



Meeting Minutes FCA Group 1 - Managed land proxy small group session

Date: 22nd January 2025 - 20:00-21:00 UTC, 21:00-22:00 CET, 01:30-02:30 IST, 15:00-16:00 EST

Location: "Virtual" via Zoom

This small group session was designed for TWG members based in European and American time zones who had experience working with the managed land proxy forest carbon accounting approach. Emails sent after the session by certain members detailing their input have been included in the meeting minutes.

Attendees

Technical Working Group Members

- 1. Kate Dooley, University of Melbourne
- 2. Vaughan Andrews, Weyerhaeuser
- 3. Alessandro Baccini, Chloris Geospatial / Boston University
- 4. Christoph Leibing, IKEA
- 5. Miguel Brandao, KTH Royal Institute of Technology
- 6. Nathan Truitt, American Forest Foundation
- 7. Nicolas Gordon, CMPC

Hosts (GHG Protocol, EY)

- 1. Amir Safaei, WBCSD GHG Protocol
- 2. Matt Ramlow, WRI GHG Protocol
- 3. Adrien Portafaix, EY
- 4. Gregory Simonnin, EY

- 5. Ishita Chelliah, EY
- 6. Johannes Tinter, EY
- 7. Francois Binard, EY
- 8. Weza Bombo Joao, EY





| Item | Topic and Summary | Outcomes |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <i>Introduction</i> The meeting began with a brief introduction and an overview of the agenda, focusing on discussing three use case scenarios related to forest management and corporate GHG inventory accounting perspectives using the managed land proxy approach. | No specific outcomes. |
| 2. | <i>Case Scenario 1: Forest Ownership in</i> <i>Malaysia</i> A forest management company manages a pine plantation under a concession in Malaysia. The plantation is intensively managed with even-aged management, established in the 1970s with a 20–30-year rotation, covering 750 ha within Malaysia's 2.4 million ha licensed for planted forests. | The discussion emphasized the necessity for annual reporting of stock changes and the use of the managed land proxy. Key challenges included distinguishing between direct and indirect anthropogenic effects and addressing the impact of land use change. The need for accurate baseline data for the activity-based accounting approach was also highlighted. |
| 3. | <i>Case Scenario 2: Family-Owned Forest in</i> <i>Austria</i> A family privately owns and manages a small forest area in Austria. The forest is extensively managed with selected harvests in an uneven- aged mixed forest, owned and managed by the family for the past 75 years, covering 20 ha. | The need for data on net change in forest carbon stocks and the importance of using the managed land proxy were underscored. Participants discussed the complexities of defining the baseline for activity-based accounting approaches, accounting for increased growth, and addressing subjective assumptions. |
| 4. | <i>Case Scenario 3: Forest License on Public Lands in British Columbia, Canada</i> A forest management company operates according to a forest license on public forest lands in British Columbia, Canada. The forest is harvested by clearcut with reserves and replanting within a timber supply area following the provincial forest stewardship plan, with a 40–60-year rotation period, covering 15-25 ha parcels within the 2 million ha timber supply area. | The feasibility of hybrid approaches and the impact of management changes on forest growth and carbon sequestration were key points of discussion. Challenges included defining a baseline for activity-based accounting approaches and accounting for carbon sequestration accurately. The need for accurate baseline data and the complexities of managing changes in forest growth were also emphasized. |
| 5. | <i>Closing Remarks</i> The meeting concluded with a reminder of the next steps, including the continuation of discussions and the collection of individual feedback on the use cases. | Participants were reminded to review the summarized points and provide additional comments. The board would remain open for further input until Sunday, and the feedback would be shared with other group members for a comprehensive review. |

Summary of discussion and outcomes

1. Introduction

• The meeting began with a brief introduction and an overview of the agenda, focusing on discussing three use case scenarios related to forest management and corporate GHG inventory accounting perspectives using the managed land proxy approach.





Summary of discussion

 The session aimed to align solutions among the different technical working group members and build consensus. The purpose of the call was to gather feedback on different accounting options elaborated in the provided material. The discussion included background information and the practitioner's view on forest management across different continents. The goal was to understand the pros and cons of various approaches and gather individual feedback on specific use cases.

Outcomes (e.g. recommendations, options)

• No specific outcomes.

2. Case Scenario 1: Forest Ownership in Malaysia

• A forest management company manages a pine plantation under a concession in Malaysia. The plantation is intensively managed with even-aged management, established in the 1970s with a 20–30-year rotation, covering 750 ha within Malaysia's 2.4 million ha licensed for planted forests.

Summary of discussion

Perspective a): Consideration of how the company managing the forest plantation will account for scope 1 land management net biogenic (LM) CO2 emissions or removals.

Selected Approach:

- The company should report the change in forest carbon stocks on an annual basis. Using the managed land proxy, they should measure stock change on an annual basis within the concession. The company should fully report on stock increases (removals) and decreases (emissions), including all land under their concession yearover-year. Other voices suggested the company should also estimate the change in terrestrial carbon stocks (average vs baseline) and exclude carbon sequestration that would have taken place anyway. (Interpretation: the comment refers to activity based accounting)
- In addition to reporting CO₂ scope 1 and/or scope 3 emissions or removals using the managed land proxy, they should separately account for and report carbon fluxes based on average stock change vs baseline (baseline includes emissions from initial establishment of the plantation) and exclude enhanced carbon sequestration from anthropogenic warming. Overall, the company should measure stock change and carbon fluxes on an annual basis. (Interpretation: the comment refers to activity based accounting)

Strengths:

• The primary strength of this approach is that it portrays the atmospheric impact of the company's actions. This method is easy to implement, reflects the actual difference the atmosphere feels relative to the land unit in a given year, and is consistent with inventory accounting principles applied to other sectors in GHGP. It is consistent with the scientific reporting consensus of IPCC LULUCF, UNFCCC country-level GHG reporting, and ISO standard on corporate GHG reporting. Additionally, it captures anthropogenic emissions and sequestration, and encourages sustainable forest management and replanting after every rotation.

Weaknesses:

• This approach does not differentiate the impact of CO₂ fertilization on forests. It fails to distinguish between direct anthropogenic and indirect anthropogenic effects. Although baseline data on terrestrial carbon stock potential is available globally,





accurate accounting remains challenging and will require specific location and species considerations.

Other Options:

 The compromise to require the use of the managed land proxy within the scopes and to employ activity-based accounting separately is an acceptable compromise. The suggested compromise with dynamic/case-adjusted baselines and reporting the counterfactual foregone sequestration outside of scope can be of value for forest companies and wood users. Other options could be used outside of scopes to ensure consistency across regions/companies.

Arguments Against:

It was noted that if there are no alternative means to address the distinction between direct and indirect anthropogenic effects—particularly in the context of target setting—the limitations of the selected approach in making this distinction could pose significant challenges.

Perspective b): Consideration of how a sawmill sourcing sawlogs from this plantation will account for scope 3 LM CO2 emissions or removals.

Selected Approach:

• If there is a 1:1 relationship between the mill and the land, the mill would report the net change in forest carbon stocks. If there are multiple mills all sourcing from the land, each mill should only account for the proportion of emissions/removals equal to their share of the fiber. The managed land proxy should be used to measure stock change on an annual basis within the concession, based on data from the supplier. In the scope 3 context, the spatial system boundary becomes crucial. Depending on data availability and complexity of the supply region, a wider spatial boundary may be most prudent for tracking stock changes in the land the sawmill is connected to via their supply chain. The sawmill would report based on the managed land proxy and the share of sourcing from that specific region.

Strengths:

The managed land proxy is the preferred approach by the IPCC in the case of Scope

 It is easy to implement, reflects the actual difference the atmosphere feels relative
 to the land unit in a given year, and is consistent with inventory accounting principles
 applied to other sectors in GHG Protocol. This approach has precedence and scientific
 consensus under IPCC LULUCF. It incentivizes suppliers to designate larger areas to
 conservation and increasing carbon stocks, increase MAIs, and implement fire/storm
 resilient forest management.

Weaknesses:

 There is a risk of a free-rider problem in scope 3 for forestry. This approach fails to distinguish between direct anthropogenic and indirect anthropogenic effects. It requires full traceability and data sharing from the supplier, which may not be forthcoming. Additionally, data is needed to do correct allocation, and complete harvest volumes are required vs the sources volumes to allocate emissions and removals correctly.

Other Options:

 A compromise approach with case-sensitive baseline and reporting of foregone sequestration outside of scopes can add value. Other options could be used outside of scopes to ensure consistency across regions/companies.





Arguments Against:

• It was noted that if there are no alternative means to address the distinction between direct and indirect anthropogenic effects—particularly in the context of target setting—the limitations of the selected approach in making this distinction could pose significant challenges. Additionally, it was emphasized that any selected approach must be tested against the realities of dynamic and varying forest landscapes.

Queries or Clarifications for Case 1:

- There were questions about what constitutes double counting in this context.
- It was noted that a concession usually includes multiple forest management types, such as voluntary designated protection areas, carbon forestry projects, agroforestry, and mosaic forest management. The chosen method must work for all land use types and land covers and not create bias for or against specific types of forestry.
- The issue of consequential and attributional modeling was raised, with some members advocating for a consequential approach to better account for additionality and avoid giving credit to fluxes that would have taken place anyway.
- Concerns were also expressed about the scientific integrity and consistency of the managed land proxy option.

Outcomes (e.g. recommendations, options)

• The discussion emphasized the necessity for annual reporting of stock changes and the use of the managed land proxy. Key challenges included distinguishing between direct and indirect anthropogenic effects and addressing the impact of land use change. The need for accurate baseline data was also highlighted which refers to the data for the base year or base period in the inventory, as this initial year is essential for tracking annual increases or decreases in forest carbon stocks.

3. Case Scenario 2: Family-Owned Forest in Austria

• A family privately owns and manages a small forest area in Austria. The forest is extensively managed with selected harvests in an uneven-aged mixed forest, owned and managed by the family for the past 75 years, covering 20 ha.

Summary of discussion

Perspective a): Consideration of how a pulp mill sourcing pulpwood from this and similar family forests will account for scope 3 LM CO2 emissions or removals.

Selected Approach:

• The mill will need to have data on the net change in forest carbon stocks across their sourcing region and know the total amount of fiber provided by the sourcing region. The managed land proxy should be used to measure stock change on an annual basis within the sourcing region, assessing all working lands that supply timber products. The mill should ensure mass balance, net removals or net emissions, and ensure emissions and removals are both counted. Stock change and carbon fluxes should be measured on an annual basis.

Strengths:

• This approach is easy to implement, reflects the actual difference the atmosphere feels relative to the land unit in a given year, and is consistent with inventory accounting principles applied to other sectors in GHGP. Although it is complex for the





company to consider inventory data from multiple areas, it is necessary for accurate reporting.

Weaknesses:

• This approach fails to distinguish between direct anthropogenic and indirect anthropogenic effects. It requires the company to have access to some form of inventory data at the scale of the sourcing region.

Other Options:

• Other options could be used outside of scopes to ensure consistency across regions/companies.

Arguments Against:

 It was noted that if there are no alternative means to address the distinction between direct and indirect anthropogenic effects—particularly in a target setting context—the limitations of this approach in making that distinction could become problematic. Additionally, if the company is unable to obtain traceability or data from the supplier, or data from the sourcing region, the MLP approach is likely to be ineffective. It was also mentioned that an activity-based approach would face similar challenges, as it would also depend on data from the management unit or sourcing region.

Perspective b): Consideration of whether their scope 3 accounting would differ if the wood was salvaged after a human-induced fire.

Selected Approach:

• No, change. The approach remains the same.

Strengths:

• This approach is easy to implement, reflects the actual difference the atmosphere feels relative to the land unit in a given year, and is consistent with inventory accounting principles applied to other sectors in GHGP.

Weaknesses:

 This approach fails to distinguish between direct anthropogenic and indirect anthropogenic effects. It is important to note that in this case, the failure to distinguish would hurt the reporting company, not help it. Additionally, there are environmental risks of salvage wood, and proving causality for human-induced fires will be extremely difficult.

Other Options:

• Other options could be used outside of scopes to ensure consistency across regions/companies.

Arguments Against:

It was noted that if there are no alternative means to address the distinction between direct and indirect anthropogenic effects—particularly in a target setting context—the limitations of the MLP approach in making that distinction could become problematic. Additionally, if the company is unable to obtain traceability or data from the supplier, or data from the sourcing region, this approach is likely to be ineffective. It was also suggested that an activity-based approach would face similar challenges, as it would depend on data from the management unit or sourcing region. Finally, it was noted that neither approach is likely to provide the level of detail necessary to effectively make this distinction. While the discussion has been theoretical, the kind of hyperlocal monitoring required to capture these nuances in an inventory is neither practicable nor desirable in reality.





Queries or Clarifications for Case 2:

- There were questions about what is meant by "credits" in the context of the managed land proxy approach, particularly in light of the concern that, similar to case study 1, this approach could result in undue credits and generate carbon-negative products that do not reflect real-life conditions.
- It was noted that managed forests show higher CO₂ absorption rates and overall carbon stocks than unmanaged forests due to the benefits of active land management.
- Additional use cases were suggested to evaluate and test different approaches, including afforestation of grassland, management of land prone to natural wildfires, and agroforestry systems.

Outcomes (e.g. recommendations, options)

 The need for data on net change in forest carbon stocks and the importance of using the managed land proxy were underscored. Participants discussed the complexities of defining the baseline for activity-based accounting approaches, accounting for increased growth, and addressing subjective assumptions. The difficulty of defining the natural state in Europe and the potential for double counting were also highlighted.

4. Case Scenario 3: Forest License on Public Lands in British Columbia, Canada

• A forest management company operates according to a forest license on public forest lands in British Columbia, Canada. The forest is harvested by clearcut with reserves and replanting within a timber supply area following the provincial forest stewardship plan, with a 40–60-year rotation period, covering 15-25 ha parcels within the 2 million ha timber supply area.

Summary of discussion

Perspective a): Consideration of how the forest management company will account for scope 1 LM CO₂ emissions or removals.

Selected Approach:

 The company should report the net change in carbon storage on the managed lands. Using the managed land proxy, they should measure stock change on an annual basis within the license, removing any reserve areas from consideration. The company should report the same carbon stock change on all land year-over-year on a FMU basis. They should report average carbon stock changes against baseline, excluding carbon fertilization. (Interpretation: Managed land proxy approach) Stock change and carbon fluxes should be measured on an annual basis.

Strengths:

• This approach is easy to implement, reflects the actual difference the atmosphere feels relative to the land unit in a given year, and is consistent with inventory accounting principles applied to other sectors in GHGP. It aligns with IPCC LULUCF, and baseline data on terrestrial carbon stock potential is available globally.

Weaknesses:

• This approach fails to distinguish between direct anthropogenic and indirect anthropogenic effects.

Other Options:

• Other options could be used outside of scopes to ensure consistency across regions/companies.





Arguments Against:

• It was noted that if there are no alternative means to communicate the importance of distinguishing between direct and indirect anthropogenic effects—particularly in a target setting context—the limitations of the selected approach in making this distinction could become problematic.

Perspective b): Consideration of how a biomass power plant sourcing wood biomass from this company will account for scope 3 LM CO2 emissions or removals.

Best Approach:

• The managed land proxy should be used to measure stock change on an annual basis within the license, removing any reserve areas from consideration.

Strengths:

• This approach is easy to implement, reflects the actual difference the atmosphere feels relative to the land unit in a given year, and is consistent with inventory accounting principles applied to other sectors in GHGP.

Weaknesses:

• This approach fails to distinguish between direct anthropogenic and indirect anthropogenic effects. There is a risk of over-crediting removals to wood product under the managed land approach.

Other Options:

 Other options could be used outside of scopes to ensure consistency across regions/companies.

Arguments Against:

• Concerns were raised regarding the potential issues that may arise if there are no alternative means to communicate the necessity of considering the distinction between direct and indirect anthropogenic effects, particularly in a target setting context. It was highlighted that the inability of the selected approach to make this distinction could pose significant challenges

Queries or Clarifications for Case 3:

- There were questions about the use of foregone sequestration as in-scope reporting and whether this would open up for counterfactual scenario reporting in scopes.
- It was suggested to consider other counterfactuals such as the substitution effect or market effects of timber/bioenergy demand leading to afforestation of degraded land and the associated climate/CO₂ removal effects.

Outcomes (e.g. recommendations, options)

• The feasibility of hybrid approaches and the impact of management changes on forest growth and carbon sequestration were key points of discussion. Challenges included defining a baseline and accounting for carbon sequestration accurately. The need for accurate baseline data and the complexities of managing changes in forest growth were also emphasized.

5. Closing Remarks

• The meeting concluded with a reminder of the next steps, including the continuation of discussions and the collection of individual feedback on the use cases.





Summary of discussion

• The session emphasized the importance of gathering individual feedback on the use cases and addressing any immediate questions or concerns. Participants were encouraged to review the summarized points and provide additional comments. The board would remain open for further input until Sunday, and the feedback would be shared with other group members for a comprehensive review.

Outcomes (e.g. recommendations, options)

• Participants were reminded to review the summarized points and provide additional comments. The board would remain open for further input until Sunday, and the feedback would be shared with other group members for a comprehensive review.