

Cosmo Films: Is Flexible Packaging Sustainable?

Analyzing Its Environmental Impact, Advantages & Challenges



The flexible packaging industry has been witnessing tremendous year-on-year growth globally. It is helping organizations to bring down their environmental footprint by reducing their dependency on glass/metal-based rigid packaging in a sustainable way. Despite this, environmentalists & consumers identify flexible packaging & plastics as marine debris & litter. Plastics that were designed to bring down environmental footprint ironically have been a concern for the environment.

So should we stop using plastic? But how will we be packaging products then? Read on to know more about the environmental impact of flexible packaging, its benefits & challenges.

ENVIRONMENTAL IMPACT OF FLEXIBLE PACKAGING

Loose food products are prone to spoilage & damage. Plastics increase their shelf life, reducing the chances of wastage. And while one can still use rigid packaging, it isn't a viable option either. *If we look into the root cause, the problem is not with the use of plastic, but its life cycle.* Most flexible packaging ends up in the trash, which then becomes an environmental concern.

The day calls for a circular economy that facilitates the recycling of flexible packaging. Many organizations are now promoting flexible packaging collection drives, installing converting & recycling machines in order to make 100% recycling of plastic products. Also, manufacturers are producing solutions that are easy to recycle.

ADVANTAGES OF FLEXIBLE PACKAGING

Flexible packaging has multiple benefits to offer to the users & environment. Below are some:

1. **Reduced Energy & Natural Resources Consumption:** Flexible packaging requires very little raw material in manufacturing as compared to rigid packaging. [Reports suggest that 2.5 pounds of flexible packaging raw material is enough to contain 100 pounds of beverages as compared to glass packaging which requires 84 pounds of glass for the same amount of beverages.](#) A similar concern can be seen with regards to the consumption of resources in their production processes. Flexible packaging requires less energy & water in manufacturing as compared to rigid packaging.
2. **Reduced Waste in Landfills:** Increasing landfills is one of the biggest challenges faced by both developed & developing nations. Flexible packaging requires less dumping space in landfills as compared with other packaging solutions. Also, as companies are becoming aware, they are now producing flexible packaging solutions that facilitate the recycling process. This eliminates the traditional linear economy that ends up in landfills.
3. **Reduced CO2 Emission:** The carbon footprint of a packaging system is based on its CO2 & other greenhouse gases emission. This will include the emission during the manufacturing process, logistics, storage, use & reuse, and disposal. Flexible packaging causes less CO2 emission during the transportation & storage process as compared with rigid packaging. This is because it consumes lesser space in transportation, thus can be transported with lesser means, reducing CO2 emission. The same space-saving feature helps in disposal as well, as it covers lesser landfill space.
4. **Increased Product-to-Packaging Ratio:** The product-to-packaging ratio is used to measure material efficiency and is calculated by comparing the weight of the product with that of packaging. Flexible packaging, being extremely space-efficient and lightweight, has a higher product-to-packaging ratio than rigid packaging.
5. **Increased Longevity of Packaged Products:** Flexible packaging offers an amazing barrier against gases & moisture, increasing the shelf life of packaged products. This reduces food wastage and reduces greenhouse gases emission from stale food. It also saves in-store costs of retailers from packaged food spoilage.

6. **Better Packaging Innovation:** Flexible packaging is truly flexible in nature, allowing product packaging design innovation. It can be molded in any shape & form, even to tailor-fit your product. This further reduces its storage space, making the product packaging more efficient & environment-friendly. Packaging designers are leveraging flexible packaging to make it aesthetically appealing for buyers. This is a great way to increase the chances of conversion.

Replacing flexible packaging with the traditional rigid packaging options is not the solution. This can, in fact, further take us multiple steps back in the sustainability race. Using flexible packaging efficiently is the only way forward to enhance packaging quality and achieve sustainability. At Cosmo Films, we are a leading specialty films manufacturer, producing eco-friendly, flexible packaging solutions. We engineer BOPP-based products which are easy to recycle and flaunt superb quality. Connect with our experts to know more.