# Path to Sustainability in Packaging

#### **OUR FOOTPRINT**

The average American produces more than 4 pounds of trash every day. That's almost 1,500 pounds of trash per year. That's heavier than a polar bear. Or a grand piano.

There is a growing consciousness of the impact of our footprint, and the steps that individuals can take to **Reduce**, **Reuse**, **& Recycle** their waste. Companies are also taking stock of their environmental impact and making strides in their plans for sustainability.





# **NEW INITIATIVES**

Packaging often plays a prominent role in these sustainability plans. Decreasing or optimizing packaging can significantly affect a company's overall footprint. We're seeing this play out in many forms, from frustration-free packaging to increased use of recycled materials. E-commerce retailers are more conscious of using **right-size boxing and more efficient void fill** as well as creating positive customer experience interactions with their packaging.

These initiatives help consumers feel better about their own footprint as well as that of the brands they're supporting. In turn, these moves **promote customer loyalty, cut costs, and drastically reduce the amount of waste produced** every year.



### *CHANGING TRENDS IN PACKAGING*

In the packaging industry, initiatives in engineering and redesign have drastically cut the volume of packaging to positively impact sustainability.

An example here is the modern plastic water bottle. Many water bottles you can buy in stores today have much thinner plastic and smaller caps than ten years ago. This change reduced the amount of resin used, led to less material waste, and, ultimately, to less energy waste.

However, a complication comes when primary packaging (the water bottle itself) becomes less substantial, and secondary packaging (like stretch wrapping) has to make up for new challenges in transporting these products. Thinner water bottles, for instance, trigger more complicated fluid dynamics as their primary packaging becomes less stable.

However, some manufacturers are reducing their primary packaging but not adjusting the secondary packaging to support these changes.



When secondary packaging is not adjusted properly, it will fail to create the stability you need to contain the load. This can result in more waste than what was saved by reducing the primary packaging.

# HOW TO REDUCE DAMAGE & WASTE IN PACKAGING

Last year in the US food and beverage industry, 7.2 billion dollars' worth of damaged material was lost in freight. This is not only a huge loss to the economy, but also a massive amount of waste that's being dumped in landfills unnecessarily.

The **keys to reducing material waste AND load failure waste** at the same time can be found in these three elements:

Successful Unitized Loads
Optimal Stretch Wrapping
Setting and Holding Standards

The combined impact of each of these elements can drastically improve sustainability in packaging.







#### 1. SUCCESSFUL UNITIZED LOADS

Good unitization involves **successful load containment and load control.** Unitizing loads means considering the different elements of a package as a single unit primary and secondary packaging are studied together as a system. Engineers study both the material quantities and how the materials are applied in each layer of packaging to optimize the system as a whole.

The difference between a unitized load (with load containment and load control) versus an un-unitized load, is the difference between an egg shipped in a carton versus an egg shipped in a shoebox. The work that goes into engineering the carton pays off in protecting the egg and eliminating damage and unnecessary waste.



#### 2. OPTIMAL STRETCH WRAPPING

The best way to minimize the risk of damage during transport is NOT by simply applying more stretch wrap, cornerboards, slip sheets, and top sheets. That would only add to cost and, without a proven model of success, could also add to waste. More film and packaging applied to a load doesn't necessarily increase protection.

The way to increase protection is by choosing the best performing stretch film for your application, optimizing the wrap pattern, and altering the settings of the stretch wrapper. Performing these steps may even allow you to eliminate cornerboards and slip sheets.

Optimal wrapping is always more effective than simply adding more packaging. And to determine the proper film, wrap pattern, and machine settings requires the added step of testing and analysis to set and hold proven standards.



Stretch wrapping is an area in most operations that offers massive room for improvement in sustainability and efficiency. This can have a real effect on your footprint and bottom line.

At Atlantic, we use the **TruMotion testing** equipment in our Packaging Solution Center together with expert analysis of film, prestretch, wrap patterns, and machine settings to test stretch wrapping on unitized loads. Based on the results on initial tests, we refine each of the elements and test again until we get it right. This process determines a proven benchmark standard for any unitized load.

Once we set the standard, it's imperative to maintain it in the face of shifting or deteriorating machine conditions as well as changes in machine operators throughout the day.

To maintain the standard, we apply our **MUST Monitoring hardware and software** system to monitor and hold the standard over time. You get access to a dashboard app that monitors all your lines and displays a health score for each. Our experts also monitor your lines and will alert you to any significant change they see that may affect your benchmark.

Monitoring ensures you get the **lasting benefit** of sustainability and cost savings.

#### SO, WHAT CAN YOU DO?

As consumers, we vote with our dollar. When you buy products with recyclable packaging, or support brands with a clear mission for sustainability, you put pressure on companies to supply more products with efficient, minimal packaging. As brand owners and packaging engineers, we have a clear path forward for reducing excess waste, reducing damage, and making a real difference in our path to sustainability.

With initiatives coming from all sides of product production-from consumers, suppliers, and the packaging industry itself--we have a fighting chance to work towards sustainability and build a legacy we can feel good about.



### **CONTACT** | Ric Lee

**Address:** 

Atlantic Packaging 12201 Steele Creek Road Charlotte, NC 28241

Email: ricl@atlanticpkg.com Phone: 678-943-4852 (mobile)

WEBSITE

