ensure that the mitigation impact will continue to the target year, otherwise its NDC target will be compromised in the target year

Option V: environment integrity is most safeguarded but less incentive for the buyer country to choose as the transfer would not impact NDC target



# Challenges to operationalize CA

---

CA might need to happen in the target year, i.e. 2030, after the Emission Reduction Payment Agreement (ERPA) terminates

Program entities normally have little or no say on CA

- The host government agencies in charge of negotiations will take times to make decisions on CA. There are multiple agencies involved in strategic issues such as CA.
- The host government's choice of CA option(s) has no direct effect on program implementation

Several factors to consider when negotiating options for CA

- Year(s) to adjust: target year or year of transfer
- Volume to adjust: Average annual ER over purchase period, average annual ER over crediting period, or cumulative ER
- The choice of options could have significant implications on ER pricing
- There are further complications if there are multiple buyers involved through parallel purchase or seniority-based purchase

# An example of ER stream and CA at target year

Assuming host country NDC target is single year target at 2030, annual average ER is the basis for CA

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total ER	Adjustment on 2030 *
ER stream	1	2	3	4	5	6	7	8	9	10		
Host Country												
Reporting on ER transfer	1	2	3	4	5	6	6	6	6	6	45	
CA adjustment												4.5
Purchasing Party												
TCAF	1	1	1	1	1						5	0.5
Purchasing Party 1		1	1	1	1	2	2	2			10	1
Purchasing Party 2			1	1	1	1	1	2	3		10	1
Purchasing Party 3				1	2	3	3	2	3	6	20	2
Total ER purchase	1	2	3	4	5	6	6	6	6	6	45	4.5

If ER is averaged through purchase period, then the volume for CA will double

Without international rules and clarity on CA, it will be difficult to obtain specific binding commitments from the host country at the point of ERPA negotiation

# Art 6.2- Registry requirement under Draft rules

---

Art 6.2 cooperative approaches are

- Broad (not limited to crediting), decentralized, party-defined (case-by-case)

Limited UNFCCC role: definitions, accounting & review

```
graph TD; A[Limited UNFCCC role: definitions, accounting & review] --> B[Safeguards & limits: transfers, holding requirements, supplementary, carry over, usage]; A --> C[National ITMO registry, & synthesis reports, int'l registry for ITMO tracking]; A --> D[Provides/reviews guidance (first in 2024); technical expert review];
```

Safeguards & limits: transfers, holding requirements, supplementary, carry over, usage

National ITMO registry, & synthesis reports, int'l registry for ITMO tracking

Provides/reviews guidance (first in 2024); technical expert review



Share of proceeds for adaptation ?

# Art 6.2 – Party reporting obligations

---



## Initial report

- Comply with responsibilities: Authorize ITMO use, NDC, Inventory, ITMO tracking
- NDC implementation period
- Basis/method for CAs
- Quantify NDC in ITMO metric



## Biennial transparency report

- Comply with requirements
- Environmental integrity, BAU and baselines, consistency with sustainable development

# Art 6.2 – Party reporting obligations

---



## **Annual submission**

- Emissions/removals and ITMOs (transferred...used)
- CAs applied



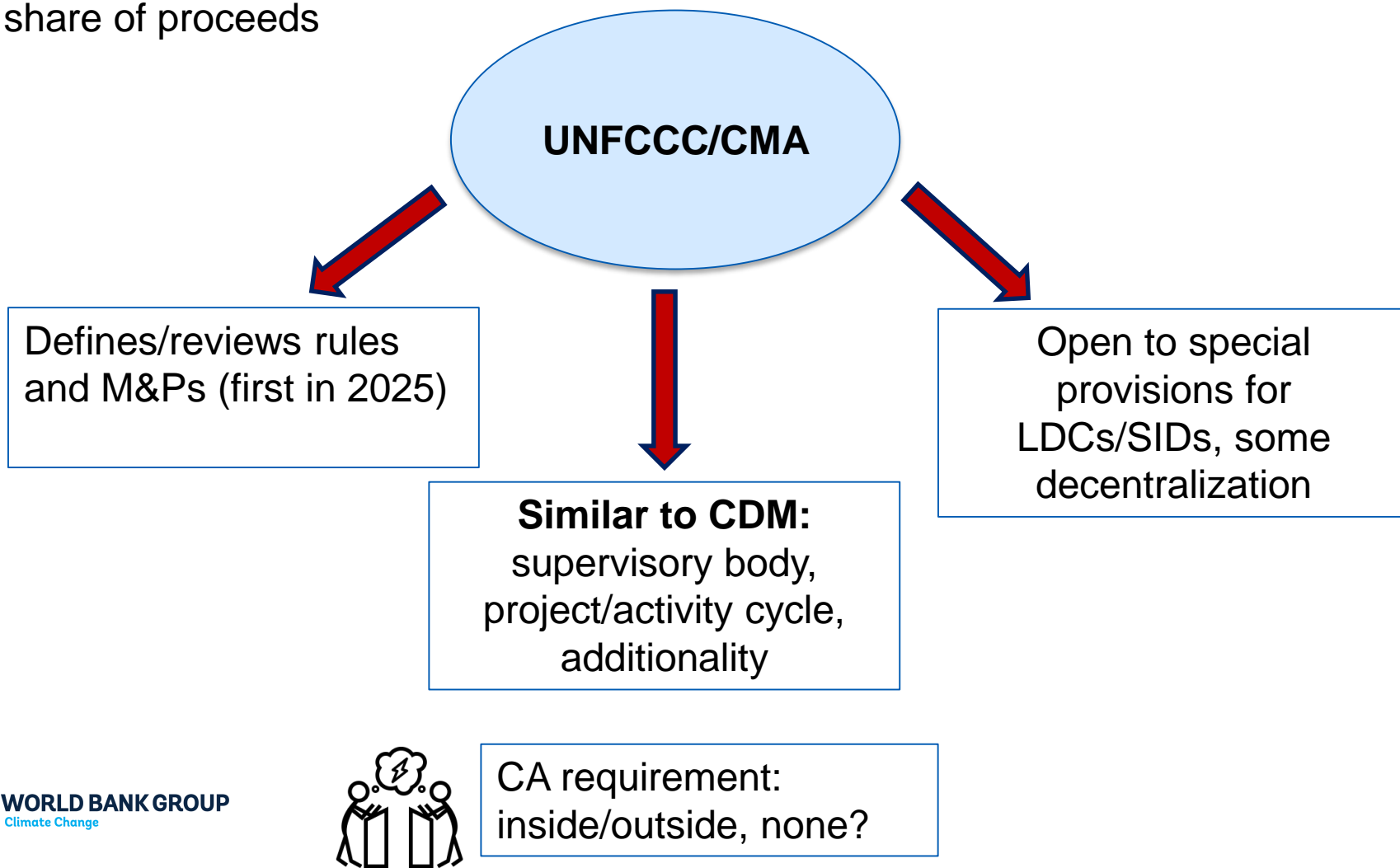
## **ITMO Tracking Registry**

- Or use UNFCCC default

# Registry and reporting requirement under Art 6.4 – Draft rules

Art 6.4 crediting mechanism under UNFCCC supervision

- CMA supervision body, need for overall mitigation (+ in host countries), share of proceeds





**WORLD BANK GROUP**  
Climate Change



[ntao@worldbank.org](mailto:ntao@worldbank.org)