

# TAKE A LOOK AT EPS RECYCLING

2016

EPS RECYCLING RATE REPORT

Expanded polystyrene (EPS) foam is one of the most heavily debated materials when it comes to recycling. Many are not aware EPS packaging is recyclable—and has been recycled successfully by businesses and consumers throughout the United States for over 25 years.



## **METHODOLOGY**

The 2016 Expanded Polystyrene Recycling Rate Study was conducted by the EPS Industry Alliance (EPS-IA) to better track EPS recycling activity. The Study gathers data to reflect both post-consumer and post-industrial streams. The 2016 results are based on data received from 45 EPS manufacturers and independent recyclers in the U.S.

Participation in the EPS recycling survey is voluntary and the reported data is based on the responses received. Many companies have limited resources to put towards participation in the survey, and some companies may choose not to respond due to their confidentiality policies. Therefore, because there is not 100 percent participation, the presented totals represent the minimum amount of EPS recovered for recycling.

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. Due 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 custom molded applications are used as the denominator in the recycling rate equations, which were provided by the American Chemistry Council (ACC) Plastics Industry 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 custom molding facilities for non-packaging applications.

# DATA

More than 118 million pounds of EPS were recycled during calendar year 2016. This figure includes 63 million pounds of post-consumer packaging and 55.7 million pounds of post-industrial recovery. Post-consumer is defined as any material that is recycled after its intended end-use while post-industrial recovery includes EPS facility scrap that is recycled but never served its intended purpose as a packaging material or other end-use application.



2016 Total million pounds of EPS recycled

118.7

### **EPS Recycling Post-Consumer & Post-Industrial**

(millions of pounds)



EPS recycling has come a long way over the past few decades. Since its inception in the 1990s, EPS has shown steady growth in both the post-consumer and post-industrial sectors.



Post-Industrial (millions of pounds)

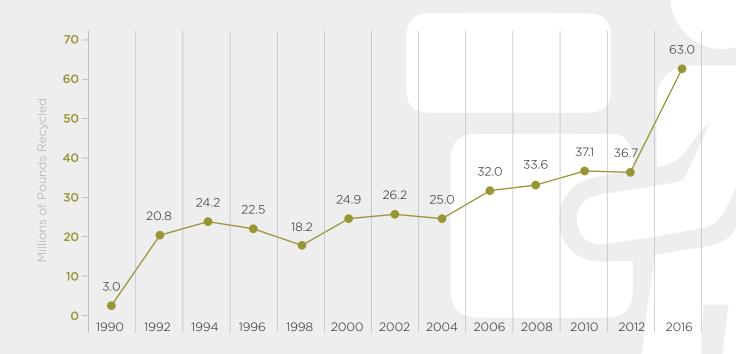
**55.7** 



Post-Consumer (millions of pounds)

63.0

### Post-Consumer EPS Recycling 1990-2016



The 25-year baseline shows incremental gains with more than 23 million pounds of EPS recycled annually on average. The EPS industry fosters ongoing development of new and innovative recycling initiatives that will promote further EPS recycling growth.

# **EPS RECYCLING SUCCESSES**







Alpine Waste & Recycling was the recipient of a densifier grant and is the first recycling company in the Denver area to accept curbside EPS from consumers. They are also one of the few processing facilities in the U.S. to accept foam in their single-stream. The foam densifier installation was part of a recent \$5 million expansion and upgrade of the company's Altogether Recycling plant, which increased the plant's processing capacity by 150 percent. Alpine provides its customers automated sustainability reports, with precise waste diversion results to help the public understand the impact of their recycling efforts on the environment. In 2016, they recycled 140 tons of EPS foam.

A team of undergraduate students at University of Wisconsin - Madison wanted to revolutionize the mindset that EPS is trash, and instill the idea that EPS boxes can safely and easily be recycled or reused. The UW Boxable collection system was created at 24 sites across campus. EPS boxes are either recycled or reused by biotechnology companies for shipping containers. After solidifying the Boxable program at the University of Wisconsin - Madison campus, it was expanded to two other locations: University of Illinois Urbana Champaign and University of Washington in St. Louis.





Foam Cycle created an innovative and patent-pending container recycling system that allows counties, municipalities, schools, colleges and businesses to collect, recycle, process and market EPS foam. Their first one-stop EPS foam education, collection, processing and transportation system was recently installed at the Sussex County MUA Landfill that has been seamlessly integrated into daily operations. Over 2 tons of EPS foam was collected and processed in its first four months.

# COLLECTION

Not everything can be recycled all the time. In order for materials to be recycled, stable markets must exist and there must be a demand for the end products. Each community has its own guidelines for which plastics are accepted, and these can vary widely. To enhance collection efforts and maximize the investment in recycling equipment, EPS Industry Alliance 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 www.epsindustry.org.

For consumers that do not have access to a local drop-off center, the EPS-IA 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 30 locations nationwide. Full instructions and a list of Take-Back locations are available on the EPS-IA website.



Many communities engage in special collection events for EPS foam throughout the year.

Visit our Facebook page

@epsrecycling to learn more.

ECC

**NEARLY** 

300

**DROP-OFF LOCATIONS** 



82
CURBSIDE
PROGRAMS



**MORE THAN** 

PER YEAR
SPECIAL COLLECTION
EVENTS

### **EPS-IA Members**

**ACH Foam Technologies** 

ADLAM Films LLC

**AFM Corporation** 

Airlite Plastics Co.

APTCO, LLC

Aqua-Pak Styro Containers Ltd.

Archbold Container Corporation

Armstrong Brands, Inc.

Atlas EPS, A Division of Atlas Roofing

BASF Corporation

Beaver Plastics Ltd

Big Sky Insulations, Inc.

Cellofoam North America, Inc.

Chemtura Corporation

Comfort Research LLC

Concrete Block Insulating Systems, Inc.

DABO Precision Co., Ltd.

Demand Products, Inc.

**DiversiFoam Products** 

Drew Foam Companies, Inc.

**Dyplast Products** 

**EFP Corporation** 

Erlenbach GmbH

Flint Hills Resources, LP

FMI-EPS, LLC

Foam Equipment & Consulting Co.

Foam Fabricators, Inc.

Fransyl LTD

Groupe Isolofoam

Hirsch Americas, LTD

**Houston Foam Plastics** 

**Huntington Solutions** 

llene, Inc.

Insulation Corporation of America

Insulation Technology, Inc.

Insulfoam LLC

KBM ApS

KDX America

Kongskilde Industries Inc.

kurtz ersa

Lanxess Corporation

Le Groupe LegerLite, Inc.

Lifoam Industries

Mansonville Plastics(BC)Ltd. / First Choice

Manufacturing

Marko Foam Products, Inc.

Michigan Foam Products

**MODIX** Corporation

Nexkemia Petrochemicals Inc.

Northwest Foam Products

NOVA Chemicals, Inc.

Nuova IdroPress SpA

OPCO, Inc.

Pacific Allied Products

Palpac Industries, Inc.

Plasti-Fab Ltd.

Plastilite Corporation

Plymouth Foam Inc.

Polar Industries, Inc.

Poly Molding, LLC

Polyfoam Corporation

Polyform Inc.

Polymos Inc.

Polystyvert Inc.

Progressive Foam Technologies, Inc.

**ProWall Building Products** 

**RADVA** Corporation

RAPAC, LP

Riemschneider Recycling & Plastics, Inc.

Robin II, Inc.

Schaumaplast Precision Foam Molders, LP

Schlaadt Plastics Ltd.

Sebright Products, Inc.

Shelter Enterprises, Inc.

Sonoco Protective Solutions

Starrfoam Manufacturing, Inc.

Styropek USA

Styrotek Inc.

SungHoon Tech Co., Ltd.

Takashima U.S.A., Inc.

Therma Foam, LLC

Thermal Foams, Inc.

Thermalite Products Inc.

Truefoam Limited

Vanocur Refractories, LLC

Versa-Tech, Inc.

Vinmar Overseas Ltd.

Zimmermann Management Solutions, LLC



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