



SUSTAINABILITY

Kaufman Container

Vision for Sustainable Packaging

- The Sustainable Packaging Coalition (SPC) envisions a world where all packaging is:
 - Sourced responsibly
 - Designed to be effective and safe throughout its life cycle
 - Meets market criteria for performance and cost
 - Is made entirely using renewable energy
 - And once used, is recycled efficiently to provide a valuable resource for subsequent generations.



SUSTAINABLE PACKAGING
COALITION®

A PROJECT OF  GREENBLUE®

Sustainable Packaging Key Components

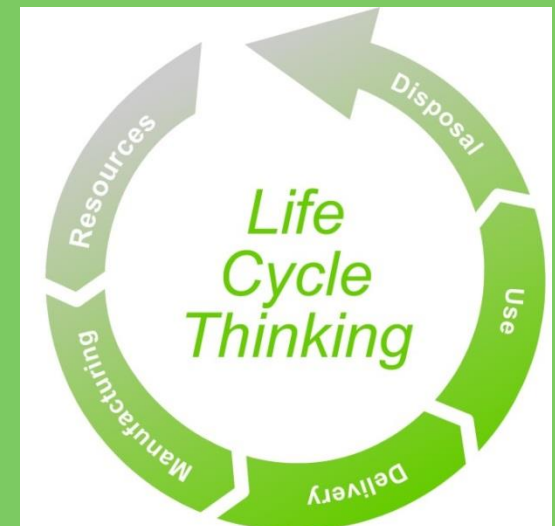
- Is sourced, manufactured, transported and recycled using renewable energy
- Is manufactured using clean production technologies and best practices
- Is made from materials healthy throughout the life cycle
 - ▣ All ingredients need to be considered including additives, inks, adhesives and coatings
- Meets market criteria for performance and cost
 - ▣ Improved package design
 - ▣ Design for recovery and source reduction
- Optimizes the use of renewable/recycled source materials
 - ▣ The use of bio-based renewable or recycled materials can support the development of sustainable packaging
 - ▣ Plant & sugar cane based resins are available



Design Stage

Sustainable packaging design considers the full life cycle of a package. Every decision, from the base material to the label will determine how sustainable a container is.

- Anticipatory Design is the fundamental best practice for sustainable packaging
- Design for reuse, recycling, composting and energy recovery
 - Using recycled materials reduces the consumption of resources and energy and extends the useful life of materials currently in circulation
- Source Reduction:
 - Light weighting (Reducing the gram weight in containers and closures)
- Design for transport:
 - Considerations of transport packaging and pallet efficiency can result in energy, material and cost savings
 - Consider the distance your materials will be traveling



Education

- Our goal is to educate our customers, while proactively promoting viable and more sustainable packaging solutions

- **Ask yourself:** How important is sustainability to your business?
 - ▣ Very important: The main reason consumers will buy your product
 - ▣ Somewhat important: You like the concept, but it won't be the core of your brand



Kaufman Initiatives

- Sustainable packaging is a topic we regularly discuss with our customers
- **Logistics:** It is our mission to provide our customers with the most efficient and affordable freight rate. This could include shipping from one of our two warehouses or direct from the manufacturer.
 - ▣ Rail Transport
- High efficient lights in our warehouses



Vendor Relationships

- **Mandatory Supplier Audits:** Before Kaufman partners with a vendor on a project, they must have already been audited and passed our quality standards. This ensures:
 - Clean and fair working conditions
 - Packaging uses significant quantities of energy, water & materials in manufacturing and production processes. Clean product reduces the environmental impact of manufacturing processes and toxics used or emitted.
 - Minimizes number of rejected items

- We work in partnership with vendors that have sustainability programs already in place

Customer Benefits

More Sustainable

Fast-track to solutions that provide the largest environmental benefits
Support decision making with facts



Lightweight

Identify opportunities for weight reduction and environmental performance improvement



Brand Positioning

Reach internal and external sustainability goals and targets



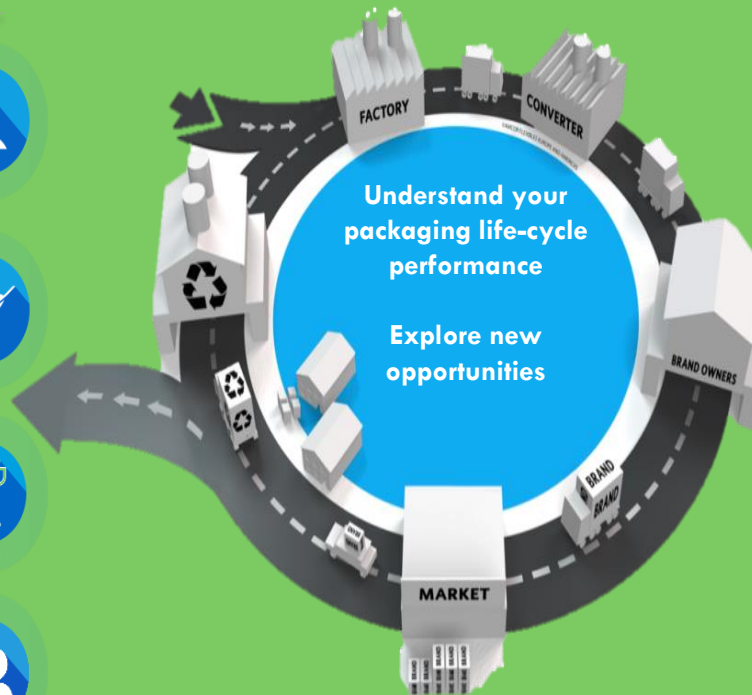
Consumers Engagement

Identify the potential for a claim
Ground sustainability claims with facts



Cost Savings

Avoid the use of expensive external consultants



Features

Best-in-class database

- Comprehensive background database (> 200 materials and evolving)

Comprehensive approach

- Systematic quality check by our vendor's sustainability experts
- 6 environmental life cycle impact indicators
- ASSET™ report for effective and transparent communication of results
- Supporting information document provides additional insights into approach and methods

Things to Know about ASSET™

1 How can the customer benefit from ASSET?

ASSET is a service offered to customers who want to improve the environmental credentials of the packaging they use and possibly make external claims on the reductions achieved (subject to approval by the AFEMEA/AFA sustainability team)

2 ASSET works in a 3-step eco-design process

- 1. Evaluate:** assess current specifications, anticipate risks and opportunities, understand the packaging life cycle.
- 2. Explore:** identify improvement options for new products, benchmark ideas for smarter solutions, assess the impact of design options.
- 3. Evolve:** redesign package to create the biggest benefit over its life cycle, retrieve fact-based information on product sustainability credentials, helping our customers to better satisfy their own customers and other stakeholders requests.

3 ASSET is third-party certified

Carbon Trust Certification Ltd has certified Asset against leading international standards and guidelines:

- GHG Protocol Product Life Cycle Accounting and Reporting Standard (2011, carbon footprint)
- PAS2050:2011 (carbon footprint)
- ISO14044:2006 (Life Cycle Assessment)
- ISO14046:2014 (water footprint)
- Code of Good Practice for Product Greenhouse Gas Emissions and Reductions Claims (2008)

Product applications



Food & Beverage



Home and Personal Care



Pharmaceutical



Tobacco

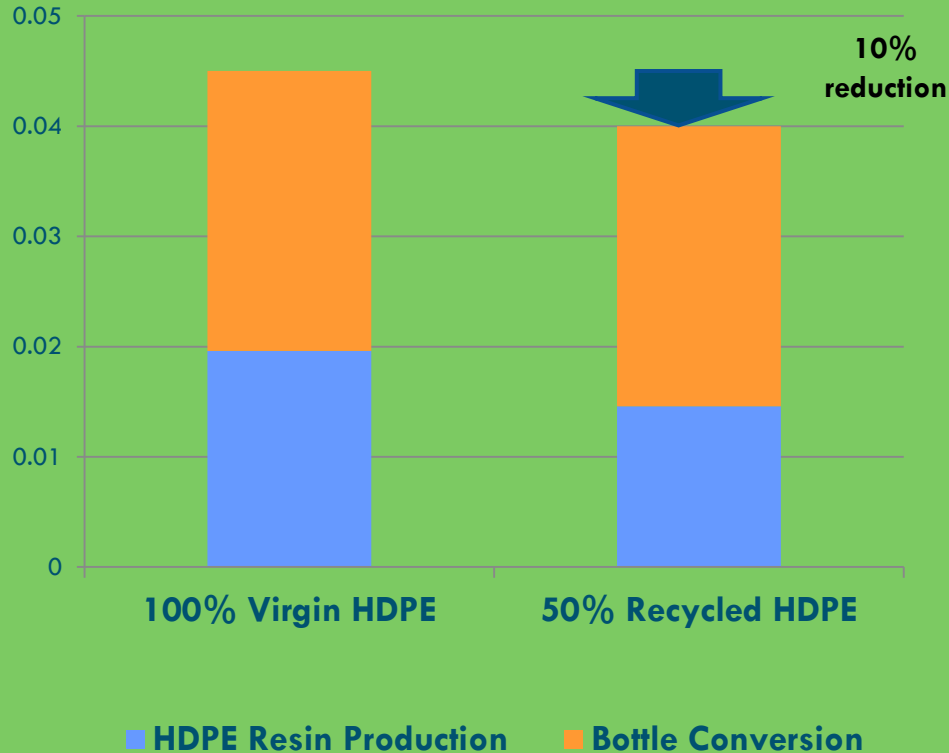


Utilizing PCR to showcase your brand's sustainable packaging commitments



Kaufman Container's 3 oz HDPE Roll on Cylinder

Carbon Footprint (kg Carbon Dioxide per bottle)*



- Our vendor sources and converts over 100M pounds of post-consumer recycled PET and HDPE each year
- Recycled content reduces the need for virgin material and helps to “close the loop”
- Our vendor uses up to 100% recycled PET and 50% recycled HDPE in its packaging
- Recycled material can reduce life cycle carbon emissions of packaging by up to 50%

*LCA measures cradle to gate carbon impact of resin production and representative bottle conversion process using ASSET streamline LCA software

Post Consumer Resin (PCR)

The higher the percentage of PCR used, the more positive impact on the environment

- Can be created with PET, PP & HDPE resins
 - ▣ PET
 - ▣ Polypropylene
 - ▣ HDPE:
 - PCR can be in the middle of a tri-layer package.
 - ▣ FDA Approved Food grade sources



PCR Frequently Asked Questions

- ❑ **How high of a percentage of PCR can you do?**
 - We have sources capable of up to 100% PCR for PET, HDPE containers & tubes. Various levels of PCR is also available in PP resins.
- ❑ **How does PCR compare to normal plastic in terms of price & minimum order requirements?**
 - **Price:** With any amount of PCR, there is an increase in costs
 - **MOQ:** Quantities as low as 10,000 pieces depending on the project
- ❑ **Are there any quality concerns when it comes to PCR?**
 - All forms of PCR are prone to some visual imperfections and/or variations in color. If you are interested in PCR, you must be willing to accept a slight variation in color. One solution is to use dark or opaque colors to hide the imperfections.
 - PET: Occasional black flecks in the finished bottle
 - HDPE: A little less white than virgin resin

Decoration

- ❑ In-House decorating facility in Cleveland, OH
- ❑ Ability to decorate small & large runs
- ❑ Capabilities include:
 - Silk Screening (Most sustainable option)
 - Hot Stamping
 - PS, Sleeve & Heat Shrink Labeling

- ❑ Formal documented quality assurance program
- ❑ ISO & GMP compliant
- ❑ Regularly audited by top customers including Estée Lauder, L'Oreal, Nestlé and SC Johnson.



Viscose Celon Bands

- Ideal tamper evident solution to protect the integrity of your product
- Celons are made from extruded cellulose that originates from wood pulp derived from renewable sources
- Eco-Friendly & 100% Biodegradable



Got Gas?

- Seal and protect against contaminants,
- Helps validate full tank
- Provides visual assurance with tamper evidence

100% BIODEGRADABLE

viscose

Self shrinking tamper bands for highly flammable gases.

Apply by hand, no heat equipment required.

100

Thank You

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