### Welcome to Foam Cycle



Foam Cycle is a patented foam collection, densifying and recycling system designed to be placed at outdoor municipal recycling drop off centers.



So what exactly is "Styrofoam"?

Styrofoam is a trademarked brand of The Dow Chemical Company for a product commonly called "Blue Board". Its a foam building insulation board used in walls, roofs, and foundations as a thermal insulation.

Blue Board is not recyclable because it contains fire resistant materials.





What most people incorrectly call Styrofoam is really either one of two materials

It's either Expanded Polystyrene (EPS) also known as Foam Packaging (coolers, furniture, TV & electronic packaging) Large foam items made up of 98% air and 2% polystyrene plastic. Foam Packaging is shipped into our homes and businesses from companies across the globe.

Or Food Service Foam (foam cups, plates, egg cartons & takeout food containers)
The Foam Cycle system can process and recycle one or both of these foam materials



Foam Cycle began in 2016 with our first test site at the Sussex County Municipal Utilities Authority (SCMUA) 250 acre landfill and recycling drop off center located in Sussex County, New Jersey



Foam Packaging is made up of 98% air & 2% polystyrene plastic Each Foam Cycle system is equipped with a foam densifier machine capable of removing all of the air and extruding the 2% polystyrene plastic called ingots.

Ingots have a high resale value and are in high demand right here in the US. They are uses as feedstock to make among many things picture frames.



In the summer of 2019, Foam Cycle & the SCMUA were awarded a <a href="Green Team">Green Team</a> from Montclair State University (MSU). This exceptional team of students spend the summer analyzing the impact foam packaging waste has on a landfill.



To portray the impact of the Foam Cycle recycling program for Sussex County was a calculation of filling a 125 cubic-yard trailer (or 3,500 lbs.) of loose foam packaging waste. The recycling process reduced the loose foam to only 3 pallets of densified foam ingots also weighting 3500 lbs. saving the county valuable <u>landfill air space!</u>

# Sussex County, New Jersey (SCMUA) Landfill Air Space Savings Calculation

Year	Pounds EPS Processed	*Conversion to Cubic Yards	**Compaction Rate @ 50%	***SCMUA Landfill Value
2017	8,520	304.29	152.14	\$ 16,431.43
2018	13,900	496.43	248.21	\$ 26,807.14
2019	11,680	417.14	208.57	\$ 22,525.71
YTD 2020	13,940	497.86	248.93	\$ 26,884.29
Totals	48,040	1,715.71	857.86	\$ 92,648.57

*Trailer Load Conversion to CY =	lbs EPS/28
**Compaction Rate = CY/50%	
***SCMUA Landfill Value = \$86.40/tor	n x 2,000lbs

EPS foam though lightweight, is rigid and voluminous. Diversion, versus disposal of this material in a landfill translates to a cost avoidance scenario associated with the amount of air space the raw material occupies. The SCMUA has therefore estimated a total landfill air space savings (cost avoidance) for EPS diversion of \$92,648.57 since October 2016.

Estimating a 125 cubic-yard trailer load equaling 3,500 pounds of loosely stacked EPS foam, the SCMUA has diverted about 13.73 trailer loads of raw material from the landfill since October 2016.

Year	*Trailer Loads	
2017	2.43	
2018	3.97	
2019	3.34	
YTD 2020	3.98	
Total	13.73	

*Trailer Load = _	pounds EPS/3,500
Convert to CY = #	of trailers @ 125 CY









The Foam Cycle System consists of three (3) components that are all delivered at the same time. Just plug in the power and you're up and running!

- 1. One 20' x 8' custom designed metal Foam Recycling Container
- 2. One all-weather metal Foam Collection Bin
- 3. One 200 lb. per hour Foam Densifier machine





#### **Welcome to Better Frame**

Foam Cycle will soon be introducing Better Frame. Its a picture frame made from the recycled foam ingots that where generated from the Foam Cycle system. It's the first closed-loop circular picture frame made right here in the US. If a Better Frame is ever broken or no longer needed, you can simply send the frame back to be recycled. This one of a kind manufacturing process grinds the old frame and uses the resins to made a new frame helping to keep this one time waste material out of the waste stream for good!

Visit www.BetterFrame.org for more information





#### Foam Collection Cargo Trailer (optional add on)

This unique and custom designed cargo trailer is used to extend Foam Packaging waste collection within a community. Placing the main Foam Cycle system at the "Hub" or anchor location, these trailers would be used as a "Spoke" and placed in more rural areas and at local colleges and universities. They can also be used at Special Waste and Earth Day events.

- The trailer can hold 29.03 cubic yards of loose Foam Packaging waste. EPA volume-toweight ratio for loose Foam Packaging waste is 32lbs per cubic yard for a maximum full trailer weight of 928lbs.
- The trailers graphics can be customized to include local sponsors.
- The trailers dimensions are: 7'W x 16'L x 7'H ( 3500 GVWR).

## SUSTAINABLE GALS



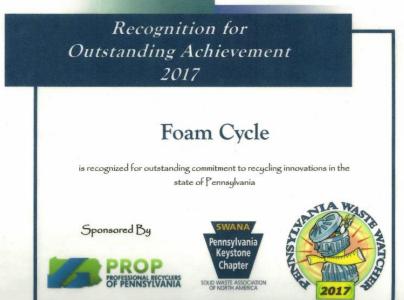
Foam Cycle and Better Frame are proud to be part of the UN Sustainably Development Goals

### Foam Cycle Recycling Awards













### **Foam Cycle System Pricing**

The complete and patented Foam Cycle system includes the following equipment:

- 1. One 20'x8', ISO certified metal **Foam Container Housing** unit that is fully painted and includes all signage. This container is equipped with two 8' wide aluminum roll-up doors, LED interior lights, dual mounted exhaust fans, electrical circuit panel and a three phase disconnect box.
- 2. One 48w" x 76"h metal outdoor Foam Collection Container.
- 3. One **200** lb. per hour, **Foam Densifier** machine. This densifier can process and densify Foam Packaging waste (coolers, furniture, TV and electronic packaging) as well as Food Service Foam (cups, plates, clamshells, egg cartons, meat trays)
- 4. The price of the above listed package is \$78,500.

<u>Additional Foam Collection Containers</u>: The cost per container is \$2,400. Each container comes with three (3) large poly bags. Additional bags are available for purchase.

Foam Collection Cargo Trailer: Cost is \$18,000 which includes a custom wrap.

<u>Electric</u>: Electric required for the Foam Cycle container and stand alone foam densifier is 4 wire / 220v / 3 phase / 60 amp service. Power is provided by the customer and once installed a Foam Cycle tech will be sent to connect and start the densifier (this service is included). 480v powered units are available.

On-Site Training: On-site training and marketing assistance are included

**Delivery**: Delivery charges are not included.





Watch our 30 second pitch video here!

https://youtu.be/JLugcvYjR10

### **Thank You!**









Visit us at: www.FoamCycle.com