



PACKAGING SECOND ONLY TO NATURE'S ORIGINAL.

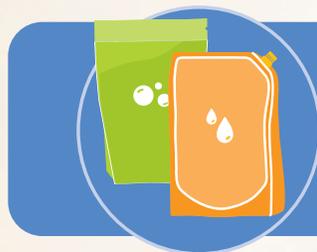
Flexible packaging is often used for e-commerce delivery, which has become increasingly more important during the COVID-19 pandemic and in many cases, the more environmentally preferable packaging option. In fact, over half (56%) of Americans say they have increased the frequency of their deliveries from online purchases since the beginning of COVID-19.

Much of Flexible E-Commerce Packaging is Reusable and Recyclable

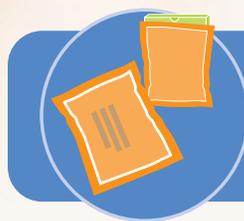
Much of the flexible packaging used in e-commerce applications, including bubble, dunnage and poly mailers and pouches is made of Polyethylene (PE), and is reusable and recyclable. Flexible pouches are designed to be used again for easy consumer returns and dunnage, like air pillows, are designed to be refilled and used over and over again. Dunnage is a filler that is used to prevent a product from shifting during shipping, resulting in product damage.

These materials are also recyclable through in-store drop-off programs, alongside grocery store and dry-cleaning bags and overwraps. The flexible film bales are then used by companies like Trex that manufacture among other things, composite decking, railings, and furniture.

In 2020, Trex purchased over 21 million pounds of post-consumer PE film for recycling from commercial partners in California alone.



FACT OR FICTION?



FICTION: Flexible mailers can't be recycled.

Check out local store-drop-off programs and look for How2Recycle labels on packages.

FICTION: Recycling is the only sustainability factor that matters.

Water consumption, GHG emissions, fossil fuel, and source reduction are all important sustainability attributes, and flexible packaging gets exemplary marks for each.



FACT: Flexible packaging is an ideal solution for e-commerce applications.

Brand owners/retailers can achieve lightweight, durable, and cost-effective e-commerce shipping by choosing flexible packaging.



E-commerce Packaging Made from Flexible Materials Has a Lower Environmental Footprint

In most cases, flexible packaging requires less energy to manufacture and transport and reduces product waste, which reduces greenhouse gas emissions, and sends less material to landfills. This is due to the efficient use of resources enabled by flexible packaging.

Bans on Flexible E-commerce Packaging Will Result in Negative Environmental Impacts

A recent FPA report: “Sustainability and Life Cycle Impacts of Flexible Packaging in E-commerce” details these environmental benefits – below is just one example comparing flexible e-commerce packaging with more traditional formats.

MAILER PACKAGING COMPARISON SUMMARY

FORMAT	FOSSIL FUEL CONSUMPTION (MJ-EQUIV)	GHG EMISSIONS (KG-CO ₂ EQUIV)	WATER USE (l)	PRODUCT-TO-PACKAGE RATIO AND PERCENT WT.	PKG LANDFILLED (G)/1,000 KG MAILER
POLY MAILER 	1.49	.06467	24.70	5.8:1 85.2%:14.8%	166,400
BUBBLE MAILER 	2.60 (+74%)	.1092 (+68.9%)	36.68 (+48.5%)	3.4:1 77.1%:22.9%	284,975 (+71%)
PAPER CUSHION 	2.34 (+56.6%)	.3425 (+430%)	195.68 (+692%)	0.8:1 43.3%:56.7%	972,807 (+485%)
PAPERBOARD 	3.51 (+135%)	.4494 (+595%)	124.56 (+404%)	0.7:1 41.8%:58.2%	1,034,696 (+522%)

Loss of Product Contributes to Higher Carbon Footprint Than Packaging Waste

As more products are shipped via e-commerce, brands continue to look for ways to optimize shipping, reduce costs and product loss, and lessen environmental impact, all while offering consumers a positive experience. To achieve these goals, more brands and e-commerce providers are using flexible packaging as the primary package. Flexible e-commerce packaging can withstand rough handling, limits leaks and breakage, and reduces the amount of packaging material used.

Less Flexible E-Commerce Packaging Ends up Being Disposed Even if Not Recycled

The total amount of material used for flexible e-commerce packaging is often so much less than other packaging types, that even if it is not recycled, less flexible e-commerce packaging will be landfilled or otherwise disposed of than its counterparts. Again, using the mailer example above, based on U.S. carton/paperboard recycling rates (25.6%), the paper-based mailers, while having a higher recycling rate, still result in approximately 5X as much material going to landfill than the poly mailer.

RIGID VS FLEXIBLE PACKAGING



Amount of Material Ending Up as Municipal Solid Waste

