

Actions and Market Instruments Technical Working Group

In-person workshop – Day 3

GHG Protocol Secretariat team:

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Amsterdam

Agenda – Day 3

Time	Topic
9:00 – 9:15	Intro
9:15 – 9:45	Breakout report back
10:15 - 11:00	Traceability resolved (new proposal)
11:00 – 12:30	Topic breakout: Double counting and mutual exclusivity
11:00 – 12:30	Topic breakout: Operationalizing additionality
12:30 – 1:15	Lunch
1:15 – 1:45	Breakout report back
1:45 – 2:30	Small Breakouts 1. High level claims S2, 2. High level claims S3, S2 table options – <i>decided to be held online post in-person meeting</i>
2:30 - 4:30	Examples – testing our interim results in the background
4:30 – 5:00	Content wrap up – revisiting decisions , way forward
5:00 pm	Workshop concludes

Breakout report back

9:15 – 10:00



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Traceability revisited – new proposal

10:15 – 11:00



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New proposal on traceability

- **Statement 1:** Companies **may** have any level of traceability and **may** use any traceability system. Companies **shall** calculate emissions using the average emission factor corresponding to the most precise level of traceability they have (e.g. supply shed/sourcing region, jurisdiction or other).
 - Companies do not need to use chain of custody models but **may** do so.
- **Statement 2:** Companies using certificates in statement 2 **shall** use a system of record and **should** use chain of custody models where available.

Guidance

- Provide guidance on the calculation and cascade of supplier emission factors in the multi-statement GHG reporting structure, including providing information related to statement 1 and statement 2

Pending to discuss

- Residual emission factors

Topic breakout: Double counting and mutual exclusivity

11:00 – 12:30



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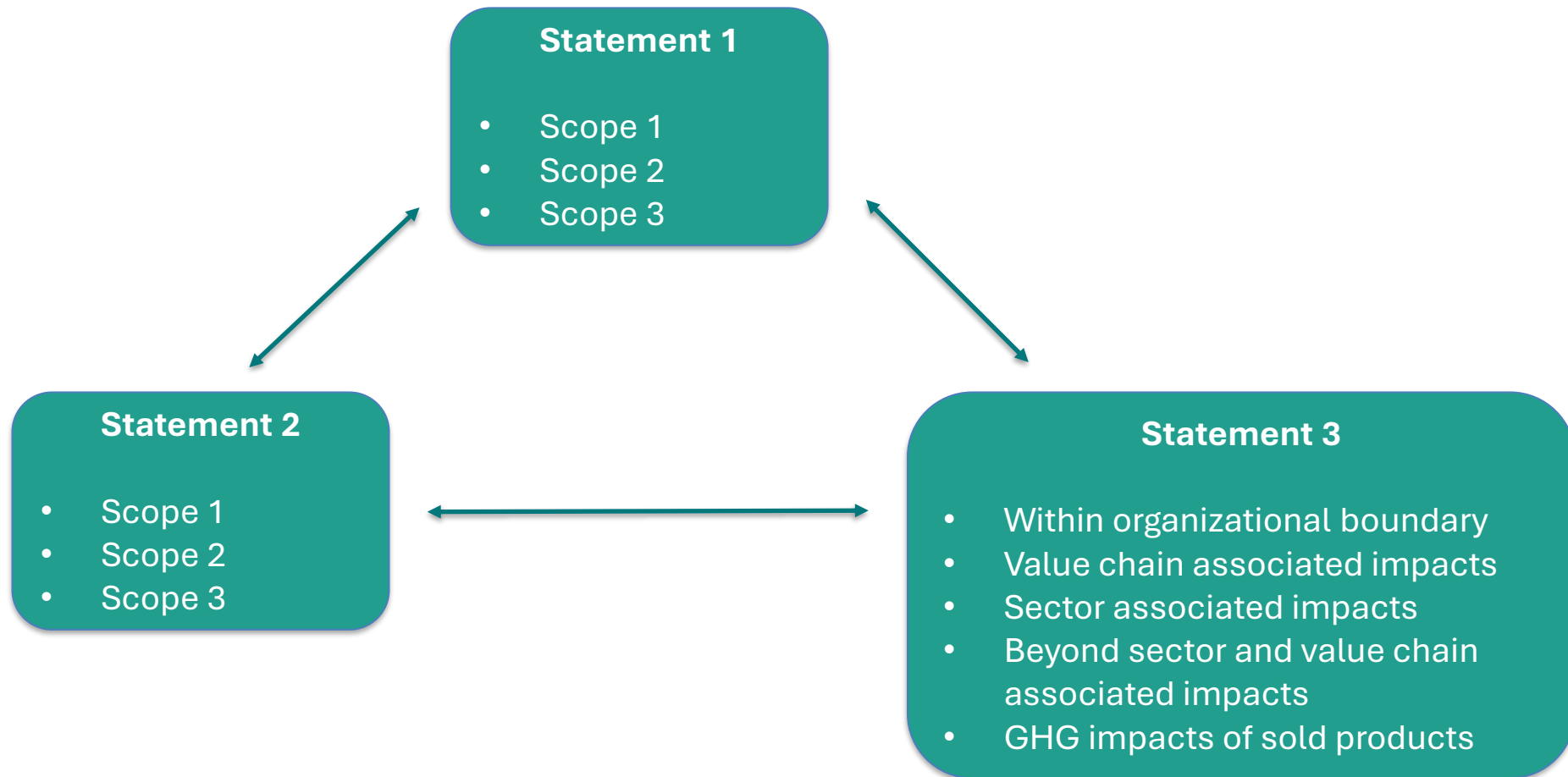


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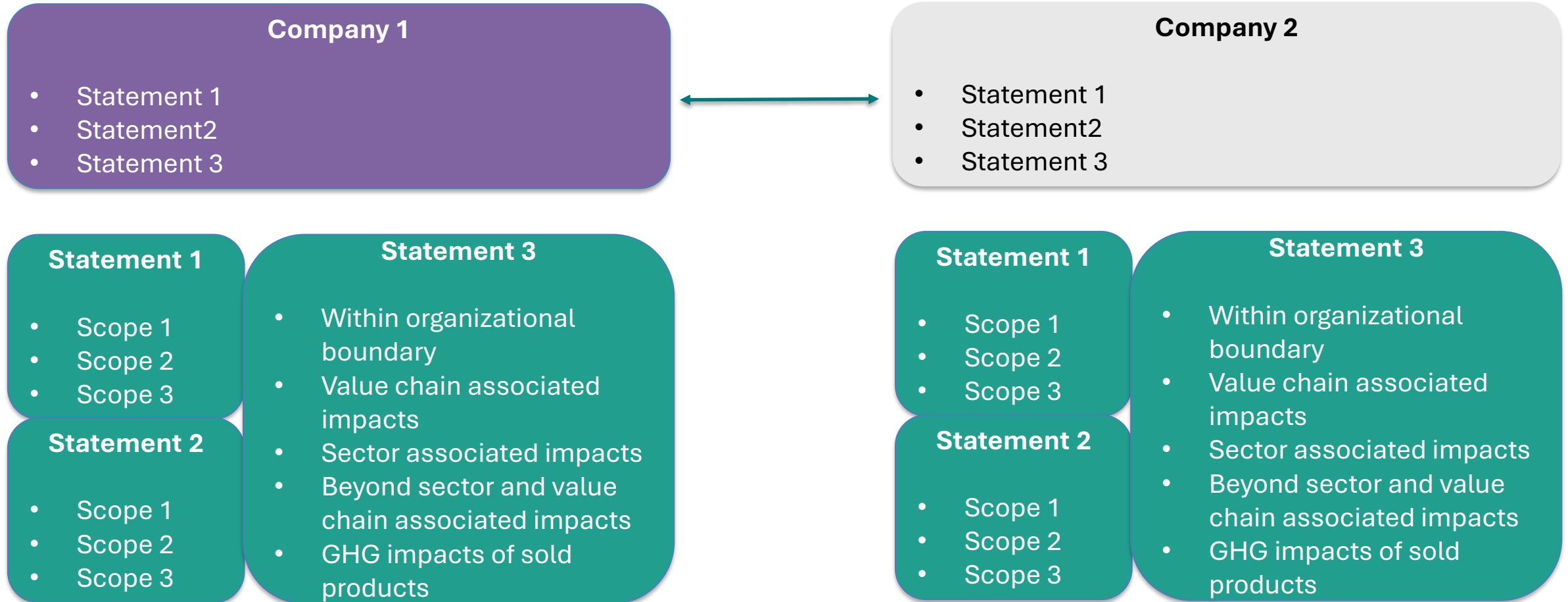
Mutual exclusivity

- AMI white paper: "Decisions have not been made on whether statements are mutually exclusive or not."
 - Annex A question: "Should statements be mutually exclusive, such that no reported emission or impact appears in more than one statement?"
- Selected feedback expressed in prior discussions:
 - Mutual exclusivity is necessary to provide clarity in reporting and communication of reductions and avoid double counting/overcounting of reductions across statements
 - Mutual exclusivity is unnecessary if the different statements are designed to communicate different metrics
 - Companies should have flexibility to report an action in which statement best meets the goals of the action
- Two questions:
 - Can a given action/instrument be reported in only one statement?
 - Can a given emission/removal or impact (change in emissions/removals) be reported in only one statement?

Relations within one company

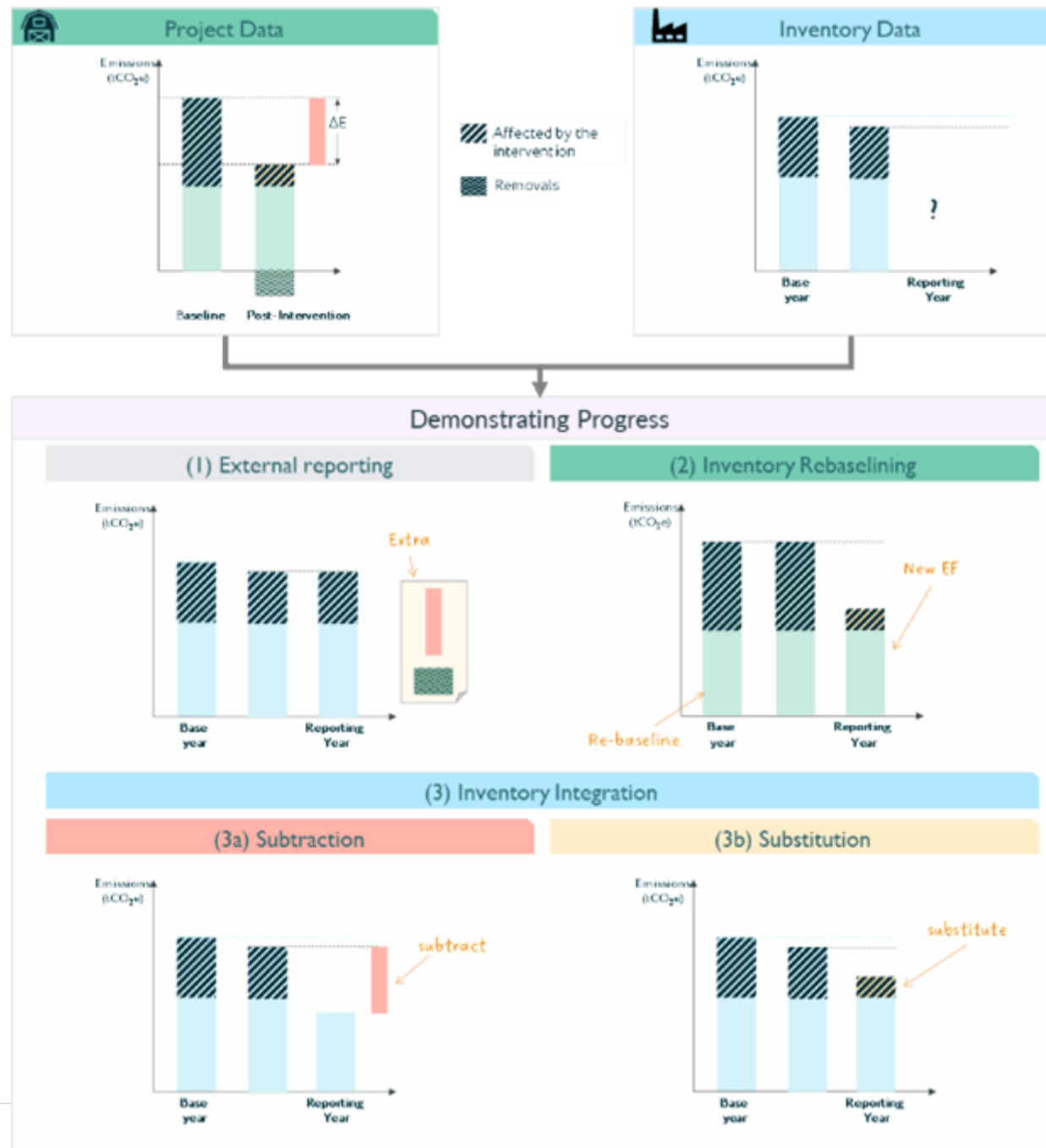


Relations between companies



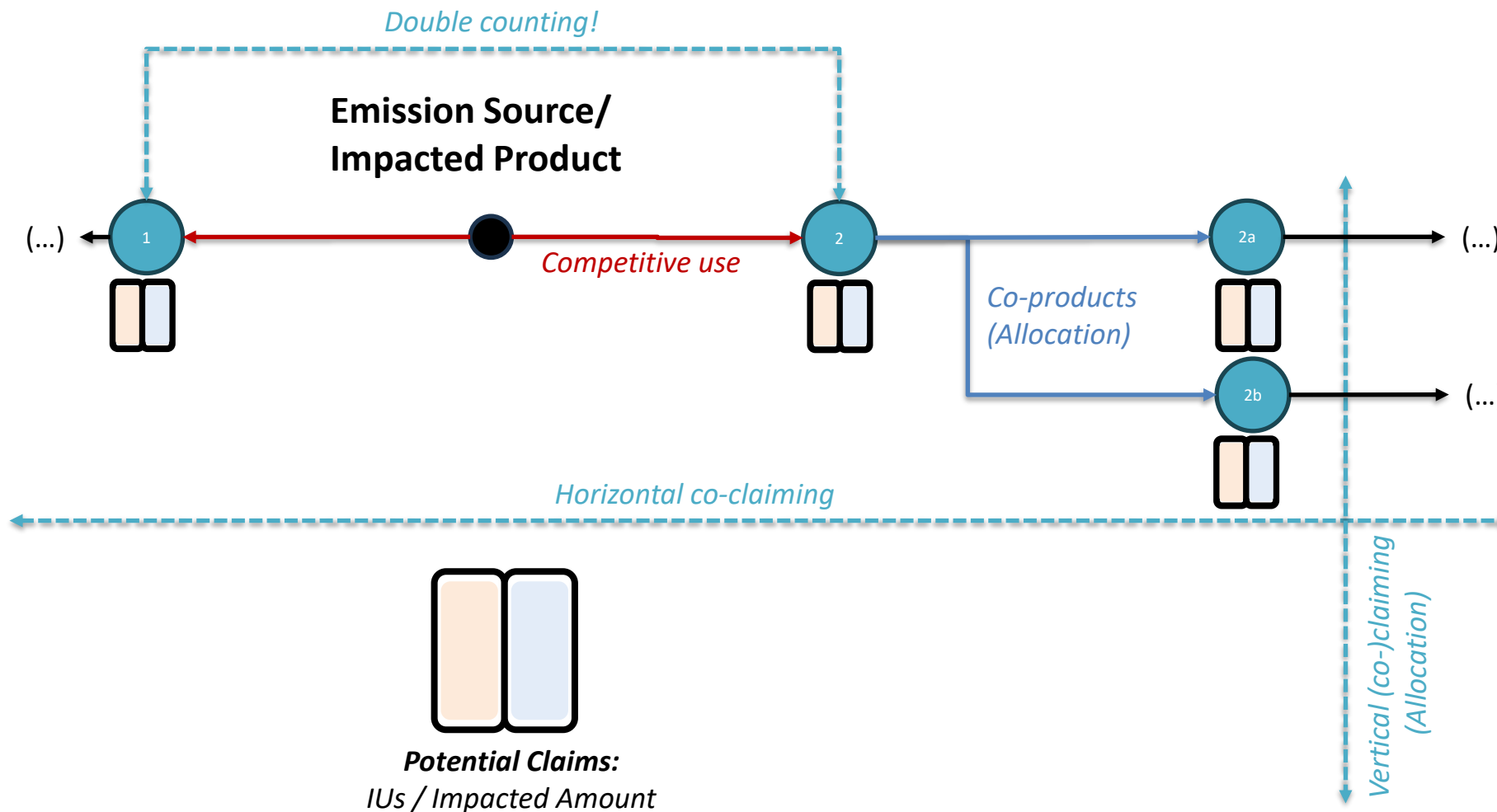
Mutual exclusivity – illustrative example

- A company purchases a new highly-efficient boiler for one of their direct suppliers at a specific production facility. The company purchases only a 10% of the overall outputs of the production facility.
 - The full impacts of the boiler could be calculated in statement 3 for the company
 - The downstream scope 3 impacts could be reported in statement 1 for the company
- Is it ok to report both? - yes
- Should only a portion be reported in each statement?



Double counting and co-claiming

Draft for TWG Discussion

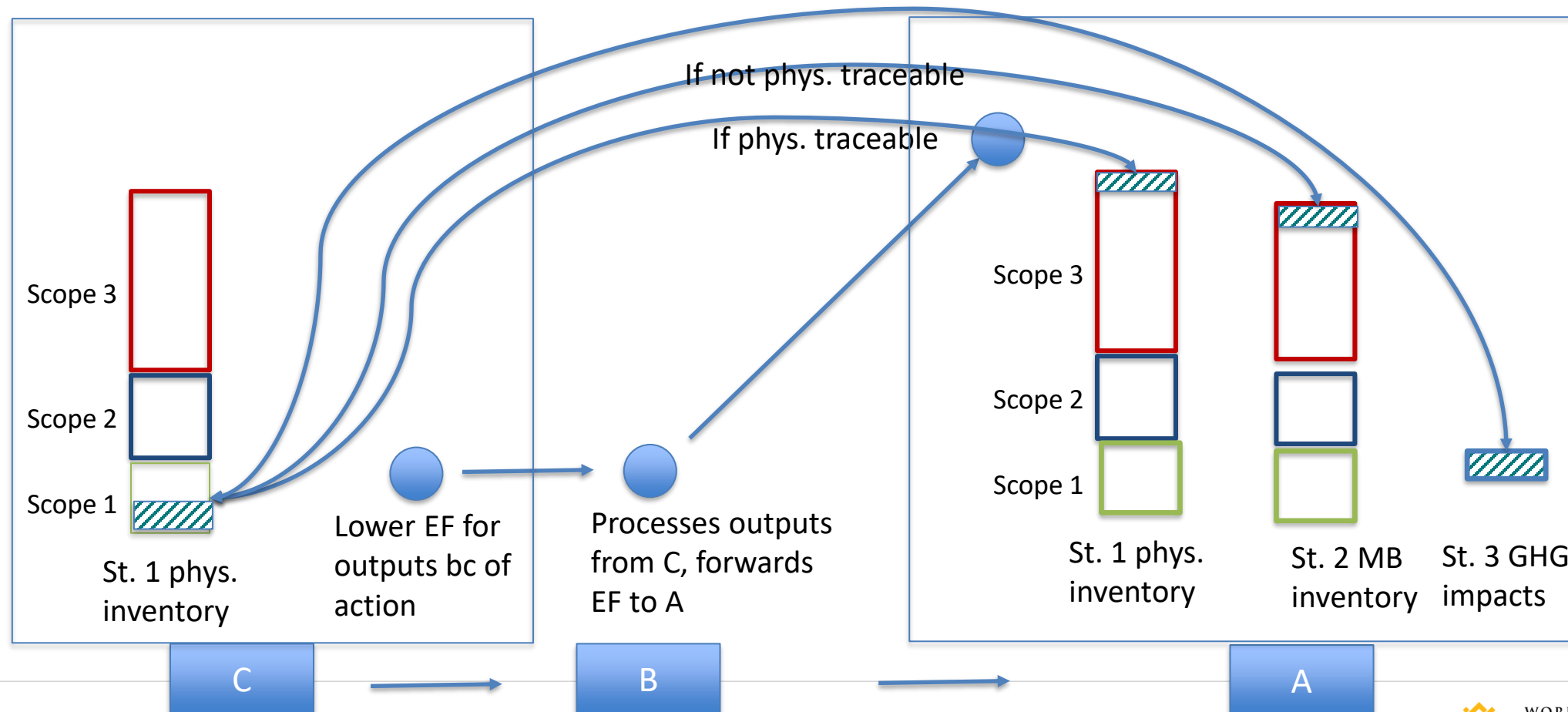


Scope 3 inventories can refer to the same impacted product or emission source, which provides **potential co-claiming options across the horizontal and vertical axis**. Hereby, the horizontal axis describes different steps or exchanges within a supply network, while the vertical axis is used for actors within the same step across a single or multiple co-products.

However, to avoid any **over or double counting** is important to consider **competitive usage and co-product allocation** in the network.

Company A finances an intervention at company C

Example: A finances a boiler replacement at C, reducing C's Scope 1 emission and thus also EF of products sold to B that are processed there to another product then sold to A.



Accounting:

- A can account for full impact of the action in its statement 3
- A can as well report a lower Scope 3 in either statement 1 or 2 due to lower EF in products received from B
- C reports lower Scope 1 emissions

Double counting between statements within one company

Statement 1 vs 2: For parts of the inventory where market instruments are not applicable, should companies 'fill in' their statement 2 with statement 1 to produce a 'complete' statement 2 inventory?

Statement 1 vs Statement 3 (non credits): Should companies report an action in statement 1 and also quantify and report the consequential impact of that instrument purchase in statement 3? Should that be required, optional, or prohibited?

Statement 2 vs Statement 3 (credits): Should companies report an instrument in statement 2 and also quantify and report the consequential impact of that instrument purchase in statement 3? Should that be required, optional, or prohibited?

In cases where one action/instrument has more than one GHG impact, how should that be reported in relation to statement 2 and 3? One type of impact in statement 2; separate impact in statement 3 (consequential impact relative to baseline scenario)

Example: building a renewable based boiler at a supplier

- Statement 3: set baseline, calculate baseline and project emissions → GHG impact in terms of avoided emissions (t)
- This project also has a (small) effect on reporting company's Scope 3 emissions as it sources products from that supplier that come with a lower carbon footprint per unit.
- Is it ok to report the full project in statement 3 while having some impact on Scope 3 in statement 1

Excerpt from New Climate Institute report

Accounting integrity depends on preventing double-counting and misattribution

- A central challenge for book-and-claim is ensuring that certificates reflect real, attributable emissions reductions without enabling double-counting or overstating impact. Many frameworks seek to address the potential risk of double-counting by applying residual emissions factors to products once their low-carbon attributes are sold. While this can preserve formal consistency in theory, ensuring its application is challenging and sometimes unrealistic in practice.
 - Consider the example of a new low emissions steel facility: a tech company from another country may purchase the green certificates, while a machinery manufacturer receives the physical steel but cannot market it as low emissions. This raises a fundamental question: should the machinery manufacturer report a 'higher than reality' emissions factor for the steel, even when it knows the physical product has lower emissions? If so, this risks distorting the physical inventory; if not, it risks double counting.
 - Moreover, the residual factor approach assumes that companies use bottom-up, verified supplier data. While this may be feasible for electricity, it is far less common for other emission sources, where companies rely on averages or estimates. As a result, the practical implementation of robust safeguards against double claiming remains highly uncertain.
- This double-counting challenge is not uniform across use cases.
 - For nascent technologies with very limited market penetration, the risk of distortion may be relatively small, as residual emissions factors would not differ significantly from sector averages.
 - However, for more mature technologies used in the context of traceability constraints, the risk of double-counting and misattribution becomes substantially more pronounced, and these tensions may be difficult to fully resolve in practice. This implies that, in such use cases, the application of book-and-claim may need to be limited to a relatively narrow set of cases where the potential for real impact is highest, and the use of residual emission factors remains practically feasible. In other contexts, the challenges to accounting integrity may outweigh the benefits.

Topic breakout: Operationalizing additionality

11:00 – 12:30



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Day 1: Quality criteria breakout group outcome

Additionality required for Statement 3

Draft text (note: we will update the text based on TWG member feedback received during the session)

- **Statement 3:** Actions and market instruments **shall** be additional, i.e. reflect emissions reduction, avoidance, or removal that would not have occurred in the absence of the reporting company's intervention (*Note:* specific additionality tests to be determined).
 - **Credits:** The greenhouse gas (GHG) emission reductions or removals from the mitigation activity **shall** be additional, i.e., they would not have occurred in the absence of the incentive created by carbon credit revenues. (ICVCM)
 - **Other actions:** Companies **shall** demonstrate that emissions reductions or removals from projects meet additionality requirements based on established frameworks or standards. (SBTi)

Day 2: Statement 2 design session outcomes

Topics agreed

- Three options were discussed:
 - 1) scope 2 from 2015 equivalent, 2) scope 2 approach from 2026 equivalent, or 3) additionality-based approach.
- Option 3 was agreed: Additionality required for Statement 2.
 - Principles level: Additionality is the principle for all sectors, that the system has to be designed to have impact. Details for how to operationalize it TBD including role for sector-specific approaches.

Next steps

- Breakout session: operationalizing additionality
- Explore sector-specific insights to determine the role for general approaches vs sector-specific approaches

Open questions

- Whether each sector can define and operationalize additionality as it suits its own sector – agriculture is different from fuels etc.
- What is the appropriate level of rigor for an additionality assessment
- Appropriate terminology: additionality vs impact
- Whether to have disaggregated reporting within statement 2 of deliverable/non-deliverable or gradations of additionality

Parking lot

- Clarify what goes in statement 1 and what goes in statement 2
- Base year for statement 2
- Eligibility criteria
- Reporting claims

Questions

- How to operationalize additionality for statement 2 and statement 3. Remaining questions to answer:
 1. Whether to call the quality criterion 'additionality' or 'impact'
 2. Design
 - A. Market-level or project-level assessment of additionality or either is allowed
 - B. Which additionality tests (9 options)
 1. Should the standard put forward (a small number of) additionality tests that are required of all?
 2. Should there be optionality in which additionality tests are used?
 - C. Who tests for it – system operator or certificate buyer or either is allowed
 - D. Level of rigor: what should be the level of rigor along a spectrum of additionality (balancing of false positives vs false negatives)
 - E. In addition to a minimum required threshold for additionality for an action/market instrument to be reported, whether to have disaggregated reporting within statement 2 of gradations of actions/instruments with more/less additionality/impact
 3. Whether any of the above questions are sector-specific and if so whether approach to additionality requirements should be sector-specific
 4. Role of AMI standard in defining principles vs details; whether to leave details for programs, third party standards, sector-specific standards to define further details building on AMI common principles

Additionality tests discussed in May TWG meeting (1/3)

Name of test	Short description
1. Legal, Regulatory, or Institutional Test	The outcome must not be required (or effectively required) by any official policies, regulations, guidance, or industry standards.
2. First-of-its-kind	The project must be the first-of-its-kind within a given geographical region.
3. Common Practice Test	The project must not be common practice within the jurisdiction where it is located.
4. Investment Tests	The project must not be financially viable or the most financially attractive option in the absence of the intervention.

Additionality tests discussed in May TWG meeting (2/3)

Name of test	Sub-type of test
Investment Tests	Simple Cost Analysis.
	Investment Comparison Analysis.
	Investment Benchmark Analysis.
	Change in financial metric test.
	Contract Duration. The duration of the contract must make a material difference to the financial viability of the outcome.
	'Procurement factor' showing that the revenue from an EAC exceeds a threshold percentage of the costs of renewable generation. Price of EAC/LCOE.
	The project must not have received any form of subsidy or government financial support.

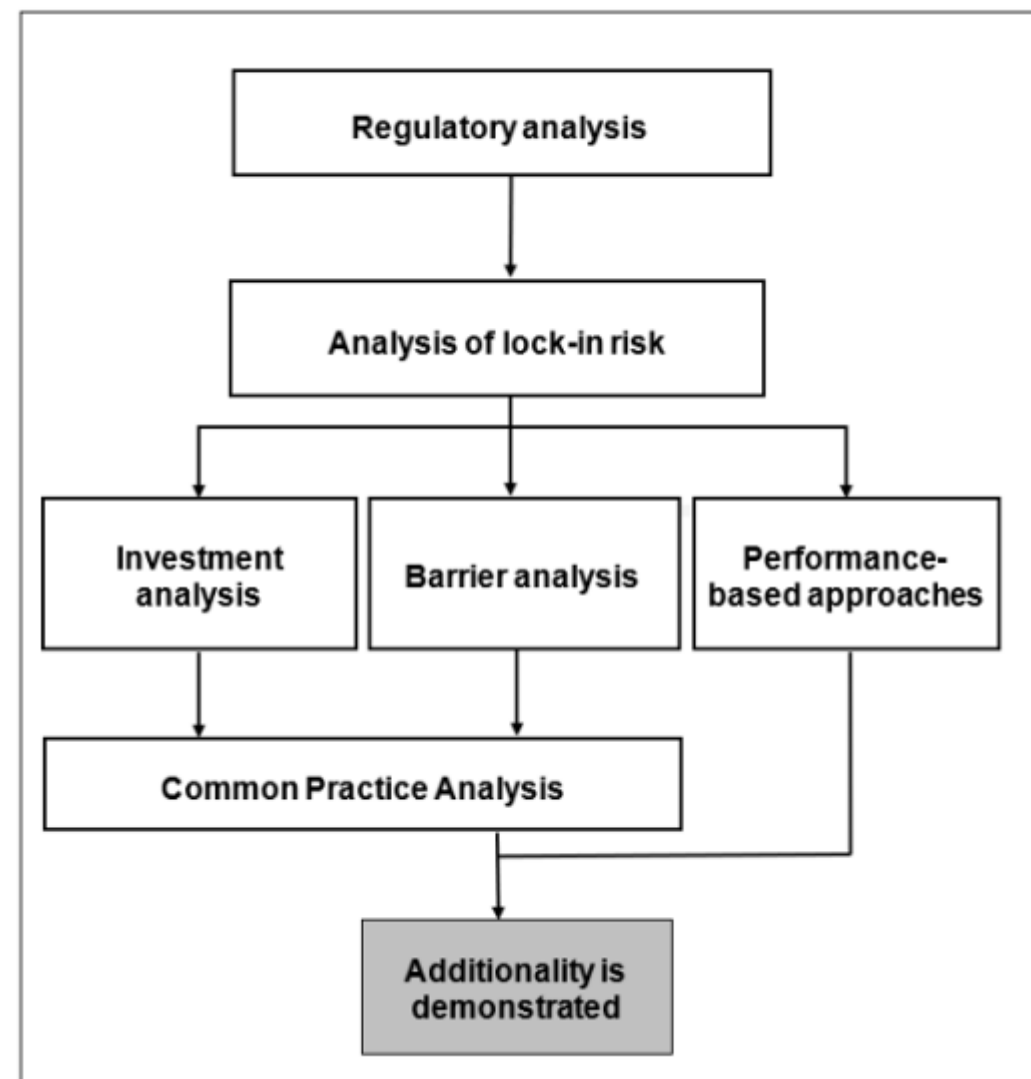
Additionality tests discussed in May TWG meeting (3/3)

Name of test	Short description
5. Timing Test	The timing of an outcome should reflect the temporal order or proximity of a cause-effect relationship for the outcome to be considered additional.
6. Barrier test	There must be barriers to a project that an intervention is able to remove.
7. Performance standard	The project achieves a level of emissions (or other performance metric) lower than a selected benchmark level.
8. Positive lists	Lists of project-types that are considered to be additional.
9. Quasi-experimental tests	Comparison of the project site to a control site(s).

Example: Article 6.4 Paris Agreement flowchart

- Article 6.4 of Paris Agreement uses multiple additionality tests to demonstrate additionality – tests are used in combination, not only one test since each has pros/cons/limitations

Figure 1. Flowchart of the approaches to demonstrate additionality



Additionality tests from other standards/guidance

- ISO draft text (14064-2 working draft): The following additionality tests **shall** be applied:
 - The project exceeds all regulatory and legal requirements; and
 - The project activity is not common practice; and
 - The project overcomes at least one identifiable barrier (e.g., financial, technical, or institutional)
- TCAT MAARG additionality tests
 - A) Is the mitigation beyond what is required by any enforced legal obligation?
 - B) Was the intent to generate mitigation outcomes documented before the activity started?
 - C) Was eligibility and additionality validated before registration or crediting?
 - D) Was at least one structured additionality analysis conducted and passed?"
 - D1) Investment analysis (The project is financially unattractive without mitigation incentives)
 - D2) Barrier analysis (Barriers to implementation were real and mitigation incentives addressed them.)
 - D3) Common practice analysis (The project type is uncommon in the sector/region)

Discussion: Statement 2

- How to operationalize additionality for statement 2 and statement 3. Remaining questions to answer:
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Discussion: Statement 3

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Annex: Additionality text from New Climate Institute report

Additionality requirements should differ by use case

- If book-and-claim is intended to finance interventions that would not otherwise occur, then certificate procurement should have a demonstrable causal impact on outcomes. However, the way this is demonstrated varies across use cases.
- For truly nascent or constrained technologies, additionality may be largely implicit and further additionality tests may not be needed. This logic relies on a high bar for demonstrating technology nascency and limited access.
- In contrast, for mature systems with traceability constraints, additionality cannot be assumed.
 - Evidence from existing renewable energy certificate markets suggests that short-term or spot purchases do not reliably drive new supply or system-level change in such cases. Further additionality tests are therefore needed.
- There are many different types of additionality tests, each with its own advantages and limitations.
 - Simple additionality tests, such as demonstrating that an intervention is not common practice or goes beyond regulatory requirements, may offer a practical screening function, but they do not necessarily ensure that interventions lead to meaningful system-level change.
 - A combination of multiple tests could offer more confidence that system-level impacts will occur.
- In some cases, additionality may be more credibly demonstrated where certificate procurement is linked to long-term offtake agreements or financing structures, as seen in fuel supply agreements for SAF, or long-term purchase power agreements (PPAs) for new renewable electricity installations. These arrangements can provide clearer evidence that revenues are directly enabling new production capacity, rather than simply reallocating existing supply.

Annex: Additionality text from New Climate Institute report

Conditions for scaling nascent technologies

- Where book-and-claim supports emerging technologies, its credibility depends on two conditions being met simultaneously.
- First, the technology must be genuinely nascent or geographically constrained. If it is already widely available, there is no clear justification for using certificates instead of direct procurement.
- Second, the technology must be aligned with net-zero pathways. Nascency alone is not sufficient; support should not reinforce incremental improvements that risk locking in high-emitting systems. For example, the possibility of using biomethane certificates to claim emission reductions from gas heating in manufacturing processes overlooks, and potentially distracts from, the fact that replacing gas-based heating systems is the long-term transition needed in these cases.
- These are joint conditions: one ensures that book-and-claim is used only where it is needed, while the other ensures it contributes to long-term decarbonisation. Treating them as alternatives undermines the rationale for this use case.
- One way to operationalise this may be through technology allowance lists linked to transition pathways and regularly updated. While promising, such approaches also raise governance challenges, as decisions on eligibility can define transition trajectories and may be subject to competing interests.

Breakout report back

1:15 – 1:45



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3 mini breakouts

Only briefly discussed during meeting; decided to delegate to subgroups post in-person meeting

Statement 2

1. Your task is to write down the (high level) claims that an **organization** likely wants to make when using Statement 2
2. You should come up with a written proposal. It should refer to GHG emissions.
3. Please also take into account which **instruments related claims** are needed for that
4. You've got 45 minutes

Statement 3

1. Your task is to write down the (high level) claims that an **organization** likely wants to make when using Statement 3
2. You should come up with a written proposal. It should refer to GHG emissions.
3. Please also take into account which **instruments related claims** are needed for that
4. You've got 45 minutes

Statement 2

1. Your task is to design options how tables for Statement 2 would look like in practice (e.g. a) just line items within scope 1,2,3 where market instruments are applied; b) full inventory with elements from Statement 1 where no market instruments used/applicable c) other options)
2. You should come up with a written proposal/tables
3. You've got 45 minutes

Case studies / examples

14:30 – 16:00 Cases – and how they would fit into Q Criteria, our traceability and additionality considerations



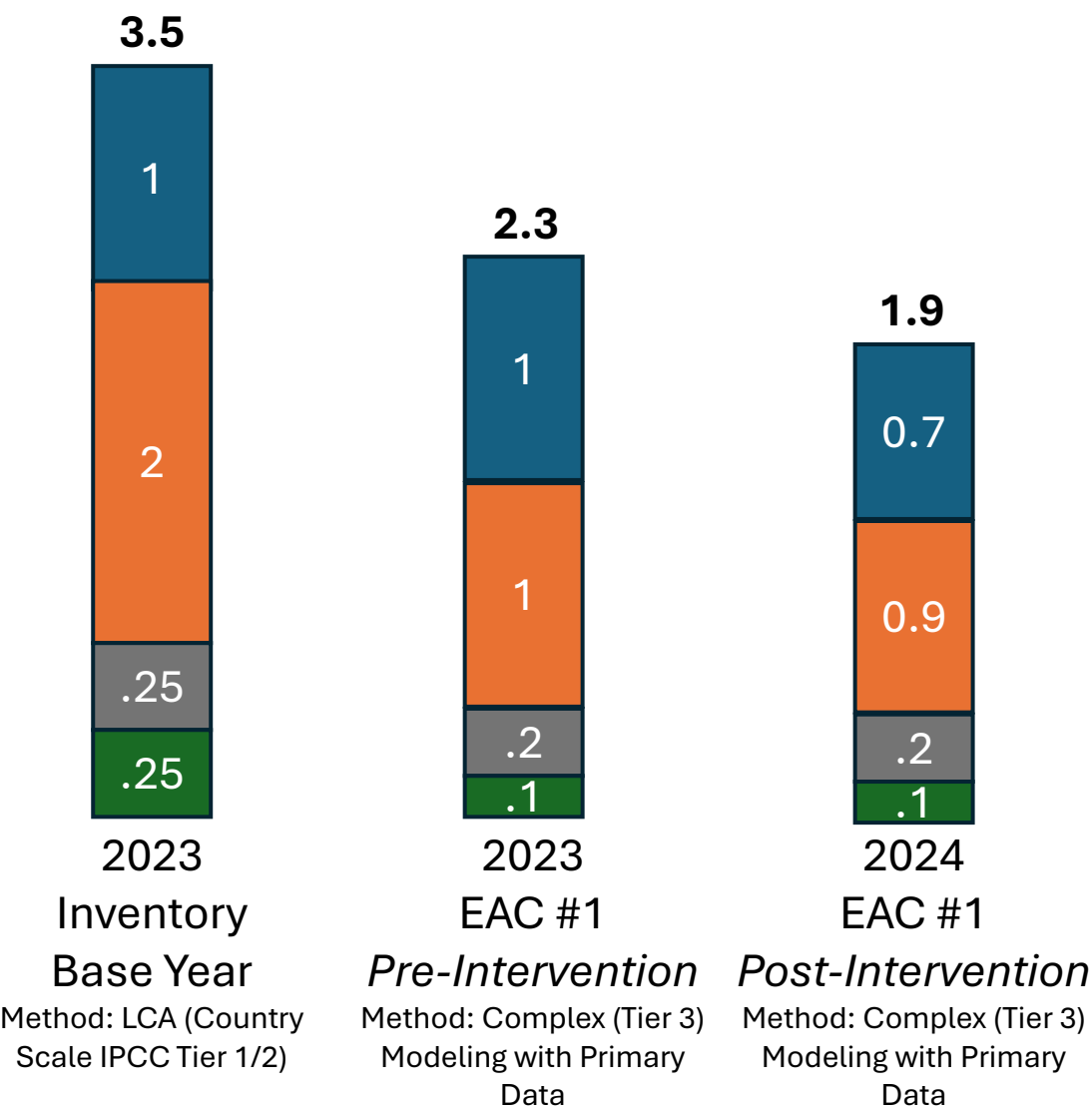
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Do we need a separate market-based inventory base-year?

Example: Corn Carbon Intensity (bushel/kg CO₂e)



Key

- Soil Organic Carbon Emissions

- N₂O (Direct/Indirect)

- Fuel/Energy Use

- Land Use Change

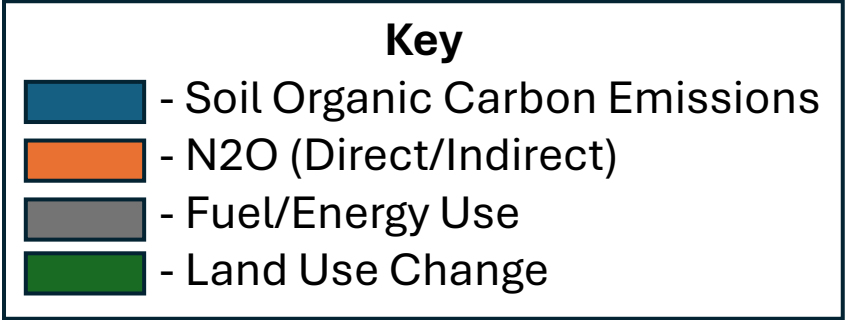
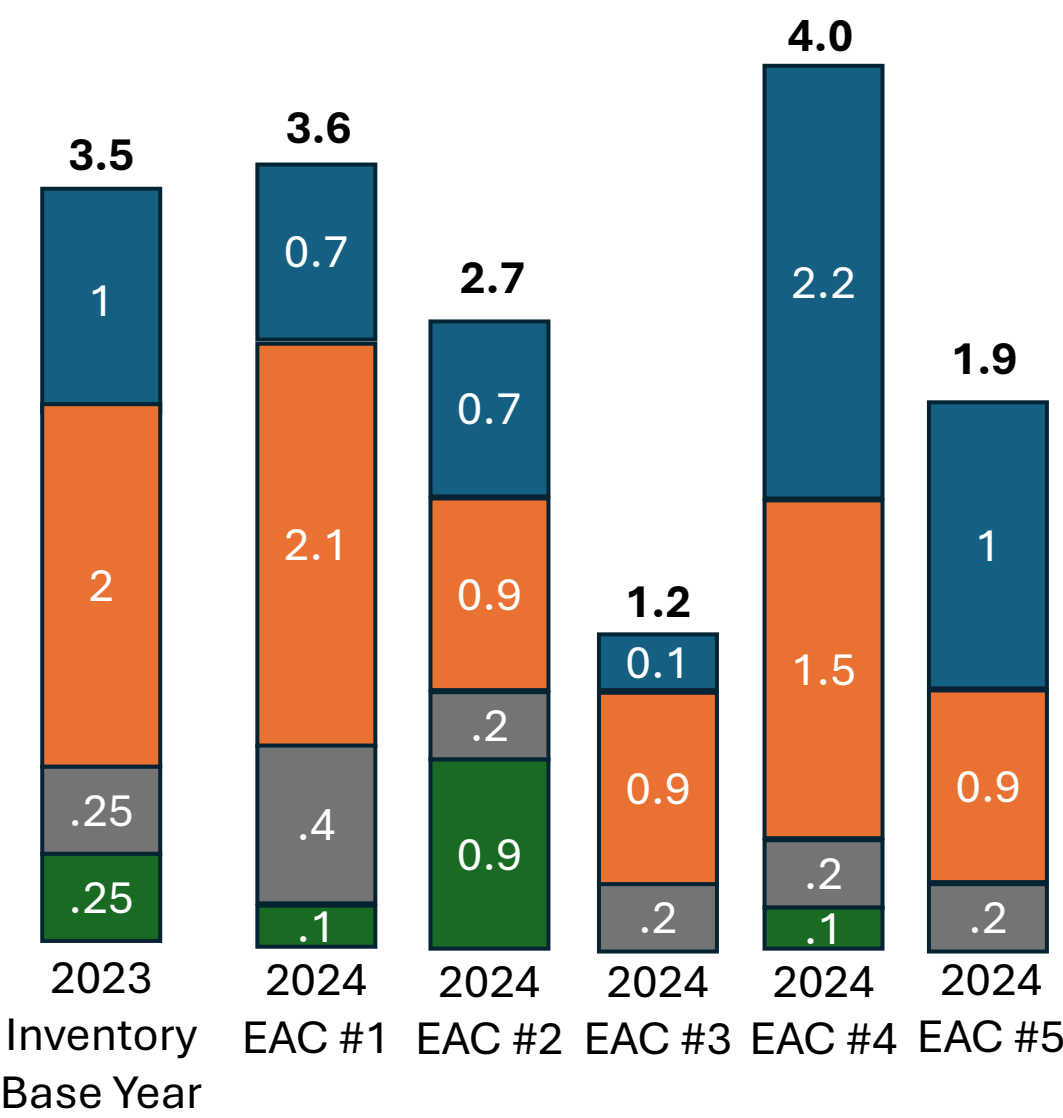
Problem: The 2023 physical inventory base year is not comparable to the 2024 EAC for the same product. *Comparison would over-estimate the impact of purchasing EACs.*

- Considerations:**
- EAC project is in a higher-yielding part of the country, which results in a reduced EF

- Questions:**
- Should we re-calculate the physical inventory base year for project volumes?
 - What if the pre-intervention year does not align with the inventory base year?
 - What if we don't purchase EACs in 2024 (and go back to using LCA values)?

Do we need a separate market-based inventory base-year?

Example: Corn Carbon Intensity (bushel/kg CO₂e)



Problem #2 - Scale: The company sources 3m bushels of corn each year – **and is engaged with 30 EAC generating-projects totaling 1m bushels per year**, *all using different methodologies with natural variation in yield/weather/soil also playing a role.*

Considerations:

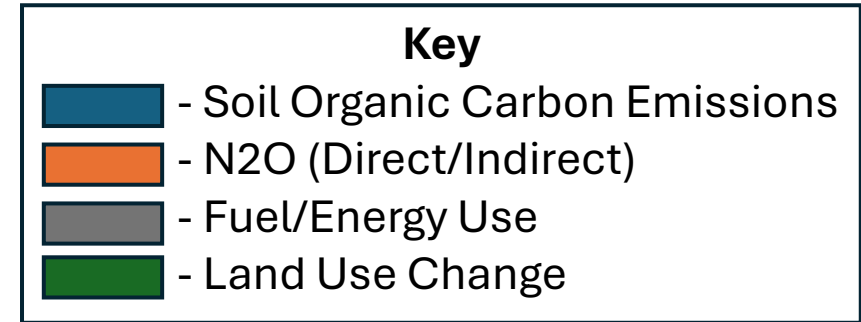
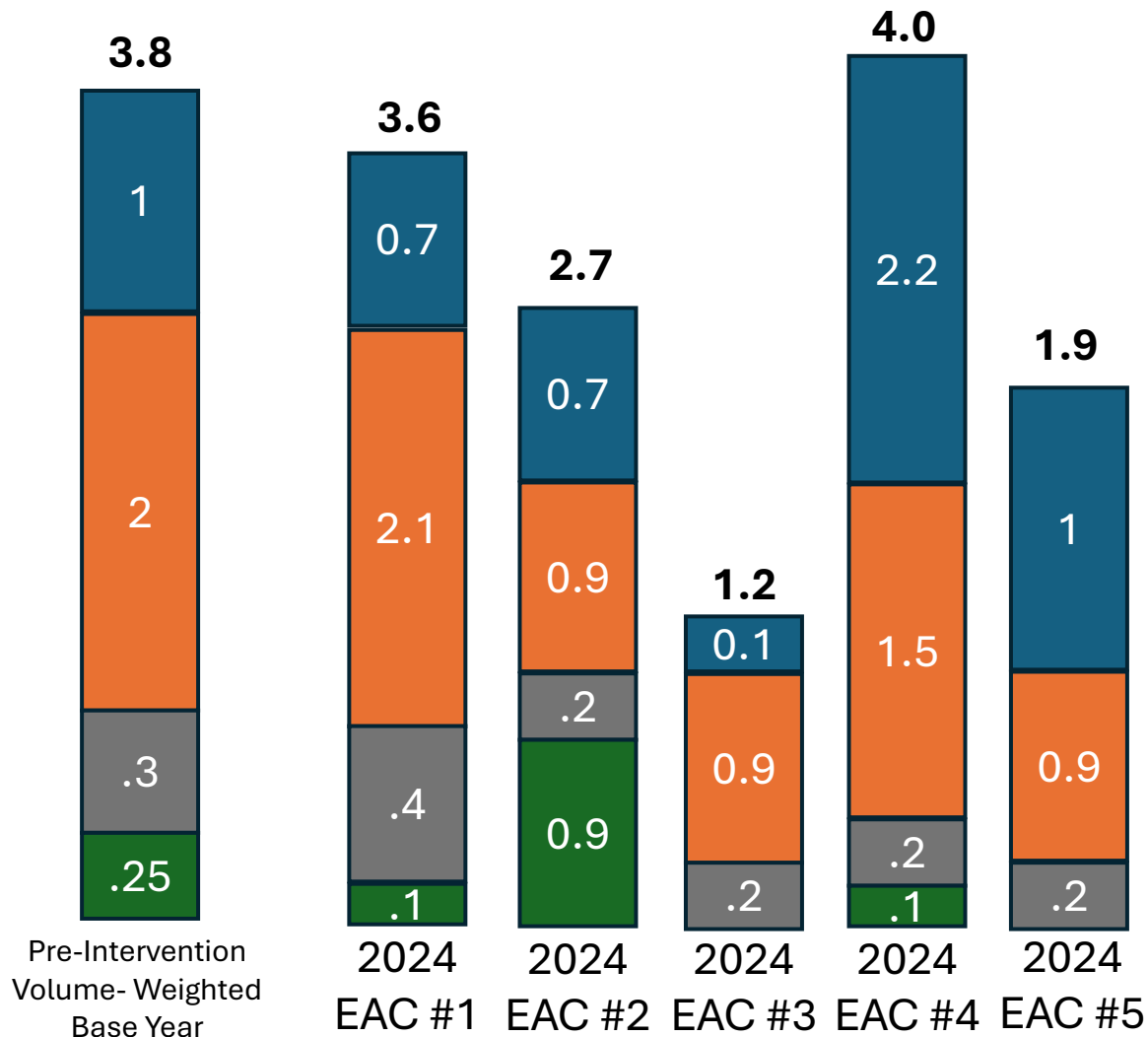
- Because they use different methodologies (approaches to primary data, models) the EACs are not really comparable.
- Yield differs a lot between the locations due to natural factors

Questions:

- If we recalculate the physical inventory, how should we weight the recalculation for multiple EAC projects?

Do we need a separate market-based inventory base-year?

Example: Corn Carbon Intensity (bushel/kg CO₂e)



Key Considerations:

1. The large variance in EAC EFs will make re-calculation essential to identify trends over time.
2. With a varying pre-intervention year establishing a single base year will be different due to data availability.

Final Questions:

- Should we have a stand-alone base-year for EACs?
- If we do have a stand-alone base year for EACS:
 - Should it be a single year?
 - Should it be a base-period (multi-year average)?

Takeaways

- Due to variance in methodology and natural variation (for the land sector) direct comparisons of the physical inventory to the market-based statement will be difficult.
- Just having one base year is difficult when considering the time series (if I don't buy EACs from the same project every year, it is impossible to have a single base year that is comparable to all inventory years until a target is reached)
- A base year for the market-based statement may be needed.
- More work (a sub-group?) is required to evaluate this challenge.

Next steps and path forward

16:30 – 17:00



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Thank you!

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