



The story of cartons.

 **Tetra Pak®**
PROTECTS WHAT'S GOOD



When it comes to food packaging, cartons matter

“A package should save more than it costs.”

This belief of our founder, Dr. Ruben Rausing, guided Tetra Pak in developing the aseptic carton technology. It is also why, for us, solving the global challenge of protecting perishable food while reducing reliance on fossil-based resources is so important.

By allowing food to be stored and transported without the need for refrigeration or preservatives, Tetra Pak cartons help get food to people everywhere.

Discover how they make an impact in three key areas: food protection, carbon footprint, and recycling.

1. Food protection

Aseptic cartons prioritise food safety and quality while offering convenience. They protect perishable foods such as milk, juice, and plant-based beverages during transport and storage, extending shelf life by up to 12 months without the need for refrigeration or preservatives.¹

This means perishable foods can be accessible worldwide, including in regions far from farms or with limited refrigeration. The extended shelf life also helps reduce food spoilage and waste. All in all, aseptic cartons play an important role in supporting resilient food systems and ensuring a reliable food supply chain.

Made primarily from paperboard, aseptic cartons achieve excellent food protection with their multi-layer structure. The paper layer provides robustness and a surface for printing, the polymer layers block moisture and hold everything together, and the ultra-thin aluminium layer shields against light and oxygen to prevent harmful microorganisms from entering. This multi-layered design ensures food stays safe while preserving its colour, texture and taste.

¹ Protecting perishable foods. Source: <https://www.tetrapak.com/sustainability/focus-areas/food-access-availability-and-resilience/protecting-perishable-foods>



Aseptic cartons extend shelf life by up to **12 months**

2. Carbon footprint

Cartons have a lower carbon footprint compared to single-use packaging made primarily from fossil fuel-based materials in the perishable food category, particularly in the dairy and juice categories².

They are made primarily from paperboard sourced from FSC™-certified forests and other controlled sources - a renewable material that can be replenished when sourced responsibly - minimising the need for fossil fuel-based materials.

To further increase the renewable content of aseptic cartons, we are using plant-based plastics, such as Bonsucro-certified polymers derived from sugarcane, and developing a paper-based barrier to replace the ultra-thin aluminium foil layer.

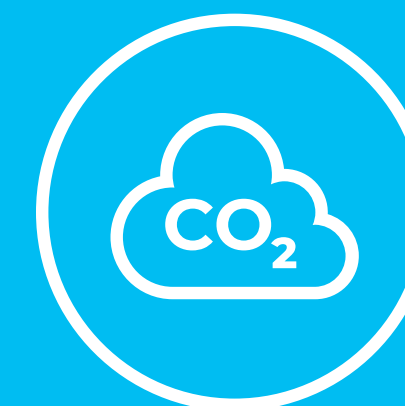
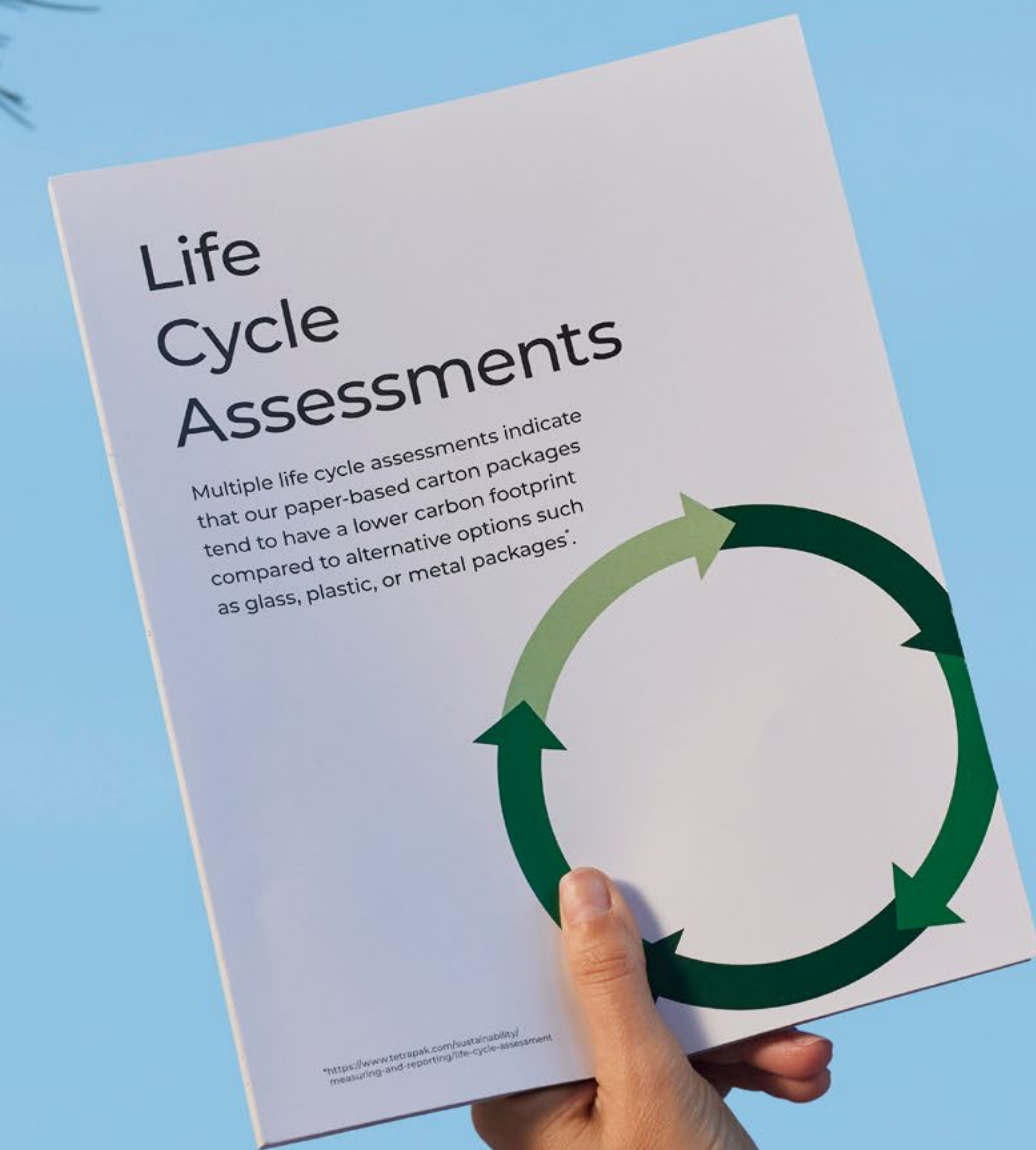
For example, a Tetra Brik® Aseptic 200 Slim Leaf package with a paper-based barrier contains up to 90% renewable content, reducing its carbon footprint by one-third compared to its standard equivalent³.

Aseptic cartons also reduce emissions through efficient transport and storage. They do not require refrigeration, which saves energy, and their stackable design means fewer trucks are needed, cutting fuel consumption and associated emissions.⁴ View supporting Life Cycle Assessments (LCAs) here: <https://www.tetrapak.com/sustainability/measuring-and-reporting/life-cycle-assessment>

² Source: <https://www.tetrapak.com/sustainability/measuring-and-reporting/life-cycle-assessment>

³ Certified by the Carbon Trust™ - benchmark: Tetra Brik® Aseptic 200 Slim Leaf carton package with aluminium foil layer

⁴ Source: 20-011-Circular Analytics_ACE - Full report_2021-03-11



€100 million
annual investment to enhance the
environmental profile of cartons

3. Recycling

Cartons can be collected and recycled into valuable materials where adequate collection, sorting, and recycling infrastructures exist at scale.

The paper fibres can be turned into new paper products like shopping bags, cardboard boxes, or tissues, while the polymers and aluminium (polyAl) can be recycled into warehouse pallets, crates, outdoor furniture and more.

We invest up to €40 million annually in recycling infrastructure and collaborate with value chain players to drive progress in the circularity of cartons. Additionally, we are investing an extra €100 million per year over the next 5 to 10 years to enhance the environmental profile of cartons by simplifying material structures, increasing renewable content – such as the paper-based barrier – and improving recycling.

Read more about our new paper-based barrier here: <https://www.tetrapak.com/solutions/packaging/packaging-material/paper-based-barrier>



€40 million

annual investment in collection, sorting,
and recycling infrastructures worldwide

The all-in-one packaging solution



Cartons are an all-in-one package. They offer excellent food protection, have a lower carbon footprint than single-use packaging made primarily from fossil fuel-based materials in the dairy and juice categories, and can be recycled where infrastructure exists at scale - helping to keep valuable materials in use for longer.

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