

Carbon protection in products – Canopy Wood policy definitions and methodology

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Background

Under FSC certified forest management in tropical areas where the forests are endangered from conversion to other uses FSC FM (Forest Management) and FSC CoC (Chain of Custody) certified wood products protects carbon (CO₂) stored in the biomass of the forests.

However, the **Marrakech Accords** is a set of agreements reached at the UN Conference of the Parties 7 (COP7) meeting in 2001 on the rules of meeting the targets set out in the Kyoto Protocol under United Nations Framework Convention on Climate Change (UNFCCC).

In the agreement the following resolution was declared:

Decision -/CP.7

Land use, land-use change and forestry (LULUCF)

“Acknowledging with appreciation the scientific advice provided in the Special Report on Land use, Land-use Change and Forestry prepared by the Intergovernmental Panel on Climate Change”

4. “Decides that any changes to the treatment of harvested wood products shall be in accordance with future decisions of the Conference of the Parties”

The parties thereby removed the possibility of forest protection through sustainably derived products by excluding forest protection and wood products from access to carbon credits from the Clean Development Mechanism (CDM).

Since then, humanly induced emissions from deforestation (tropical) has risen to 20% (FAO) of all CO₂ emissions.

Scope of application

Creating consumer awareness of the link between CO₂ emissions and carbon protection in products is an important part of the Canopy Wood code of conduct and every effort possible should be made to accurately make such information publicly available.

Under the Canopy Wood code of conduct calculating and disclosing carbon protected in products is voluntary in 2009 due to the complexities of implementation. From 2010 it is mandatory under the code to calculate and disclose the calculations and the carbon amounts in CO₂ equivalents per unit and per volume protected though the products produced in accordance with the code.

Carbon credits derived from buying products should not be used in voluntary emissions reduction (VER) schemes unless the methodology is disclosed and third party audited.

As a general rule carbon protection under the code has no monetary value and serves only as a theoretical value. The reason for this is that no generally accepted methodology has yet been developed and broadly agreed to for determining the lifespan of a wood product containing carbon.

Monitoring and compliance

The application of carbon protection in products is voluntary in 2009. From 2010 the code should apply. However, the calculations are complicated and approximations are acceptable as long as:

- The methodology is made transparent
- Weaknesses in the modeling are made public
- The above and the approach is 3rd party verified

Definitions

The amount of CO₂ protected in a product depends mostly on:

- a. The average dry biomass in the forest per hectare (ha).
- b. The annual average harvest per ha measured in cubic meters (M³) and converted to metric tons of dry biomass. (Any CO₂ credits sold from residual wood waste as a consequence of the harvest must be adjusted for)
- c. The length of the harvest rotation cycle in the forest.
- d. The applied deforestation rate/risk.
- e. The gross amount of wood used in the production of each single product (adjustment for the way the wood waste is handled and used must be taken into consideration).
- f. The lifespan of the wood product and how the wood product is disposed off.

In addition, energy usage converted to CO₂ equivalent in all aspects of the supply chain from production in the forest to final consumer should be calculated and used to determine the net amount of CO₂ impact associated with a single product. However, it is acceptable to split the calculations into 2 parts where the first part, which is compulsory, is the total estimated energy usage up to and including the delivery of the products to a corporate client and part 2, which is encouraged but not compulsory, is the energy usage related to bringing the product to market including energy usage for by products, transportation etc. ¹⁾

¹⁾ Measuring CO₂ equivalents for wholesale clients of the wood item producing company is not compulsory because the complexities might be overwhelming for the clients and deter them from using wood products under the Canopy Wood code of conduct.

Other things equal, timber purchases under the Canopy Wood Code should be coming from the forest with the highest equivalent CO₂ measurement per M³ of gross timber harvested. ²⁾

Methodology and approach

Various methods can be used to determine the amount of carbon stored in products.

- CDM (Clean Development Mechanism)
- CCBA (The Climate, Community & Biodiversity Alliance)
- REDD project (UN Collaborate Programme on Reduced Emissions from Deforestation and Degradation)

All of these are highly sophisticated and lengthy processes, aimed at establishing carbon protection data for either future official or the voluntary carbon credit markets.

An approach involving confining to the principles of a major official and transparent standard should be used.

Special provisions and approximations are acceptable for small scale FSC certified forest managers as well as community farms.

The product producer should obtain relevant data from the FSC forest operator:

- Annual gross timber production
- Annual net sawn wood production
- Total energy usage in connection with the annual gross timber production
- Energy usage for sawn wood production measured and converted to CO₂ emissions/M³
- Total size of forest under FSC management
- Establish a baseline for the land under a deforested scenario
- Dry average biomass in the forest
- Length of the rotation cycle of the forest operation
- Local and regional deforestation rates
- Usage or disposal of residual wood in sawn wood production
- Energy usage related to transportation of sawn wood to producer

The product producer should calculate CO₂ emissions related to:

- Energy usage related to the production of wood products
- Energy usage related to transportation and shipment of wood products to consumers
- The disposal of wood waste from production

²⁾ The highest CO₂ equivalent protection measure will normally come from the forest with the highest applied deforestation rate and the smallest annual timber harvest in relation to the dry biomass per ha in the forest.

In addition, the producer must make estimates of:

The lifespan of the products and
Most likely means of final disposal of the wood product

When the average dry biomass per ha measured in tons is available, it is generally accepted that 50% of the dry bio mass is carbon in solid form.

Care should be taken that carbon credits are not sold to the VER market by the forest operators and generally that no double counting takes place anywhere in the calculations.

The goal of this Canopy Wood policy is to give qualified and concrete information to users/ buyers of wood products under the canopy Wood code of conduct about the positive climate effect in terms of avoided CO₂ emissions through the use of these products.