



# **Options for emissions accounting: developed country targets**

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SBSTA workshop on developed country targets  
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# Overview

New OECD/IEA paper on emissions accounting options for UNFCCC:

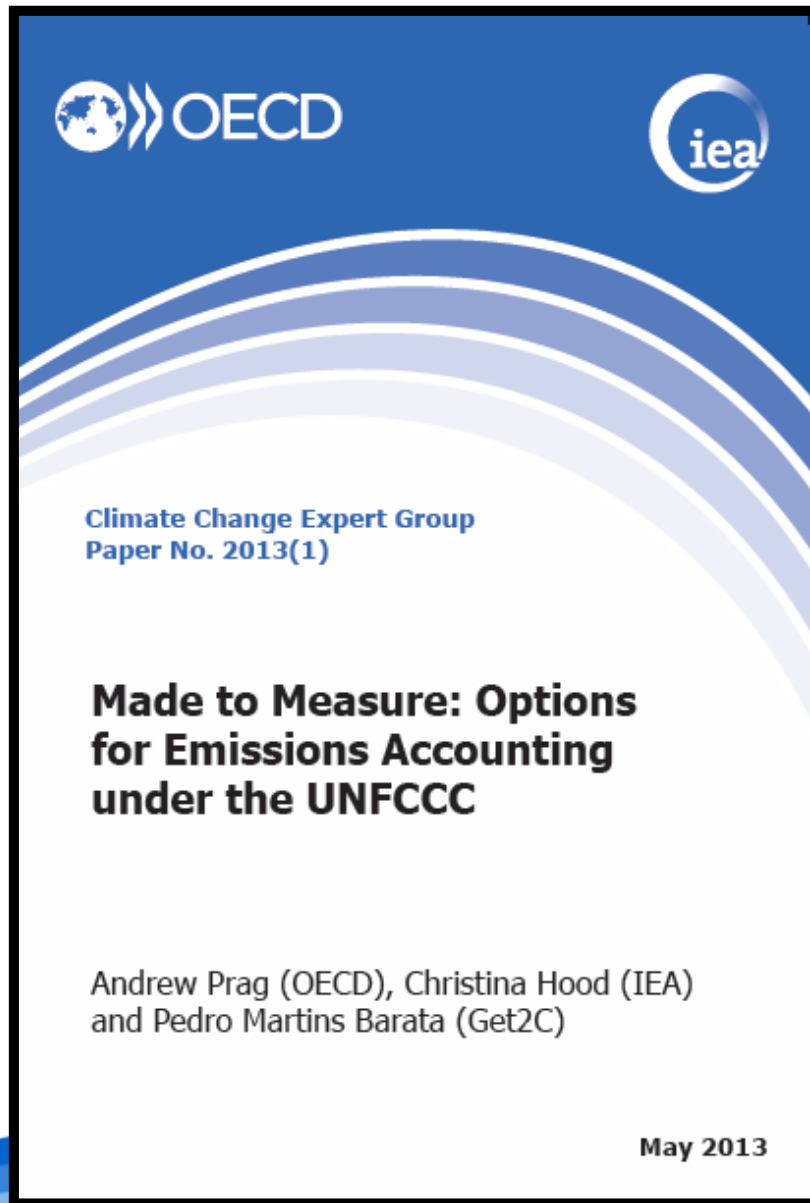
- Elements of a broadly-applicable accounting framework
- Accounting for transfers of market units
- Accounting for emissions/removals from the land-use sector

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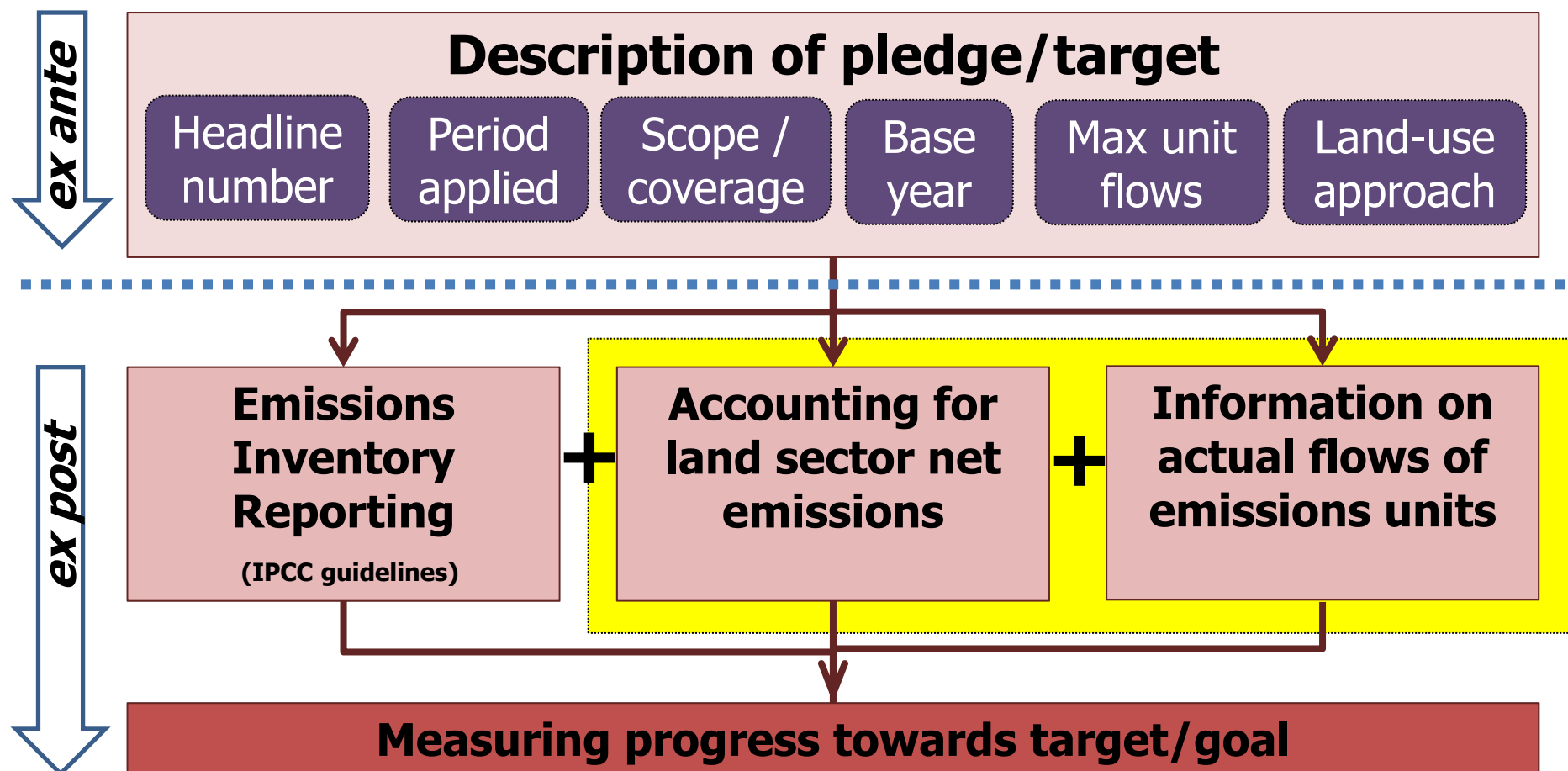
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# Towards an accounting framework under UNFCCC



- For developed countries, UNFCCC mitigation **reporting requirements** include biennial reports and Common Tabular Format tables
- Apart from Kyoto Protocol, do not yet have an accounting framework for **transfers of market units** and **land-use emissions/removals**
- What do we need in addition to existing reporting requirements to **build an accounting framework?**

# Elements of an accounting framework

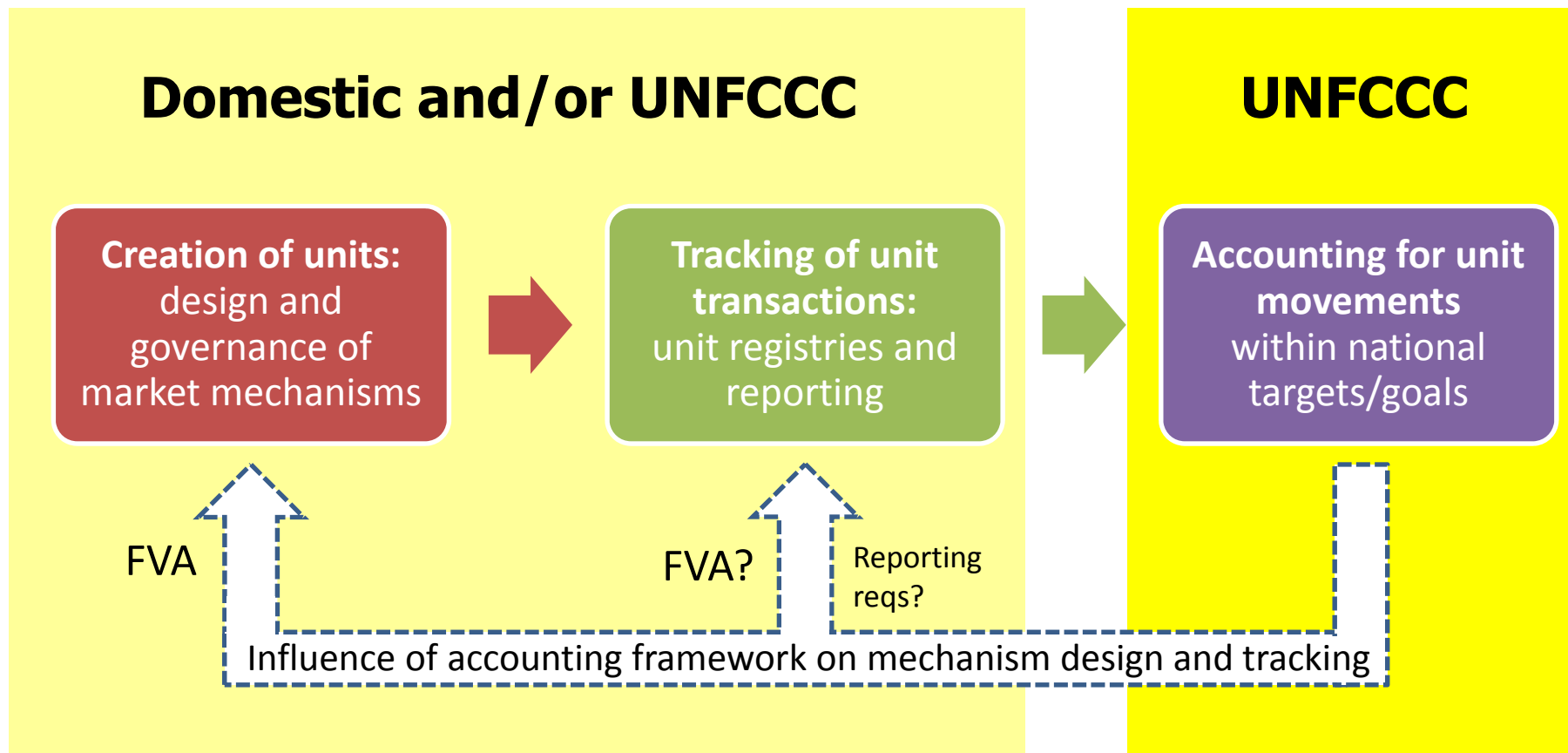


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# “Life cycle” of units: scope of UNFCCC accounting



# Which units matter, and how to account for net flows of units?

- **Two conditions** under which units matter for UNFCCC accounting:

“Used” by Party as **counting directly towards a target** under UNFCCC

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Originating **outside the boundary of the target** (geographic, scope or temporal)

- Could include **credits** (offsets) **AND allowance units** from domestic emissions trading systems
- **Three key challenges:**

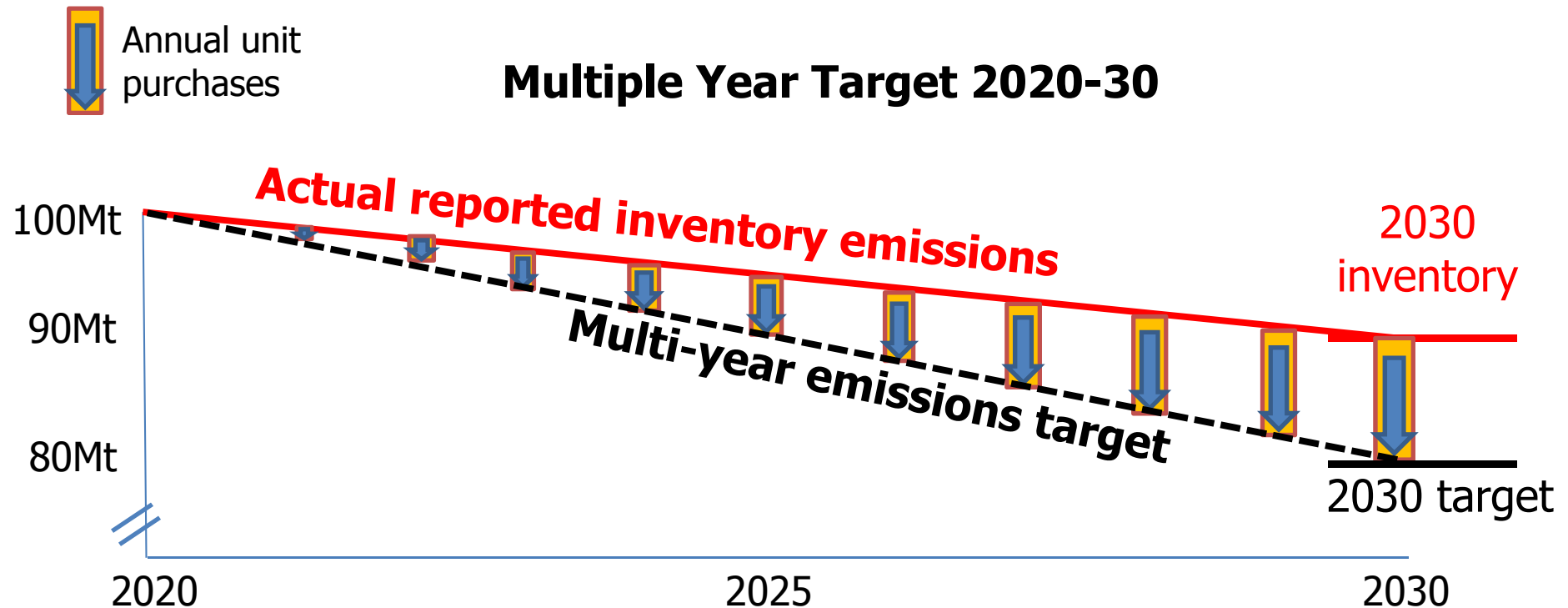
How to know in advance **which units** Parties may count towards pledges?

How to address “**double claiming**” of units towards more than one country target

Does the target’s **period of application** matter?



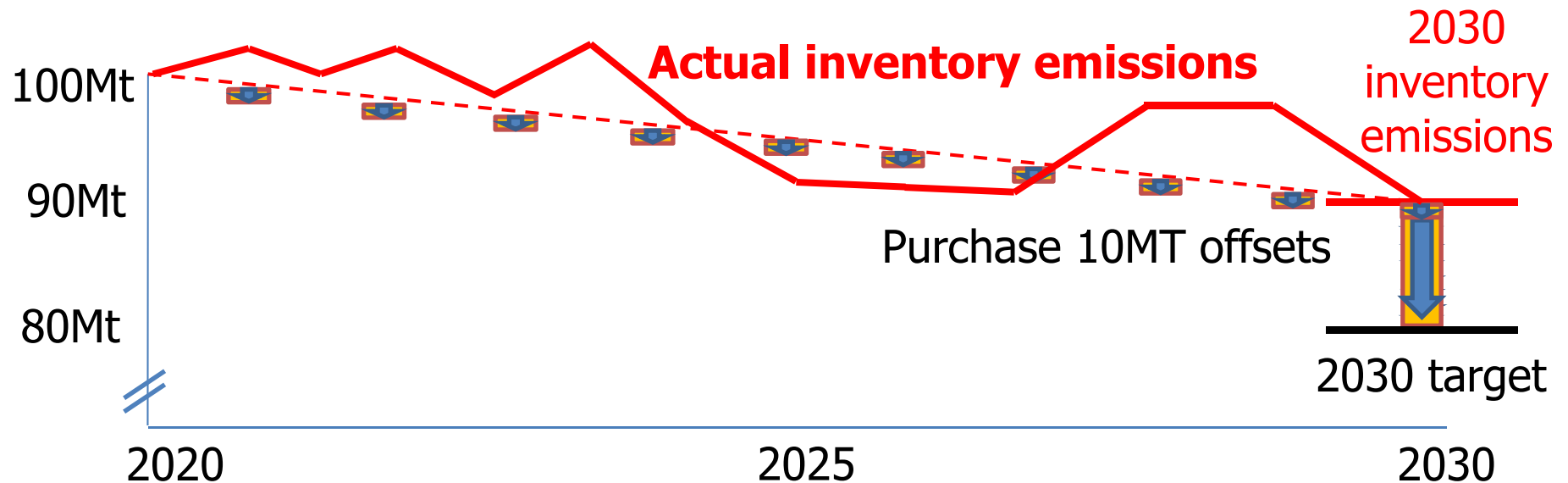
# Pledges defined as single-year or multiple-year targets



- Units purchased for each year of multi-year target
- Multi-year target avoids risk that emissions in single target year are unrepresentative of general trend

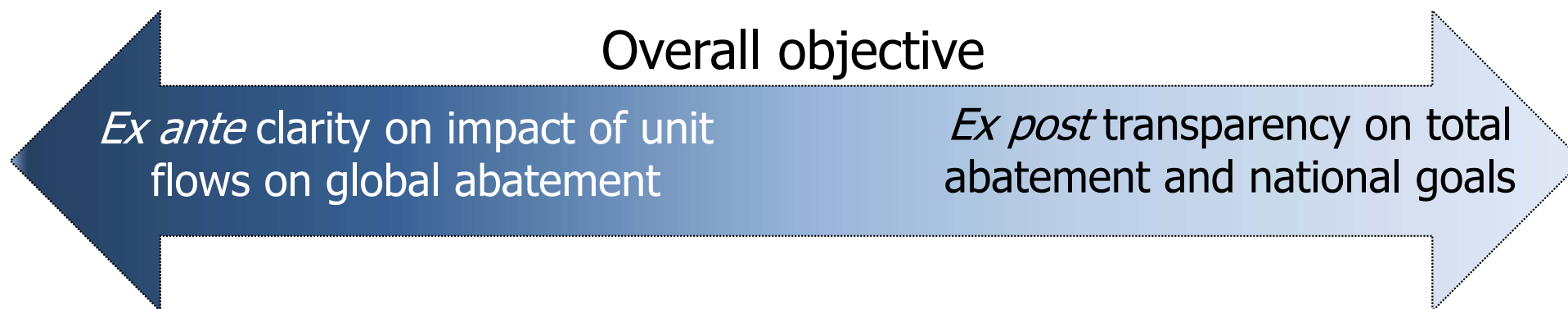
# Impact of a single year target

## Single Year Target 2030



- If units only bought to cover 2030 emissions, overall abatement is less than for multi-year target
- Gets complex when we think about “vintages”...

# Options for tracking and reporting requirements



## Option A

- Prohibit double claiming (could lead countries to redefine pledge numbers)
- No use of international units for single-year targets
- Central tracking system mandatory

## Option B

- Quantify double claiming (enforce limits, or *ex ante* estimates)
- Quantify unit use toward single-year targets
- Voluntary opt-in to central tracking

## Option C

- *Ex post* reporting of unit flows and units used
- No central tracking system, only domestic systems

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# Land-use sector emissions and removals

- Land-use sector has unique characteristics:
  - ◆ Distinguishing man-made impact from natural variation in carbon stocks and emissions
  - ◆ Long time lags for policy interventions
  - ◆ Measuring removals as well as emissions
- Two main accounting approaches to date (both originating from IPCC):

**Activity-based:**  
Used by Kyoto Protocol, with changes in second period

**Land-based:**  
Used for Convention reporting and inventories

# Options for moving forward on land-use accounting

## Adopt **land-based** approach

- Emphasis toward more complete coverage
- Understanding data limitations

## Build on **activity-based** approach

- Expanding list of activities
- Decisions on whether activities are mandatory or voluntary

## Develop **completeness** approach

- Develop threshold criteria to determine sufficient coverage (regardless of approach)

# Conclusions

## Accounting for unit flows:

- *Ex ante* information important to know which units will be relevant to UNFCCC and to expose double claiming
- Period of application (single vs multiple year) important for understanding unit flows and cumulative emissions

## Accounting for the land-use sector

- Developing completeness criteria to overcome land-based versus activity-based dichotomy

# Thank you



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[www.oecd.org/env/cc/ccxg.htm](http://www.oecd.org/env/cc/ccxg.htm)



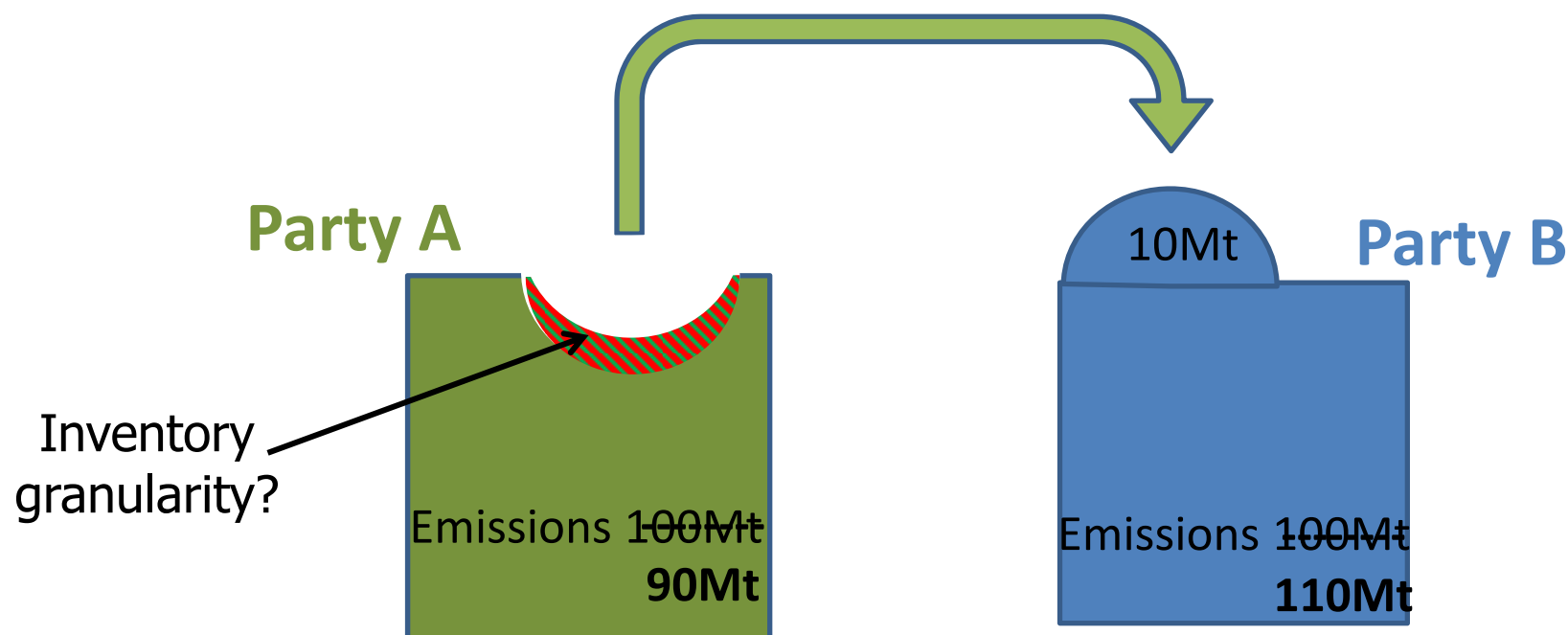
# Annex: extra slides

# Addressing “double-claiming”

- Accounting for developed country targets could be influenced by the source of “imported” units – depending on how other countries account for net unit flows when reporting progress
- If net export of units is not accounted for by selling country, then if units are purchased and “used” by another country there is overlap of country pledges
- Overlap = reduced mitigation effort globally
- If “double-claiming” can’t be eliminated, it needs to be transparent and understood



# Double claiming example



- If Party A DOES NOT account for **export** but party B DOES account for **import**, then:
  - ◆ Declared total =  $90 + 100 = 190\text{Mt}$ ,
  - ◆ Real emissions inventory total =  $90 + 110 = 200\text{Mt}$

# Convergence on land-use baseline approaches

- Approaches to baseline
  - ◆ “Net-net”: calculate net emissions in target year and compare to net emissions in base year
  - ◆ “Gross-net”: calculate net emissions in target year, no comparison with base year
  - ◆ Forward-looking baselines: compare net emissions in target year to projected baseline conditions
- Convergence towards forward looking baselines (reference levels) IF credible data to back up assumptions
  - ◆ Use in forest management under KP2
  - ◆ Investigating use in REDD+
  - ◆ Proposed under voluntary crediting schemes