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The Greenhouse Gas Protocol Initiative

the foundation for sound and sustainable climate strategies

Product Accounting & Reporting Standard

Summary of Changes

Introduction

The following table highlights the key edits made to the November 2009 version of the *Product Lifecycle GHG Accounting and Reporting Standard*. Key edits include changes to requirements, additions to guidance, and any reorganization since the previous draft. These edits were made based on the following feedback:

- Stakeholder comments received during the first public comment period (November - December 2009)
- Stakeholder comments received during five in-person workshops from November – December 2009)
- Road testing feedback received during an in-person workshop in May 2010 and written feedback in July 2010
- Feedback received during the Steering Committee meeting in June 2010
- Feedback received from Technical Working Group members during two webinars: April 2010 and August 2010

The stakeholder written comments, a summary of the stakeholder comments, and a summary of the road testing feedback are available on our website, <http://www.ghgprotocol.org/standards/product-and-supply-chain-standard>.

Summary or Edits

Chapter & Section ¹	Edit
Chapter 2: Goals of the Product Standard	Made this its own chapter (formerly part of the <i>Introduction</i> chapter).
Section 2.1	Added more guidance on the use of the <i>Product Standard</i> for comparisons.
Section 2.3	Added a section on the relationship between the <i>Scope 3</i> and <i>Product Standards</i> .
Chapter 3: Business Goals	Made this its own chapter (formerly part of the <i>Introduction</i> chapter). Added a business goal “to assess risk”.
Chapter 5: Fundamentals of Product Life Cycle GHG Accounting	Combined the <i>Overview of Product GHG Accounting</i> and <i>Establishing the Methodology</i> chapters from the previous draft while moving some of the concepts from those chapter to other chapters in the new draft: <ul style="list-style-type: none"> - The discussion on screening and the requirement about the type of greenhouse gasses to account for moved to the data chapter - The discussion on perception moved to the boundary chapter
Section 5.1 & Section 5.2	Added background on the relationship between ISO 14044 and this standard.
Section 5.3	Updated the definitions of attributional and consequential approaches.
Section 5.4	Added a section on the use of sector guidance and product rules.
Chapter 6: Establishing the Scope of a Product Inventory	Renamed <i>Defining the Functional Unit</i> chapter and moved the guidance on choosing a product from the <i>Introduction</i> chapter.
Requirements (Section 6.1)	Refer to the functional unit more generically as unit of analysis to address feedback that a functional unit cannot be defined for an intermediate product. Added a requirement on how to define the unit of analysis for intermediate products. Added the reporting requirements that were originally only in the reporting chapter. <ul style="list-style-type: none"> – This was done consistently throughout the updated standard so companies are aware of the reporting requirements as they address the requirements of a particular chapter.
Section 6.2.1	Added more guidance on choosing the studied product.
Section 6.2.2	Added more guidance on defining the functional unit.

¹ The chapter names and section numbers are based on the most recent version of the standard: Draft for Stakeholder Review – October 2010.

Section 6.2.3	Added guidance on identifying the reference flow.
Section 6.2.4	Added guidance on defining the unit of analysis for intermediate products and when doing an inventory on intermediate products may be appropriate (i.e. when the function is unknown and therefore the functional unit cannot be defined). This was moved from the <i>Boundary Setting</i> chapter.
Section 6.2.5	Added guidance on defining the unit of analysis for a service
Chapter 7: Boundary Setting	
Requirements (Section 7.1)	<p>Removed the terms foreground and background.</p> <p>Added a requirement that any exclusions shall be disclosed and justified.</p> <p>Capital goods (and all other processes formerly known as background) are no longer required if significant, but should be included when relevant.</p> <p>The time boundary (formerly reference to as temporal boundary) shall represent the complete life cycle and be disclosed in the inventory report (no longer a 100 year temporal boundary).</p> <p>Kept the same statement that cradle-to-gate inventories may be completed for intermediate products, but moved the definition and guidance on intermediate products to the <i>Establishing the Scope</i> chapter.</p>
Section 7.2.3	Added more guidance on identifying use and end-of-life profiles.
Section 7.2.4	Added guidance on what constitutes a justifiable exclusion and how to determine insignificance.
Section 7.2.5	Removed discussion of qualitative and quantitative significance tests and replaced it with guidance on when non-attributable processes (formerly background processes) may be relevant.
Section 7.2.6	Added more guidance on defining the time boundary and how to handle embedded product carbon stored during end-of-life.
Chapter 8: Allocation	
Requirements (Section 8.1)	<p>Increased consistency with ISO 14044 by renaming the substitution allocation method system expansion.</p> <p>Added requirements specific to recycling allocation and identified two recycling allocation methods: the 0/100 output method and the 100/0 input method.</p> <p>Improved the transparency of the reporting requirements for allocation.</p>
Section 8.3	Added examples for each allocation method.
Section 8.3.4	Added more guidance on choosing an allocation method.

Section 8.4	Added definitions and guidance for two recycling methods: the 0/100 output method and the 100/0 input method. Added guidance on choosing between the two methods.
Chapter 9: Collecting Data & Assessing Data Quality	Combined the <i>Collecting Data</i> and <i>Assessing Data Quality</i> chapters to address feedback that data quality should be assessed as a company collects data, not after.
Requirements (Section 9.1)	<p>Added requirement on the types of GHG emissions to collect (formerly in the <i>Methodology</i> chapter).</p> <p>Maintained the primary data requirement but redefined primary data as process data from specific processes in the product's life cycle.</p> <p>Added a reporting requirement that emission and removals shall be qualified as a percentage of primary data, secondary process data, and secondary financial data</p> <ul style="list-style-type: none"> - Collecting removals data in addition to emissions has been included to address feedback on how to report biogenic emissions <p>Clarified and revised the data quality assessment requirement.. Activity data, emission factors, and/or direct emissions data shall be assessed by the data quality indicators during the data collection process.</p> <p>Added a data quality reporting requirement. For significant processes, companies shall report a descriptive statement on the data sources, the data quality, and any efforts taken to improve data quality.</p>
Section 9.2	Removed the data type hierarchy (i.e. primary better than secondary).
Section 9.2.3.	Moved discussion on screening to the data chapter (formerly in the <i>Overview of Product GHG Accounting</i> chapter) and added more guidance on how to perform screening.
Section 9.2.4 – 9.2.6	Redefined data definitions and provided more guidance on how to collect different data types.
Section 9.2.8	Clarified the guidance to better identify what types of data needs to be assessed during data quality.
Chapter 10: Data Management Plan	Moved from an appendix to a guidance chapter.
Chapter 11: Assessing Uncertainty	Moved from part of the <i>Data Quality</i> chapter to its own chapter.
Requirements (Section 11.1)	Added requirement to report a qualitative statement on the sources of uncertainty and methodological choices.
Section 11.2	Added guidance describing the types of uncertainty and how you can provide a qualitative statement for the inventory report.

Chapter 12: Calculating Inventory Results	Renamed the chapter (formerly named <i>Calculating GHG Emissions</i>).
Requirements (Section 12.1)	<p>Added requirements on how inventory results shall be quantified.</p> <p>Added requirements to not include:</p> <ul style="list-style-type: none"> - weighting factors for delayed emissions - offsets - avoided emissions <p>when calculating inventory results. All may be reported separately in the inventory report.</p>
Section 12.2.1	Added guidance on how to calculate the GHG impact of the studied product.
Section 12.2.2.	Added guidance on how to quality inventory report information.
Section 12.2.3	Added guidance on how carbon storage is handled in the inventory report.
Chapter 13: Assurance	<p>Revised the assurance requirements, including the required the levels and types of assurance permissible. Inventory assurance (either by a third party or first party) is still required.</p> <p>The chapter introduces two types of assurance: data assurance (on the inventory results, methodologies, assumptions, and adherence to the standard's requirements) and model assurance (on the methodologies, assumptions, and adherence to the standard's requirements).</p> <p>Data assurance shall be performed when possible. When data assurance is not possible model assurance shall be performed. The type of assurance shall be determined during the pre-assurance check by the assurance provider.</p>
Chapter 14: Reporting	
Requirements (Section 14.1)	<p>Removed requirement to produce two reports (summary and detailed reports). Only one report is now required.</p> <ul style="list-style-type: none"> - Detailed reported requirements were either moved into the general reporting requirements or made optional. <p>Moved the reporting template to Appendix E.</p> <p>Added the following reporting requirements:</p> <ul style="list-style-type: none"> - Business goals - Justification and disclosure of excluded attributable processes - Biogenic and non-biogenic removals and emission (to be reported separately as well as part of the total results when applicable) - Land use change impacts(to be reported separately as well as part of the total results when applicable) - Time boundary for the total inventory and separately for each stage when applicable (e.g. when the use or end-of-life stages

	<p>have long time boundaries)</p> <ul style="list-style-type: none"> - Embedded product carbon that is not released during waste treatment shall be justified and reported - A qualitative statement on sources of uncertainty and methodological choices shall be reported <p>Updated data and data quality reporting requirements to:</p> <ul style="list-style-type: none"> - For significant processes companies shall report a descriptive statement on the data sources, the data quality aspects, and any efforts taken to improve data quality - The percent of total GHG emissions and removals quantified using primary data, secondary process data, and secondary financial data shall be reported
Section 14.2	Guidance on reporting emission reductions was moved to the <i>Setting Reduction Targets and Tracking Inventory Changes</i> chapter
Chapter 15: Setting Reduction Targets and Tracking Inventory Changes Over Time	This chapter is a new addition to the <i>Product Standard</i> since the November 2009 draft.
Appendix A: Guidance on Product Comparisons	This appendix is a new addition to the <i>Product Standard</i> since the November 2009 draft.
Appendix B: Guidance on Program Design	This appendix is a new addition to the <i>Product Standard</i> since the November 2009 draft.
Appendix C: Land Use Change Impacts	This appendix is a new addition to the <i>Product Standard</i> since the November 2009 draft.
Appendix D: Supplier Engagement	This appendix is a new addition to the <i>Product Standard</i> since the November 2009 draft.
Appendix E: Quantifying Inventory Uncertainty	This appendix is a new addition to the <i>Product Standard</i> since the November 2009 draft.
Appendix F: Public Report Template	This template (originally just for the summary report) has been updated to reflect the additional reporting requirements and moved to an appendix.
Appendix G: Glossary	Updated and revised glossary terms.