

Calculation of a “Carbon Footprint” for Corrugated Packaging

General Statements

In accordance with the CEPI Framework and the CITPA Methodology, the following general statements should accompany all information relating to the carbon footprint of corrugated packaging:

1. All paper and board products have two unique positive aspects:
 - they are based on a renewable raw material, using as a starting point the capacity of forests to bind CO₂;
 - they store carbon and, furthermore, the recycling of paper and board products prevents this CO₂ from returning to the atmosphere.
2. Sustainable forest management ensures that at a very minimum carbon stocks in the forest are stable and that in general they improve over time. Specifically for European Forests, according to the European GHG inventory, forests of the EU-15 are a net carbon sink, with net CO₂ removals by forests having increased by about 25% between 1990 and 2004.”¹
3. After use, land filling of corrugated packaging should be avoided whenever possible. The preferred end of life treatment for corrugated packaging is recycling.

Data

Based on the 2009 European Database for Corrugated Board Life Cycle Studies, with additional supporting data, the following is the average calculated greenhouse gas balance associated with the production of corrugated packaging:

Fossil CO ₂ equivalent per tonne of packaging	784kg
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Note that this is “cradle to gate” calculation and transport from corrugated plant to the customer is not included

We consider that the methodology used to calculate this value is in line with BSI PAS 2050.

The stored CO₂ equivalent per tonne of corrugated packaging is 1684kg.

Warning

This value is provided for additional information but it is not valid to subtract it from the fossil CO₂ equivalent.

Contacts

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¹ Annual European Community greenhouse gas inventory 1990–2004 and inventory report 2006, http://reports.eea.europa.eu/technical_report_2006_6/en/EC-GHG-Inventory-2006.pdf