(carbon)plan

NOV 30 2022

Technical Working Group
Land Sector and Removals Guidance
Greenhouse Gas Protocol

RE: Land Sector and Removals Guidance, Sept. 2022 Draft for Review

Dear Technical Working Group members,

Thank you for the opportunity to comment on the GHG Protocol's draft Land Sector and Removals Guidance.[1] For context, CarbonPlan is a nonprofit research organization that works to improve the transparency and scientific integrity of climate solutions. Our comments today are informed by our research on ton-year accounting,[2] the value of temporary carbon storage,[3] and our broader efforts to improve carbon market quality standards.

We appreciate the extensive work that has gone into the draft Land Sector and Removals Guidance documents, as well as the GHG Protocol's leadership in setting clear, practical, and consistent accounting standards. In particular, we recognize that the GHG Protocol's successful track record has helped pave the way for mandatory disclosure regimes that build on the GHG Protocol's methods.[4]

Although we are glad to see additional guidance on land sector and carbon removal-specific issues, we write to raise serious concerns about the Draft Guidance's qualified endorsement of tonne-year accounting methods. If adopted, these methods would undermine the Draft Guidance's storage monitoring framework and permanence principle. They would also unnecessarily introduce irreconcilable units into the GHG Protocol's accounting framework.

We respectfully urge the GHG Protocol to prohibit the use of tonne-year accounting methods in all reporting contexts. We also recommend that the GHG Protocol enhance its disclosure requirements for credited reductions and removals.

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1 GHG Protocol, Land Sector and Removals Guidance, Draft for Pilot Testing and Review (Sept. 2022) (hereinafter "Draft Guidance").

2 Freya Chay et al., Unpacking ton-year accounting, CarbonPlan (Jan. 31, 2022).

3 Danny Cullenward et al., The cost of temporary carbon removal, CarbonPlan (Dec. 9, 2020).

4 See, e.g., U.S. Securities and Exchange Commission, The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Federal Register 21,334 (Apr. 11, 2022) at 21,343-45 (describing the GHG Protocol as the "leading accounting and reporting standard," on which the SEC's proposed climate disclosure rule was based).

1. **Storage discounting frameworks and dynamic carbon accounting methods, including all forms of tonne-year accounting, should be prohibited because they violate the Draft Guidance's permanence principle and would introduce fundamentally inconsistent units into the GHG Protocol's accounting framework.**

The Draft Guidance rightly proposes that companies that book carbon removal also commit to ongoing storage monitoring and report any storage reversals.[5] These provisions implement the Draft Guidance's permanence principle and ensure that those who claim carbon removal as an asset are also tracking the associated liability — the chance that carbon storage booked as carbon removal is re-emitted in the future. This is the right way to think about the benefits and responsibilities of carbon storage, and we commend the GHG Protocol for this strong approach.

At the same time, however, Chapter 9 of the Draft Guidance explicitly contemplates allowing companies to report "temporary product carbon storage" using tonne-year accounting and other "dynamic" or "discounting" methods.[6] While this proposed application could be relatively narrow and would require companies to report tonne-year-based removals separately from their usual Scope 1, Scope 2, and Scope 3 emissions,[7] Chapter 6 of the Draft Guidance also invites input on whether these methods should be used in place of the robust carbon removal monitoring and reversal reporting requirements discussed above.[8] The potential application of these problematic methods to the broader domain of carbon removal accounting is particularly concerning, and we urge the GHG Protocol team to reject this approach.

The Draft Guidance would be greatly improved if it simply removed all references to tonne-year accounting, storage discounting frameworks, and dynamic carbon accounting methods. While we strongly recommend disallowing tonne-year methods in their entirety, the Draft Guidance should at minimum clarify that tonne-year accounting methods are not acceptable outside of the limited application of reporting carbon stored in products — which must be booked separately from emissions reported under Scopes 1, 2, and 3, as is currently proposed.

For additional context, we note that other standards-setting organizations have recently considered and rejected tonne-year accounting methods. For example, the world's largest carbon offsets registry, Verra, decided not to proceed with a proposal to allow tonne-year accounting in its flagship Verified Carbon Standard program.[9] Similarly, the Integrity Council for

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5 Draft Guidance, Part 1 at 93-100 (Chapter 6.2).

6 Draft Guidance, Part 1 at 90-92 (Chapter 6.1.3) (removal accounting); Draft Guidance, Part 1 at 165-166 (Chapter 9.4) (accounting for product carbon pools); Draft Guidance, Part 2 at 102-104 (Chapter 20.2) (accounting for product carbon pools). We note that the Draft Guidance appears to use the terms "storage discounting framework," "dynamic carbon accounting," and "tonne-year accounting methods" interchangeably; our concerns apply to each of these terms.

7 Draft Guidance, Part 1 at 165-166 (Chapter 9.2).

8 Draft Guidance, Part 1 at 90, lines 11-19 (Chapter 6.1.3).

9 Verra, Verra Defers Updates to the VCS Program (June 22, 2022); *see also* Freya Chay et al., Comments to Verra on ton-year accounting and NCX's harvest deferral methodology, CarbonPlan (Apr. 25, 2022).

the Voluntary Carbon Market has proposed to exclude any carbon credits using tonne-year methods from its forthcoming quality standards.[10] We urge the GHG Protocol to follow suit.

1.1. Tonne-year accounting is inconsistent with the permanence principle.

Tonne-year accounting methods are fundamentally inconsistent with net-zero emissions and the ultimate goal of stabilizing planetary temperatures, as we recently explained in a comment to the UN Paris Agreement Article 6.4 Supervisory Body.[11] These once-obscure methods were developed in the late 1990s, well before the contemporary understanding of cumulative carbon emission budgets emerged in the mid-to-late 2000s.[12]

By design, tonne-year methods ignore the warming consequences of emissions after an arbitrary time horizon and are therefore incapable of accounting for the permanent impacts of CO_2 emissions. As a result — and as the Draft Guidance properly recognizes — "[t]onne-year accounting and other storage discounting methods … do not accurately reflect the impact of a company's activities on cumulative CO_2 emissions and the remaining carbon budget."[13]

If adopted as a basis for greenhouse gas reporting, tonne-year accounting could allow companies to book the immediate-term benefit of temporary carbon storage in annual reporting and ignore the long-term liability of reversal for those same tonnes. Yet these are the precise concerns identified in Chapter 12.6 of the Draft Guidance, which explains why temporary carbon storage that does not include ongoing monitoring should not be included in corporate net-zero accounting "due to a lack of equivalence with emissions included in the target boundary."[14]

1.2. Tonne-year accounting methods would introduce fundamentally inconsistent units into the GHG Protocol's accounting framework.

In addition to its scientific shortcomings, tonne-year accounting methods would also undermine the consistency of the GHG Protocol's accounting framework. Good accounting requires consistent units. For carbon accounting, the core unit is tonnes of CO_2 emitted or removed.[15]

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[10] Integrity Council for the Voluntary Carbon Market, Core Carbon Principles, Assessment Framework, and Assessment Procedure, Draft for public consultation (July 2022) at 36, 98.

[11] CarbonPlan comment letter to the UN Paris Agreement Article 6.4 Supervisory Body (Oct. 10, 2022).

[12] Myles Allen et al. (2022), Net Zero: Science, Origins, and Implications, *Annual Review of Environment and Resources* 47: 849-887.

[13] Draft Guidance, Part 1 at 91 (Box 6.2).

[14] Draft Guidance, Part 1 at 233, lines 15-17 (Chapter 12.6).

[15] We recognize that there are longstanding debates about the use of CO_2-equivalence to represent the combined effects of multiple greenhouse gasses, typically based on global warming potentials (GWPs). These issues are conceptually identical to those raised by tonne-year accounting. We commend the GHG Protocol's Corporate Standard for requiring companies to separately report the volume of emissions of each individual greenhouse gas. Without a similar treatment for temporary carbon storage calculated using tonne-year methods, it would be impossible to reconcile the greenhouse gas accounting of companies using tonne-year methods with those that do not.

Tonne-year accounting violates this principle by artificially designating a certain quantity of temporarily stored CO_2 as if it were the equivalent of *real* tons of CO_2 physically emitted or removed. In practice, tonne-year accounting requires a series of value-laden assumptions to approximate the value of temporary carbon storage. The resulting assertions of equivalence are based on concepts in economics, such as discounting and expected climate damages, as opposed to a straightforward application of physical climate science.[16]

We respectfully suggest that the integration of economically discounted accounting methodologies is fundamentally inconsistent with the Draft Guidance document's current (and appropriate) focus on greenhouse gas fluxes and pools, e.g. as described in Chapter 4.[17]

2. The final guidance document should expand the disclosures required for credited emissions reductions and removals.

Chapter 13 of the Draft Guidance provides helpful rules for reporting credited emission reductions and removals outside of Scopes 1, 2, and 3 — a critical step for discerning mitigation efforts within companies' greenhouse gas inventories from credited reductions and removals that rely on intervention accounting methods outside of the company's value chain. We support all of the distinctions addressing the type of credits used (emission reduction vs. removal enhancement), how those credits are used (to satisfy compensation, contribution, or financing targets), as well as whether those credits represent offsets or insets.[18]

In an effort to improve transparency and better facilitate the evaluation of the types of credits reported under the GHG Protocol, we suggest expanding the extent of disclosure required for credited emission reductions and removals. Because there is often significant variation in the quality of carbon credits, additional information beyond the total number of credits and type (emission reduction vs. removal enhancement), and usage is required to fully assess the emissions profile of a reporting corporation. That information is not generally available in the voluntary carbon markets today, where registries frequently do not require retirement beneficiaries to identify themselves and thus there is often no way to publicly track offset credit usage through existing market mechanisms.[19]

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[16] Liz Marshall (2009), Biofuels and the Time Value of Carbon: Recommendations for GHG Accounting Protocols, World Resources Institute Working Paper; Kenneth R. Richards (1997), The time value of carbon in bottom-up studies, *Critical Reviews in Environmental Science and Technology* 27: 279-292; Ben Groom and Frank Venmans (2021), The social value of offsets, Working Paper.

[17] Draft Guidance, Part 1 at 34-44 (Chapter 4.2).

[18] Draft Guidance, Part 1 at 244, lines 15-19 (Chapter 13.2).

[19] Sadie Frank and Danny Cullenward, Why carbon offset disclosure matters, CarbonPlan (Feb. 8, 2022). We have similarly encouraged the U.S. Securities and Exchange Commission to consider expanding its carbon credit disclosure requirements beyond the categorical totals contemplated in the Draft Guidance. Sadie Frank and Danny Cullenward, Comments to the Securities and Exchange Commission on carbon offset disclosure, CarbonPlan (June 24, 2022).

To facilitate greater transparency, the Draft Guidance should require disclosure of additional, project- and credit-level details about all credited emission reductions and removals reported under the GHG Protocol. In addition to reporting the total number of credits retired in an accounting year, companies should report subtotals for each registry from which those credits were purchased, the name of the project that generated those credits, and the vintage year(s) of the credits. Disclosing these additional attributes will greatly facilitate the evaluation of the mitigation claims supported by the use of carbon credits under the Draft Guidance.

Thank you for the opportunity to submit comments.

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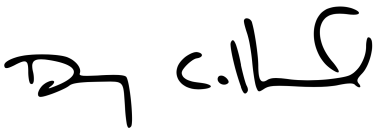

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