



2012 Results Reflect Increased 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 2012 Expanded Polystyrene (EPS) Packaging Recycling Rate Study (the “Rate Study”) was conducted by the EPS Industry Alliance (EPS-IA). To better track EPS recycling trends EPS-IA gathers data to reflect both post-commercial and post-residential collection streams. The 2012 results reflect a modest decrease in the number of post-consumer pounds recycled, and a substantial increase in the number of post-industrial pounds recycled based on data received from fifty one EPS manufacturers and independent recyclers in the United States.

As reflected in Table 1, more than 93 million pounds of EPS was recycled during calendar year 2012. This figure includes 36.7 million pounds of post-consumer packaging and 56 million pounds of post-industrial recovery. Post-commercial recycling is 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.

Since 1991, EPS recycling has demonstrated a stable baseline, incremental growth and steady end-use market developments. This growth can be attributed to innovative and sustainable programs specifically geared to EPS recycling. Businesses and consumers play a shared role in reducing the amount of packaging material that enters the waste stream by doing their part to recycle. Through this integrated approach – with everyone doing their part – increased recycling is achievable.

As compared to the 2010 Rate Study, 2012 showed an increased incremental growth in the amount of post-industrial 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.

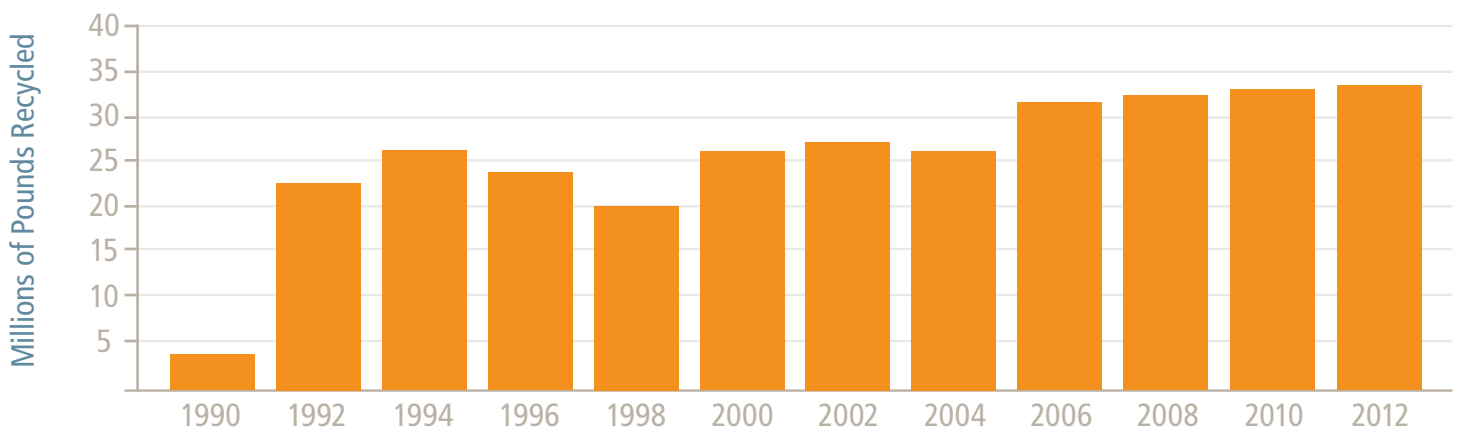
TABLE 1:
2012 DOMESTIC EPS RECYCLING

(MILLIONS OF POUNDS)

Post-Consumer	36.7
Post-Industrial	56.9
Total EPS Recycling	93.7



FIGURE 1: DOMESTIC POST-CONSUMER EPS RECYCLING (1990–2012)



EPS RECYCLING: STRONGER THAN EVER

As shown in Figure 2 and Table 2 below, the EPS packaging recycling rate percentage continues to grow steadily, showing a dependable track record to deliver consistent results. In fact, when comparing rigid, durable PS and other grade materials, EPS post consumer recycling represents 50% of all post-use polystyrene recycled in the US and is one of the highest among all the plastics family.

FIGURE 2: U.S. POST-CONSUMER EPS RECYCLING RATE HISTORY (1990–2012)

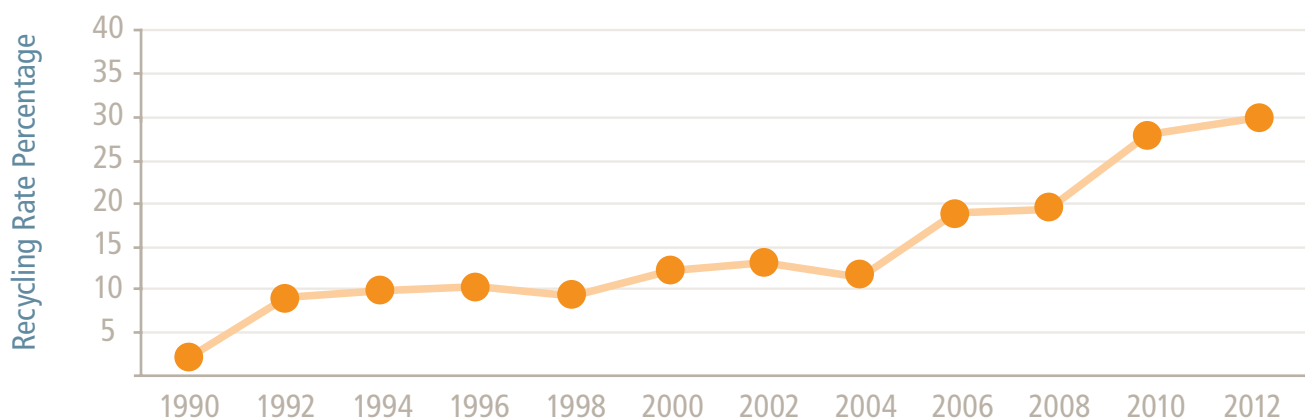


TABLE 2: U.S. POST-CONSUMER EPS RECYCLING COLLECTION DATA (1990–2012)
MILLION OF POUNDS

RATE COMPONENT	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012
POUNDS RECYCLED	3.0	20.8	24.2	22.5	19.2	24.9	26.2	25.0	32.0	33.6	37.1	36.7
POUNDS SOLD	179	218	238	217	202	206	201	222	166	172	130	123
RECYCLING RATE	1.7	9.5	10.2	10.4	9.5	12.1	13.0	12.0	19.3	19.5	28	30

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 the 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.

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. 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 **EPS Industry Alliance** 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 Reuse Program**, 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, EPS-IA 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 EPS-IA website at www.epsindustry.org. For consumers that do not have access to a local drop-off center, the EPS Industry Alliance 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 EPS-IA website.

The Plastic Loose Fill Reuse Program

The Plastic Loosefill Reuse Program features a Google map that 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.epsindustry.org.

Established in 1991, the program 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*.



**Loose Fill
Reuse Program**
www.epsindustry.org

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. 2011 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 2012 more than 93 million pounds of polystyrene was recycled.
- EPS meets five of the criteria for sustainable packaging based on the Sustainable Packaging Coalition's definitions.
- 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.
- The EPS industry has achieved an average post-consumer recycling rate of 14% and average post industrial recycling rate of 25% for the past fifteen years, one of the highest among all plastics.



1298 Cronson Boulevard, Suite 201
Crofton, MD 21114
800-607-3772
www.epsindustry.org

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