**Comment/Explanation\*:***Include your justification for your proposed change to the draft standard below.*
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_We strongly recommend that “Carbon storage for products” be moved to the optional calculations section, or struck from the standard entirely. Based on Table 5.3.2 GWP Data Sources, a wide variety of potential data sources are allowed to be used for these calculations that include common LCA tools, EPDs, LCAs and MEP figures provided in the appendices. Biogenic carbon storage is not consistently reported in these documentation types, so it is not appropriate at this time for carbon storage to be a required metric.

We think that including “Carbon storage for products” as a required metric introduces unnecessary confusion and places undue effort on users of this standard trying to comply using the noted data sources. The carbon content calculation that appears to try to resolve this ambiguity leaves much open to interpretation and could be misused or misinterpreted to mistakenly credit carbon content of materials from non-biogenic origin. We suggest the “Carbon storage for products” calculation could be maintained in the standard, but moved to the Optional section, as shown below. Alternatively, we would support this calculation being struck out of the standard entirely, until clearer methods around biogenic carbon storage are established and followed by the relevant data sources cited in Table 5.3.2 in North America.

**Proposed Change to the Draft Standard\***
*Use “strikethrough” and “underline” formatting to indicate all proposed changes. Changes must be shown with “hard-formatting” strikethrough and underline, not “track changes”.*

*Use a color other than red to indicate proposed changes to the draft.*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### ~~6.2.2 Carbon storage for products~~

~~Carbon storage for each~~ *~~Minimum Assessed Product~~* ~~that includes~~ *~~biogenic carbon~~* ~~as per Section 5.3.5 and carbonation as per Section 5.3.6 shall be calculated as follows:~~

**~~CS~~~~product~~ ~~= (Material Quantity – Waste Factor) x GWP~~~~biogenic~~**

~~Where:~~

~~CS~~~~product~~ ~~= Carbon storage for a project-specific quantity of a~~ *~~building product~~* ~~for life cycle modules A1-A3 (kg CO2)~~

~~Material Quantity = Total quantity of product calculated as per Tables 10.1.1 and 10.1.5~~

~~GWP~~~~biogenic~~ ~~=~~ *~~Biogenic carbon~~* ~~or carbonation associated with a~~ *~~building product~~* ~~for life cycle modules A1-A3 based on a data source selected according to Table 5.3.2. If the relevant data source does not include a GWP~~~~biogenic~~ ~~factor, the GWP~~~~biogenic~~ ~~factor shall be calculated as follows:~~

**~~GWP~~~~biogenic~~ ~~= Material Quantity (mass) x Carbon Content x 3.67~~**

~~Where:~~

~~GWP~~~~biogenic~~ ~~= Mass of atmospheric~~ *~~carbon dioxide~~* ~~stored in the product~~

~~Material Quantity = Mass of product calculated as per Tables 10.1.1 and 10.1.5~~

~~Carbon Content = Percentage of product mass represented by carbon content x Carbon content of feedstock material~~

~~3.67 = Molar mass conversion factor from carbon content to CO2 content~~

…

## **6.3 Optional Embodied Carbon Calculations**

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### 6.3.3 Carbon storage for products

Carbon storage for each *Minimum Assessed Product* that includes *biogenic carbon* as per Section 5.3.5 and carbonation as per Section 5.3.6 shall be calculated as follows:

**CSproduct = (Material Quantity – Waste Factor) x GWPbiogenic**

Where:

CSproduct = Carbon storage for a project-specific quantity of a *building product* for life cycle modules A1-A3 (kg CO2)

Material Quantity = Total quantity of product calculated as per Tables 10.1.1 and 10.1.5

GWPbiogenic = *Biogenic carbon* or carbonation associated with a *building product* for life cycle modules A1-A3 based on a data source selected according to Table 5.3.2. If the relevant data source does not include a GWPbiogenic factor, the GWPbiogenic factor shall be calculated as follows:

**GWPbiogenic = Material Quantity (mass) x Carbon Content x 3.67**

Where:

GWPbiogenic = Mass of atmospheric *carbon dioxide* stored in the product

Material Quantity = Mass of product calculated as per Tables 10.1.1 and 10.1.5

Carbon Content = Percentage of product mass represented by carbon content x Carbon content of feedstock material

3.67 = Molar mass conversion factor from carbon content to CO2 content