Forest Carbon Accounting TWG Second Plenary Session

Meeting 9

Date: March 13, 2025

Time: 16:00-18:00 UTC, 17:00-19:00 CET, 21:30-23:30 IST, 11:00-13:00 EST

Location: Virtual *(The full recording of the Zoom meeting has been made available on SharePoint for all TWG Members to access)*

Attendees

Technical Working Group Members

1. Antti Marjokorpi, Stora Enso Oyj
2. Charles Canham, Cary Institute
3. Jiaxin Chen, Ontario Forest Research Institute
4. Lucine Courthaudon, SBTi
5. Nathan Truitt, American Forest Foundation
6. Natasha Ribeiro, Eduardo Mondlane University (Mozambique)
7. Nicolas Gordon, CMPC
8. Pippa Notten, The Green House, University of Cape Town
9. Tim Searchinger, WRI/Princeton University

Guests

N/A

Secretariat team (GHG Protocol, EY)

1. Amir Safaei, WBCSD – GHG Protocol
2. Matt Ramlow, WRI – GHG Protocol
3. Alejandra Bosch, GHG Protocol
4. Oliver James, GHG Protocol
5. Adrien Portafaix, EY
6. Ishita Chelliah, EY
7. Johannes Tinter, EY
8. Francois Binard, EY
9. Weza Bombo Joao, EY

Documents referenced

- N/A

Summary

Item	Topic and Summary	Outcomes
1.	**Housekeeping and Session Introduction** The Secretariat provided an overview of the agenda and objectives and aimed to clarify approach definitions and ensure alignment on key elements.	• Members can submit additional comments on the three approach proposals by March 18th.
2.	**Approach #1: Managed Land Proxy – Discussion on Methodology** This section centered on advancing understanding of the Managed Land Proxy (MLP) approach, including definitions of managed and unmanaged lands, spatial and temporal boundaries, and how emissions and removals are allocated across scopes	• N/A
3.	**Approach #2: Activity Based Approach – Discussion on Methodology** This section centered on advancing understanding of the Activity-based accounting (ABA), highlighting the importance of distinguishing anthropogenic emissions from natural fluxes, the use of counterfactual baselines, and the need to transparently reflect management and harvest practices within Scope 1 and Scope 3 accounting.	• N/A
4.	**Approach #3: Option 1B – Discussion on Methodology** This section centered on clarifying Option 1B, a hybrid reporting framework that integrates outputs from the MLP and ABA approaches, emphasizing its role in structuring how emissions and removals are reported.	• N/A
5.	**Closing Remarks** Comments from this session would be integrated into the working documents ahead of the next session, with main authors of the proposals refining the methodology and the next small-group discussions are planned to address remaining issues.	• N/A

Discussion and outcomes

1. Housekeeping and Session Introduction

- The session agenda included discussions on the FCA process and approach definitions for MLP, and ABA methodologies.
- Clarification was provided on the accounting approach in line with Greenhous Gas (GHG) Protocol guidance.
- The objectives for the plenary session were to align on approach statuses, understand areas of agreement, and determine unresolved issues for Phase 3 discussions.
- The discussion on the MLP submission included feedback from various TWG Members, with presentations structured around eight elements.

Discussion

- The Secretariat informed the group that a few Members would not be able to attend the session. It was noted that these Members would have the opportunity to provide their input via email or a written submission on relevant areas after the session. The Secretariat emphasized the importance of maintaining a safe space for discussions and ensuring that no confidential information is disclosed. Additionally, Members were encouraged to engage in open and honest dialogue on all topics. The Secretariat announced that one of the TWG Member had withdrawn from participation and welcomed also a new TWG Member.
- One TWG Member introduced themselves as part of the Science Based Targets initiative, working on FLAG guidance and related land sector workstreams within the sector standards team. The Member stated having joined SBTi in 2023 and expressed enthusiasm for learning more about forestry-related topics.
- The Secretariat proceeded to address the meeting minutes' communication. It was noted that while the Terms of Reference (ToR) initially stated a five-day turnaround for meeting minutes, the close scheduling of sessions made it challenging to adhere to this timeframe. As a result, the Secretariat proposed extending the deadline to ten working days after each meeting. Additionally, it was confirmed that the last session's minutes had been uploaded to SharePoint.
- The Secretariat presented an overview of the agenda for the session. It was mentioned that the objectives of the FCA process and plenary session would be outlined in response to queries from the previous session. Each approach—MLP, and ABA—would be discussed for up to 45 minutes. The Secretariat stated that each session would begin with a briefing by the key authors, followed by a 35-minute discussion covering eight key elements. Furthermore, it was highlighted that the Secretariat would introduce the hybrid option submitted by a subgroup of the TWG Members, who was unable to attend, and the session would conclude with next steps and timelines.
- The Secretariat addressed a question from the last session regarding the accounting approach in alignment with GHG Protocol guidance. It was stated that the Secretariat had responded to this query via group email on February 24th, and key points from his response had been summarized in the presentation. The Secretariat reiterated the FCA Technical Working Group's objectives, including defining problem statements with examples, refining existing options, and proposing new solutions for reporting forest management emissions and removals while adhering to GHG Protocol decision-making criteria. In addition, the Secretariat noted that alternative versions of the approach would need to address primary concerns raised by Members. The session also provided references for Scope 3 definitions, with links to relevant sources included in the presentation.
- The Secretariat outlined the high-level objectives for the plenary session, emphasizing the need for clarity on approach definitions. It was mentioned that the previous small group sessions had led to three submissions and corresponding comments in our working document. The Secretariat indicated that the floor would first be given to the authors of each submission for a ten-minute presentation, followed by a discussion on seven defining elements. The session's goal was to align on approach statuses, reach a shared understanding of agreed aspects, and identify open points requiring further discussion in Phase 3. The Secretariat stated that documents would remain open for comments until March 18th, allowing for additional feedback. The ultimate objective was to develop a single proposal—either a consensus or multiple proposals—moving forward with mutually acceptable compromises.

- The Secretariat introduced the discussion on the MLP submission, which had been provided by a subgroup. The Secretariat explained that the slides structured the approach around eight elements and included feedback from EY and TWG Members.

Outcomes (e.g. recommendations, options)

- Document Review and Feedback**:** Members have five days (until March 18th) to provide additional comments.

2. Approach #1: Managed Land Proxy – Discussion on Methodology

- The discussion focused on the MLP method for inventorying carbon stocks, emphasizing differentiation between managed and unmanaged lands, including the implications of historical land-use practices, and how accurate differentiation impacts the allocation of carbon emissions and removals within Scope 1 and Scope 3 accounting frameworks.

Discussion

- One TWG Member started presenting on behalf of the subgroup MLP and explained that all land-based carbon pools are accounted for through observations. The inventory is assembled by measuring forest carbon stocks across all eight pools at two different time points and reporting the difference. Observations are conducted through direct measurements, such as remote sensing or field-based methods to account for aboveground biomass, or estimated using factors from published research and modeling approaches, particularly to account for soil carbon, which is not directly observed but modeled based on aboveground biomass observations. It was emphasized that different stock change or gain-loss approaches impact the ability to distinguish anthropogenic effects. The discussion then moved to spatial boundaries, where it was noted that in Scope 1, companies measure only the land they own and manage, companies can exclude conservation lands. In Scope 3, sourcing regions are defined by raw timber supply areas, with safeguards ensuring that national parks or unmanaged lands are not included in calculations because they are not providing timber. The company would then estimate emissions or removals from the remaining lands, and allocate to specific raw timber supplies coming out of that area. MLP could be improved by including additional safeguards.
- The TWG Member addressed temporal boundaries, explaining that the GHG protocol provides an annual snapshot of carbon fluxes without requiring causality. Instead, emissions and removals are allocated to different corporations. The TWG Member considers that inventory systems cannot distinguish between anthropogenic and natural effects because it is reporting stock changes without specifying what caused the stock change, and instead, adjustments should be made to target-setting frameworks rather than inventory methodologies. The TWG Member affirmed the need to prevent biogenic removals from being used to offset fossil fuel emissions, as this could lead to misleading claims. The importance of clear distinctions in GHG protocol language to reinforce this principle was reiterated.
- Regarding baselines, the TWG Member noted that inventory baselines differ from counterfactual baselines. In Scope 3, baselines must be updated when suppliers change, land is divested, or new acquisitions occur. The methodology was reviewed, with a focus on improving safeguards within sourcing regions to avoid counting removals from unmanaged lands.
- The TWG Member concluded with implementation requirements, highlighting the need for accurate inventories of forest carbon stocks and/or credible removals or emission factors related to management activities, and clear distinctions between managed and non-managed lands. There is potential for enhancing the managed land proxy to provide better guidance for target-setting and ensuring stricter controls on sourcing regions was also emphasized.
- The Secretariat emphasized that the goal was to ensure that everyone had a common understanding of the managed land proxy approach.
- The Secretariat opened the floor to immediate comments directly addressing the presentation or questions regarding specific elements of the approach that had been presented.

- One TWG Member stated having continued to struggle with the distinction between managed and unmanaged land. The Member pointed out that in any region where the demand for wood products was less than the supply, meaning where the harvest volume was lower than the gross growth, the method would report net removals. The Member questioned whether the concept was as simple as it seemed, suggesting that the proxy would automatically indicate net removals in such scenarios.
    - One TWG Member responded by restating the question and confirming that in a region where demand for wood products was less than production, the situation described would indeed occur. However, the Member added that there were two possible exceptions. The first was if the managed land is narrowed (in terms of its spatial scale), which could either reduce the oversupply or potentially eliminate it. The Member then speculated that only a certain percentage of the forests in the Northeast—hypothetically 40%—were actually supplying timber products. If calculations focused solely on that 40%, the results might differ.
    - One TWG Member disagreed, stating that there was not as simple boundary between managed and unmanaged. The Member explained that some areas remained unmanaged due to economic and geographic constraints. Many forests were located on marginal soils, far from roads, or otherwise uneconomical to harvest, which made them effectively unmanaged, even if owned by private landowners. The Member emphasized that this was not unique to the Northeast but applied to the entire Eastern U.S.
    - One TWG Member acknowledged these points and referenced an IPCC report that illustrated this challenge. The report contained a diagram showing the difficulty in defining managed land, depicting a continuum with reserves on one end (clearly unmanaged) and plantations on the other (clearly managed). The Member described how the middle section of the diagram was a gray area, where determining whether land was managed or unmanaged was highly contested.
    - One TWG Member continued the discussion, emphasizing that the reality was even more complicated than theoretical classifications. The Member explained that the long history of land use in the Eastern U.S. contributed to the current surplus of growth over harvest. The Member referenced past shifts in industry practices, such as the closure of paper mills and the importation of lumber from Canada, which significantly altered local harvesting dynamics. The Member elaborated on this historical context, stating that the Eastern U.S. had gone through a wave of land-use changes where forests were clear-cut, allowed to regrow, and later integrated into the timber economy under different conditions. The Member argued that trying to impose a strict definition of managed land failed to account for these long-term patterns.
    - One TWG Member responded from a European and Nordic perspective, stating that the situation was quite clear. The Member explained that certain areas are productive forest lands that are actively managed, either directly by companies or through purchases from private forest owners. The Member emphasized that in cases where the annual harvest is less than the annual growth—a common occurrence in these regions—a surplus is created. The Member noted that there were relatively few 'gray zones' in this context, as set-aside areas and reserves were explicitly excluded from the calculations. The TWG Member reaffirmed the complexity of the issue and noted that while more specific definitions could improve the methodology, some level of arbitrariness would always remain. The Member pointed out that many private landowners actively manage their forests with the explicit goal of increasing carbon stocks over time, while also conducting occasional timber harvesting.
    - One TWG Member agreed but reiterated that even in cases where landowners intended to manage their forests, economic realities often dictated whether management was feasible. The Member emphasized that these complexities made the distinction between managed and unmanaged land difficult to standardize.
    - The Secretariat stated that the definition of managed or unmanaged land is a crucial aspect of the approach and will have a significant impact on the results. The Secretariat emphasized that this definition remains an open point in the discussion and requires further clarity.
- A TWG Member introduced a second question, explicitly stating it was still unclear how the harvest activity itself influenced the net carbon balance across any defined geographic or spatial boundary. The Member emphasized that, particularly in the Eastern U.S., reducing harvest would clearly increase net removals from the land due to the successional status of Eastern forests and the historical land-use patterns spanning approximately 200 years. The Member expressed strong support for managing these forests more effectively and praised ongoing efforts like the family forest carbon program. However, the Member expressed personal discomfort with the conclusion that harvesting inevitably reduces net

carbon balance, despite strong personal advocacy for forestry. The Member underscored that scientifically and numerically, all reviewed evidence indicated that reducing harvest could increase net carbon sequestration, making it impossible for the Member to avoid concluding that harvesting negatively impacted GHG balance on those lands.

- A TWG Member responded by fully agreeing with the previous Member's points but clarified they did not see this as a challenge to the MLP approach. The Member specifically restated the point that harvesting in the Northeast reduces net carbon sequestration, noting clearly that if no harvesting occurred, carbon sequestration would be higher, whereas with harvesting, sequestration is lower but still present. The Member believes that the MLP explicitly accounts for this scenario.
- The Secretariat acknowledged the importance of the ongoing discussion but requested participants focus specifically on clarifying and leveling understanding of the methodology itself, recognizing the need to somewhat separate broader discussions.
- One TWG Member raised a methodological detail concerning scope 3 accounting, stating it seemed entities had flexibility in defining sourcing areas, giving examples such as the Northeastern U.S., the entire U.S., Maine, or a specific group of suppliers. The Member pointed out that selecting sourcing areas would significantly influence how carbon-negative or positive the resulting accounting would appear under scope 3. The Member directly sought confirmation from the TWG Member, querying if the wood harvested was effectively treated as carbon-negative when forests had a net positive growth, resulting in more negative carbon values with increased harvesting.
- One TWG Member addressed the previous question by clarifying that selecting sourcing regions was not entirely arbitrary. The Member explained, referencing the land sector removal guidance, that entities must justify sourcing region choices, typically by identifying specific counties from which mills source wood. The Member acknowledged the potential for system manipulation and suggested refining safeguards further could be beneficial. The Member expressed interest in working collaboratively with the TWG Member on improving distinctions within data from sources like FIA, acknowledging inherent difficulties in defining entirely satisfactory boundaries. Additionally, the Member clarified that certain sourcing regions, especially west of the Mississippi, typically resulted in emissions rather than removals. The Member also addressed that wood is not carbon-negative or carbon-positive within inventory accounting (and differed to others regarding how it would work in LCA accounting) and clarified that, in this context, the MLP allocates emissions or removals at an enterprise level rather than inherently assigning carbon-neutrality or negativity directly to the wood itself. The Member explained that while more harvesting could lead to greater allocation of forest carbon removals, it would occur on a decreasing scale, consistent with earlier points raised by the previous TWG Member about net sequestration reduction due to increased biomass removal.
- One TWG Member considers that under scope 3 accounting, emissions are directly assigned to the product itself, inherently making it a product-level calculation. The Member stated that assigning removals to products could lead to net-negative emissions associated with the products. The Member challenged the distinction made between product and enterprise-level accounting under scope 3, considering scope 3 inventories are the sum of the emissions or removals of products. Regarding the sourcing area, they noted the difficulty in tracing individual wood products, given widespread uncertainty regarding specific sourcing, particularly for large retailers.
- One TWG Member responded, clarifying that under existing land sector removal guidance, scope 3 removals require explicit traceability to specific sourcing regions, thus limiting the ability of companies unable to trace their wood products to claim removals.
- One TWG Member sought clarification on what emissions would be associated with wood products if traceability were unavailable, questioning how carbon neutrality would be assigned if adjacent area removals were counted instead.
- One TWG Member explained that the MLP was designed to allocate emissions and removals at the entity level. The Member acknowledged that one method for achieving this involved calculating emission or removal factors per product, multiplied by the product quantity. However, the Member emphasized that product-level calculations were a proxy and not strictly necessary if explicit physical traceability to specific forest management units were possible.

    - One TWG Member disagreed, reiterating that scope 3 accounting involved summing product-level emissions and removals. The Member stated that if no removals were assigned to wood products, the wood products would inherently be treated as highly carbon-negative, indicating a contradiction in the stated methodology.
    - The Secretariat indicated that the details on traceability would be addressed in upcoming small group sessions.
    - The Member clarified that the issue was not about traceability but fundamentally about assigning emissions to purchased wood products, stressing that the current method involved summing product-level emissions. The Member questioned how emissions would be assigned if traceability were not possible.
    - The Secretariat acknowledged the TWG Member's point as fair and provided context about pilot testing conducted to understand company approaches to defining sourcing regions. It was highlighted that companies frequently based sourcing regions at state or provincial levels due to limited available data, encountering challenges in classifying lands clearly as managed or unmanaged. Results generally indicated net removals, with a few scenarios showing net emissions. The Secretariat noted significant difficulties in achieving traceability to specific land management units due to varying spatial scales and recognized the inherent challenge in defining sourcing region boundaries, suggesting openness to additional safeguards.
- One TWG Member clarified raising a different issue separate from traceability, specifically whether removals from adjacent lands should inherently be attributed to the emission estimates of the product. The Member emphasized that wood products inherently remove carbon from forests and questioned whether CO_2 removals from adjacent lands should be integrated directly into product emissions. Instead, shouldn't these CO_2 removals from adjacent lands be accounted for separately from the carbon loss at harvest associated with the wood product? The Member indicated these as fundamentally distinct questions.
    - The Secretariat refocused the discussion on accounting at a corporate level, specifically scope 1, emphasizing the need to understand how emissions and removals are calculated. The Secretariat noted that scope 3 implementation was a separate challenge for future discussion.
- One TWG Member provided several comments based on the discussion, stating that as forest owners they have a clear identification of what is managed and what is not managed. The Member acknowledged there might be global differences and emphasized the importance of finding a universally workable solution rather than something perfect for one particular scenario. The Member stated clearly that forest situations differ significantly worldwide and that as forest owners, the identification of managed versus unmanaged lands is well-known to them, though safeguards might be needed to address reporting issues in specific regional situations. The Member further commented on sourcing regions, highlighting involvement with EUDR and strongly disagreed with previous statements, noting significant advancements in geolocation technology, allowing precise identification of sourcing regions down to the square meter. The Member pointed out this detailed disclosure was required by law starting January 1st in the European Union. The TWG Member stressed the relevance of such precise data, as the managed land of forest owners directly informs their customers' scope 3 emissions. Lastly, the Member provided an example regarding the consideration of bio-based products as replacements for fossil-based inputs, strongly asserting that the removals from bio-based products must be included in scope 3 calculations. The Member emphasized this was crucial when a company shifted from fossil-based products to bio-based alternatives.
- The Secretariat agreed with earlier comments about allocation of emissions and removals to products but suggested this discussion was broader than just the managed land proxy method and relevant also to ABA. It was highlighted that the current focus should be on corporate-level reporting, suggesting any implications at the product level should be detailed separately without distracting from the main corporate-level focus. It was also noted that the product-level implications might be managed through alternative means.
- The Secretariat raised a methodological query regarding data use for above-ground biomass and soil carbon storage.
    - One TWG Member explained that soil carbon storage data is often modeled, potentially using decades-old data, thereby affecting the extent to which anthropogenic effects are captured. The Member detailed the U.S. Forest Inventory Analysis (FIA) methods, indicating soil carbon pools are modeled based on limited sampling and projected from above-ground biomass

observations. It was mentioned that five of eight carbon pools were modeled this way and recognized significant variability in data quality and methodology internationally.
    - One TWG Member shared more on the necessity of using models for extensive forest areas in North America, emphasizing sampling and modeling as the only feasible methods. The Member provided a detailed example involving wood pellet production companies that recently entered sourcing areas in the U.S. and Canada. The Member highlighted challenges in defining the appropriate sourcing areas and baseline periods, particularly considering new production facilities. The Member questioned whether increased harvesting within defined sourcing areas should be considered carbon-neutral or negative when biomass is used for pellet production. The Member pointed to research suggesting that achieving carbon neutrality through biomass substitution for fossil fuels could take decades or even a century (due to the carbon debt payback period for trees to regrow), highlighting this as a significant challenge to the MLP approach.
    - The Secretariat summarized previous comments, identifying a significant challenge rather than a methodological query.
    - One TWG Member agreed that the managed land proxy could not solve the discussed challenge and recommended an insightful blog post by Michael Gillenwater to understand differences between allocational and consequential accounting. The Member clarified the common misconception about the managed land proxy making wood carbon neutral, explaining that inventories merely allocate fluxes without making any claims. The Member emphasized the legitimacy of questioning the claims that can be based on inventory data, particularly regarding carbon neutrality derived from biogenic removals. The Member concluded by highlighting that inventories simply demonstrate carbon fluxes within defined geographies and timeframes, leaving the determination of claims to downstream users.
    - The Secretariat intervened to halt the current discussion, clarifying that the raised points were challenges meant for subsequent discussions.
- The Secretariat acknowledged a TWG Members question in the chat on accounting for fires as significant but suggested this was related to differentiating natural from anthropogenic effects.
    - One TWG Member quickly addressed the question about accounting for fires, specifying that accounting practices would treat fires the same as timber harvests, pests, or wind throws, without judging their anthropogenic nature. The Member explained that if a forest experienced an arson-related fire, clearly out of the landowner's control, it would still be reported as an emission, purely based on observed carbon fluxes without judgments on company responsibility or alignment.
- The Secretariat indicated the methodological clarity regarding the previous answer and posed a methodological question about sourcing data for scope 3 emissions from regional databases and emission factors.
    - One TWG Member noted the complexity of global data availability. The Member highlighted that Members from countries with strong forest inventory systems, such as the U.S. and Canada, have good access to detailed data. The Member explained that, despite technical use of emissions factors, data from sources like the U.S. FIA generally provided direct outputs of carbon pool changes, with underlying models using emission factors behind the scenes.
    - The Secretariat sought clarification on whether some global regions might lack emission factor data.
    - One TWG Member acknowledged the Secretariat's question as significant and raised the possibility of using remote sensing as a reliable alternative for regions without adequate inventory data. The Member described how companies previously managed reporting before LSRG, noting companies reported zero for positive net sequestration and carbon storage in wood products as removals. The Member detailed the shift due to LSRG guidelines disallowing carbon storage reporting as removals, questioning alternative reporting solutions for net stock changes in forests. The Member suggested revisiting previous systems if the current proposal was unsatisfactory.

<u>Outcomes (e.g. recommendations, options)</u>

- N/A

3. Approach #2: Activity Based Approach – Discussion on Methodology

- The discussion focused on the ABA method with the importance of distinguishing anthropogenic emissions from natural fluxes, clarification on Scope 1 and Scope 3 accounting, including how management and harvest practices should be separately and transparently reflected in inventories and counterfactual baselines were discussed in detail.

Discussion

- One TWG Member began by stating wanting to start by saying that the presentation did a good job of making the issue very concrete. The Member explained the fundamental question as whether emissions in an inventory are anthropogenic or simply whatever happens on the land. The Member referred explicitly to the language in the 2006 IPCC reporting guidelines, highlighting that anthropogenic emissions and removals included in national inventories are a result of human activities. The Member emphasized that the causal definition is key, indicating the effect must be something caused by human activity, further pointing out that this distinction between natural and anthropogenic emissions directly follows from the data used to quantify human activity.
- The Member explained that the fundamental issue is whether an inventory reports changes in carbon simply occurring on the land that happens to be owned, or if the changes actually result from human activity. The Member considers this was not an issue between consequential and attributional accounting, but simply an effort to determine what is the result of human activity.
- The Member then clarified the approach by thinking it must be most useful to divide the effects of harvest from the effects of management because one can occur separately. The Member detailed the effect of harvest by noting one would track harvested wood and what happens to the carbon, accounting for all carbon pools, including carbon stored in wood products. The Member acknowledged this would require a policy judgment, recommending evaluating changes after 30 years, which the Member described as a policy judgment rather than a technical judgment about forests.
- The Member elaborated further on this approach, calling it the committed emissions approach, noting that it accounts for all emissions likely to occur from harvest through 30 years due to decomposition of slash, paper, and other products. The Member stated this approach is designed to credit wood products that continue to store carbon over time and differentiate between products. The Member also described an optional factor for regrowth, explaining it would consider net additional growth compared to what the forest would have achieved if unharvested.
- Moving onto management, the Member acknowledged the complexity of accounting for past management activities. The Member highlighted that people might wish to credit management practices that increased growth in the past, and agreed it was fair but posed challenging questions regarding timing and the historical costs of past harvests. The Member introduced a principle where land ownership should not influence carbon accounting, and clarified their approach follows a UNFCCC model, focusing on management changes since 1990, consistent with Kyoto Protocol principles.
- For short rotation plantations, the Member noted that plantations are similar to agricultural crops in their rapid rotations. The Member recommended evaluating plantations by comparing carbon stored during plantation life against carbon stored if land were allowed to regrow naturally, or allowed to remain a native vegetation, calculating the carbon cost based on the annualized difference over a standard 30-year period.
- Regarding sourcing areas, the Member stated the forms of management that occur within that area is more important than trying to determine where the wood comes from and establishing detailed traceability to specific plots, due to common mixing and limited traceability. However, the Member clarified if traceability to an individual mill was available, those specific carbon costs could be used.
- For scope one accounting, the Member explained it represents the net effect of harvest and management. Increased growth rates due to management are counted positively, whereas harvesting that reduces carbon stocks is counted negatively. Not the net growth, but the effect of management on the growth vs harvest of the growth, factoring all carbon pools including wood products. The Member also mentioned the concept of smoothing emissions over time to fairly reflect harvesting patterns, especially for smaller producers.

- Lastly, the Member discussed afforestation, indicating the approach credits carbon stored from establishing new forests on agricultural land but requires calculating leakage costs from displaced agricultural production
    - In the chat during the initial presentation a TWG Member shared their understanding that most countries with significant forest-related activities possess some form of inventory and corresponding emission factors, which are frequently utilized in their Nationally Determined Contributions (NDCs). The Member further noted that larger forest owners typically maintain comprehensive data regarding carbon removals, considering factors such as tree species, density, and climate conditions.
    - Another TWG Member underscored the importance of the previous point, that data availability challenges predominantly relate to Scope 3 emissions, clarifying explicitly that such challenges do not exist for Scope 1.
- The Secretariat thanked the TWG Member and opened the floor for comments, emphasizing that the discussion should remain specifically focused on methodological questions, especially how to calculate and implement the discussed methods from a corporate perspective.
- One TWG Member noted the theoretical nature of the current discussion and emphasized the importance of practical implementation at the company level. The Member raised questions regarding the counterfactual scenarios, specifically mentioning that their company manages approximately 50,000 harvesting sites, mostly in the Nordics but also across Europe, translating into thousands of sourcing areas covering tens of different forest types. The Member questioned whether it was expected to calculate counterfactual scenarios for each site or sourcing area and expressed concern that identifying the company-specific impact among numerous sourcing areas and forest types would introduce significant error, potentially even higher than with the MLP. The Member requested clarity on practical implementation rather than large-scale country-level models.
    - A TWG Member responded by suggesting methods for practical implementation, noting good general estimates available for carbon removed through harvesting. The Member explained that the core question was how to claim credit for management improvements, emphasizing that forestry companies generally aim to show management leads to increased growth. The Member suggested comparing managed growth rates with generic unmanaged growth estimates, clarifying the burden of providing robust management improvement evidence lies with the companies. The Member also acknowledged the challenge of differentiating growth rate improvements specifically due to management.
    - One TWG Member described this question as superb and relevant, highlighting a personal extensive consideration of this issue. The Member mentioned utilizing statistical models, particularly matching protocols similar to those used by the American Forest Foundation's Family Forest Carbon Program. The Member described how accurate matching could be achieved with very good inventory data, enabling comparison of harvested versus unharvested stand growth. The Member emphasized the necessity of high-quality inventory data, expressing uncertainty regarding data availability globally but noted that small sample sizes would likely compound errors significantly.
- A TWG Member briefly highlighted the inherent challenges and significant errors already present in land sector emission estimates, such as those related to beef production. The Member pointed out the significant uncertainties of the MLP, noting that emissions can vary greatly due to activities from other entities within the same sourcing area. The Member argued that attributing emissions solely based on land ownership patterns creates arbitrary variations unrelated to actual management effectiveness.
    - The Secretariat interrupted, requesting adherence to methodological discussions and deferred broader debates on this issue to a later stage.
- One TWG Member expressed difficulty following the earlier presentation due to the scrolling document and suggested following structured topics to better discuss methodological questions. The Member provided context from South America, particularly regarding baselines, mentioning historical non-industrial agricultural practices, government-subsidized plantations preventing soil erosion, and the complexity of establishing counterfactual scenarios. The Member argued the real counterfactual scenario would likely involve increased emissions due to alternative land uses like agriculture or real estate. The Member emphasized practical challenges in using counterfactuals, particularly given the negative impacts of climate change in regions like Chile, noting increased emissions due to drying

conditions and increased fires. The Member concluded by urging a methodology broadly applicable globally, given vastly different regional realities.
    - One TWG Member clarified that plantation forest management could consider future regrowth rates as part of management impacts, thus not necessarily needing backward-looking baselines.

- During the discussion, a TWG Member emphasized in the chat the practical challenges associated with implementing the counterfactual approach. The Member noted that applying the counterfactual method to their initial 60 plot locations—which included field measurements, matching to reference sites, detailed reporting, statistical analysis, and audits—began in October 2022 and has still not been finalized. The Member highlighted that while these challenges might be solvable, they should not be underestimated or dismissed without consideration.
    - In response, one TWG Member recommended using existing inventory remeasurements from both harvested and non-harvested sites to simplify and improve the practical application of the method.

- The Secretariat directed the discussion towards baselines regarding climate-change-driven changes and wildfires, questioning how such events could be differentiated in baseline calculations.
    - One TWG Member explained baselines should reflect scenarios without management; thus, naturally occurring wildfires would not assign emissions to management, while management-related fires would.
    - A TWG Member responded by describing significant difficulties in distinguishing fire causes in Chile, noting many fires were manmade but lacked clarity on intent or responsibility, making it difficult to assign emissions accurately.
    - The Secretariat sought clarification on whether methodologies required distinguishing natural wildfires from arson.
    - One TWG Member suggested potential management credit if fewer fires occur due to management, recognizing this could be explored further.
- One TWG Member described large wildfire issues in North America, highlighting China's method of temporarily excluding burned areas from forest carbon reporting. The Member emphasized that the methodology chosen should align with climate change mitigation goals, raising concerns that the chosen approach could inadvertently produce outcomes contrary to these goals. The Member advocated for the ABA, suggesting it more accurately addresses these issues compared to alternatives.
- One TWG Member revisited baseline methodological questions, especially relevant for plantations. They emphasized that the majority of around 110 million hectares of fast-growing plantations globally were established on previously converted land, arguing it's unrealistic to assume these areas would otherwise support native forests or vegetation. The Member also expressed a desire to see evidence from practical company-level implementations globally to show whether ABA produces more accurate estimates than MLP, noting that while MLP has been extensively tested, ABA remains largely theoretical.
    - The Secretariat reiterated the request to maintain focus strictly on methodological issues.
- The Secretariat sought clarification regarding the definition of counterfactual baselines proposed by a TWG Member earlier, specifically questioning whether these baselines imply no harvesting activity or no human activity at all, including forest management and game/wildlife management.
- One member provided a detailed explanation using an example involving hemlock harvesting in the northeastern US. The member described a forest where they conducted research for 30 years, highlighting occasional contracts to supply hemlock fiber to a paper mill in Maine. The member emphasized that Eastern hemlock generally has very low commercial value in the Northeast, often becoming a byproduct of harvesting activities targeting more valuable hardwood sawlogs and pulp. The member clarified that an absolute "no-harvest" scenario might not be the appropriate counterfactual baseline in such cases. Instead, the correct baseline could involve harvesting only the commercially valuable hardwoods while leaving economically marginal species like hemlock unharvested. The member stated that due to excellent inventory data available in the Eastern US, it is feasible to statistically calculate differences in carbon balance between harvesting certain products and not harvesting them, even while harvesting other timber species. The member added that typically only about 10-15% of inventory plots are harvested in any given five-year interval, enabling clear visibility into broader landscape dynamics.

    - One TWG member clarified the general stance that the baseline is a no-activity scenario, meaning no human activities including harvesting or management. The Member explained the hurdles posed by forest management activities in altering carbon balances, stressing that both harvesting and management must be factored into emissions calculations. The member emphasized the relevance of Scope 3 emissions for incentivizing sustainable consumer behaviors.
- One TWG member discussed the need to align methodological approaches within the existing GHG Protocol framework, emphasizing practical reporting and accounting challenges. The member clarified the importance of having a clear baseline for corporate inventories, arguing this baseline is necessary for setting targets, measuring progress, and transparently disclosing emissions data annually. The member expressed openness to integrating valuable elements from various approaches into a practical hybrid methodology that can be applied consistently by companies globally, emphasizing the primary goal as transparent reporting rather than consumer behavior influence.
    - One member reiterated the importance of Scope 3 emissions in shaping consumer behaviors toward sustainability. The member critically discussed the implications of using the MLP, noting it led to unrealistic FLAG targets, attributing emission changes purely to land ownership rather than actual management activities.
    - The Secretariat intervened to note that the discussion was shifting toward challenges in target setting, redirecting attention to methodological clarifications
    - One TWG member noted that the meeting lacked sufficient clarification of technical details and requested an additional session focused explicitly on addressing remaining technical questions about the ABA proposal.
    - The Secretariat recommended clearly outlining these questions in writing in the chat for structured follow-up.
- One TWG member stated in the chat that the fundamental difference between the Managed Land Proxy (MLP) and Activity-Based Accounting (ABA) is not a matter of accuracy or error, but rather that the two methods measure fundamentally different things. MLP quantifies changes in forest carbon stocks, while ABA attempts to quantify the effects of specific harvest activities.
- Another TWG member agreed with this perspective, comparing the two approaches to a microscope and an MRI machine—tools that serve different purposes and answer different questions. They also referenced the IPCC summer meeting report, which emphasized this distinction in detail.

Outcomes (e.g. recommendations, options)

- N/A

4. Approach #3: Option 1B – Discussion on Methodology

- This section centered on the discussion of Option 1B, a hybrid reporting framework that integrates outputs from the MLP and ABA approaches, emphasizing its role in structuring how emissions and removals are reported. The discussion focused on aligning inventory reporting with stakeholder needs, ensuring clarity for target-setting frameworks, and distinguishing between corporate- and product-level information use.

Discussion

- The Secretariat introduced Option 1B on behalf of the subgroup who created the proposal. The Secretariat clarified that Option 1B is not a separate quantification approach per se, but rather addresses how information from the two existing quantification approaches would be reported within the broader framework. Three reporting scenarios were outlined: reporting only emissions or removals based on the MLP approach; reporting only based on ABA; or a hybrid model combining both. The Secretariat explained that Option 1B is the hybrid model, designed to recognize the distinct

utilities of the two quantification methods and address earlier discussions about comparing and complementing these approaches.

- The Secretariat further detailed Option 1B, explaining that the MLP emissions or removals would be reported under Scope 1 or Scope 3 as part of the physical GHG inventory. In contrast, ABA would be separately reported under an additional category titled "forest carbon impact." Additionally, the Secretariat highlighted that Option 1B would incorporate specific claims guidance, designed to assist stakeholders in accurately interpreting both types of information, particularly in relation to target setting and emission reduction claims. It was emphasized that safeguards would be included to ensure appropriate use of the reported information.
- The Secretariat mentioned that this additional claims guidance could be developed by the TWG and potentially provided to regulators and target-setting programs, aligning with current practices in the GHG Protocol's Land Sector and Removals Standard. The Secretariat briefly discussed the alignment of Option 1B with broader practices within the GHG Protocol. It was noted that reporting progress toward nationally determined contributions could be analogous to ABA, whereas the physical inventory aligns with observation-based methodologies. Further, the Secretariat indicated the subgroup who created the proposal sought additional clarity from the ABA team on baseline definitions to understand the utility of the information, such as no harvest, natural regeneration, or alternative baselines, and their implications for data interpretation.
- The Secretariat emphasized that Option 1B would not overwrite existing proposals but would require harmonization on certain elements like spatial boundaries and timing assumptions to maintain comparability between methodologies. The Secretariat then opened the discussion to the group, acknowledging that detailed questions might need to be forwarded to the subgroup who created the proposal for Option 1B for further clarification.
- One TWG member raised a clarifying question about the hybrid approach proposal, asking for confirmation if the intention was indeed to ultimately apply improved versions of the MLP and ABA approaches, as developed during this TWG process, rather than their current forms.
    - The Secretariat confirmed the Member's understanding as correct.
- The Secretariat highlighted their understanding that, from a methodological perspective, this combined (hybrid) approach did not introduce new methodological aspects but rather represented a combination of the existing approaches. The Secretariat asked TWG members whether this hybrid approach was clearly understood by all or if there remained any methodological questions requiring clarification. The Secretariat noted that while the original presenter was not present, open methodological points could still be collected.
- The Secretariat added that they would create an additional column in the working document to capture open methodological questions raised by one TWG member, which were not yet reflected in the current presentation slides, to ensure all concerns were addressed clearly.
- One TWG member expressed confusion about how the hybrid approach differed methodologically from the MLP approach.
    - The Secretariat responded to clarify the difference, noting that a purely MLP approach would not require additional reporting of ABA information, whereas the proposed hybrid option would require companies to conduct and report activity-based analyses within the inventory. However, the Secretariat explained that what would ultimately be reported as emissions or removals under this proposal would still be based on information from the MLP.
    - One TWG member expressed their view that, under this scenario, the difference did not appear significant.
- One TWG member noted their earlier involvement in the development of the original proposal and shared that the underlying intent behind requiring additional ABA information was to enable target-setting bodies and frameworks (e.g., SBTi) to more easily establish targets, thus strengthening accountability linkages. The member clarified this understanding was based on prior involvement and might have evolved since.
    - The Secretariat agreed with this description, highlighting that these points were precisely those to be further developed with inputs from the TWG, particularly on how information from the ABA could be presented relative to the MLP and how both could inform target-setting and other frameworks.
- One TWG member expressed confusion about the hybrid approach, reiterating that the core purpose of the GHG Protocol was to clearly define emissions and removals, thus providing clear information for initiatives such as SBTi. The member stated that if ABA information was not explicitly included in

definitions of emissions or removals, it might be irrelevant for such initiatives, emphasizing that clear integration was essential.
    - The Secretariat explained that there were broader ongoing discussions within the GHG Protocol regarding the various types of information included in a GHG report and how different programs could utilize that information. The Secretariat clarified that this particular question was actively under discussion, and broader alignment efforts were taking place to address how different programs might be instructed to use inventory information.
    - One TWG member reiterated that from their perspective, the purpose of scope 3 inventories was to enable purchasing companies to evaluate and compare products based on clearly defined emissions and removals. The member stated that the clarity of these definitions directly influenced purchasing behavior, emphasizing the necessity of clearly defined product-level emissions and removals for scope 3 decision-making.
- One TWG member asked the Secretariat directly for additional guidance on clarifying the intended purpose of corporate inventories compared to life-cycle assessments (LCAs). The member expressed a need for the Secretariat's clarification, emphasizing that establishing a shared understanding of the intended use of corporate inventories would significantly influence TWG's approach and ability to reach consensus.
    - The Secretariat acknowledged the member's request and suggested possibly inviting members of a related corporate-standard TWG to share ongoing discussions on the intended use and purposes of GHG inventories. The Secretariat expressed openness to facilitating such cross-group alignment.
    - One TWG member strongly supported this idea, noting that it helped clearly crystallize core methodological differences in how TWG members currently perceived the purpose of a corporate inventory. The member suggested clearly presenting these differing perspectives to the decision-making body (ISB) to facilitate informed decision-making.
- One TWG member emphasized their own background in life-cycle assessment (LCA) and highlighting that the recent discussion effectively clarified the core issue: a fundamental difference between corporate inventories and product-level assessments. The member noted tension between ensuring corporate-level alignment with IPCC guidelines versus clearly assessing emissions and removals at a product-level scope 3. The member expressed concern that the hybrid approach presented is not effectively marring the strengths of both methodologies but rather represented parallel reporting. The member concluded by acknowledging the session's value in crystallizing their understanding of key differences.
- One TWG member emphasized that downstream consumers did not typically use corporate-level scope 3 data for product comparisons or purchasing decisions, as such information was overly complex and not suitable for assessing individual product performance. The member clarified that product-level assessments require different types of data and emphasized that the hybrid approach could potentially combine the best aspects of each method, provided the TWG undertook detailed further analysis. The member supported the view that the current hybrid approach needed further development to create a genuinely integrated solution.

Outcomes (e.g. recommendations, options)

- N/A

5. Closing Remarks

Discussion

- The Secretariat thanked the TWG member for the comments provided and strongly encouraged Members to either type additional comments into the chat or add them directly to the related documents. Members were assured their inputs would be carefully considered and could also be sent via email after the session. The Secretariat reminded participants that the next session would occur in two weeks, during which feedback from the current two-hour meeting would be reevaluated and

integrated into the working documents. Additionally, main authors of the documents were asked to refine their content based on the feedback received and the generated slides. The Secretariat indicated that next steps would be determined to address specific themes and issues requiring further deliberation in upcoming small-group sessions.

Outcomes (e.g. recommendations, options)

- N/A

Summary of written submissions received after to meeting

- One TWG Member provided detailed reflections on both the MLP and ABA approaches.
    - Regarding the MLP, the Member emphasized that the GHG Protocol is designed to allocate emissions and removals to entities rather than prove causality. Drawing a parallel with financial reporting, they noted that inventories should be interpreted using clear, standardized guidance—such as rules around netting and claims—which are essential for consistency and clarity. In response to a question on harvest emissions, it was explained that harvest represents a transfer of carbon from forest pools to either harvested wood products or the atmosphere, and this carbon flow must be recorded without value judgment. The Member emphasized that the inventory's role is to track carbon stocks and flows, not to create incentives or policy structures. They further elaborated that, from a Scope 1 perspective, emissions and removals should reflect the entire managed forest, not just harvested areas, and clarified that corporate inventories do not make product-level claims—those are better addressed through LCAs or EPDs. The Member acknowledged that companies currently have flexibility in defining Scope 3 sourcing regions but cautioned against drawing conclusions from pilot testing, as such exercises are limited by time and data availability. They noted that while data and methodologies will improve, this evolution will take years, referencing regulatory experiences like the EUDR as examples of gradual improvement.
    - In relation to the ABA approach, the Member raised a number of methodological concerns. They questioned whether similar approaches have been implemented for national-level IPCC reporting and highlighted that the use of a 30-year time horizon is a policy choice that should be further tested and justified. The Member asserted that comparing to a counterfactual scenario is a form of consequential accounting, regardless of how it is labeled, and requested more clarity on how the ABA proposal differentiates anthropogenic from natural or semi-natural impacts. They stressed that GHG inventories should reflect business-as-usual emissions rather than enhanced or additional removals. A recommendation was made to consult existing guidance from sources such as the GHG Management Institute to inform this discussion. The Member also expressed concern over the lack of worked examples for ABA and indicated difficulty in operationalizing it, particularly within the forest and wood products sector. Specific questions were raised about how changes in land ownership and sourcing regions over time would affect base year calculations, how a "no activity" baseline could be validated, what models should be used to establish counterfactuals, and whether these models are applicable at a global level. Finally, they questioned the rationale for allowing both backward- and forward-looking assessments, warning this could lead to selective reporting that skews results in favor of reduced emissions or increased removals.
- One TWG Member provided input on both the MLP and ABA approaches, raising methodological questions and reflections, and suggesting changing the term ABA to Counterfactual Forest Carbon (CFC).
    - On the MLP approach, the Member referenced the IPCC (2006) definition of managed land as land subject to human intervention for production, ecological, or social functions. They questioned the rationale, based on GHG Protocol decision criteria, for excluding land managed for purposes other than timber production from MLP scope. The Member emphasized that land managed for conservation should also be considered managed land under MLP. Excluding such land could disincentivize land managers from setting aside areas for conservation or safeguarding ecological benefits such as biodiversity, soil health, and water. The same applies to agricultural land, where managers should be incentivized to dedicate portions for

conservation to generate climate mitigation benefits through carbon stock maintenance. The Member noted that excluding these lands risks pushing managers toward maximizing production at the expense of conservation. If concerns exist that entities may appear "too carbon negative" due to sourcing from areas with significant conservation zones, these issues should be addressed at the target-setting level through mechanisms like SBTi, not by narrowing the MLP scope.

- On the ABA approach, the Member argued that labeling the method as "Activity-Based Accounting" is misleading and suggested Counterfactual Forest Carbon (CFC) instead. In common usage, activity-based emissions reporting refers to calculations based on direct operational data (e.g., fuel use), which is distinct from the counterfactual, foregone sequestration-based logic proposed under CFC. They identified the approach as a form of carbon opportunity cost accounting that inherently relies on counterfactual baselines. The Member raised several methodological questions regarding the CFC approach: The Member highlighted the need for real-world Scope 1 and Scope 3 case studies covering diverse forest and silvo-pastoral systems to verify claims of accuracy, practicality, and alignment with GHG Protocol criteria. The Member questioned how emissions would be treated from phytosanitary harvests or salvage logging following natural disturbances like beetle outbreaks or storms, given that these stock decreases are not anthropogenic. Concerns were expressed over the arbitrary selection of the baseline year and the 30-year forecast period, and how these choices align with GHG Protocol principles. The Member challenged the selective focus on foregone sequestration, asking how the approach accounts for other consequential impacts, such as substitution effects of wood products or market-driven afforestation in different regions as a result of wood demand. On substitution, the Member argued that emissions or avoided emissions from substitutes do not belong in a company's inventory but are broader societal effects beyond the boundaries of entity-level reporting. The Member noted that applying carbon opportunity cost accounting to within-scope afforestation on agricultural lands (e.g., pastures) may only be logically consistent if leakage is treated in a way that supports opportunity cost accounting. The Member referred to recent comments regarding the SBTi wood commodity pathway and expressed differing views based on their experience as a participant in the SBTi FLAG Advisory Group.