



Independent scientific study demonstrates corrugated packaging significantly outperforms reusable plastic containers in climate impact, energy efficiency, and supply chain performance—delivering both environmental and business advantages.

# SUPERIOR CLIMATE & ENERGY PERFORMANCE

Corrugated packaging outperforms RPCs with 57 to 110 percent better performance in the areas that matter most:

**57**%

Greenhouse Gas **Emissions** 



69%

Respiratory **Effects** 



Non-Renewable **Energy Use** 





These advantages align directly with top retailer sustainability priorities identified in 2023 Deloitte research:

**Reducing Greenhouse Gas Emissions** 



Using Sustainable **Materials** 



Minimizing Energy Consumption.





# **SUPPLY CHAIN AND COST EFFICIENCIES**

Container weight drives both environmental impact and business costs. Key advantages:



Lighter corrugated reduces freight costs and transportation emission



Local sourcing enables shorter supply chains



More products per truckload improves logistics efficiency

### RECYCLING AND CIRCULAR **ECONOMY LEADERSHIP**



The recycling performance difference is dramatic:

Corrugated Recycling Rate:

Polypropylene Plastic (RPC) Recycling Rate



**Corrugated Fibers** 

Will Be



In New Products



### PROVEN INDUSTRY PROGRESS

Source: 2020 Corrugated Industry LCA

The corrugated industry demonstrates measurable environmental improvements from 2006 to 2020:

Reduction in: Ozone Depletion



Reduction in: Water Use





Acidification

Reduction in:



Reduction in: **Smog Formation** 









## **STUDY CREDIBILITY**

Independent research:

Conducted by Anthesis Group

### Scientific rigor:

Adheres to ISO 14040/14044 international standards for life cycle assessment

#### **External validation:**

Independent peer review confirms the study meets requirements for public environmental claims