



# Forest Carbon Accounting TWG First Plenary Session

Meeting 6

Date: February 06, 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)

Meeting minutes will be shared with TWG members within 10 days after the meeting to ensure quality, instead of the 5 days stated in the Terms of Reference; however, the recordings will be shared on the SharePoint after the call for their reference.

#### **Attendees**

# **Technical Working Group Member**

- 1. Alessandro Baccini, Chloris Geospatial / Boston University
- 2. Antti Marjokorpi, Stora Enso Oyj
- 3. Charles Canham, Cary Institute
- 4. Jennifer Skene, NRDC
- 5. Jiaxin Chen, Ontario Forest Research Institute
- 6. Melissa Gallant, TNC
- 7. Miguel Brandao, KTH Royal Institute of Technology
- 8. Natasha Ribeiro, Eduardo Mondlane University (Mozambique)
- 9. Nicolas Gordon, CMPC
- 10. Pippa Notten, The Green House, University of Cape Town
- 11. Tim Searchinger, WRI/Princeton University
- 12. Torbjörn Skytt, Mid Sweden University
- 13. Vaughan Andrews, Weyerhaeuser

#### **Guests**

N/A

#### Secretariat Team (GHG Protocol, EY)

- 1. Amir Safaei, WBCSD GHG Protocol
- 2. Matt Ramlow, WRI GHG Protocol
- 3. Oliver James, GHG Protocol
- 4. Alejandra Bosch, GHG Protocol
- 5. Adrien Portafaix, EY
- 6. David Kennedy, EY

- 7. Gregory Simonnin, EY
- 8. Ishita Chelliah, EY
- 9. Johannes Tinter, EY
- 10. François Binard, EY
- 11. Weza Bombo Joao, E

## **Documents referenced**

N/A





# **Summary**

Item	Topic and Summary	Outcomes
1.	Housekeeping & Objectives of the FCA process to the LSR Standard	• N/A
	The meeting commenced with an overview of housekeeping rules and objectives, establishing a framework for an open discussion with each TWG member.	
2.	Discussion of the key themes of each TWG Member key themes for discussion  Participants engaged in a detailed discussion on carbon accounting complexities, emphasizing the integration of various approaches.	Emphasis on the importance of scientific integrity and practical implementation of methods; agreement on the necessity of clear definitions and parameters for both accounting methods.
3.	Wrap-up and timeline for next stages The session concluded with reflections on discussions and a commitment to compile feedback for future sessions.	Circulation of a working document for input on discussed option





#### **Discussion and outcomes**

# 1. Housekeeping & Objectives of the FCA process to the LSR Standard

- The Secretariat team presented the meeting agenda and housekeeping rules.
- The Secretariat team emphasized the importance of creating a safe space for diverse opinions.
- Efforts to accommodate participants across different time zones were highlighted.

#### **Discussion**

- The Secretariat team stated that the intention is to make the TWG space a safe environment, acknowledging that controversial discussions may arise due to differing views. They also emphasized the importance of open, honest dialogue and challenging the status quo while ensuring that no confidential information from employers is disclosed. It was noted that one member had withdrawn from participation due to other commitments but wished the group success in future plenary sessions. The Secretariat team mentioned efforts to accommodate all time zones, although some members were unable to attend due to discrepancies. To address this, access to recordings and the opportunity to submit statements aligned with plenary rules would be provided.
- The Secretariat team recapped the approach being taken, referencing recent email exchanges that had been rich in content. They outlined a divergent phase aimed at understanding various options, including managed land proxy and activity-based approaches. The goal is to clarify these methods, identify key challenges, and explore potential mitigation actions. The Secretariat team reiterated the importance of laying out options and associated challenges before assessing them against GHG protocol decision making criteria. They also expressed the desire to compile this information into a document that details out each method, its challenges, and potential solutions. One of the Secretariat team members acknowledged a question in the chat asking if a TWG member should only focus on their preferred accounting method and how to contribute if someone has no clear preference.
  - The Secretariat team suggested that sharing views on both accounting methods (Managed land proxy (MLP) and Accounting-based approach (ABA)), including strengths and weaknesses, would be beneficial. The Secretariat team emphasized the need to focus on solutions rather than challenges.
- The Secretariat team noted the need to consider various business goals and how different methods impact strategies for reducing emissions and increasing removals.
- The Secretariat team reviewed the decision-making criteria, emphasizing the importance of scientific
  integrity, feasibility, and alignment with greenhouse gas protocol principles. They explained that if
  consensus cannot be reached, the Secretariat would summarize issues and propose solutions based on
  the established criteria.

#### Outcomes (e.g. recommendations, options)

N/A

#### 2. Discussion of the key themes of each TWG Member key themes for discussion

- The Secretariat team presented the meeting agenda and housekeeping rules.
- The discussion focused on carbon accounting methods, with participants sharing insights on the managed land proxy and activity-based accounting.
- Key themes emerged regarding distinguishing anthropogenic and natural factors, the challenges of establishing baselines, and the need for coherent frameworks.
- The dialogue highlighted the importance of scientific integrity and the need for clear definitions and parameters in carbon accounting.





#### Discussion

- The Secretariat team outlined the objectives of the plenary session, emphasizing the need for clarity and common ground among members. They encouraged open dialogue and constructive communication to develop mutually acceptable solutions. The Secretariat team noted the main themes extracted from small group sessions and indicated that participants would have five minutes to speak on themes they felt confident about in relation to the accounting methods. The Secretariat team also mentioned that comments could be submitted via chat.
- One of the Secretariat team members summarized comments collected from small group sessions, focusing on three key themes: the separation of anthropogenic and natural effects, establishing baselines, and coherence with broader accounting frameworks. They encouraged insights on how different accounting methods could address these themes.
- The Secretariat team requested TWG members to speak and clarified that there was no requirement
  to comment on all three themes, allowing participants to choose their focus while keeping the decisionmaking criteria in mind. One TWG member introduced himself as one of the newest members and
  expressed difficulty in contributing meaningfully at this stage. The member requested to listen to
  colleagues first to gain a better understanding of the discussion before sharing his thoughts.
  - The Secretariat team acknowledged the request and indicated that the member would be called upon later.
- One TWG member stated that his preferred option is the managed land proxy. The member outlined several arguments supporting this approach, namely its fully aligned with the IPCC report, its scientific backing and the ability to validate hypotheses through observations. This is not the case with ABA, because the counterfactual baseline cannot be measured. The member noted that the managed land proxy could address both direct and indirect anthropogenic effects through the use of available time series data and forest use history information, despite claims to the contrary. He addressed concerns regarding sourcing areas, emphasizing that the impacts of other activities within these areas can also be allocated appropriately at the company organizational level, even if the solution is not straightforward. He further elaborated on the process, highlighting that while the first decision-making criterion has been scientific integrity, the other two—impact and feasibility—must also be considered. In his view, considering that the global share of land use emissions reported by companies will be marginal, with the major impact stemming from smaller companies and organizations with limited capacity, it is important to understand the practical and pragmatic aspects of reporting under the LSRG requirements. Finally, he stressed that the overall objective of the guidance is to enhance the reporting of emissions and removals by establishing a system that is both measurable and practically implementable for companies of all sizes including SMEs One TWG member expressed that the guidelines apply to all companies and forests, not just forestry companies. The member pointed out that a significant portion of the world's forests is government-owned and highlighted the challenges this presents. This TWG member discussed the essence of activity-based accounting, explaining how it considers the effects of management and harvest on carbon levels. The member stressed the importance of establishing baselines for forests with and without management or harvest. Further, the member noted that the IPCC estimates emissions through activity-based accounting, which has been crucial for understanding carbon sinks. The member pointed out the implications of these estimates at both corporate and national levels. In addition, the TWG member highlighted the issues surrounding targets set by the SBTi, explaining that the managed land proxy creates unrealistic expectations for forestry owners. The member argued that forest companies should not be penalized for efficient wood harvesting practices. Lastly, the TWG member proposed focusing on the details of activity-based accounting and clarifying that forestry companies should not be expected to refrain from harvesting wood.
- One TWG member identified as part of the activity-based accounting group. The member acknowledged
  the importance of being open-minded and shared initial concerns about reaching consensus in the
  discussions. Extensive experience in carbon accounting, particularly in forest management and carbon
  issues, was reflected upon, with insights shared from past work on assigning emissions levels to
  biomass energy production under the Clean Air Act in the U.S., described as a challenging and
  controversial process. The member suggested that the terms "anthropogenic" and "natural" should be
  reconsidered due to their semantic ambiguity, advocating for a focus on direct and indirect
  anthropogenic effects instead. The member emphasized that activity-based accounting compels a focus





on emissions and removals that can be quantitatively assigned to specific actions. It was noted that there is a substantial body of peer-reviewed literature on carbon flow modeling through forested landscapes, which supports the activity-based approach. The member mentioned current work on applying activity-based accounting methodologies to the entire Eastern U.S., highlighting the availability of strong databases and resources in the region. The challenge of creating an accounting standard that is adaptable to areas with varying data sources was acknowledged. Further, the member discussed the contentious nature of establishing baselines in carbon accounting, sharing an approach of using a "business as usual" characterization to assess the carbon impacts of new activities. Uncertainty was expressed about determining the right baseline, noting that the nature of the forest landscape significantly influences baseline assessments. The member reiterated hope for finding common ground in the discussions and establishing a broadly applicable framework for carbon accounting.

- One member of the Secretariat team posed a follow-up question regarding where companies could obtain the necessary baselines for their assessments.
- The TWG member suggested that companies should consult with academics experienced in forest dynamics modeling. It was noted that most forestry companies already have access to existing models for growth and yield projections, while other types of companies may need to seek external expertise.
- One TWG Member expressed support for the activity-based accounting approach, emphasizing its ability to accurately reflect costs and incentives associated with carbon emissions. The member criticized the managed land proxy for allowing the erasure of impacts from products like biomass and for potentially misleading claims about carbon neutrality. Accurately estimating the costs of products was stated to require assessing the specific changes in atmospheric greenhouse gases resulting from harvesting activities. The TWG member reinforced the existence of scientific literature supporting activity-based accounting, asserting that it is feasible to use established models and data to estimate forest emissions and removals. The availability of publicly accessible data and scientific resources to facilitate these assessments was highlighted. In response to a question about whether the data available for activity-based accounting comes from scientific literature or if companies can utilize their own data, the member stated that it is likely a combination of both, as different companies may have varying levels of data availability. The importance of leveraging both scientific literature and corporate data was emphasized.
- One member of the Secretariat team posed a question about whether activity-based accounting could be implemented without a fully developed baseline. An example was provided of estimating emissions from tree harvesting without needing a baseline, suggesting that the carbon footprint could be calculated based on known biomass.
  - One TWG member acknowledged the importance of considering the impact of activities versus no activities and indicated that understanding the dynamics of forest management is essential for accurate assessments
- One TWG member discussed the concept of mitigation, emphasizing the need to demonstrate reduced emissions or increased removals through specific actions. An analogy was provided comparing the assessment of a new medicine's effectiveness to evaluating the impact of forest management actions. The importance of comparing scenarios with and without specific actions to assess their effectiveness was reiterated, along with a clear understanding of the impacts of management practices on carbon dynamics. The TWG member elaborated on the significance of scientific integrity in the discussions and acknowledged the challenges of establishing feasible approaches for carbon accounting. The member emphasized that demonstrating the effectiveness of new programs or actions requires comparing the outcomes of those actions against scenarios without them.
- One TWG member expressed appreciation for the ongoing conversation and expressed that an option should incorporate both attributional and activity-based accounting (Option 1B).. The member noted that many issues raised regarding the managed land proxy relate to its reliance on attributional accounting rather than the proxy itself. It was stated that the managed land proxy is a reasonable approach for national reporting levels but may not be suitable for corporate greenhouse gas inventories, particularly for scope one. The member argued that land within corporate holdings should be managed in some capacity, even if for conservation purposes, and that the unmanaged land designation in national inventories was intended for wilderness areas not included in corporate inventories. The TWG member expressed skepticism about retaining the managed land proxy in scope one, while acknowledging that scope three includes safeguards to differentiate between a company's footprint and external factors. The member emphasized the importance of stock change accounting or attributional





accounting as a measurement-based approach, noting that any reporting companies undertake must include both factual and counterfactual elements to ensure grounding. The member highlighted the need to discuss not only activity-based accounting but also the assumptions and counterfactuals used in these assessments, as they significantly influence the outcomes and implications for a company's net-zero path.

- One member of the Secretariat team reminded participants that the proposal containing option 1B, as mentioned by the TWG Member, had been circulated to all members as part of the reading material and should be available on SharePoint.
- One TWG member shared a couple of slides and pointed out that all calculations are based on CO<sub>2</sub> equivalents, which are determined using Global Warming Potentials (GWPs) as recommended by the Greenhouse Gas Protocol. This involves multiplying emissions of different gases by specific characterization factors to standardize their impact. The member explained that after a pulse emission of CO<sub>2</sub>, a portion is sequestered by oceans and land, primarily by oceans, while the remaining atmospheric CO2 is multiplied by its radiative efficiency to determine its contribution to global warming. Using GWP100, the absolute global warming potential of CO<sub>2</sub> is compared with other greenhouse gases, which have GWPs of 25 and 300, respectively. A key issue raised was the risk of double counting, as the absolute global warming potential already includes the land sink, meaning that adding a separate accounting method for land removals would lead to inconsistencies if combined with GWP-based emissions calculations elsewhere in the assessment. To maintain consistency the member outlined following approach: Adjusting GWPs to only include ocean uptake while excluding land uptake, allowing the use of the managed land proxy, but leading to a 19% reduction in GWPs for non-CO<sub>2</sub> gases. The member also highlighted inconsistencies in national emissions reporting, as GWPs rely on dynamic global vegetation models, whereas bookkeeping models used in national inventories may include natural carbon flows, which the GHG Protocol aims to exclude. One member of the Secretariat team asked the TWG member to clarify the relevance of the topic for both global inventories and corporate greenhouse gas inventories.
- The TWG member stated that the issue is pertinent to both contexts, emphasizing the need for recommendations that make sense and are internally consistent. The member cautioned against compromising scientific integrity by using inconsistent approaches together.
- One TWG member i expressed appreciation for the learning experience thus far and described the complexity of the Miombo woodlands, characterizing it as a social ecosystem deeply intertwined with human activity over many years. The member highlighted the challenges posed by factors such as fires and herbivory by elephants, which significantly impact the ecosystem. The difficulty in separating anthropogenic from natural systems was emphasized, noting that Miombo and similar ecosystems in Mozambique are heavily influenced by human activities, including shifting cultivation and forest operations. The TWG member articulated the need to account for the various dynamics within these ecosystems, particularly the seasonal changes that affect carbon dynamics. The member suggested that a hybrid method might be necessary to effectively account for greenhouse gas emissions in such complex ecosystems, referencing similarities with other regions like the Chiquitano and Cerrado forests. The member acknowledged a lack of familiarity with the methods discussed but expressed a desire to understand how to account for these complexities.
  - One member of the Secretariat team asked if there was any experience with the discussed approaches.
  - The TWG member clarified that while there is experience in carbon estimations through fieldwork and remote sensing, there is limited familiarity with the specific methods being discussed.
  - Another TWG member noted that such complexities apply universally, including in regions like Canada. The member emphasized that these complexities must be addressed regardless of the chosen accounting method.
- One TWG member expressed support for the managed land proxy method, stating that it effectively
  meets the criteria outlined in the working document of the excel file. The member acknowledged that
  strong guardrails would be necessary, potentially more than those required for corporate standards or
  scope three. Concerns were raised about the feasibility of the activity-based accounting approach,
  which was described as not meeting many of the necessary criteria and relying heavily on assumptions
  that may not be universally applicable. The member highlighted the importance of proper accounting





practices, noting that many companies in the sector report their scope three emissions in flawed ways. The member emphasized that if the accounting method is not feasible, companies will not adopt it. The TWG member reiterated that the managed land proxy aligns well with existing guidance and that activity accounting could inform policy and help set targets, but it should not be the sole focus for coherence with existing guidance.

- One TWG member shared a background in lifecycle assessment and modeling carbon flows, indicating a preference for the activity-based approach. Concerns were raised about the perception of being forced to choose sides between the managed land proxy and activity-based accounting. The member noted that while the managed land proxy may seem easier to apply, there is uncertainty about its effectiveness compared to activity-based accounting. The importance of creating models that provide the right incentives for climate action was emphasized, along with the need for consistent assumptions across all entities involved in greenhouse gas inventories. The TWG member concluded by expressing interest in exploring hybrid approaches that bridge the gap between differing methodologies and emphasized the importance of establishing consistent assumptions to ensure effective modeling across various stakeholders.
- One TWG member noted agreement with points raised by others regarding modeling challenges and expressed concern about the portrayal of the managed land proxy. The member emphasized that scientific integrity should not be compromised and that as long as logical reasoning is applied, the integrity of either method should not pose significant issues. The member acknowledged that many arguments have been repeated over the years and highlighted the difficulty of engaging in discussions without clear definitions of the methods being debated. The TWG member proposed sharing a model created as a case study to facilitate understanding of the flow of carbon and emissions. The member suggested refining the model to allow for various inputs and encouraged others to provide feedback on its applicability. The member expressed hope that this approach could help bridge existing conflicts and lead to more productive discussions.
- One TWG member i indicated a preference for the managed land proxy method, asserting that it effectively meets the criteria outlined in the working document of the excel file. The member emphasized the need for clarity regarding the managed land proxy and its safeguards, arguing that it does not allow companies to evade responsibility for emissions. The member highlighted the importance of distinguishing between business-as-usual removals and additional carbon removals that can be sold as credits. A request was made to the Secretariat team to distribute the outcomes of previous workshops in 2023 and discussions on safeguards and requirements to the technical working group, as this context is essential for the current discussions. The member expressed concern that the managed land proxy is being portrayed as a way for companies to avoid taking action to reduce emissions, despite the numerous safeguards in place to ensure accountability.
- One TWG member expressed gratitude for the discussion and acknowledged the need for background
  information on the work being done. The member noted the difficulty in choosing between the two
  approaches without understanding how they would be implemented at the corporate level. The member
  shared experience in remote sensing data for quantifying carbon in vegetation and acknowledged that
  while the activity-based approach addresses double counting, it also introduces complexities in
  operationalizing the models. The member expressed support for a hybrid approach that leverages
  technology to quantify carbon stocks and changes over time, emphasizing the need for a cost-effective
  and scalable solution.

#### Outcomes (e.g. recommendations, options)

- TWG members exchanged comments and concerns regarding the proposed accounting methods and relevant technical matters on forest carbon accounting
- Emphasis by TWG members on the importance of scientific integrity and practical implementation of methods.
- Agreement on the necessity of clear definitions and parameters for accounting methods.





# 3. Closing Remarks

#### Discussion

- The Secretariat expressed gratitude for the comprehensive discussion and acknowledged the validity of many arguments presented. It was noted that there is a need to bring the discussions down to practical cases. The Secretariat recapped the phases of the discussion and indicated that the focus would now shift to formalizing the different options and specifics on paper. The member noted that small group sessions would continue to align on the specifics of each approach and emphasized that these sessions would be organized based on time zones to accommodate all participants.
- One member of the Secretariat team summarized the intent of the next plenary session, which is to take feedback from the current discussion and put it into a workable format. The member acknowledged the suggestion of using a use case to simulate thinking and emphasized the need to study the views expressed today.
- The Secretariat team thanked the technical working group members for their active contributions.
   Positive comments were noted, with some members providing solutions that could be useful for moving forward. The member expressed appreciation for the successful session and looked forward to continued collaboration.
- The Secretariat closed the plenary session by thanking TWG members, noting that the discussion had been productive and that participants had adhered to the schedule.

### Outcomes (e.g. recommendations, options)

Circulation of a working document for input on discussed options.

# Summary of written submissions received prior to meeting

- A TWG member pointed out that when people say activity-based approaches, it means estimating the effect of activities in some way, which is how all other greenhouse gas accounting works. Further, the term "inventory" does not change the fundamental nature of accounting, as it refers to "anthropogenic emissions and removals." It is not about what is happening on land but rather what people do to land. Changes not due to the activities of a reporting company are irrelevant to its emissions or removals.
- A TWG member mentioned that the objective is to estimate the climate change impact of land use, ensuring that models do not indicate actions that might result in more GHG emissions as beneficial for the climate.
- A TWG member shared that the MLP includes land natural sinks, but the focus should be on anthropogenic sources and sinks only. Mixing these is inconsistent and incompatible. Solutions for ensuring consistency include either removing the land sink from adjusted GWPs or reconsidering the MLP altogether. A new LULUCF method is being developed that is fully compatible with GWPs, focusing on carbon deficit rather than flows.
- A TWG member pointed out the need to distinguish between anthropogenic or passive removals and those due to land management, as climate accounting has focused on estimating anthropogenic emissions.
- A TWG member mentioned that agreements have recognized that there are many fluxes of carbon dioxide and other greenhouse gases between the earth and the atmosphere, but that the agreements focus on reducing those created directly by human activity. This has been particularly emphasized for "removals," i.e., carbon sequestration.
- A TWG member shared that claim making problems were identified, including the potential for companies to use removals generated from forests to claim net-zero emissions without balancing anthropogenic emissions with actual removals.
- A TWG member pointed out that companies could use removals generated from forests to claim net zero, when in fact that claim is not based on balancing anthropogenic emissions with anthropogenic removals
- A TWG member mentioned that the implications of the MLP at the company level for Scope 1 are significant, as it could enable companies to claim climate neutrality by acquiring interests in managed forests. These implicit non-anthropogenic credits could potentially cancel out all land-based emissions. Under Scope 3, wood use is generally considered carbon negative, meaning that the more wood a





company harvests and uses, the more carbon negative it is, which contradicts the MLP use at the national level. The effects of the MLP mean that emission scores assigned to products in Scope 3 and companies in Scope 1 will not only be vastly off in quantity but often in direction. This could lead to inefficient wood use being rewarded, while more efficient practices may appear less favorable.

- A TWG member shared that the MLP could undermine efforts to create forestry carbon offsets with integrity, as companies could avoid the burdens of creating additional carbon storage by simply acquiring shares in offset companies or leasing already growing forests.
- A TWG member pointed out that if sourcing areas are defined beyond the land owned by one company, the actual activities of the wood producer or consumer will generally have little to do with the net emissions assigned to that producer or company products.
- A TWG member mentioned that activity-based accounting does not mean that companies need to cease producing or using wood; rather, it focuses on increasing the efficiency of wood use.
- A TWG member shared that the discussion highlighted the need for clarity in definitions and a focus on scientific integrity, as well as the challenges in applying the activity-based approach in the context of an inventory.
- A TWG member pointed out that there is a recognition that the original concept of Net Zero counts solely active removals to balance emissions, excluding avoided emissions from natural ecosystems.
- A TWG member mentioned that avoided emissions from land-sector activities are often considered equal to product avoidance, which may not accurately reflect the efforts of land managers.
- A TWG member shared that the activity-based frameworks mentioned are not universally accepted and
  are subject to controversy, as they are inherently untestable, leading to disagreements about the
  assumptions made to describe counterfactual scenarios. Further, there are concerns about
  implementing an activity-based framework within the context of an inventory, as the assertion that an
  inventory already uses an implied counterfactual may not be correct.
- A TWG member pointed out that it would be beneficial to receive a clear description of the activity-based proposal to facilitate a comparison with the MLP, as discussing the drawbacks of one method without understanding the alternative is problematic. Acknowledgment of tradeoffs between the two approaches is necessary, and it is important to see the proposals side by side to weigh those tradeoffs effectively. To address the complexities, there is a need to think creatively about blends and novel approaches, with a willingness to compromise among members.