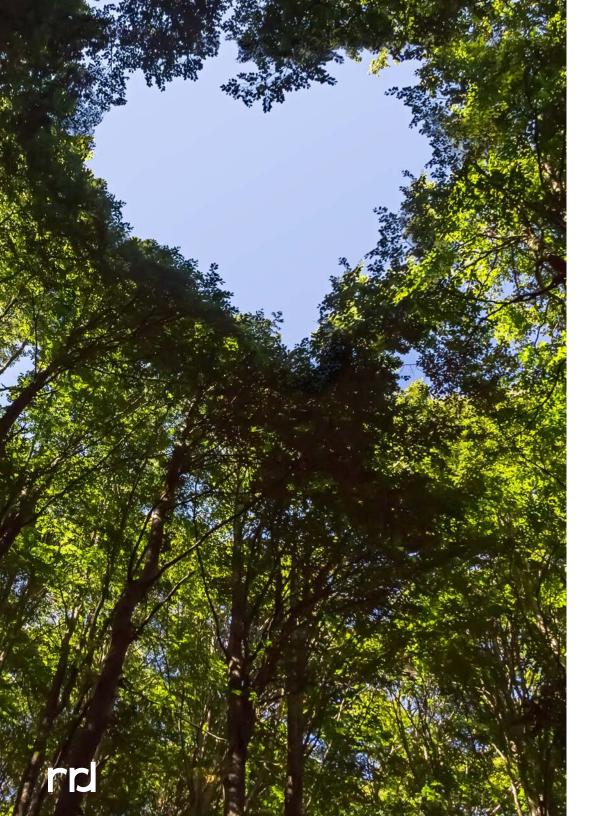


Make **Sustainable** Packaging a Priority

A quick-start guide by **RRD** Packaging Solutions

Rethink: reduce, reuse, recycle. These long-standing tenets of sustainability matter more to the world now than ever before.

How should they apply to your packaging throughput and output? We have some ideas.



INTRODUCTION

Determine your sustainability objectives

Sustainable packaging does not involve making a choice between cost-effective or eco-conscious. It integrates the two. At RRD, we work closely with clients and suppliers to ensure that our sustainable packaging objectives translate into opportunities for positive, environmentally-friendly outcomes — in form, fit, and function.

At a high level, our sustainability objectives include:

Resource efficiency – We identify, measure, and improve how we use energy, raw materials, water, and other resources.

Waste minimization – We reduce, reuse, and recycle in all of our facilities, every day.

Responsible procurement – We help our supply chain adopt sustainable practices. We also collaborate with our clients in choosing sustainable options.



Stewardship – We find, learn, and share best practices and demonstrate our commitments to sustainability.

If you'd like to see specifics on how we're working toward these, check out our corporate sustainability page: rrd.com/sustainability

As your organization continues to build its own sustainability story, consider how your paperboard packaging can meaningfully contribute to it. Upstream or down, there's a good chance it's destined for a larger role.

SUSTAINABLE PACKAGING — AN OXYMORON?

We don't think so.

Two Sides North America is an independent, non-profit organization working to dispel common environmental misconceptions and inform businesses and consumers with factual information about the sustainability and versatility of print, paper and paper-based packaging.

Here's a peek at some of their myth-busting work.

Myth: Going paperless saves forests

Fact: North American forests are a renewable resource that is continuously replenished using sustainable forest management. In fact, in North America, we grow many more trees than we harvest.

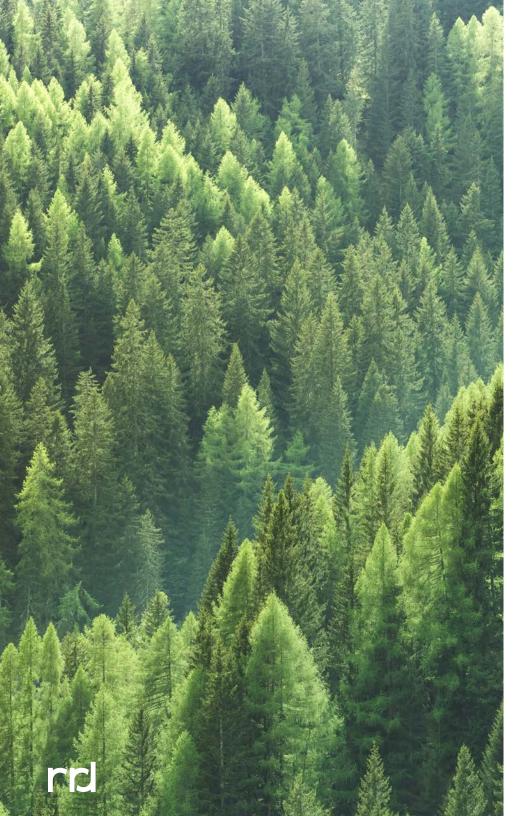
Myth: Paper is a wasteful product

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Fact: Paper is one of the most recycled products in the world. And as local collection systems improve, recycling rates will increase even further.

In 2019, American Forest & Paper Association (AF&PA) found the U.S. paper recovery rate for recycling was 66%. Corrugated boxes had a recovery rate of 92%. In contrast, recycling rates for plastics, glass and metals were 9%, 26% and 34%, respectively.





Myth: Paper-based packaging is bad for the environment

Fact: Paper is one of the few truly sustainable products. It's made from wood, a natural resource that is renewable, recyclable, and can be managed sustainably.

Myth: Paper production is a major cause of global greenhouse gas emissions

Fact: Most of the energy used in paper production is renewable and carbon intensity is surprisingly low – 65.2% of the energy demand at U.S. pulp and paper mills is met with renewable biomass energy.

With 0.8% of the world's total greenhouse gas emissions in 2017, the paper, pulp and printing sector is one of the lowest industrial emitters, according to a 2019 analysis by Navigant.

To learn more about Two Sides, visit: twosidesna.org

QUESTIONS THAT DRIVE EFFECTIVE SUSTAINABLE PACKAGING DESIGN

From paper to plastic to foil, at the outset of every packaging project, it's critically important to take enough time to ask the right questions as they will help lay the groundwork for an effective design process. For example, here are a few to tackle right off the bat:

- Are there any preferred/unacceptable materials to be taken into consideration?
- What sustainability goals are we looking to hit?
- Does the package have an opportunity to be reused?

To answer these questions confidently, you'll need to go to the source. The next time you connect with your packaging supplier, these questions can drive your most meaningful conversation around sustainable packaging.



Can we use less?

Using less doesn't have to mean you're compromising a package's integrity or the end user's experience. Amazon, for example, places an emphasis on its ship-in-own-container (SIOC) initiative with a commitment to four packaging design principles:

- Design to reduce waste
- Use 100% recyclable materials
- Provide protection against damage
- Be easy to open

Can we improve the perception of sustainability by incorporating other materials?

Plastic packaging vs. brown kraft paperboard container? To consumers, kraft will generally be perceived as being more environmentally friendly.

If perception is an issue for your products, incorporating a new material into the overall packaging design may help as long as that mix of materials can continue together in the recycling stream. Example of what not to do: gluing plastic or foam to a piece of paper and then suddenly it can't be recycled because there's no way to separate the two in the recycling stream.] Do your sustainability efforts have a place in your product's story?

More and more consumers are going out of their way to purchase (and recycle) products in environmentally friendly packaging. There's a good chance the suppliers you work with have a sustainability story of their own. Take the time to hear it. It may create a valuable opportunity to align with — and share.

For example, here at RRD, several of our packaging facilities have installed on-demand corrugated box making equipment. This enables onsite production of specific box sizes to match the product shipped, which results in less virgin corrugated material, less waste material, and minimized use of non-recyclable box fillers.

MORE ON THIS TOPIC

Click here to read "6 Questions to Drive Conversations Around Sustainable Packaging Design" by our Director of Packaging Design and Engineering.



SUSTAINABLE PACKAGING INITIATIVES

According to research from AMC Global*, more than 25% of consumers expect their behavior post COVID-19 to include an increase in purchases from brands that are committed to being environmentally friendly. Roughly the same percentage also expects to purchase more from brands using sustainable packaging.



Sustainable packaging can be one highly effective way a business can reduce its carbon footprint. And with a growing number of eco-minded packaging options becoming available, brands are no longer forced to pit cost savings, brand perception, and increased sales against each other.

* Packaging World, Sustainability Update, 2020

Here are five brands who have made packaging a critical element in their efforts toward greater environmental responsibility.

MCDONALD'S

The Golden Arches announced that by 2025 100% of its guest packaging will come from renewable, recycled, or certified sources with a preference for Forest Stewardship Council certification. Also by 2025, the company has set a goal to recycle guest packaging in 100 percent of McDonald's restaurants.

WALMART

In 2016, Walmart publicized a global goal to achieve 100% recyclable packaging for its private brands by 2025. In 2019, the retailer expanded that goal to 100% recyclable, reusable, or industrially compostable packaging for private brands. At the end of 2020, Walmart has achieved 55% of this global goal.

NESTLÉ

By 2025, the Swiss brand's goal is to phase out all plastics that are not recyclable (or are hard to recycle) for all its products worldwide. This effort includes the roll out of alternative packaging materials across its global product portfolio. Ongoing, the Nestlé Institute of Packaging Sciences is exploring new paper-based materials and biodegradable/compostable polymers that are also recyclable.

STARBUCKS

As this Seattle-based brand works to shift away from single-use plastics, it is also championing the use of recycled content in packaging. In 2020, Starbucks joined the Ellen MacArthur Foundation's New Plastics Economy Global Commitment that's centered around a vision of a circular economy for plastic in which it never becomes waste. In doing this, the brand is committed to take action by 2025 to:

- Help eliminate problematic or unnecessary plastic packaging
- Move from single-use towards reuse models where relevant
- Ensure 100% of plastic packaging to be reusable, recyclable or compostable
- Use 5-10% recycled content across all plastic packaging

THE HONEST COMPANY

For 2021, The Honest Company's new sustainable packaging initiative includes redesigned packaging for its beauty line. All of its cartons (over 100 SKUs) are now recyclable, and made using 100% "tree-free" paper made from upcycled sugarcane by-product.

LOGOS WORTH A SECOND LOOK

You've seen them around — and so have consumers — but what do they actually mean?



Forest Stewardship Council® (FSC®)

FSC[®] is an international non-for-profit organization that promotes environmentally appropriate, socially beneficial, and economically viable management of the world's forests. FSC developed the first independent system for forest products.

FSC Certification requires adherence to 10 Principles of Forest Stewardship that define good forest management.



Sustainable Forestry Initiative[®] (SFI[®])

SFI Inc. is a comprehensive, independent certification program that works with environmental, social and industry partners to improve forest practices in North America and fiber sourcing worldwide.

More than 280 million acres are certified to the SFI forest management standard in North America – making it the largest single forest standard in the world.







Programme for the Endorsement of Forest Certification (PEFC)

PEFC is an independent, nonprofit, nongovernmental organization promoting sustainably managed forests through independent third party certification.

Covering 149 governments and 85% of the world's forest areas, the PEFC is a global organization designed to assess and recognize national forest certification schemes.



Chasing Arrows

Internationally recognized for recycling activity, this symbol is in the public domain, it is not a trademark, and there is no formal approval for its use, which means it is an unregulated symbol that anyone can use.

The use of the "chasing arrows" on a product's packaging may assist recyclers with sorting, but it does not guarantee an item can be recycled through curbside collection or industrial collections (even though 54% of Americans think it does*).

FYI

For all three certifications – FSC, SFI, and PEFC – RRD maintains Chain of Custody (CoC) certified locations in the U.S., Canada, Latin America, Asia (except SFI), and Europe.

* Republic Services, The Recycling Report Card Survey, 2019

MOVING FORWARD WITH SUSTAINABLE PACKAGING

Here's what we know: Paperboard packaging has an opportunity to play a larger role in your brand's sustainability initiatives. If you're nodding your head in agreement, then what's your next move? Here are three suggestions to keep things moving.



1. DETERMINE THE SCOPE OF YOUR STRATEGY.

Which packaging materials will be in scope? Are there any preferred (or unacceptable) materials that need to be taken into consideration? Which product lines will be impacted? Will this include all packaging types (e.g., primary, secondary, tertiary)?

2. SET (REALISTIC) MILESTONES.

Once you've set your parameters, work within them to identify manageable targets. Examples of some targets we've helped our clients set in their sights include:

- Reducing a package's weight
- Integrating eco-friendly material and coating alternatives
- Improving the percentage of a package's recyclability



3. START SMALL ... AND SLOW.

Transitioning to sustainable packaging requires a thoughtful process — aka don't succumb to the urge to change everything at once. Work closely with your packaging provider to identify low-hanging fruit. Rely on them to suggest actions that have minimal impact on operating costs as well as the form, fit, and function of a package.

Opportunities to develop existing packaging are just waiting to be discovered, whether through addition by subtraction or innovative material substitutions.



SUSTAINABILITY: AN OLD CONCEPT NOW MORE IMPORTANT THAN EVER

According to recent research, more than half of consumers take sustainable packaging into consideration when selecting a product. And nearly three-fourths are willing to pay more for sustainable packaging.*

Communicating your organization's sustainability narrative through packaging makes a lot of business sense. And it will for the foreseeable future. According to McKinsey, this will require having three critical elements in place:

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A proven methodology to benchmark packaging products in terms of not only cost and convenience, but sustainability as well.



Understanding the full opportunity and value at stake across the product portfolio from increasing sustainability requirements.

Having the right partnerships in place to respond to consumer and customer packaging demands going forward.

One last bit of advice: In your pursuit for sustainable packaging, don't go it alone. If you have a high level of trust in your packaging partner(s), lean on them to help you identify and capture any sustainability opportunities that lay ahead.

* <u>Trivium Packaging</u>, Global Buying Green Report, 2021 ** <u>McKinsey & Co.</u>, "The drive toward sustainability in packaging...," 2020

Unbox opportunities for greater sustainability.

Learn how by connecting with a leader in custom paperboard packaging solutions.



Visit rrd.com/packaging