



## 2010 Results Reflect Stable Recycling Rate

Many are not aware expanded polystyrene (EPS) packaging is recyclable – and is being recycled successfully by businesses and consumers across the United States. The 2010 Expanded Polystyrene (EPS) Packaging Recycling Rate Study (the “Rate Study”) was conducted by the Alliance of Foam Packaging Recyclers (AFPR). To better track EPS recycling trends AFPR gathers data to reflect both post-commercial and post-residential collection streams. The results reflect a modest increase in the number of post-consumer pounds recycled in 2010 years based on data received from fifty-eight EPS manufacturers and independent recyclers in twenty states.

As reflected in Table 1, more than 71 million pounds of EPS was recycled during calendar year 2010. This figure includes 31.7 million pounds of post-commercial packaging, 5.4 million pounds of post-consumer packaging and 34.2 million pounds of post-industrial recovery. Post-commercial and post-consumer recycling are defined as any material that is recycled after its intended end-use. Post-industrial recovery includes EPS facility scrap that is recycled but never served its intended end-use as a packaging material.

Marking twenty years, EPS recycling has reached some level of maturity demonstrating a stable baseline, incremental growth and steady end-use market developments. Some companies are choosing to promote and support EPS recycling through shared responsibility within the supply chain. Walmart has created a closed-loop EPS recycling strategy that takes the collected material and uses it to create recycled picture frames. Several pharmaceutical companies have implemented pre-paid return shipping recycling programs for EPS biomedical coolers. Through this integrated approach – with everyone doing their part – increased recycling is achievable.

As compared to the 2008 Rate Study, 2010 demonstrates incremental growth in the amount of post-consumer recycling. This is supported by a steadfast reliance on high volume sources and proves the success of industry recycling efforts in the United States. Advances in EPS recycling technology, collaborative collection programs and new end-use markets have continued to broaden EPS recycling opportunities. In addition, the EPS industry fosters ongoing development of new and innovative recycling technologies that will promote further EPS recycling growth. These include recycled content resin and unique volume reduction technologies that are showing great potential.

Table 1

### Domestic EPS Recycling During 2010

(In Millions of Pounds)

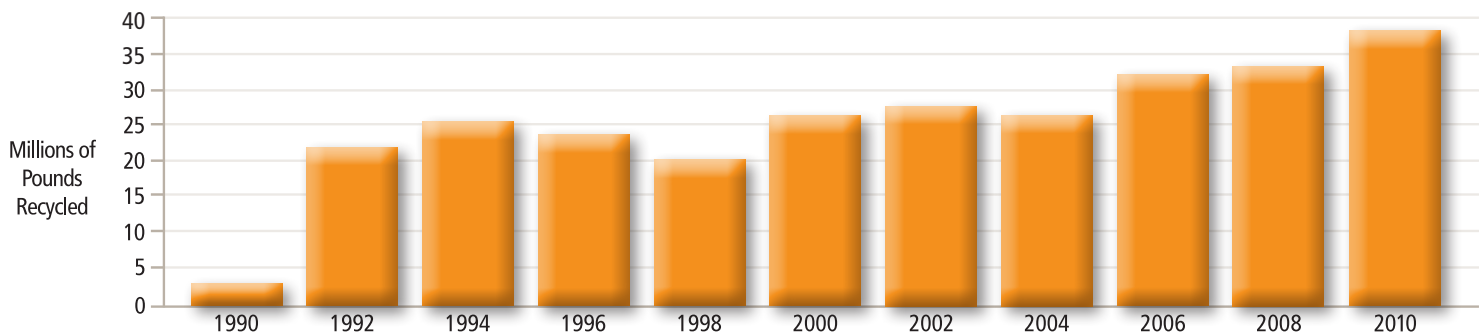
Post-Consumer	<b>37.1</b>
Post-Industrial	<b>34.2</b>
<b>Total EPS Recycling</b>	<b>71.3</b>



Figure 1

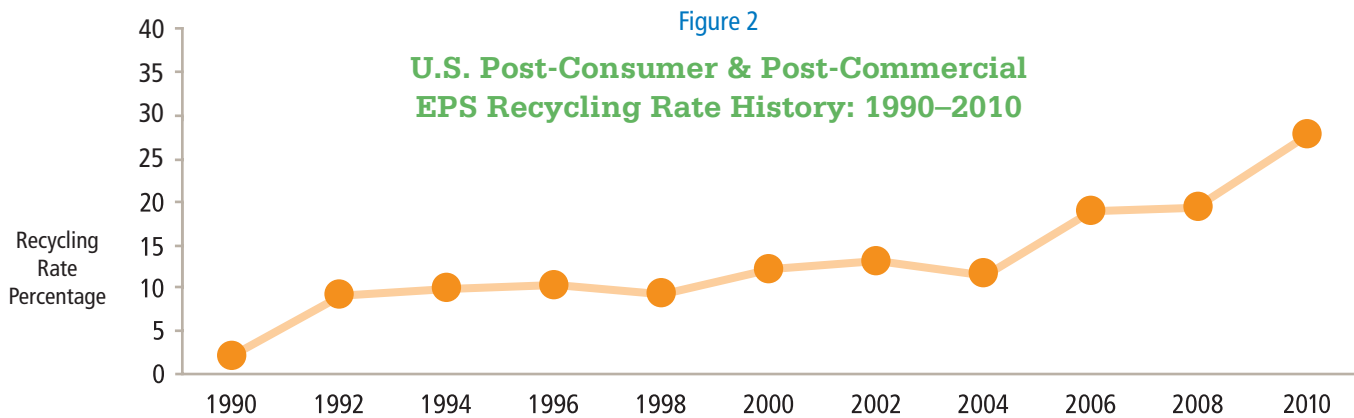
### Domestic Post-Consumer & Post-Commercial EPS Recycling

1990 – 2010



# EPS Recycling 20 Years Strong

As shown in Figure 2 and Table 2 below, the EPS packaging recycling rate remains one of the highest among all the plastics family showing a dependable track record to deliver consistent results. Including rigid, durable polystyrene and other grade materials, EPS post-consumer and post-commercial recycling represents 50% of all post-use polystyrene recycled in the U.S.



**Table 2**  
**U.S. Post-Consumer & Post-Commercial  
EPS Recycling Collection Data: 1990–2010**  
(Millions of Pounds)

RATE COMPONENT	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
<b>POUNDS RECYCLED</b>	3.0	20.8	24.2	22.5	19.2	24.9	26.2	25.0	32.0	33.6	37.1
<b>POUNDS SOLD</b>	179	218	238	217	202	206	201	222	166	172	130
<b>RECYCLING RATE</b>	1.7	9.5	10.2	10.4	9.5	12.1	13.0	12.0	19.3	19.5	28

Note: Recycling rates only reflect the percentage of material recycled for that particular year and do not account for any significant change in production volume from one year to the next.

## Report Methodology

The methodology for this annual report focuses on the development of a numerator and denominator figure. Recycled pounds, used as the numerator in the recycling rate equation, are based on an annual survey of post-consumer and post-commercial plastic recyclers (including EPS industry manufacturing facilities) and reflect a definitive quantity of EPS recycled each year. Recycled pounds were counted at the stage where materials enter a reclamation facility (as opposed to net

material recycled into resin or products) or were shipped for recycling outside of the U.S. and Canada.

Due to supply distribution chains and multiple end-use applications for EPS, a fixed number for EPS packaging generated each year is not available. Other manufacturing streams include building and construction applications, sporting goods and other durable products. As a proxy, resin sales data as reported for shape molding applications

are used as the denominator in the recycling rate equations and was provided by the American Chemistry Council (ACC) Plastics Industry Producers' Statistics Group. ACC reports are compiled from primary data reported by resin producers to the professional services firm of Veris Consulting, LCC. This does not account for non-U.S. resin sales which may offset the quantities reported by U.S. resin suppliers sold into shape molding facilities for non-packaging applications.



## EPS Collection & Reuse

Expanded polystyrene (EPS) foam packaging is an excellent material for recycling and reuse with a long history of environmental stewardship. Members of the Alliance of Foam Packaging Recyclers sponsor these efforts with ongoing financial support and active involvement in the collection and reprocessing of EPS. The EPS industry also funds the Plastic Loose Fill Council (PLFC), a national reuse program for plastic loose fill, also known as 'packaging peanuts'.

## Recycling Criteria

Not all materials are well suited for recycling. Post-consumer EPS packaging must be clean and free of tape, film and cardboard. Expanded polystyrene made with a fire retardant additive, typically used in the manufacture of EPS building insulation, requires special reprocessing conditions. To enhance collection efforts and maximize the investment in recycling equipment, AFPR recycling locations concentrate on large volume, commercial sources of post-consumer EPS. Some locations also offer consumer drop-off access.

To find out if EPS recycling is available in your area, visit the AFPR website at [www.epspackaging.org](http://www.epspackaging.org). For consumers that do not have access to a local drop-off center, the Alliance of Foam Packaging Recyclers sponsors a National Take-Back Program intended for smaller quantities of EPS which can be mailed via U.S. Postal Service or UPS to more than thirty locations nationwide. Full instructions and a list of Take-Back locations are available on the AFPR website.

## The Plastic Loosefill Council

The Plastic Loosefill Council's "Peanut Hotline" is now partnered with AFPR. The Hotline – 800-828-2214 – automatically directs consumers to local packaging businesses, primarily pack and ship stores conveniently located in neighborhood malls, which reuse the loosefill packaging. Recycling locations can be also accessed online at [www.loosefillpackaging.com](http://www.loosefillpackaging.com).

Established in 1991, the Hotline has thousands of participating centers across the country and is listed in community recycling directories, on websites of national retailers and has been featured in publications ranging from *The New York Times* to *Modern Bride* and *Recycling Today*.



**Peanut Hotline**  
**(800) 828-2214**

## EPS Handles the Environment with Care

Making environmentally conscious decisions is important to all of us. Like many of you, we are concerned about waste disposal and its effect on the environment. We want you to know we are doing everything we can to ensure that the materials we use, such as our expanded polystyrene packaging, are environmentally safe and responsible.

- All polystyrene packaging comprises only a tiny fraction of the material that goes into our landfills. In fact, less than one percent by weight and volume of the total municipal solid waste stream is polystyrene.  
(Source: EPA Municipal Solid Waste in U.S. 2009 Facts & Figures,).
- Prior to 1988, there was essentially no recovery of post-consumer polystyrene for recycling. Although the availability of polystyrene recycling programs varies by community, in 2010 more than 71 million pounds of polystyrene was recycled.
- The EPS industry has achieved an average post-consumer recycling rate of 19% and average post industrial recycling rate of 25% for the past fifteen years, one of the highest among all plastics.
- As the recycled content of EPS packaging increases (10 – 20 % recycled content is common) energy use typically decreased by 3% to 13%.
- Innovations in manufacturing technologies ensure EPS production minimizes energy consumption, recycles water and recaptures air emissions.
- EPS meets five of the criteria for sustainable packaging based on the Sustainable Packaging Coalition's definitions.



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