

OLIVER WEBINAR SERIES

The Sustainability Imperative: Folding Carton Packaging for a Greener Future



OLIVER INC.

CREATIVE PACKAGING SOLUTIONS

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The Sustainability Imperative: Folding Carton Packaging for a Greener Future

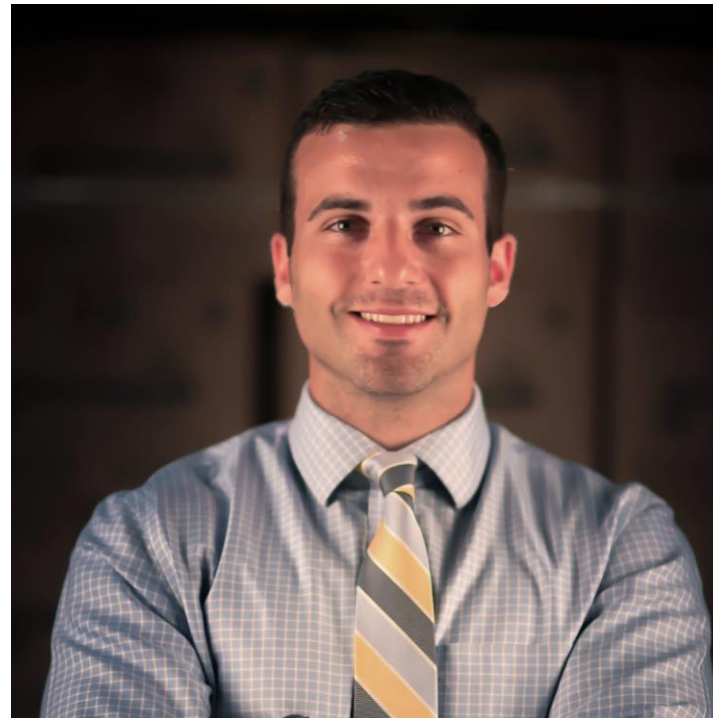
Hosted by Doug Doroh

VP Sales & Marketing, Oliver Inc



Guest Speaker, Rj Bianculli

Managing Director, Emerald Brands



Today's Agenda

Arriving at an environmental crossroads

- A brief history of the eco-friendly movement

Why sustainability is important, and why you should care.

- Impact on Sales, Operations & Your Customers

How to incorporate today's principals of sustainability into your packaging

Emerald Brands – Innovation Product

- A “Tree Free” alternative sustainable substrate for your packaging needs

Designing for Sustainable Results

- Oliver Inc. resources at your disposal



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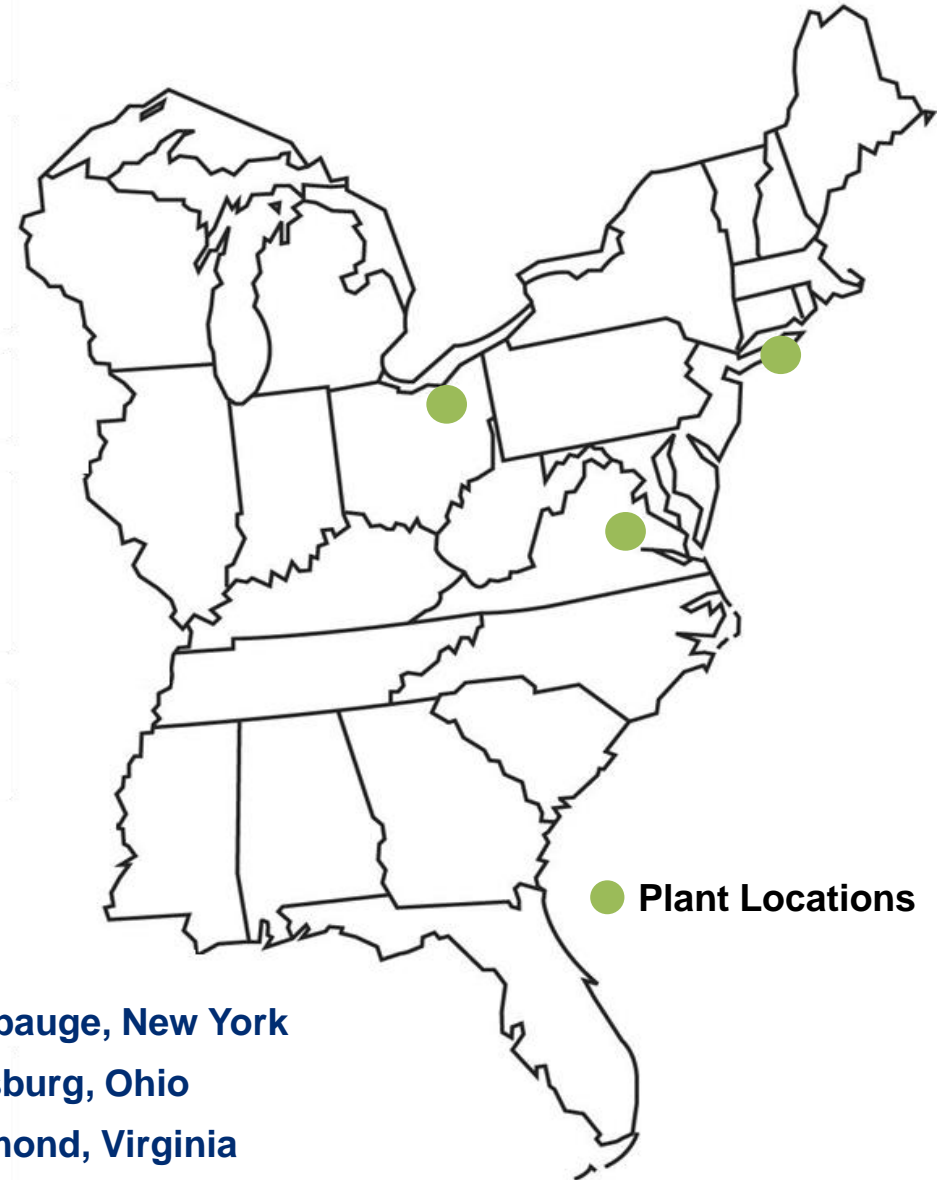
POHLIG
PACKAGING

DISC

DISC, Pohlig, and Oliver Printing & Packaging have joined forces under Oliver Inc.

Three esteemed companies that are masters of their craft and passionate for the packaging and printing industries have come together to form an industry powerhouse.

We provide extraordinary customer experience and exceptional value throughout the United States.



● Plant Locations

- Hauppauge, New York
- Twinsburg, Ohio
- Richmond, Virginia



OLIVER INC.
CREATIVE PACKAGING SOLUTIONS

Our Commitment

- **Core Purpose** - Making a positive difference in the lives of our employees, customers, and communities.
- **Our Niche** - We are committed to providing creative, competitive, and reliable packaging and print solutions that **drive sales** and **peace of mind** for our customers.

Folding Cartons



Labels



Marketing Collateral



Fulfillment



Arriving at an environmental crossroads

A brief history of the eco-friendly movement



1950s – Single Use and Convenience were King



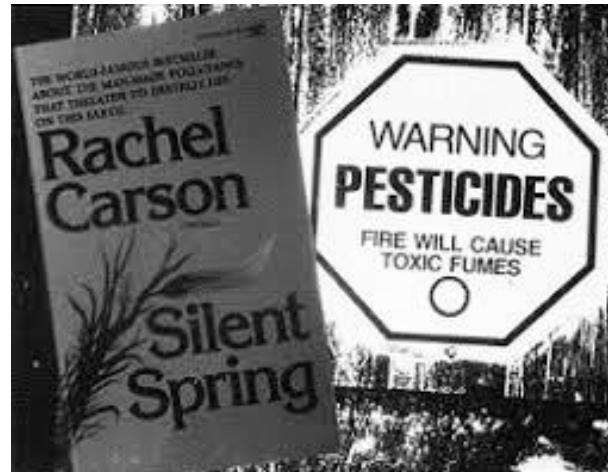
Life Magazine
1955

Celebrated
Throwaway
Living

- Disposability of items was nothing but positive
- Single use products, paper plates, plastic cup meant convenience for consumers
- Marketers programmed consumers that its ok to throwaway



During the 1970's & 80s environmentalism takes off



- In the 1970s the EPA is formed
 - Clean Water Act – 1972
 - Clean Air Act – 1970
 - Endangered Species Act – 1973
-
- In 1983, the UN defines sustainable development as:
 - ***“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”***

2020 becomes a turning point as we embrace sustainability



- Sustainability is at the forefront of consumers and regulators' minds.
- It's no longer a question of if brands should shift to more sustainable packaging, but how.
- Consumers buying power is driving sustainability:

67%

Of consumers now identify as environmentally aware.

87%

Of consumers would buy a product with a social and environmental benefit if given the opportunity.

Driving forces behind increased focus on packaging sustainability

1

Higher consumer awareness



- Technology & Social Media have spread the movement.
- Consumers are willing to substitute packaging that does not meet sustainability requirements

2

Tougher regulatory pressure



- States & Local Restrictions: i.e. (banning straws and grocery bags)
- Legal obligations for emission reductions
- International obligations in Europe and beyond.

3

New business potential



- Availability/willingness of consumers to pay higher prices for sustainable packaging
- Improving supply chain management (availability, quality, price, and sustainability of raw materials)

Business Case for CPG Brands



Sales



Operations

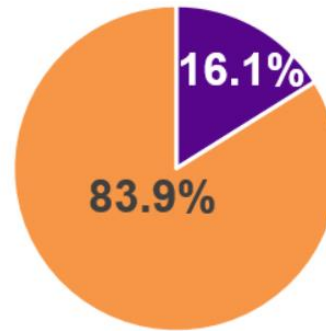


Brand Loyalty

Despite the fact that Sustainability-Marketed Products are 16% of the market, they delivered more than 55% of the market growth.

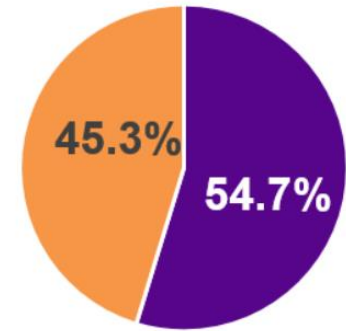


\$ Share of Market
(2019)



- Sustainability-marketed products
- Conventionally-marketed products

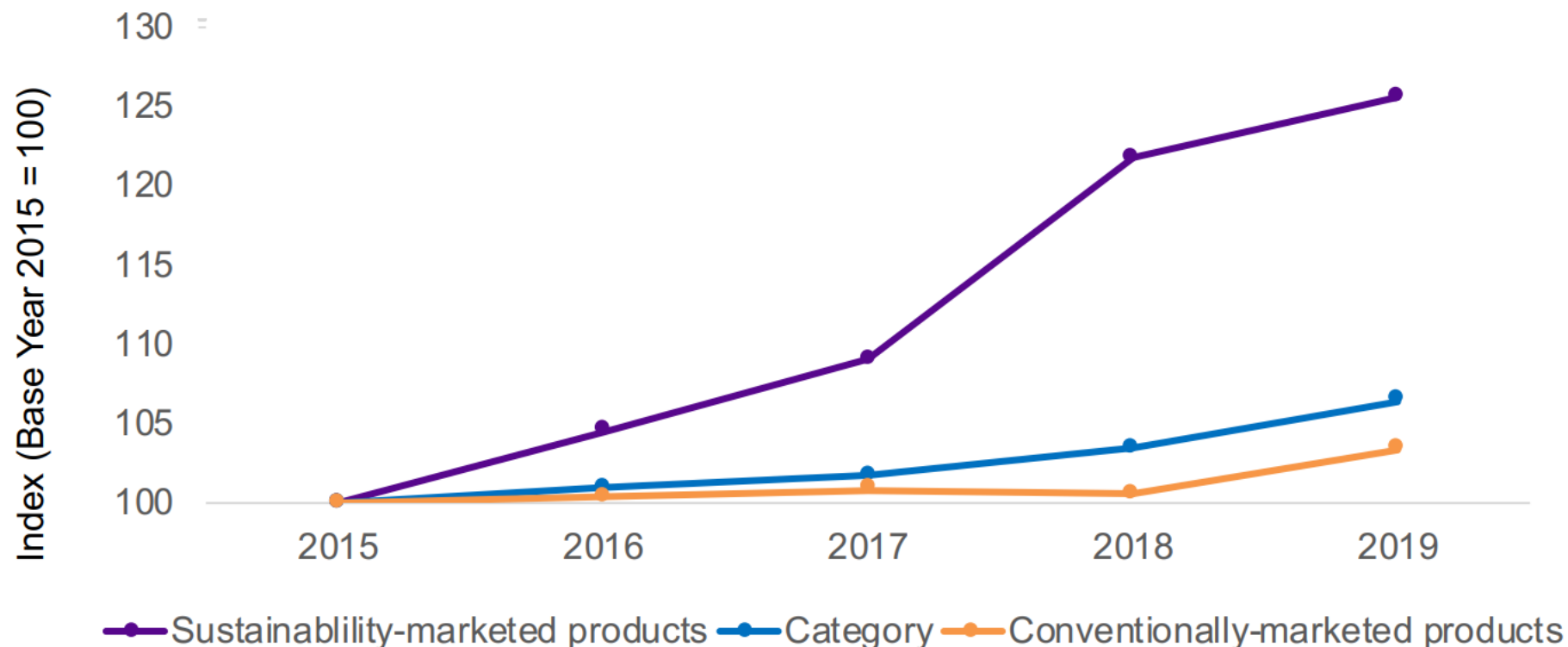
\$ Share of Market Growth
(2015-2019)



- Sustainability-marketed products
- Conventionally-marketed products

Increased Sales for Sustainability-Marketed Products

Sustainability-marketed products grew 7.1x faster than conventionally-marketed products, and 3.8x faster than the CPG market.



Sustainability-marketed
4-YR CAGR:
5.86%

Total Market
4-YR CAGR:
1.56%

Conventionally-marketed
4-YR CAGR:
0.83%

A close-up photograph of several wooden puzzle pieces scattered on a light-colored wooden surface. The pieces are in various orientations, with some showing interlocking shapes. The lighting is warm and soft, creating a textured, natural feel.

Will consumers really pay for sustainable packaging?

65%

Of consumers would pay more for sustainable packaging.

36%

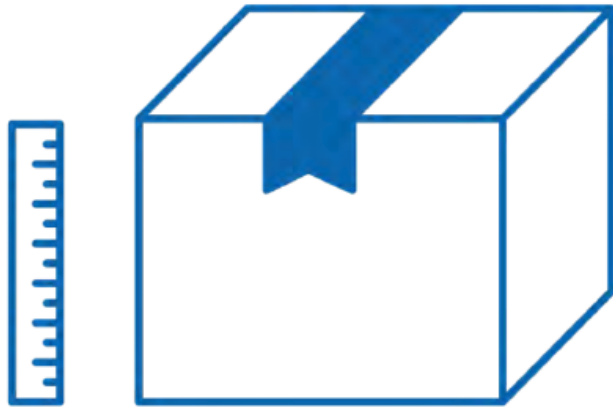
Of consumers would buy additional sustainable packaged products if they were more available in stores, available for more products, and better labeled



**“If you have
empty space in a
package, you’re
shipping air.”**

Operations

Every inch counts



In 2015 shippers changed policies to charge by the dimensional size **or** weight, whichever is larger.

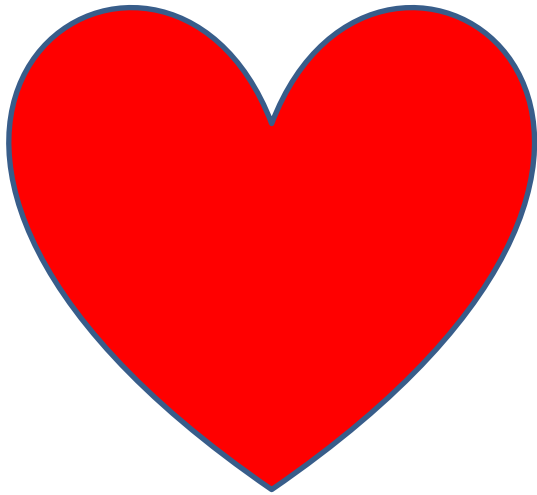
Choosing The Correct Structure and Substrate

- Purchasing less material saves costs on the front-end.
- Lighter packaging means cases and pallets weigh less, reducing transport costs.
- Smaller packaging means more cases fit on a pallet, reducing transport costs.
- More products in fewer shipping containers reduces your carbon footprint.
- When consumers open the designed-to-fit packaging, they perceive your brand as a steward of the environment.



Reducing from a
16pt. To 15pt.
Caliper can yield
6.25% weight
reduction





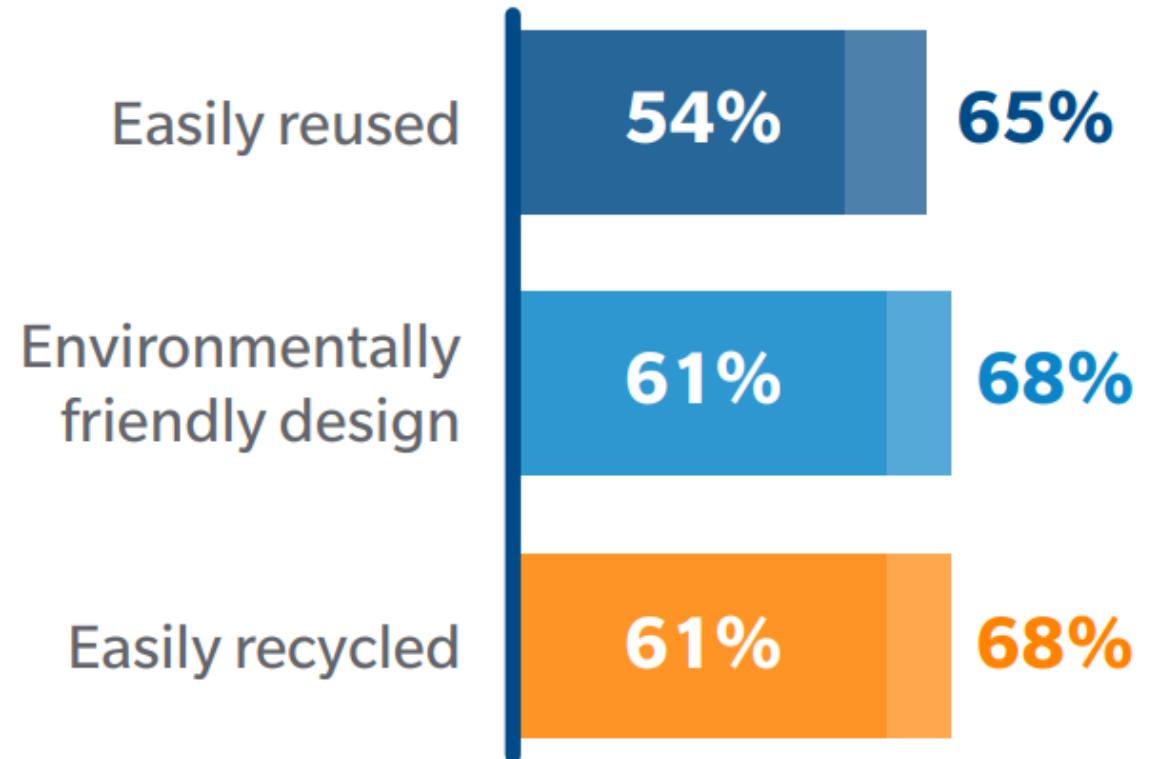
Brand Loyalty

- Shared Values
- Trust
- 81% of millennials want companies to be good corporate citizens

Sustainable Packaging Impacts Consumer Trust

Key sustainability features that **IMPACT BRAND TRUST** and **SATISFACTION** increased in importance:

(from November 2019 to September 2020)



2,024 consumers were surveyed online: Nov 2019 (pre-COVID) n = 1,002; Sept 2020 (mid-COVID) n = 1,022

Brands Setting 100% Targets by 2025

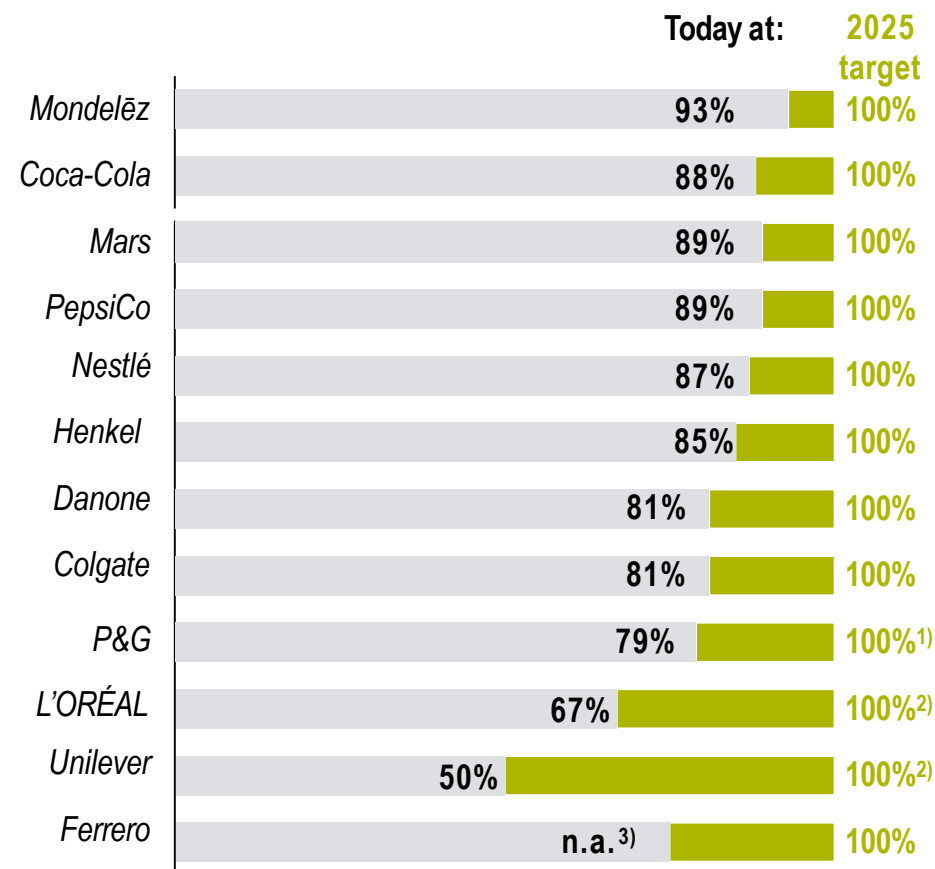
Recent surveys indicate:

- 61% of companies are working to increase recyclability of current packaging portfolio
- 55% of companies seek to reduce weight through packaging design

Jabil/Dimensional Research (2019)



100% targets for 2025



2) 2030 target 2) Plastic packaging only 3) No progress data available

Source: Annual reports, press research, Roland Berger

Sustainability Certifications You & Your Customers Can Trust

These



Not These



Sustainable Packaging Portfolio



“Using the FSC logo to communicate the ecological efficacy of its packaging is symbolic of a broader commitment to matching consumer demand for sustainable and safe products.”

What is sustainable packaging?

Sustainable Packaging achieves its intended role while minimizing resource requirements and maximizing opportunities for recovery, recycling, or reuse that reduces the impact of end-of-life disposal.

How to incorporate today's principals of sustainability into your packaging



REDUCE

Decrease the amount of packaging and fiber material used.



REUSE

Consumers can reuse packaging for outgoing shipments, including returns, and repurpose packaging in creative ways



RECYCLE

Focus on creating packaging using recyclable materials



- Restructuring
- Substrate Selection

General Mills/Nestle UK Packaging Redesign



- Reduce the amount of plastic used in packaging by up to **15%** compared to current levels.
- **618 tons** of plastic and cardboard packaging every year.
- The new packs will also mean that fewer trucks are required to transport the products to stores across the UK, saving an estimated total of **115,000 road miles** - resulting in a reduction of **180 tons of CO₂** per annum.

Sustainable Packaging Portfolio



“...use sustainable, recycled, biodegradable, and recyclable materials whenever possible.”





REUSE

- Repurposing
- Upcycling

Single Box Approach

Allbirds:

- Their shoes are made with natural materials and sole formed out of sugar cane instead of oil.
- Their single-box solution is made with 90 percent post-consumer product and entirely recyclable.
- Can be used as the shoebox, the master shipper, and the return shipper all in one.





Reusable Fast-Food Packaging

- Burger King & McDonalds have partnered with TerraCycle's circular packaging service, Loop, to test out the use of reusable food and beverage containers.
- Starting next year, select BKs in New York City, Portland and McDonald's in the UK will give consumers the option of getting their sandwiches, sodas and coffee in the reusable containers and cups.
- Customers opting for the reusable packaging are charged an undisclosed deposit upon purchase that is refunded when the containers are returned to a collection system at the restaurant.
- From there the containers will be picked up by Loop, cleaned and sanitized and reused by the chains

Repurposing Shipping Boxes For A Good Cause

Amazon along with many other retailers and brands have partnered with Give Back Box allowing customers to ship charitable donations for free in existing boxes





- **Recycled Materials**
- **Recyclable Materials**

Recycling: Finding the forest through the trees

Perception	Reality
You can't recycle printed paper and paperboard with UV inks and coatings.	They can be recycled into lower grades, such as corrugated and building materials. When processed through deinking (floatation and dispersion) facilities, they can be recycled into pulp used in tissue and possibly fine paper grade (1).
Printed paper and paperboard decorated with hot stamping and cold foil can't be recycled.	Paperboard with hot stamping and cold foil applications are recyclable. Depending on the availability of deinking (floatation and dispersion) facilities, can be recycled into pulp used in tissue and possibly fine paper grade (2).
Windowed cartons can't be recycled	Depending on access through local recycling programs, such cartons can be broken down to produce lower grades of paper or building materials. Consider using cellulose-based window material sourced from cotton or wood that is both compostable and biodegradable (3).
Most paper and paperboard end up in landfills	Approximately two-thirds of the paper and paperboard waste in the United States is recycled, which is among the highest compared to other materials (4).

Reference: 1. RadTech Report, Recyclability of UV and EB Printed and Coated Paper, 2005; 2. Pira International study on the recyclability and repulpability of foil-decorated paper and paperboard; 3. Food and Beverage Recycling: Myths vs. Facts, Carton Council; 4. EPA, Facts and Figures about Materials, Waste, and Recycling, 2017

Heinz New Multipacks

- Will eliminate 550 tons of plastic on supermarket shelves
- PEFC-certified paperboard and is completely recyclable and sourced from renewable and sustainably managed forests.



**WE WILL REMOVE PLASTIC FROM
ALL OUR MULTIPACKS IN 2021**



HEINZ
ESTD 1869



Sustainable Packaging Portfolio



After consulting with the Oliver team, Source Atlantique, changed to a 100% Recycled uncoated paperboard to compliment their line of recyclable paper based cake and pie pans.

Smarties makes switch to recyclable paper packaging

Nestlé's Smarties is set to become the first global confectionery brand to switch to recyclable paper packaging, eliminating approximately 250 million plastic packs sold worldwide every year.





EMERALD™

W E L C O M E

A close-up photograph of a pair of hands cupped together, holding a small green plant with dark soil. The background is a blurred green field.

Who We Are

- Since 1997, Emerald Brand has been committed to mainstreaming sustainability in the disposables category.
- Our model centers around utilizing agricultural by-products & safer chemicals in our finished goods.
- We support farmers by purchasing by-products from their crops, preventing them from being discarded.



The Emerald Process

Instead of using tree fiber to produce paper products, we use agricultural fibers which are a rapidly renewable alternative.



Agricultural fibers are often wasted, as they are treated as trash by most farmers



Emerald pulps this fiber into paper creating a user for the wasted material without contributing to deforestation.



Emerald Tree-Free finished Product



Emerald Tree-free™ packaging:
the options are endless!



Sustainable Packaging Trends & Statistics

Trends to look for in 2021:

- More companies announce sustainable packaging goals and create action plans
- Brands looking to achieve and overachieve environmental goals
- Material health becomes more important in packaging

Packaging Statistics

- Nearly 3/4 of consumers are willing to pay more for sustainable packaging
- nearly 1/4 are willing to pay for an increased cost of 10% or more
- 60% of consumers say they are less likely to buy a product in harmful packaging

ENVIRONMENTAL ATTRIBUTES

CHLORINE FREE

Emerald™ Products are either ECF or TCF. Our domestically grown pulp is completely unbleached and free of any harsh chemicals.



PETROLEUM FREE

Emerald™ Products can be made with either clay, plant starch, polylactic acid (PLA), or Tree-Free™ fiber instead of petroleum-based plastics.



BPA FREE

Petroleum-based plastics pose many health risks. Tree-Free™ and PLA (plant-based compostable alternative) are BPA Free because they contain no recycled fiber.





- + 100% Tree Free™
- + 100% Compostable and Biodegradable Options
- + BPA Free
- + Chlorine and Dye Free
- + USDA BioPreferred



- + Made from bagasse, a formerly wasted by-product of sugarcane and rapidly renewable material
- + Virgin material* out-performs recycled products without harming the planet
- + Strong durable board
- + No added chemicals or bleaches
- + Customizable

*Virgin material is material that has not been previously used or consumed, or subjected to processing other than for its original production like that of recycled content.



Coated Options

Natural PVP C1S

White Coating One Side
Natural Back Paperboard



Uses:



Food
Packaging



health and beauty
product packaging



pharmaceuticals



refrigerated
packaging



confectionery
packaging

Property	Measure Unit	Method	Tolerance	Options			
Caliper	pts	Tappi 410	+/- 4%	12	14	16	18
Normal Basis Weight	lbs/1000 sq ft	Tappi 410	+/- 4%	50.2	55.7	63.5	70.1
Grammage	g/m ²	Tappi 411	+/- 4%	245	272	310	342
Thickness	microns/10	Tappi 411	+/- 4%	30	36	40	46
Stiffness Tab CD	gcm	Tappi 489	- 15%	24	35	57	63
Stiffness Tab MD	gcm	Tappi 489	- 15%	39	60	92	115
Brightness	%	Tappi 452	- 3%	85			
Gloss 75 FS	%	Tappi 480	- 4%	50			
Moisture	%	Tappi 412	+/- .5%	7.2			
Rugosity	Microns	Tappi 555		2.5			

High whiteness and brightness coated paperboard with a natural color on back. Designed to highlight printing and bring elegance to your packaging.

Natural Coated C1S

One side coated paperboard



Uses:



luxury
packaging



health and beauty
product packaging



confectionery
packaging



pharmaceuticals



personal care

Property	Measure Unit	Method	Tolerance	Options	
Caliper	pts			15	17
Normal Basis Weight	lbs/1000 sq ft	Tappi 410	+/- 4%	57.6	63.1
Grammage	g/m ²	Tappi 411	+/- 4%	281	308
Thickness	microns/10	Tappi 411	+/- 4%	38	43
Stiffness Tab CD	gcm	Tappi 489	- 15%	57	63
Stiffness Tab MD	cgm	Tappi 489	- 15%	92	115
Bright 75 FS	%	Tappi 452	+/- 6%	40	
Moisture	%	Tappi 412	+/- .5%	7.2	
Rugosity	Microns	Tappi 555		3.5	

Paperboard coated with natural color coating that makes it an elegant product for luxury packaging. Even though the paperboard is coated, it doesn't lose its natural image and has excellent printing features. Allows stamping, embossing and UV applications.

Natural Grease Resistant Option

Natural Grease Resistant Kit 7

Grease resistant paperboard

Uses:



Property	Measure Unit	Method	Tolerance	Options			
Caliper	pts			12	14	16	18
Normal Basis Weight	lbs/1000 sq ft	Tappi 410	+/- 4%	42.4	47.7	55.3	61.9
Grammage	g/m ²	Tappi 410	+/- 4%	207	233	270	302
Gauge/Thickness	microns/10	Tappi 411	+/- 4%	30	36	40	46
Stiffness Tab CD	gcm	Tappi 489	- 15%	24	35	57	63
Stiffness Tab MD	gcm	Tappi 489	- 15%	39	60	92	115
Moisture	%	Tappi 412	+/- .5%	6.5			
Rugosity	%	Tappi 555		9.5			
Greaseproof	Kit			7			

No plastic or fluorocarbons are used in production of this grease resistant paperboard making it ideal for direct food contact. Specially designed to satisfy the needs of the food-packaging market and complies with FDA regulations according to ISEGA's certification.

Natural Uncoated Options

Natural Base Stock

High Moisture Resistance

Uses:



Property	Measure Unit	Method	Tolerance	Options			
Caliper	pts	Tappi 411	+/- 4%	12	14	16	18
Normal Basis Weight	lbs/1000 sq ft	Tappi 410	+/- 4%	41.0	46.3	53.9	60.4
Grammage	gsm	Tappi 410	+/- 4%	200	226	263	295
Thickness	microns/10	Tappi 411	+/- 4%	30	36	40	40
Stiffness Tab CD	gcm	Tappi 489	+/- 15%	29	51	63	82
Stiffness Tab MD	gcm	Tappi 489	+/- 15%	50	84	101	141
Moisture	%	Tappi 412	+/- .5%	7	7	7	7

Base stock designed for extrusion. Useful for any packaging application that requires high tolerance to humidity.

Natural Offset

Natural Color Uncoated Paperboard

Uses:



Property	Measure Unit	Method	Tolerance	Options			
Caliper	pts			12	14	16	18
Normal Basis Weight	lbs/1000 sq ft	Tappi 410	+/- 4%	41.0	46.3	53.9	60.4
Grammage	g/m ²	Tappi 410	+/- 4%	200	226	263	295
Thickness	microns/10	Tappi 411	+/- 4%	30	36	40	46
Stiffness Tab CD	gcm	Tappi 489	- 15%	24	35	57	63
Stiffness Tab MD	gcm	Tappi 489	- 15%	39	60	92	115
Moisture	%	Tappi 412	+/- .5%	6.2			
Smoothness LM	SHEFFIELD	Tappi 538		260			
Smoothness LF	SHEFFIELD	Tappi 538		200			

Paperboard without coating designed for printed packaging that conveys a message of commitment to sustainability.

Sustainable Packaging Portfolio



“The team worked with Oliver to understand the options for sustainable and recyclable tree-free materials.”



Lauren Conrad Beauty Tree-Free™ Packaging - First Run 2020 ENVIRONMENTAL IMPACT SAVINGS



All environmental savings estimates are based on conversion from products of the same weight made entirely of virgin wood fiber and/or petroleum-based plastic resin. Landfill waste estimates of products containing recycled content account for materials removed from the waste stream before production. Water, GHG, and energy savings of products containing Tree-Free and plastic-free materials are calculated at the raw material level of production and are not a complete Life Cycle Assessment. Landfill waste diverted at the end user level is based on proper disposal of recyclable, compostable, and biodegradable products. We are continuously researching

Frequently Asked Questions:

How to get samples:

- Reach out to your Oliver Sales Representative.

What calipers are available:

- 12, 14, 16, 18pt – C1S and Natural Two sides

Lead Times:

- Based on customer demand, we are exploring building out an inventory program to ensure we always have board on hand.
- For large orders that cannot be pulled from inventory, plan 5-6 weeks.

Where is the board produced:

- South America

Can you decorate the board with traditional techniques:

- This board functions the same as a traditional uncoated paperboard sheet and we have not seen any limitations in its functionality.

Emerald Sustainability Accreditation



EMERALD™

THANK
YOU



www.EmeraldBrand.com

www.Paradigm-grp.com

Designing for Sustainable Results

Oliver Inc. resources at your disposal



Designing for Sustainable Results

At Oliver, we've defined a four-step process to achieve your sustainability objectives.

- 1. Define Your Objectives.**
- 2. Creating the Right Structure.**
- 3. Choosing the Right Materials.**
- 4. Measure the Results.**





Sustainability is not just a business philosophy
It permeates throughout our organization

The Pillars of Our Sustainability Commitment



Energy efficiency and support for clean alternative energy



Eco-friendly consumables



Responsible Sourcing

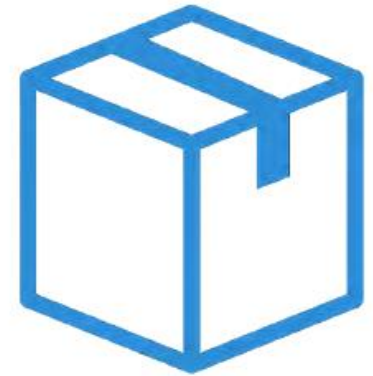


Waste elimination

“...sustainable materials and business practices that support nature’s capacity to endure.”

Thoughts & Considerations

- How could your package be restructured to be more sustainable?
- How could the packaging be repurposed functionally or creatively?
- What materials could be changed to make your packaging more sustainable?
- Is sustainability part of our marketing message?





OLIVER INC.
CREATIVE PACKAGING SOLUTIONS

Questions?

Please use the Q/A
function in Zoom



Let's Get Started!

Our representatives will schedule a phone call or Zoom meeting to start the process of changing your packaging to reach your objectives.

Email us at

Doug Doroh

ddoroh@oliverinc.com

www.oliverinc.com

Thank you!

