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The Greenhouse Gas Protocol

Product Life Cycle Accounting and Reporting Standard

Comment Template

We are providing this template to streamline public comment submissions. To use this template, please follow the instructions below:

- The Product draft is open for stakeholder comment from November 11, 2009 through December 21, 2009.
- To provide written comments, please use the comment template provided, instead of sending comments in a separate file or e-mail, in order to streamline the comment process.
- When using the comment template, please organize comments by chapter/section and reference page numbers and line numbers.
- If you have questions during the public comment process, please email Holly Lahd at hlahd@wri.org.
- Submit comments as an attached MS Word file by email to Holly Lahd at hlahd@wri.org no later than **Monday, December 21st, 2009**. We appreciate any effort to submit written comments before the deadline.

Feedback from (name): Clare Broadbent and Nick Coleman

Organization: World Steel Association

Chapter/Section	Comments
The outline and overall structure of the document	<ul style="list-style-type: none"> • The document is generally well written but could be better structured in terms of layout and flow. For example, the discussion of consequential LCA is described under the section methodology. However, methodology could also cover wider issues such as allocation.
1. Introduction	<ul style="list-style-type: none"> • <i>Section 1.3.1 – Supply Chain Engagement and improvement in disclosure practices (page 9).</i> <p>Recycling and waste management is a key issue in terms of disclosure. For metals, generating a product GHG inventory helps to demonstrate the benefits of recycling and the impacts of using recycled material (recycled content). This encourages the supply chain to improve recycling rates at end of life rather than demanding recycled content, which is limited by supply rather than demand.</p>



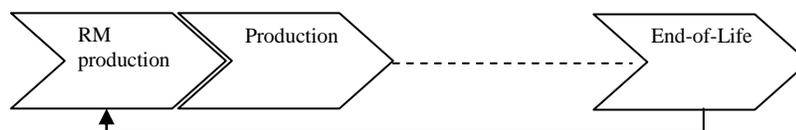
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	This could be used as an example in Box 1-2 of supply chain engagement
2. Principles of Product GHG Accounting	<ul style="list-style-type: none"> No additional comments
3. Overview of Product GHG Accounting	<ul style="list-style-type: none"> <i>Box3-1 (Page 16)</i> shows the perspective of a company selling an intermediate such as steel. It should be noted that for materials which are highly recycled the end of life phase is an area where the material producer can be heavily involved or have access to data.
4. Establishing the Methodology	<ul style="list-style-type: none"> This section explains clearly the difference between consequential and attributional LCA which is a useful addition to the document and often ignored. A completely new product might be a further example of where a consequential analysis is required or where one material substitutes another. Currently, It is difficult to identify an example of sector guidance that might specify the use of consequential LCA. Line 8 on page 19 specifies that attributional LCA shall be used, which seems over prescriptive given the benefits of the consequential approach. <i>Section 8: Allocation</i> could also be included in <i>Section 4: Establishing a methodology</i> as the issues are linked.
5. Defining the Functional Unit	<ul style="list-style-type: none"> No Further Comments
6. Boundary Setting	<ul style="list-style-type: none"> <i>6.2 Requirements (page 24)</i> It is not clear what threshold would be applied to the qualitative/quantitative significance test for capital equipment. Perhaps a percentage of the total impact would help to define this better? It is noted that this will be further investigated in the road testing phase and a percentage figure (1%) is mentioned on page 34 line 11. <i>6.3.3 Guidance – Temporal Boundary (page 28)</i> It is not clear why it is necessary to set a temporal boundary of 100 years for products that have a lifespan of longer than 100 years. A cut-off after 100 years might miss some longer term impacts or benefits of long lasting products. <i>6.3.4 Guidance – Intermediate Products (page 28)</i> For intermediate products such as steel, the steel industry provides cradle-to-gate data. However, it is also useful to provide data on intermediate products with end of life recycling included, in certain circumstances. The rationale behind this is that production and end-of-life are heavily linked for materials with high recycling rates such as steel. In other words, end-of-life steel scrap is a raw material for steel production. When working with our supply chain some end-users like the information supplied in a format, which integrates production and end-of-life in the intermediate product inventory. It is recommended that the standard allows material producers to supply inventories that extend beyond cradle to gate as long as this is documented. For example, production and end-of-life but excluding the use phase (as shown below). A suggested rewrite of <i>lines 1-3 on page 29</i> would be: “A company may include end-of-life recycling of an intermediate product in a partial cradle-to-grave assessment where the product is recycled in a closed material loop (Section 8.3.3). Where a producer of intermediates supplies an assessment including end-of-life recycling it should be reported, which life cycle stages have been included to avoid double accounting.”





- *6.3.5 Guidance – Process mapping (Page 31)*

Figure 6-4 shows the process flow for the manufacture of Hot Rolled Coil via the BF/BOS steelmaking route. This diagram could be improved as follows:

- i) Iron ore feeds into both the sinter plant and the blast furnace
- ii) Secondary Steelmaking is not presented correctly in the current diagram. It is suggested that this process is removed as it is an over complication in the context of this document.
- iii) Scrap can originate from external sources (including end-of-life/postconsumer scrap) or internal sources (the hot rolling mills). The diagram should show the input of postconsumer scrap to the basic oxygen furnace. Steel scrap is also an output of raw material acquisition and preprocessing.
- iv) The oxygen vessel should be relabeled the basic oxygen furnace
- v) Steel co-products, where allocation is required, are mainly produced at the blast furnace, basic oxygen furnace and coke plants. Examples include blast furnace slag, which is used in concrete production and process gas.

In line with the comments regarding recycling in 6.3.4 and considering scrap as a raw material, page 31 lines 8-12 could be rewritten as follows:
 “Figure 6-4 illustrates a process map for a partial inventory of an intermediate product. In this example, recycling is shown for steel scrap which originates from both external sources (e.g. end-of-life products) and internal sources (e.g. rolling processes); if the company wanted to include end-of-life recycling of the flat steel product after its use, to account for inputs and outputs of scrap across the life cycle, then a partial cradle-to-grave assessment is required. For an intermediate product, a company should clearly state the end point of the inventory and which life cycle stages have been included or excluded. In the example, shown here, the end point is a flat steel product exiting the production gate and excludes any assessment of scrap produced at end of life both as an input in manufacture and as an output when the final product is sent for disposal and recovery.

7. Collecting Data

- *Page 38 line 48.* It should be noted that CO₂ emissions are almost always calculated using carbon mass balances or emission factors rather than measured.

8. Allocation

- The hierarchy of allocation methods is a useful addition to the standard. However on *Page 52 footnote 16* states: “because this standard is based on an attributional approach, only direct system expansion can be used to solve allocation problems”. This comment seems to contradict the suggested hierarchy of allocation methods suggested on page 54, which includes substitution allocation (**figure 8-4**). The footnote should be removed or rewritten.
- *Recycling (Page 56) line 24*
 The Comment “For example, if a company purchases and inputs 30% recycled material to create the subject product, the company should accurately assess the GHG inventory of the recycled material” supports the case for including end of life recycling in inventories for intermediate products, which contain recycled material, such as metals (see comments on Section 6).



	<ul style="list-style-type: none"> • <i>Recycling (Page 57) line 20</i> The sentence: “Likewise, if the portion of end of life product that is recycled, then that figure should be used as the basis for emissions calculation” is poorly worded. • <i>Examples of recycling allocation methods (Page 58)</i> <p>A suggested example of applying the De-facto closed loop recycling methodology to steel is provided here:</p> <p>A steel lighting column is manufactured from 100 kg of steel. At the end of life of the lighting column, 95 kg of the steel is recovered for recycling and 5kg is lost. The steel is recycled in a de-facto closed loop system because the virgin and recycled materials have the same inherent properties. The GHG inventory for the lighting column includes the production of 5kg of virgin material (which accounts for the lost material) and the emissions associated with recycling 95 kg of material.</p>
9. Assessing Data Quality and Uncertainty	<ul style="list-style-type: none"> • No Comments
10. Calculating GHG Emissions	<ul style="list-style-type: none"> • No Comments
11. Assurance	<ul style="list-style-type: none"> • No Comments
12. Reporting	<ul style="list-style-type: none"> • No Comments
Appendix A: Data Management Plan	<ul style="list-style-type: none"> • No Comments
Appendix B: Additional Guidance on Collecting and Calculating Data	<ul style="list-style-type: none"> • No Comments
Appendix E: Glossary	<ul style="list-style-type: none"> • No Comments
Any other general comments or feedback	

