



TRICORBRAUN®

CREATING SUSTAINABLE  
PACKAGING FROM THE  
GROUND UP

81%

OF GLOBAL SHOPPERS  
FEEL STRONGLY THAT  
COMPANIES SHOULD HELP  
THE ENVIRONMENT

-Nielsen



From concerns about climate change to sustainable finance regulations, consumers and investors alike are looking at how companies are doing their part to ensure a more sustainable future for us all.

### Sustainability is No Longer Optional

According to Trucost:

“We are hearing that ESG [environmental, social, and governance] characteristics influence the allocation of one of every four dollars invested in the U.S. Investors point to their rationale for considering sustainability impacts in their decisions [and] highlight the growing evidence that companies with a focus on financially material ESG issues outperform others.”<sup>i</sup>

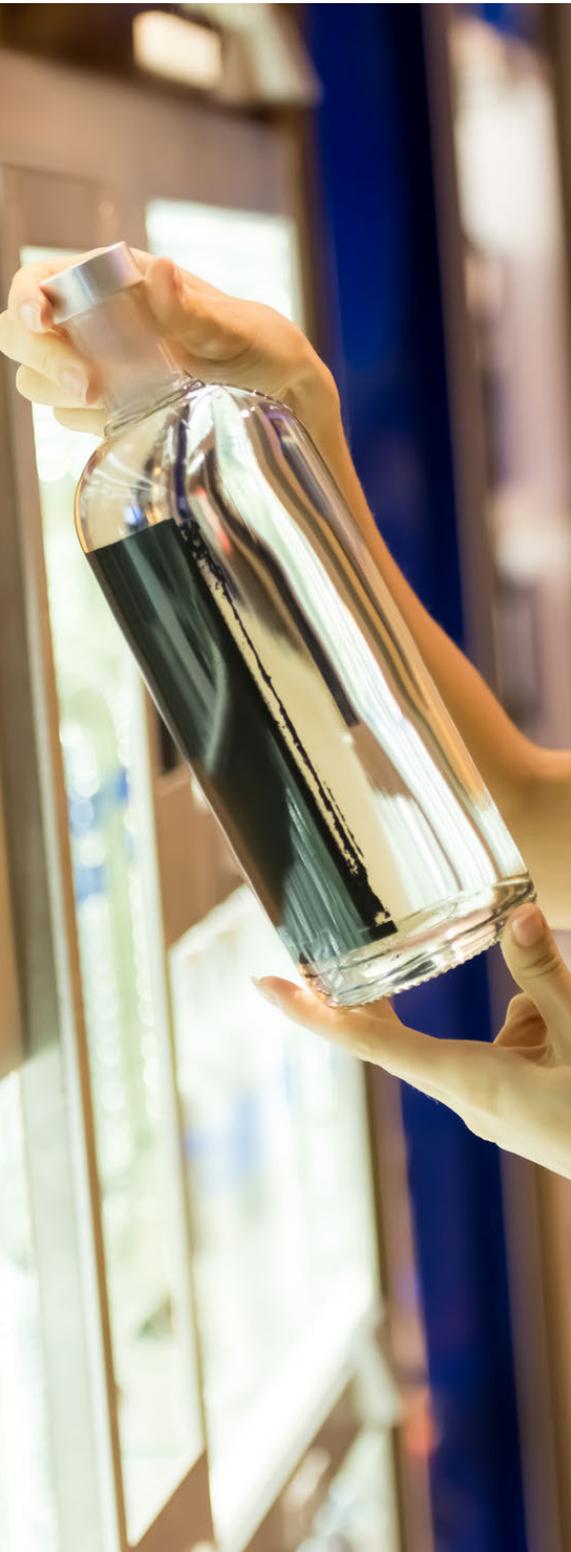
Like investors, consumers care about sustainability. Deeply. And they are increasingly putting their considerable purchasing power toward brands and products they see as sustainable. A 2018 report found that 81% of global shoppers feel strongly that companies should help the environment.<sup>ii</sup>

And it’s not older, richer shoppers—but younger consumers who will be in the marketplace for generations. Studies find that Millennials and Generation Z are willing to pay more – considerably more – for sustainable products.<sup>iii iv</sup>

So what are you, a consumer packaged goods (CPG) brand, supposed to do? Nielsen identified a number of sustainability strategies that CPG retailers and manufacturers can take.<sup>v</sup> Of those, packaging was #1.

Not only can incorporating sustainable packaging solutions help you to establish or maintain brand equity by allowing you to market your sustainability story, but it shows consumers who care—that you care too. It shows that your care for our planet and well-being is at the center of your brand’s development—and investment.

**TricorBraun can help.**



## OUR PRIORITY IS PACKAGING

The primary goal of packaging isn't sustainability: it's protecting and preserving the product. That means that before you even think about bio-resins, eco-resins, or anything else, you need a partner who can evaluate the requirements of your product and recommend a material and a structure that ensures shelf stability, durability, and compatibility. Think of it this way: regardless of the materials used, a package that fails to protect and preserve the product fails the consumer. The package is disposed of sooner; it may not make it to the customer in shipping, or the package arrives but it is so damaged that the consumer is unable to use it—making it the least sustainable solution ever.

As a brand owner, you must ensure product integrity. Preserving the aesthetic and functional requirements of a package has never been more essential than in the age of ecommerce. Today's package might be handled up to 20 times before it reaches its destination (versus 5x using traditional bricks and mortar channels). As a result, your packaging must preserve, protect, and ensure aesthetic and structural integrity from development to delivery to the consumer's door. Dented, leaking, and crushed packages risk negative consumer experiences—and can impact perceptions of your brand, especially in our social media age.

Once these primary packaging requirements are established, it's time to consider which of the many sustainable solutions can best address your brand goals. In fact, meeting these goals can be achieved through a combination of design optimization; materials selection; and refillable, reusable, and recyclable packaging.

### Incorporating Sustainability Into Design

While form, fit, and function come first, there are other elements that are typically taken into account when designing a package. These include your product's containment requirements and how the product will be dispensed. For example, do you need to maintain food freshness? Is your product breakable? Are consumers going to grab it from a bag, pour it out of a can, or even pump it out like dishwashing liquid?

Two other key considerations: aesthetic preferences and consumer and market trends. After all, your packaging should represent your brand and help drive loyalty.



Initiative Foods®  
Nesting/stacking feature

The good news is you can address all these core considerations with a sustainable design.

So what does sustainable design look like? Examples include:

- Nesting
- Stacking
- Dispensing
- Integrated Packaging
- Refillable Packaging
- Right-Sizing

Your package design elements can optimize the amount of material used. For example, a square bottle (versus a round bottle) is more efficient for case packing. This allows you to fit more product on a pallet and put more in each truckload. This, in turn, means fewer truckloads—and a smaller carbon footprint. Similarly, right-sizing to minimize empty space means less material is used in making the package. The right packaging partner can help you design an innovative and cost-effective packaging solution that not only addresses your form, function and brand needs but also meets your sustainable objectives—and your target cost of goods.

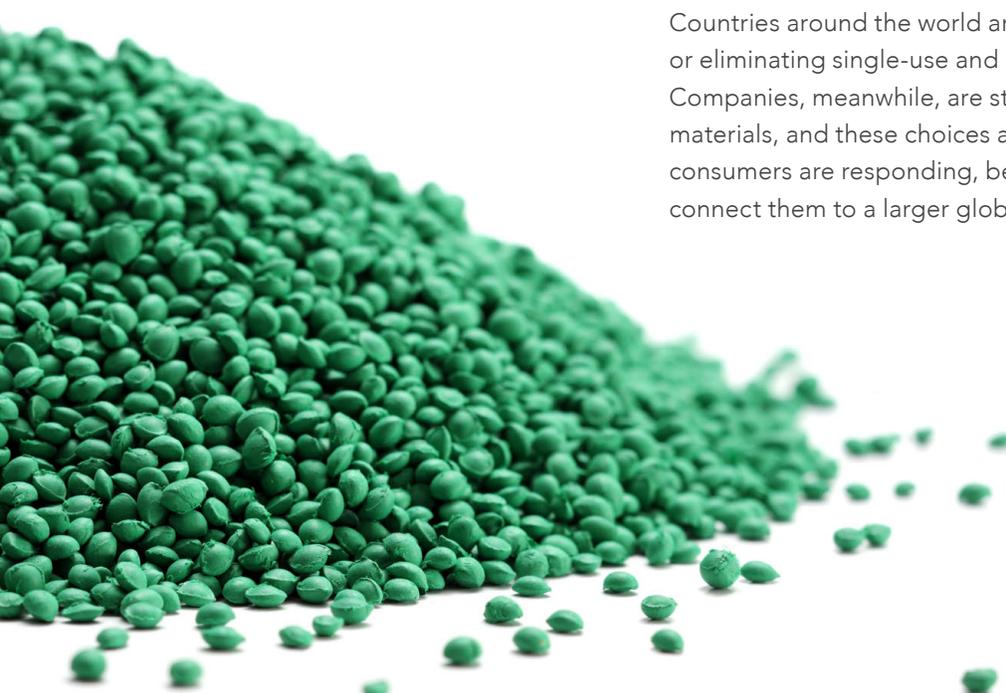


Nature's Way®  
Square bottle provides more efficient case packing

## Selecting Sustainable Packaging Materials

Along with design, your choice of materials offers opportunities to create more sustainable packaging.

There are a number of reasons why sustainable packaging makes sense. Countries around the world are implementing laws aimed at reducing or eliminating single-use and non-environmentally friendly plastics. Companies, meanwhile, are starting to incorporate more sustainable materials, and these choices are informing their brand stories. And consumers are responding, because sustainable packaging solutions connect them to a larger global movement of like-minded people.



Moreover, the data shows that consumers are willing to pay more for products made with recycled and other sustainable materials. According to Nielsen:

“Nearly half (48%) of U.S. consumers say they would definitely or probably change their consumption habits to reduce their impact on the environment. And these consumers are putting their dollars where their values are, spending \$128.5 billion on sustainable fast-moving consumer goods products this year.”<sup>vi</sup>

The same report found that sales of products with sustainable attributes make up 22% of the total store, and that number is expected to rise to 25% by 2021.

There’s also a more pragmatic reason to use sustainable materials: it’s our planet, and it’s the only one we have. Virgin, petroleum-based resins are a finite, non-renewable resource. We can’t use them forever. Moreover, non-biodegradable materials cause permanent and lasting damage, as we’re seeing in the sea of disposable plastic impacting marine life in our oceans.

So what is a sustainable material? While there isn’t (at least yet) a standard definition, sustainable options typically include renewable, biodegradable, reusable, or recycled source materials that reduce the environmental impact and ecological footprint when compared to plastic packaging made from 100% virgin resin. Examples include:

- Recycled PCR and biodegradable plastics
- Recycled glass or metal
- Bio-resins, eco-resins, and PHA polyesters
- Milk protein, chicken feathers, mushroom packaging, and other non-plastic “green” materials

Sustainable packaging can also develop from both something old and something new. On the repurposed side, “new garbage” involves using discarded items like fishing nets and old flipflops to create beautiful packaging solutions. Meanwhile, Newlight Technologies has created a new plastic, AirCarbon, made by taking methane-based carbon from farms and landfills and converting it into plastic polymers.



Biotrē™  
Sustainable flexible packaging solution





## Packaging and the Circular Economy

Design optimization and materials selection are your packaging building blocks. As we've discussed, once you've met the form, fit, and function test, then you can begin to think about how your design and materials choices can make your packaging more sustainable and align your brand more directly with the broader global movement for a more sustainable future.

As you do so, it's helpful to think about the circular economy and where your products and your brand fit in. Whereas most products today are linear (create, use once, discard), under a circular model a resource stays in use and is recycled again and again. The goal of the circular economy is to make the cycles as tight as possible by reducing the number of steps to get products back from useless to useful. Fewer steps means less energy use, less transportation, and less use of materials and other resources.

While the circular economy might not yet be a household term, there is evidence that consumers are hungry for the model. Take, as an example, Loop, an initiative rolled out earlier this year by recycling company TerraCycle. Described as a "global circular shopping platform," Loop compares its service to the milkman. Just as the milkman used to drop off fresh bottles of milk and pick up the old ones for reuse, Loop is doing this for a growing number of products. UPS drivers deliver a reusable Loop bag with CPG products. Once they've been used, consumers call to schedule a delivery of new materials—and a pickup of the old containers. Loop then handles the cleaning and refilling of the packaging. Unilever, Nestle, and Walgreens are among the early companies to sign on—and redesign their packaging in order to participate.

At TricorBraun, we're helping companies create packaging for Loop. For example, we sourced and designed eco-friendly toothpaste packaging for a tiny, chewable toothpaste tab that activates foam as you brush. The innovation behind the concept isn't that it's replacing squeeze toothpaste; it's how these "tooth tabs" will be sold in reusable packages.



Loop by TerraCycle  
Love Beauty and Planet, Häagen-Dazs



## The Value of Refillable, Reusable, and Recyclable Packaging

Beyond Loop, there are good reasons to consider refillable, reusable, and recyclable packaging.

While refilling products isn't a new idea (think Method or Aveda), the renewed focus on the environment and consumers' desire to do more makes this the right time for brands to rethink their packaging options and solutions. The primary benefits of refillable packaging are that you don't need to dispose of the package and you don't need to divert the package from the landfill through a recycling effort. From buy-in-bulk and refill at home to buying refills and reusing a dispensing unit, there are multiple ways to design and engineer refillable packaging. Another sustainable strategy that's gaining traction: beautiful packaging designed for consumers to repurpose for another use—writing their own next chapter to your brand story.

Refillable packaging has additional benefits too. While it typically requires more energy and resources to create a refillable container, over time that refillable container has lower environmental and economic costs. For retailers, refills have the potential to reduce the cost of a reuse system by cutting out or drastically cutting back the recycling component.

## CHOOSE SUSTAINABILITY

Consumers want more sustainable, reusable and recyclable packaging. It makes people feel good about themselves—and they also want to purchase from brands who are walking the walk on sustainability.

As you start to think about how to incorporate more sustainability into your products and brand story, it's important to have a packaging partner with the expertise to guide you through that process, wherever you may be in your journey.

TricorBraun's industry-leading Design & Engineering and Supply Chain teams can help navigate the many design and materials options to achieve the one that will best work for you and your brand story. This includes staying up-to-date on market trends as well as conducting our own research to understand what consumers want and need. We're focused on not just creating a pretty package but one that can

48%

NEARLY HALF OF U.S. CONSUMERS SAY THEY WOULD DEFINITELY OR PROBABLY CHANGE THEIR CONSUMPTION HABITS TO REDUCE THEIR IMPACT ON THE ENVIRONMENT.

-Nielsen

get to market quickly. For example, are the materials you want to use available where and when you need them? Will your bottle cap design actually fit on the machine you're using for manufacturing? What do customers want from a form-fit-function perspective?

Finally, there are also process and operational decisions that can make your product more sustainable. For example, identifying vendors who are closer to your manufacturing site will result in less carbon emitted due to transportation.

TricorBraun is vendor-agnostic, meaning we are not tied to specific products or platforms. Leveraging our global supply chain network, we can evaluate the vast array of materials and serve as your trusted partner to make an objective recommendation on the best sustainable options to meet your goals.

As consumers demand more sustainable packages—rigid and flexible—brands that focus on getting “it all right” will have a competitive advantage. Whether you're just getting started or looking to repackage an existing product line, considering sustainability adds bottom-line value to your brand, your business, and our planet.

<sup>i</sup> Trucost: The ESG Themes Dominating Corporate Conversations in 2019.  
<https://www.trucost.com/trucost-blog/the-esg-themes-dominating-corporate-conversations-in-2019/>

<sup>ii</sup> Nielsen: The Evolution of the Sustainability Mindset.  
<https://www.nielsen.com/us/en/insights/report/2018/the-education-of-the-sustainable-mindset/>

<sup>iii</sup> Nielsen: Consumer-Goods Brands that Demonstrate Commitment to Sustainability Outperform Those That Don't.  
<https://www.nielsen.com/us/en/press-releases/2015/consumer-goods-brands-that-demonstrate-commitment-to-sustainability-outperform/>

<sup>iv</sup> Nielsen: Was 2018 the Year of the Influential Sustainable Consumer?  
<https://www.nielsen.com/us/en/insights/article/2018/was-2018-the-year-of-the-influential-sustainable-consumer/>

<sup>v</sup> Nielsen: The Evolution of the Sustainability Mindset.  
<https://www.nielsen.com/us/en/insights/report/2018/the-education-of-the-sustainable-mindset/>

<sup>vi</sup> Nielsen: Was 2018 the Year of the Influential Sustainable Consumer?  
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