Introduction

The first draft of the GHG Protocol Product Standard was completed in October 2009 and road tested by 40 companies between January and June 2010. The road testing companies provided feedback to WRI and WBCSD on the practicality of the draft standard. The second draft of the Product Standard was developed, incorporating feedback from the road testing companies as well as:

- Written comments from over 60 organizations in the stakeholder advisory group on the Draft for Stakeholder Review (November 2009)
- Stakeholder comments received during five in-person stakeholder workshops, attended by over 350 participants (November - December 2009)
- Feedback from the Steering Committee (June 2010)
- Feedback from Technical Working Group members during two webinars (April 2010 and August 2010)

The second draft of the standard was released for a one-month public comment period in November 2010. Forty-eight organizations submitted comments on the draft standard.

For each chapter of the standard, WRI and WBCSD asked commenters whether they agreed or disagreed with the requirements and guidance. In most cases, a majority of commenters agreed with the proposed text. In the cases where commenters disagreed, many provided recommendations on how the text could be improved to address their concerns. The following summary provides an overview of key recommendations, as well as a qualitative\(^1\) indication of the level of agreement for each chapter.

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\(^1\) Quantitative voting results are not provided since not all commenters answered the questions for each chapter, making it difficult to draw meaningful conclusions.
General Feedback

- Overall, most respondents agreed that the standard was useful and provides inventory results that are useful in reducing emissions.
- Most commenters said they plan to use this standard when it is finalized to account for and report product GHG emissions.
- Some commenters cited data uncertainty and potential misinterpretation of results by stakeholders as two potential barriers.
- Some commenters suggested including case studies throughout the standard to make it more user-friendly.

Chapter 1: Introduction

- Most commenters agreed with the chapter.
- Recommendations included:
  - Provide more background on how this standard links to existing GHG Protocol standards and other standards
  - Better explain the business value of using the standard
  - Provide an overview of the steps to developing an inventory, along with a table with the standard's requirements
  - Mention the limitations of the standard in the introduction (e.g., only accounts for one environmental impact category)

Chapter 3: Business Goals

- All commenters agreed with the businesses goals included in the standard.
- Commenters requested a few clarifications of the goals, including:
  - Clarify that supply chain engagement can include engagement with customers and waste operators
  - State that the list of goals is not exhaustive and companies may have additional goals
  - Clarify whether reporting mitigation measures is required
- Other comments on the chapter included:
  - Combine chapters 1 and 2
  - Highlight the goal of increasing energy efficiency

Chapter 4: Principles of Product GHG Accounting & Reporting

- Nearly all commenters agreed with the principles included in the chapter.
- Recommendations included:
  - Align with principles included in the draft ISO 14067, such as reliability, avoidance of double counting, and priority of the scientific approach
  - Clarify why the completeness principle requires disclosure of non-GHG impacts. GHG Protocol does not offer guidance on these disclosures, so the requirement to report non-GHG impacts should be removed.
  - Clarify that accuracy and completeness are not achievable together. Accuracy only applies when “exact” values are known, so the principle should be replaced with a precision principle.

Chapter 5: Fundamentals of Product GHG Accounting & Reporting

- Most commenters agreed with the information and guidance in the chapter.
Recommendations included:
  o Clarify the role of PAS 2050, ISO 14040, ISO 14044, and the draft ISO 14067 in the development of the GHG Protocol *Product Standard*.
  o Add clearer language to describe the role of consequential allocation methods (i.e. system expansion) within the attributional approach of the standard. Consider removing or significantly shortening the discussion of consequential modeling.
  o Provide more guidance on the limitations of assessing only one environmental impact (GHG impacts) for decision making.

Chapter 6: Establishing the Scope of a Product Inventory

- Nearly all commenters agreed with the requirements on establishing the scope of a product inventory. There were many positive comments on the guidance for determining functional units, reference flows, and intermediate products.
- Recommendations included:
  o Provide more real world examples of determining the functional unit and reference flows of both final and intermediate products (where applicable)
  o Include guidance on choosing products that are of strategic importance to the reporting company, which could include both GHG impacts and revenue/sales volume
  o Clarify the meaning of “quantified performance” in the definition of functional unit

Chapter 7: Boundary Setting

- Most commenters agreed with the boundary setting requirements. This chapter received positive comments on:
  o The distinction between attributable and non-attributable processes
  o The additional requirements and guidance on justifiable exclusions
  o The removal of the requirement to include significant capital goods
  o The revised language on the requirements for cradle-to-grave inventories
- Many commenters provided specific recommendations for revisions, including:
  o Clarify the definition of attributable process to include “services” along with materials and energy flows
  o Add separate life cycle stages for transportation and packaging
  o Give more guidance on when capital goods should be included (but keep as a recommendation, not a requirement)
  o Further clarify the requirement for cradle-to-grave inventories, with mixed recommendations to make this requirement more or less strict
  o Clarify whether the significance threshold should be based on individual inputs/processes or overall inventory results
  o Clarify the reference to “indefinite” in the time boundary section and consider requiring a 100 year time boundary cut-off.
  o Clarify the requirement to report the time boundary, specifically when parts of the product have different end of life management

Chapter 8: Allocation

- Most commenters agreed with the requirements in the allocation chapter, both on general and recycling allocation. Most of the disagreements in this chapter focused on the recycling allocation guidance.

**General Allocation**
A few comments asked for clarification on how system expansion is consistent with the attributional approach.

Two commenters supported the use of sensitivity analysis to look at multiple allocation methods.

Recycling Allocation

The comments on the recycling section varied. Four stakeholders commented on the positive improvement of the text since the previous draft, while two suggested the text be completely revised. There were similar numbers of comments for and against the recycling methods in the chapter, which reflects the disagreement within the LCA community on the best recycling allocation methods.

Specific recommendations included:
- Change the names 0/100 and 100/0
- Clarify the relationship of the 0/100 method to system expansion, avoided emissions, and consequential modeling
- Clarify the relationship of the 0/100 and 100/0 methods to open-loop and closed-loop
- Add a disclaimer that results using different recycling methods are not comparable and require sensitivity assessment when choosing between two methods
- Improve consistency with ISO 14044
- Add examples and case studies

Chapter 9: Collecting Data & Assessing Data Quality

- A large majority of commenters agreed with the requirements and guidance sections in the chapter.
- There was generally a positive response to the readability and flow of the chapter.
- There was confusion on whether the pedigree matrix (Table 9.2) was required as part of the data quality assessment, which should be further clarified.
- On financial activity data, one commenter said this data type should not be an option in the standard, and another said it should not be classified as secondary, since a company can use its own financial data.
- A few commenters said that the requirement to collect primary data can be perceived to be in conflict with the guidance that data quality should drive data collection efforts.
- A few commenters said there is little value to report by data types (e.g. primary vs. secondary) because these types do not correlate to quality or reflect how companies engaged supply chain partners in data collection.
- One commenter pointed out that the precision data quality indicator is a quantitative indicator, and suggested eliminating this indicator to make the data quality assessment more qualitative.

Chapter 10: Data Management Plan

- The majority of commenters agreed that the data management plan was a helpful tool and the chapter provides useful guidance.
- A few commenters suggested moving the chapter to an appendix or a website since a data management plan is not required for implementation of the standard.

Chapter 11: Assessing Uncertainty

- Most commenters agreed with the requirement to report a qualitative description of uncertainty for the specified uncertainty sources.
- Many commenters noted how well this chapter explains complicated concepts.
While there was general support for the qualitative reporting requirement, for many commenters it was unclear that the table at the end of the chapter includes the specific reporting requirements. They suggested moving the table’s contents to the front of the chapter in the requirements chapter.

A few commenters said a quantitative assessment should be required, especially for product labeling. Others said quantitative assessment was too burdensome at this point in time.

Chapter 12: Calculating Inventory Results

Most commenters agreed with the requirements in the chapter.

A few commenters suggested that chapter should clarify what the term “avoided emissions” means in the context of the standard, particularly on how the requirement to report avoided emissions separately and the use of the system expansion allocation method could work in practice.

A few commenters recommended that the standard should require the use of the most recent IPCC factors to add consistency and be consistent with the draft ISO 14067 and PAS 2050.

A few commented that the role of carbon capture and storage (CCS) should be clarified in the standard.

A few commenters suggested that additional guidance and examples would be helpful in this chapter.

Chapter 13: Assurance

Most of the commenters agreed with the assurance requirements.

Recommendations included:

- Clarify the difference between assurance, verification, and audit. Avoid using new terms if possible.
- Some commenters said third party verification should be a requirement, while others said that no assurance should be required.
- A few commenters supported adding critical review, as defined in ISO 14040/44, as an option to conform to the assurance requirement.
- A few stakeholders suggested including more references to the ISO standards relating to critical review and/or verification.
- A few commenters said the chapter needs more consistency in terminology, both within the chapter and within the standard.

Chapter 14: Reporting

Half of the commenters agreed with the requirements and guidance provided in the chapter.

The majority of commenters who disagreed with the requirements focused on a few specific requirements, rather than all of the requirements.

Specific recommendations included:

- Allowing transportation and packaging to be reported separately from the defined life cycle stages
- Clarifying the relationship between project accounting and the separate reporting of offsets and avoided emissions
- Consider whether the report can be used for multiple products within the same product category
- Consider consistency with reporting requirements in ISO 14044 and 14067
- Consider removing the requirement to report percentage of data by data types
- Clarify that reporting on performance tracking and inventory changes over time is only required if companies wish to report a reduction target or performance change over time
- Clarify how companies wishing to report in conformance with the standard can handle potential confidentiality issues

Chapter 15: Tracking Inventory Changes Over Time
Most commenters agreed with the information in the chapter.

Specific recommendations included:
- Clarify that this is only one example of the use of a product inventory
- Require companies to disclose the reason for change in the inventory results
- Clarify the difference between updated and recalculated inventory and make requirements consistent with ISO 14067
- Add a case study
- Clarify that tracking reductions over time is not a requirement

Appendix A: Product Comparison

- Most commenters supported the guidance on product comparison.
- Many commenters requested additional guidance, examples of product rules or sector guidance documents, or more references to ISO standards (e.g. ISO 14025).
- Most commenters appreciated the added clarity on the types of comparisons supported and not supported by the product standard.

Appendix B: Program Design

- A large majority of commenters supported the guidance on program design.
- A few commenters suggested this appendix be moved to the website so it can be updated as new programs emerge or be developed as a separate guidance document.

Appendix C: Land Use Change Impacts

- Many commenters were supportive of the information in the appendix, especially how user-friendly and concise the guidance is.
- A few commenters said the lack of data and available calculation tools will make calculating land use change impacts difficult for users of the standard.
- A few commenters disagreed with the exclusion of indirect land use change impacts, since they may be large impacts for some product categories.

Appendix D: Supplier Engagement

- Commenters were supportive of the chapter, and suggested additional real world examples be added.

Appendix E: Quantitative Inventory Uncertainty

- Of the comments received on this appendix nearly all agreed with the guidance on quantifying uncertainty.
- A few comments and alternative methods were provided on the Taylor Series propagation formulas.

Appendix F: Public Report Template

- The majority of commenters supported the public reporting template. Most of the disagreements relate to the reporting requirements (see comments on Chapter 14).
- A few commenters requested clarification on whether the template includes only reporting requirements, or requirements plus optional elements.
- A few commenters asked to clarify the audience for the reporting template.
A few commenters suggested reorganizing the template and providing explanations of the table so users can interpret the information correctly.

Glossary

- A few commenters suggested edits to the definitions.
- A few commenters pointed out that many of the definitions were actually descriptions, not definitions.