Replacing Plastic Packaging with Other Materials Would Increase Environmental Impacts

ALTERNATIVES TO PLASTIC PACKAGING WOULD

NEARLY DOUBLE GREENHOUSE GAS EMISSIONS¹

When comparing materials throughout the entire life cycle of a package, plastics leave a much smaller environmental footprint than alternatives.



Normalized U.S. Results for Plastic Packaging and Substitutes 99% 100% 100% 98% 46% 17% 20% Water Consumption Solid Waste Global Warming Potential Potential

Substituting Plastic Packaging Negatively Impacts Solid Waste

If consumers weren't using plastics, they'd be using more glass and metal as substitutes. On average the combined weight of alternative materials is about 4.5 times more than the weight of plastic packaging,² and compostable packaging requires the more rigorous conditions of municipal composting facilities to degrade³.



Plastics Makers Circular Economy Goals

U.S. resin manufacturers have set goals to ensure that 100% of plastic packaging is recyclable or recoverable by 2030 and that all plastic packaging is re-used, recycled or recovered by 2040.

2040

All plastic packaging is

100%

reused, recycled

Plastic Packaging



Using plastics in packaging requires less energy

Saves enough energy to heat nearly

48 million



The plastic packaging lifecycle including post-consumer disposal, results in less

Saves the weight of

290,000

jumbo jets worth of waste



Production of plastic packaging consumes much less water, including in waste system

Saves the weight of

461.000

Olympic-sized swimming pools

- Life Cycle Impacts of Plastic Packaging Compared To Substitutes in the United States and Canada. Franklin Associates, A Division of Eastern Research Group (ERG), Apr. 2018 https://plastics.americanchemistry.com/Reports-and-Publications/LCA-of-Plastic-Packaging-Compared-to-Substitutes.pdf.
- Role of plastics in decoupling municipal solid waste and economic growth in the U.S., Demetra A. Tsiamis, Melissa Torres, Marco J. Castaldi, https://plastics.americanchemistry.com/Plastics-Decoupling-Waste-and-Growth.pdf
- 3. http://www.bpiworld.org/

