

Reducing Our Footprint: The Food, Beverage and Consumer Products Industry's Progress in Sustainable Packaging



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Based in Washington, D.C., the **Grocery Manufacturers Association (GMA)** is the voice of more than 300 leading food, beverage and consumer product companies that sustain and enhance the quality of life for hundreds of millions of people in the United States and around the globe.

Founded in 1908, GMA is an active, vocal advocate for its member companies and a trusted source of information about the industry and the products consumers rely on and enjoy every day. The association and its member companies are committed to meeting the needs of consumers through product innovation, responsible business practices and effective public policy solutions developed through a genuine partnership with policymakers and other stakeholders.

In keeping with its founding principles, GMA helps its members produce safe products through a strong and ongoing commitment to scientific research, testing and evaluation and to providing consumers with the products, tools and information they need to achieve a healthy diet and an active lifestyle.

The food, beverage and consumer packaged goods industry in the United States generates sales of \$2.1 trillion annually, employs 14 million workers and contributes \$1 trillion in added value to the economy every year. Visit www.gmaonline.org.

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INTRODUCTION

The food, beverage and consumer products industry, which contributes \$1 trillion in added value to the nation's economy, recognizes the environmental challenges of serving 300 million consumers in the U.S. We strive to meet these challenges with robust initiatives aimed at reducing the industry's environmental footprint, while continuing to deliver the safe, convenient and affordable product choices consumers expect and deserve. These efforts span the entire supply chain, from farm to fork, and include programs that are reducing water consumption, enhancing energy efficiency, streamlining transportation operations, and incorporating more sustainably sourced commodities.

Reducing the amount of material used in our packaging and supply chain is also among our top priorities. As this report will make evident, the industry has already made significant strides in avoiding packaging, and plans to accelerate these efforts are underway.



EXECUTIVE SUMMARY

Leading food, beverage and consumer products companies plan to avoid manufacturing 19 percent of average packaging weight from 2005–2020

The food, beverage and consumer products industry's culture of continuous improvement means that manufacturers are focused on finding new and innovative ways to optimize packaging to protect goods from damage and contamination, and finding ways to reduce the amount of packaging that would otherwise be used. Avoiding packaging material on the front end ultimately means less packaging going into landfills.

In an attempt to quantify these efforts, the Grocery Manufacturers Association (GMA) enlisted McKinsey & Company and Georgetown Economic Services (GES) to survey its members to gain a clearer picture of our progress in packaging avoidance as well as plans for additional progress.

The resulting two surveys asked participants to share the results of their initiatives to manufacture more environmentally-conscious packaging, and their efforts to accelerate the manufacture of more sustainable packaging over the next decade. One survey asked for data related to years 2005–2010, and the second asked for similar data related to years 2011–2020.

Key findings include:

- More than 1.5 billion pounds of packaging has been avoided from 2005–2010.
- From 2011–2020, manufacturers expect to avoid another 2.5 billion pounds of packaging.
- By 2020, through the efforts of these representative manufacturers, **more than four billion pounds of packaging will be eliminated nationwide.**
- The 14 companies that participated in both surveys plan to avoid manufacturing 19 percent of average packaging weight from 2005–2020.¹

Additional findings show that:

- The number of packaging improvements implemented by companies has been increasing each year.
- Packaging reduction changes have spanned most product categories; no single product category dominates the packaging improvements within the food, beverage and consumer products industry.
- Paper and plastic are the categories of packaging materials that have received the most focus.
- Among the numerous environmental benefits to packaging changes are decreased transportation costs, reduced landfill waste and lower carbon dioxide emissions.



¹ Averages calculated using anticipated packaging avoided from beginning of survey period.

METHODOLOGY

The data reported here are the findings of two separate blind surveys conducted in the winter of 2010–2011 for the Grocery Manufacturers Association by independent third parties.

McKinsey & Company surveyed food, beverage and consumer products companies asking them to quantify packaging weight reductions achieved between 2005 and 2010. Nineteen companies responded to the McKinsey survey, representing approximately \$225 billion in annual U.S. sales,² or roughly one-third of the U.S. market. This sample is representative of the food, beverage, and consumer products industry.

Similarly, Georgetown Economic Services (GES) surveyed food, beverage, and consumer products companies about packaging reductions and improvements they are likely to make in the next decade. Twenty-one companies responded to the GES survey. The collective respondents represent roughly \$200 billion in U.S. sales.² Specifically, participating companies were asked to quantify planned additional packaging reductions between 2011 and 2020, and were also asked about other packaging improvements they are likely to implement in the coming decade.

There was significant overlap between the respondents to both surveys, with 14 companies participating in both the McKinsey and GES surveys. The 14 overlapping companies represent roughly \$150 billion in annual U.S. sales.²

GMA plans to periodically report progress on these efforts.



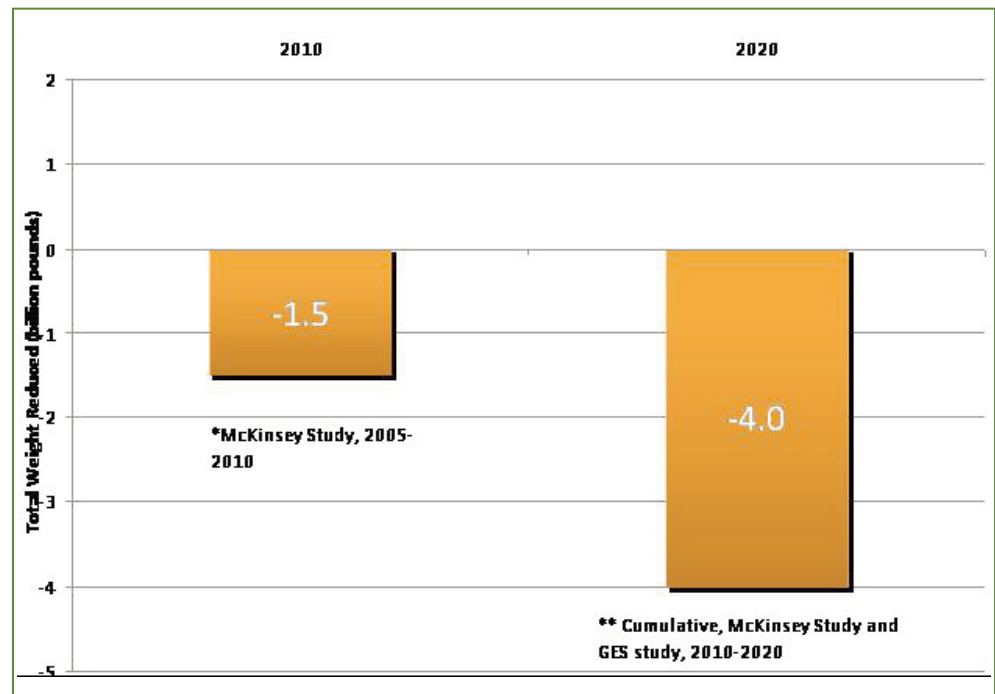
² Based on 2009 sales data.

Our Goal: Avoiding Four Billion Pounds by 2020

Food, beverage and consumer products makers have long been engaged in efforts to develop packaging that requires fewer input materials, that uses sustainable input materials, that is recyclable and that degrades faster. These efforts are paying dividends.

From 2005–2020, survey participants reported that packaging improvements will result in the avoidance of four billion pounds of packaging from commerce (*Figure 1*). Four billion pounds includes 1.5 billion pounds of packaging that has already been eliminated since 2005, with an additional 2.5 billion pounds of packaging to be phased out by 2020. All told, over the next decade, companies reporting in the GES survey will avoid manufacturing 10 percent of total average packaging weight.³ The 14 companies participating in both surveys anticipated they will avoid manufacturing 19 percent of average packaging weight from 2005–2020.¹

Figure 1: Cumulative Pounds of Packaging Avoided



What exactly do these packaging improvements and reductions mean for communities? For starters, it means that through 2020, we anticipate that four billion fewer pounds of consumer waste will have been sent to landfills or recycling centers than otherwise anticipated.

³ Percentage based on 2010 levels of total U.S. average packaging weight.

Removing four billion pounds of packaging from the waste stream represents, in greenhouse gas emission equivalence, any one of the following:⁴

- Removing 363,000 homes from the energy grid for one year, or
- Avoiding the consumption of 479 million gallons of gasoline, or
- Removing 815,000 vehicles from America's roads for one year.

Data from the GES survey further indicates that over the next decade, packaging improvement efforts by CPG companies will continue to accelerate. One-hundred percent of participants reported that they will take steps to further reduce packaging weight reduction. Responding companies also reported a host of additional benefits resulting from individual packaging initiatives. These success stories show promise and direction as the industry seeks scalable approaches that can further reduce its environmental footprint.

ADDITIONAL BENEFITS FROM PACKAGING IMPROVEMENTS, 2005-2010

- **One company reduced landfill waste by 20.7 million pounds and green house gas emissions by 11 million pounds**
- **One company saw a 50 percent improvement in transportation efficiency**
- **One company saw a 43 percent improvement in shipping efficiency**
- **One company was able to eliminate 2,000 trucks from its fleet**
- **One company saw 26 percent less water usage, 18 percent less electricity usage, 56 percent less fossil fuel usage, 10 percent less resin usage, 35 percent reduction in transport distance and 40 percent less greenhouse gas emissions**

Source: McKinsey & Company Winter 2010-2011 Survey

⁴ Source: EPA Greenhouse Gas Equivalency Calculator; EPA: Solid Waste Management and GHG, McKinsey analysis

Industry's Efforts: Packaging Innovation at Work

How are consumer packaged goods companies achieving these significant reductions? Between 2005 and 2010, respondents to the McKinsey survey indicated they have engaged in more than 180 packaging improvement initiatives. More than 60 initiatives were pursued in 2009 alone. These initiatives were as diverse as the companies participating in the survey. Some representative examples include:⁵

- A leading canned food manufacturer undertook a major packaging redesign, resulting in the elimination of more than 700,000 pounds of PVC plastic and the ability to ship 25 percent more units per truckload, removing 150 trucks from the road annually and saving 14,000 gallons of fuel.
- A leading beverage manufacturer introduced a thinner plastic bottle, eliminating 2.45 billion pounds of packaging between 1999 and 2009.
- A leading sauce manufacturer switched to 100 percent post-consumer material for its glass bottles and introduced a new plastic bottle made entirely from bioplastics.
- A leading consumer products company replaced more than 90 percent of its U.S. shipping cartons with cartons made from 100 percent post-consumer waste, 85 percent of which are also recyclable.

As reported, participants in the McKinsey survey stated that they have eliminated more than 1.5 billion pounds of packaging since 2005. Included in this figure is the elimination of more than 800 million pounds of plastic and more than 500 million pounds of paper materials.

In addition to avoiding packaging weight, the McKinsey survey found that several companies are engaged in efforts to increase the use of sustainable and recyclable inputs. On average, these efforts involved a 49 percent increase in the use of recycled plastic inputs for the projects reported.



⁵ Compiled from 2009 CPG company sustainability reports from individual company websites

Safeguarding Consumers and the Environment

Through innovation and ingenuity, the food, beverage and consumer products industry is a global leader in environmental sustainability. We continue to strive to produce and use product packaging in an environmentally responsible manner with promising results. Industry efforts to reduce weight and increase recyclability of its products have led to nearly half of all food, beverage and consumer products containers and packaging being recycled in the United States,⁶ a rate that is 40 percent higher than the overall national recycling rate of all waste of 34 percent.⁷

The food, beverage and consumer products industry is proud to claim many of the oldest and most respected companies in the world. These companies have achieved long term success by adopting a culture of continuous improvement focused on innovation and meeting consumer demand. While proud of our success to date in reducing our environmental footprint, the industry looks forward to reaching its goal to eliminate an additional 2.5 billion pounds of packaging in the coming decade.



⁶ Source: U.S. EPA 2009 Municipal Solid Waste Report, Winter 2011

⁷ Overall recycling rate includes all types of waste.

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