

Accounting and MRV – key challenges for the development of market-based approaches

Anke Herold
16th CTI Workshop
Berlin, 23.6.2016



Avoiding double counting in meeting mitigation pledges

Double counting: a GHG emission reduction or removal is counted more than once towards attaining mitigation targets.

Under Paris Agreement:

A GHG emission reduction/removal unit issued from GHG emissions/removals covered by an NDC of a Party to the PA

A unit accounted towards meeting an NDC of a Party to the PA

Challenges:

Which GHG emissions/removals are covered by an NDC?

- Clear related to coverage of gases, many NDCs not clear related to coverage of source/ sink categories
- Can countries with non-quantified NDCs issue quantified credits that are sold and used towards meeting a quantified NDC?

Multitude of fragmented mechanisms and crediting schemes:
How can a selling Party know whether a unit sold will be accounted towards mitigation targets under the PA or used for other purposes?

How to deal with double counting?

Purchase of units:

- For units acquired add equivalent amount to NDC target or subtract equivalent amount from national GHG emissions

Selling of units:

- For units sold subtract equivalent amount to NDC target or add equivalent amount to national GHG emissions

Actual situation more complicated:

A multitude of crediting mechanism and allowance trading mechanisms already in place with long crediting period. Host countries now decided to adopt an economy-wide NDCs.

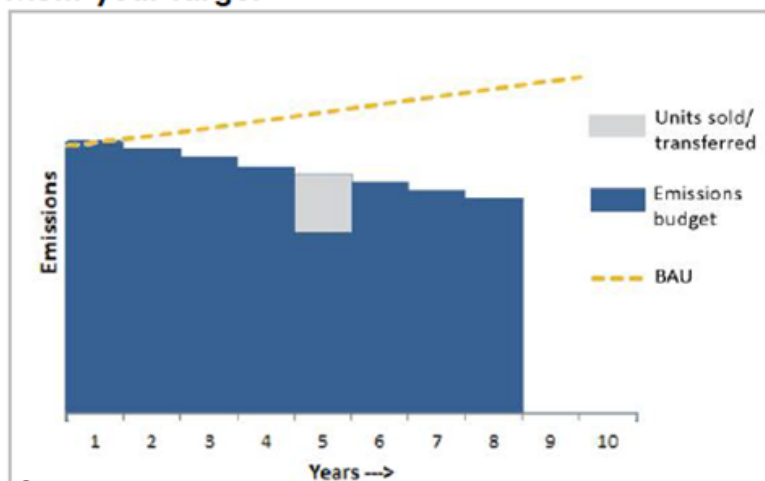
- Credits from voluntary standards and existing mechanisms can be seen as double counting as the emission reductions planned as part of the NDC are sold outside a country
- Market approaches can be seen as part of the conditional finance that countries expected to receive.

Single year targets

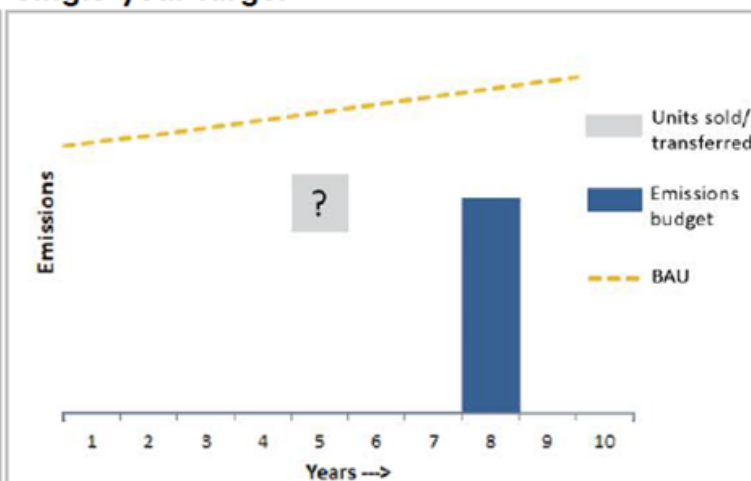
Accounting challenge: single year NDC targets (emission reductions in year 2030) against market mechanisms that issue credits/ allowed over a multi-year period.

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

Multi-year target



Single-year target



Source: Lazarus et al 2014

- How to account for units issued and sold in years prior to the NDC target year?
- Carbon mechanisms do not track and report exactly in which year an emission reduction/ removal occurred, but average over longer periods.

Inconsistent baselines I

- Countries chose baselines for NDCs, most common is either base year or BAU emission projection.
- For crediting mechanisms different baselines may be chosen at project, regional, programme or policy level based on different assumptions
 - ⇒ BAU projections usually not detailed in terms of assumptions for sectors, regions, policies, programmes or projects
 - ⇒ Using different baselines, the accounted emission reductions/removals in NDCs will not be the same as accounted emission reductions / removals from crediting mechanisms, even when they are resulting from the same activity
 - ⇒ Principle of „a ton is a ton“ will not apply
 - ⇒ How can we account for emission reductions in a coherent way when the emission reductions are not comparable?

Inconsistent baselines II

Example

- Baseline in NDC assumes for the land sector annual deforestation of an area based on an average of several historic years which is equivalent to 0.28% of the total forest area
 - REDD+ project activity assumes deforestation of 50% of the forests
 - Based on the historic deforestation rate used for the BAU, it would take 180 years until 50% of forests would be deforested
- ⇒ By assuming a much higher deforestation rate, the crediting activity assumes much higher emission reductions than the national BAU projection.

Different monitoring and estimation methodologies

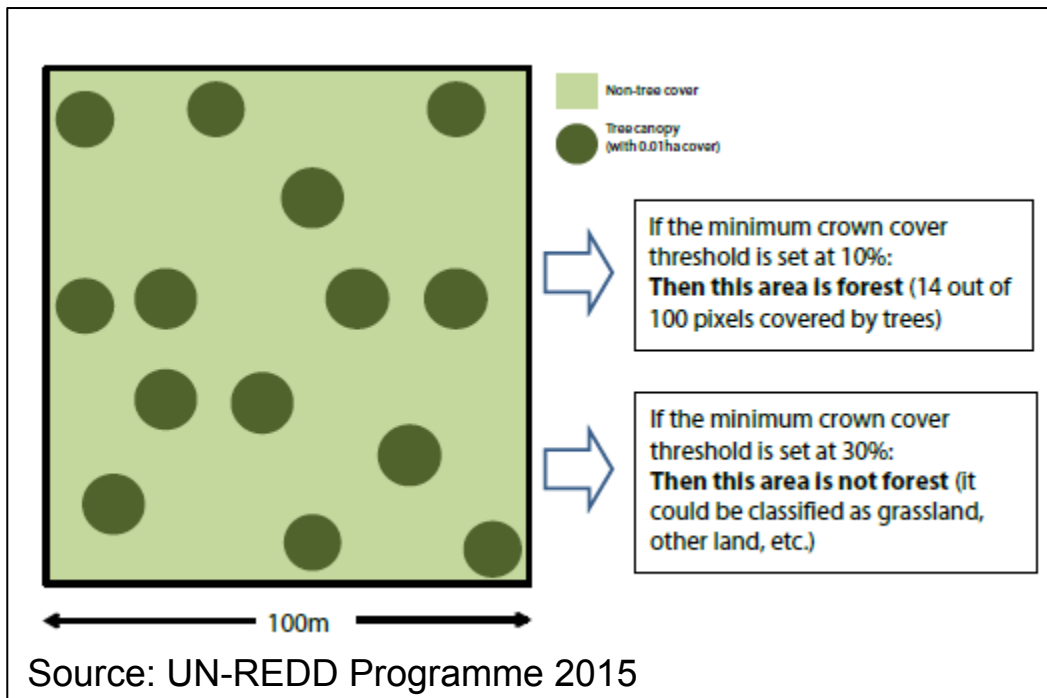
- More precise AD in cap-and-trade systems and crediting activities than in GHG inventories (e.g. plant/ installation specific data, forest data)
- Measured EFs or other estimation parameter in projects or trading systems
- Different choice of IPCC default values for crediting activities
- Different choice of literature values
- Different GWPs in inventory and crediting activities
- ⇒ difficult to reconcile emission reductions from market-based approaches with emissions estimated in GHG inventory
- ⇒ If country would add an equivalent amount of emissions when emission reduction units are sold, the amount is likely to be higher or lower than the emission reduction accounted in the inventory.

Different definitions

Example:

GHG inventory and REDD+ reference level use forest definition of 30% minimum crown cover

Crediting activities use forest definition of 10% minimum crown cover



Inventory accounts areas as deforested whereas crediting project still issues units for avoided deforestation on the same area.

Governance and available information

- How can governments keep track of crediting mechanisms in their countries and ensure consistency in methodologies used? Not all mechanisms publish transparent information.
- At the moment the same crediting projects appear under the CDM and voluntary standards or in different voluntary standards
- This seems to be the case even when the standards claim that they have mechanisms to avoid double counting or double claiming
- Who will control and review?
- Who will enforce that double counting is eliminated if it occurs?

Conclusions I

Accounting and MRV rules have to be developed in the areas:

1. Design of market mechanisms under Article 6 of the PA
2. Tracking and reporting of units/emissions/ removals that can be added/ subtracted to meet NDCs
3. Domestic implementation of NDCs and market-based approaches

Not all Parties want to use market-based approaches, relevant MRV and accounting requirements should not apply to all Parties, but those that opt to use mechanisms.

Governance issues

- What rules are part of UNFCCC system under PA?
- What rules needed at domestic level (oversight of what happens in the country)?

Conclusions II

Opt-in to use mechanisms under PA

- Should ensure consistent MRV requirements for carbon mechanisms and national GHG emissions
 - Methodologies , GWPs, definitions
 - consistent baselines, definitions etc.
 - Transparency of monitoring and reporting
- Should address accounting requirements
 - tracking of credits/allowances
 - addition/ subtraction & vintage/ periodicity
 - double counting
 - Which mechanisms qualify under PA
 - Governance / responsibilities issues

Thank you for your attention!

Do you have any questions?



Anke Herold

Research Coordinator International Climate Policy

Öko-Institut e.V.

Office Berlin

Schicklerstraße 5-7

10179 Berlin

E-Mail: a.herold@oeko.de