



Tetra Brik® Aseptic 1000 Edge LightCap™ 30

Carbon footprint report example



Primary information contained in this report

- Verified cradle-to-grave carbon footprint
- Verified carbon footprint(s) reduction for packages with plant-based polymers based on cradle-to-grave results that may be used to support public communication
- 'Plant-based' is used in the tables to describe versions of the package containing plant-based polymers in the opening and/or in the packaging material.

Verification

The carbon footprints of the included packages and the reduction have been verified by the Carbon Trust to PAS 2050:2011, ISO 14044:2006 and ISO 14067:2018.



More information is available on www.carbontrust.com/tetrapak.

Use of the Carbon Trust name and label need to be in line with relevant license agreements and guidelines.

Scope of the carbon footprint

Cradle-to-grave, including: raw material production, transport of raw materials, packaging material converting, closure converting, film extrusion and blowing, strip production, transport of packaging materials to filler, forming and filling of the package, transport of packaging materials to distribution center and end-of-life.

The terminology of ISO 14067:2018 has been used, meaning that all relevant GHG emissions and removals are covered in the term 'carbon footprint'. The carbon footprint results are expressed in 'CO₂ equivalents' (CO₂e).

Package footprint data

Package:

Tetra Brik® Aseptic 1000 Edge LightCap™ 30 (PLH Compound)

Packaging material quality:

/ml BIO CLC Dup

Geographic scope:

Tetra Pak Global Average v11

Printed:

2025-02-10



Cradle-to-grave carbon footprint (g CO₂e/package)

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Total Cradle-to-grave	61	49	50	38

Carbon footprint % reduction for packages with plant-based polymers based on cradle-to-grave results

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Reduction	-	-19%	-17%	-37%

Package properties

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Package weight, incl. opening (g)	32	32	32	32

Biogenic carbon (g CO₂/package)

	Standard packaging material		Plant-based packaging material	
	Standard opening	Plant-based opening	Standard opening	Plant-based opening
Biogenic carbon in material	29	39	38	47

Geographic scope

Calculations based on 'Tetra Pak global average' data

Raw material: For the production of paperboard and aluminium foil, global average data from Tetra Pak's GHG reporting is used representing the performance in the last full reporting year. For production of plastics data as presented by Plastics Europe is used (www.plasticseurope.org) and for production of plant-based plastics data is from the Braskem 2023 'I'm green™ PE Life Cycle Assessment'.

Converting: Global average data from Tetra Pak's GHG reporting is used for converting operations and for the transport of raw materials to the converting factory. The packaging material waste rate in converting is used to calculate the impact to produce the extra raw materials required, which is allocated to the 'converting' results.

Forming and filling: Global average data from Tetra Pak's GHG reporting is used for the transport of packaging materials to the filler, and the forming and filling of the package. The calculations are based on the most recent version of the filling machine, relevant for the type and size of the package. Transport of packaging materials to distribution center is modeled based on average distances and transport emission factors from Tetra Pak's GHG reporting.

End-of-life: The end-of-life scenario represents the global average situation for cartons, based on Tetra Pak statistics. The 'cut-off' method has been used when modelling end-of-life: no environmental burdens nor credits have been included in the results for cartons going to recycling or incineration with energy recovery. End-of-life results include impacts from incineration without energy recovery and landfill.



Biogenic carbon in packaging material

Plants capture and store carbon from the atmosphere. When wood fiber is processed into paperboard, or sugarcane into plant-based polymers, the finished packaging material contains biogenic carbon captured from the atmosphere.

The biogenic carbon uptake for plant-based polymer is included into the calculated carbon footprint. The approach followed is the -1/+1 approach as described in section 6.5.2 of ISO 14067:2018. Removals of CO₂ into biomass are characterized as -1 kg CO₂e/kg CO₂ and emissions of biogenic CO₂ are characterized as +1 kg CO₂e/kg CO₂ of biogenic carbon in the calculation of the carbon footprint.

The release of biogenic carbon is accounted at end of life, unless burdens are transferred to other systems (incineration with energy recovery and recycling) or carbon is not released (landfill).

However, the accounting of biogenic carbon uptake is only applied to polymers, to show the difference between plant-based and fossil. It is not applied to paperboard as there are no fossil alternative to it in our packages.

The impact of LUC (Land Use Change) is also included in the modelling, in line with ISO 14067 and PAS 2050.

Rounding of carbon footprint figures

The displayed carbon footprint figures are rounded; however the percentages of reduction are based on exact figures. A carbon footprint of zero in the report can be the rounding of any number between -0.5 and 0.5 g CO₂e.

Updates and revisions

The results are based on version 11 of the Tetra Pak internal "CO₂ Product model" valid from January 2025. The CO₂ Product model has been certified by the Carbon Trust. The model is periodically updated to ensure that the latest available emission factors and material specifications are applied. The results of the model may not be directly comparable with those generated in earlier versions.