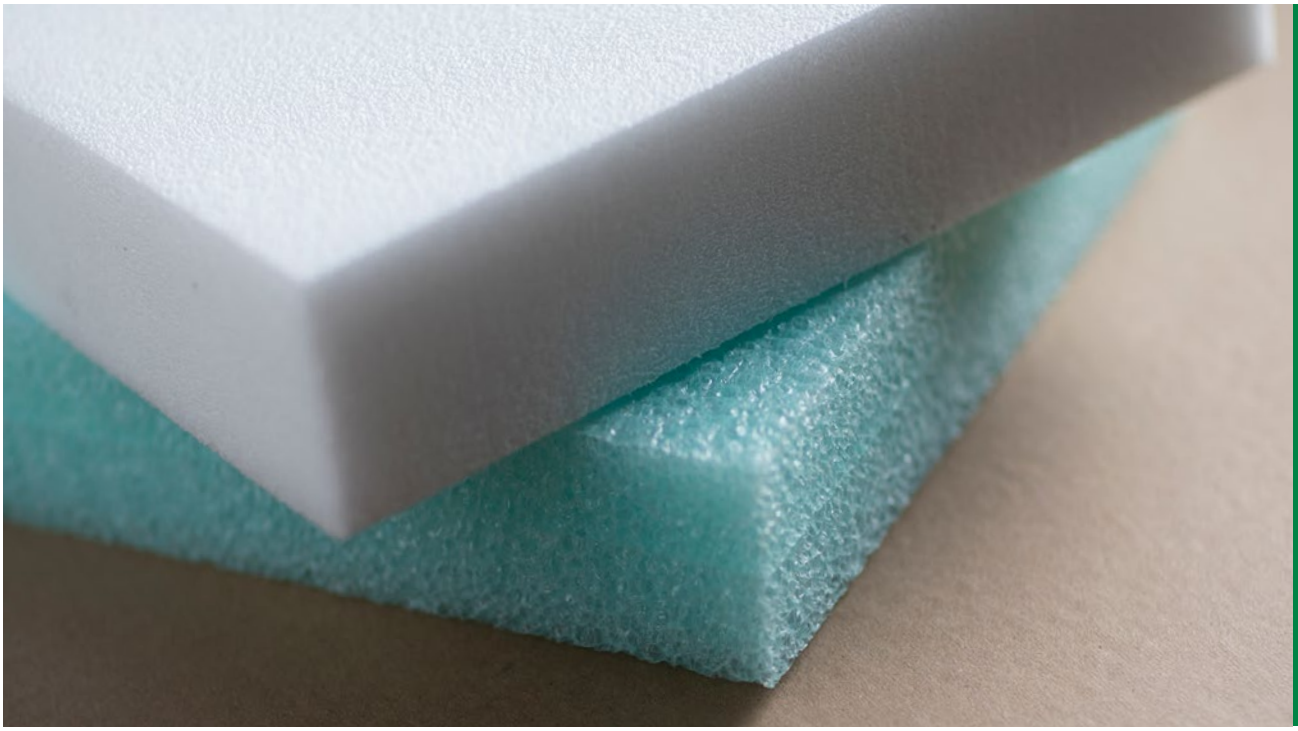
Sustainabiltiy

# Case Study

Pregis and Foam Industries close the loop by enabling the swift recycling of polyethylene engineered foam



Pregis Foam Densifier Program | Pregis PolyPlank® Foam for Fabrication



Pregis®

## Overview

Pregis provides its fabrication partner, **Foam Industries** with **Pregis PolyPlank Foam** which it then converts into custom packaging solutions alongside other offerings made of wood, plastic, and sewing. Foam Industries is a family-owned business with an extensive inventory of diverse and customizable packaging products.

To make it easier for Foam Industries to recycle scrap foam, Pregis offers a Foam Densifier Program, which helps turn foam pieces into dense logs of pure polyethylene, making them more efficient to transport in mass and more attractive to recyclers. The densification turns a 2,500-pound truckload of waste into a 40,000-pound truckload of highly-desired recyclable material.

**Densifier at work!**
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## Challenge

Engineered polyethylene foam is not often perceived as a sustainable product, especially relative to fiber-based packaging materials like corrugated, wood, or molded pulp. However, the sustainability benefits are significant because of its ability to be precisely engineered for protection, practically eliminating damage. Engineered foam is one of the most robust and customizable methods of protecting items, and when the foam is collected and recycled correctly, pure polyethylene remains a high-value material for recyclers.

Circularity of foam plank

## Solution

Pregis is a growth-minded business partner that routinely seeks ways to support foam fabricators, ensuring they are successful, profitable, and innovative in their businesses. This case is no different. Through Pregis' Foam Densifier Program, Foam Industries is contributing to the circular economy by substantially increasing the circularity of foam plank.

Collect, recycle, reincorporate

"We have customers that initially feel better about paper or wood because they think it is better for the environment," explains Foam Industries VP of Sales & Marketing Jack Nelson. "Even before the Densifier Program, we were recycling scrap, but explaining how recycling works didn't always eliminate the misconception. Now we have recycling data and visible evidence that helps illustrate the advantages of engineered foam and makes its use much more compelling. In addition to the high degree of customization and robust protection, it is really clear the material is being handled appropriately."

The Pregis Foam Densifier Program manages scrap polyethylene foam collection, recycling, and reincorporation. Fabricators collect foam scrap and load it into the machine, transforming loose scrap into logs. These logs are easy to carry, store, and load onto a truck. More polyethylene goes to the recycler on each truck as logs than loose foam scrap by a ratio of 20:1.

More scrap per truckload

**This is a densified polyethylene foam log. Once it is densified, the log is easily moved, stored and transported.**

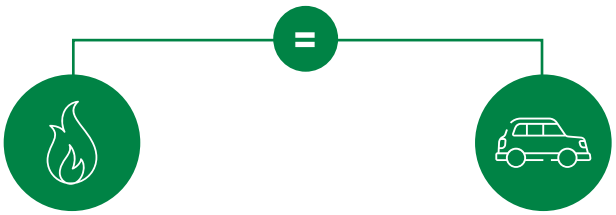
**Most importantly, it's easier for a recycler to granulate.**

*Source: Foam Industries*

Recyclers can now routinely process the logs without additional work -- closing the loop as quickly as possible -- with fewer trucks and no additional personnel. By removing 20 times the truck trips from the road, and all of the personnel and effort those trips would have cost, the savings and environmental value of this activity is significant.

By using the COMPASS® tool for life cycle assessment to evaluate environmental impact, including transportation and end-of-life processing, the calculated annual savings is a 170 percent reduction in greenhouse gasses. This reduction is the equivalent of 335 metric tons a year which also equals the energy use of 42 homes for a year or 72 cars driven for one year.

**170 percent reduction in greenhouse gasses**




**Energy use of 42 homes in a year**

**72 cars driven for one year**

The Densifier Program is a game-changer for fabricators who want to offer polyethylene foam plank because it provides maximum protection for fragile and high-value items. Engineered precisely and using only the right amount of material, foam is the substrate that boasts the most minimalistic and efficient material usage. With its protective performance (coupled with the densifier) fabricated foam can be considered a sustainable solution.

Just by virtue of its effectiveness as a protective packaging solution, foam eliminates costly damages and results in less landfill waste and emissions from reships.

For an added environmental benefit, Pregis also offers fabricator partners **PolyPlank Renew™ Foam** which is made with a minimum of 60% post-industrial content and can be extruded in many thicknesses and densities. This product can also be densified and recycled.

As a result of this program, Foam Industries offers its customers the highest-performing custom foam plank packaging solutions that enable the circular economy.

For more information on extruded or laminated polyethylene foam plank, contact Pregis today.

To learn how Foam Industries can support your packaging needs with customized solutions, contact a Foam Industries team member.

**Maximum protection for fragile and high-value items**

**Minimalistic and efficient material usage**

**Eliminates costly damages**