



Plastics Recycling - It's Not Linear!

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Welcome to:



Packaging and Food Service Foam Recycling



“Wish Cycling”

What most people incorrectly call *Styrofoam* is one of two materials:

- ❑ Polystyrene (PS) Food Service Foam
(foam cups, plates & takeout food containers)
- ❑ Expanded Polystyrene (EPS) Foam Packaging
❑ 98% air & 2% polystyrene plastic
❑ (coolers, medical, furniture, TV & electronic packaging)





Foam Cycle is a patented “Foam Recycling System” that can be placed at outdoor Recycling Drop-Off Centers



SUSTAINABILITY
hard-to-recycle center

Recycling Drop-Off
Center in Arvada



The Foam Cycle System consists of three (3) components

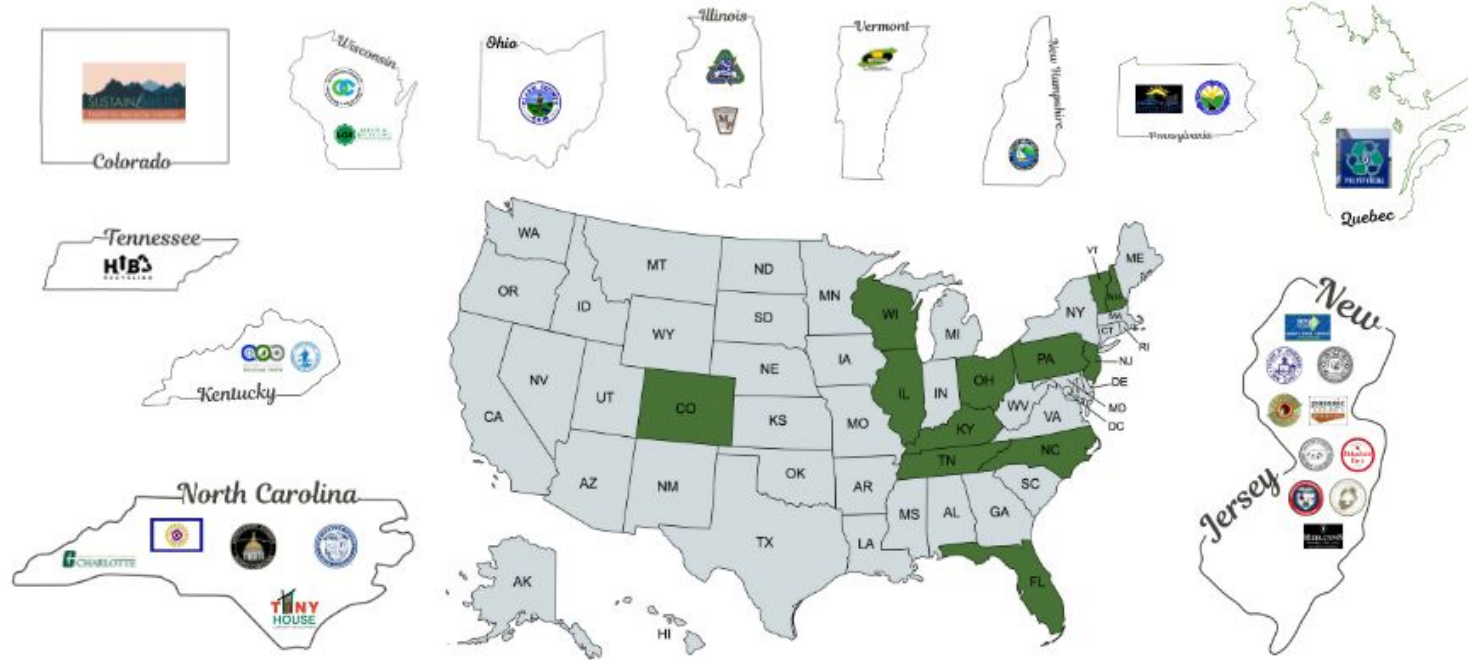
1. One 20' x 8' custom designed metal Foam Recycling Container
2. One all-weather metal Foam Collection Bin
3. One 200 lb. per hour Foam Densifier machine

Just plug in the power and you're up and running!



Current Foam Cycle Sites Across the Country

The Foam Cycle System is now successfully operating in several states nationwide and Canada.



Since 2016, active Foam Cycle sites have expanded to include volunteer organizations, non-profit agencies, counties, municipalities, and public-private partnerships that have committed to recycling foam packaging and food service foam.

Thanks to Foam Cycle, **over 11,548,000* people** have access to foam recycling where none existed before.

*2020 US Census



Snapshot of Foam Cycle System's Impact to Date

31+

Foam Cycle Systems

Successfully operating in the US and Canada.

65k

Revenue from Foam Cycle sites

Aggregate total value 2017 - 2023.

11,548,000

Residents nationwide

Have access to foam recycling where none existed before.



595,688 lbs (298 tons)

Accrued weight from Foam Cycle sites

Reported annually 2017 - 2023.



US Patent No.

11,241,695

Issued February 8, 2022

"Method and system for recycling Polystyrene Waste."

120

Trailers

Trucking costs avoided.



458,206

Cubic Feet

Foam diverted from landfills.





REDUCED TRUCKING

TRUCKLOADS DIVERTED

More than **120 Tractor Trailer*** loads of PS foam was diverted, realizing **trucking cost savings** for all Foam Cycle recycling programs.

A 53-ft trailer filled with loose **packaging foam** weighs about 3,500 lbs. The 3 pallets of densified foam weigh approximately the same.

Densifying shows the impact that recycling foam has in reducing trucking costs, with private and subscription hauling services typically transported to out-of-state landfills and incinerators.

(53 FT TRAILER = 3,816 CUBIC FEET)



LANDFILL AIR SPACE SAVINGS

CUBIC FEET OF FOAM DIVERTED

Nearly **458,206 Cubic Feet*** of PS foam has been **diverted from the landfill** for all Foam Cycle recycling programs.

When disposed of, **packaging foam** takes up valuable landfill airspace. Made up of 98% air and 2% polystyrene plastic, the material size is reduced at a 90-1 ratio when the air is safely removed with a foam densifier machine. Densifying foam saves valuable landfill air space, along with corresponding tipping fees.

**Conversion metric source: FRC Landfill Space Saved Per Year
<https://www.recyclefoam.org/grants>*



Over **315,000 residents** have access to EPS foam recycling



More than **42,000 pounds (27 Tons)** of packaging EPS has been diverted from Colorado landfills



Diverting EPS foam has saved **32,371 cubic feet** of landfill airspace & at least **9 tractor trailer loads** in reduced trucking **Conversion metrics source: <https://www.recyclefoam.org/grants>



Corresponding **disposal tipping fees savings** total at least **\$810.08** (\$38.50/ton tipping fee*)



SustainAbility has been able to realize more than **\$8,000 in revenue** from marketing EPS (Average @ \$0.19/per pound)



Foam Recycling *Circular Economy* in Action



Step 1 - Collect
Foam Collection Bin



Step 2- Densify
Foam Densifier Machine



Step 3 - Aggregate
Stockpile Densified "Ingots"



Both PS & EPS
have high market
value for
recycled content
in many products



Extrude
Ingots into Molding Boards

Better Frame
*Molding boards created
into picture frames*



Foam Insulation Board
*Includes up to 70% recycled
PS and EPS*

SOPRA XPS Products
Contribute to LEED Certification



The Foam Recycling Solution Come Join the Team!



Buster Foam says: "Bring It!"



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www.FoamCycle.com

Summit for Recycling - Fort Collins, Colorado - June 3rd-5th, 2024



Want a Tarp?
<http://renegadeplastics.com/tarps>



Thank you

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