



OEPA/SWMD Meeting

August 1, 2019

Agenda

- Recleim Overview
- Implementation Overview
- Concluding Remarks

Who is Recleim?



Founded in 2012 to revitalize a dying industrial town, Recleim combines **innovative, next-generation** recycling technology with unsurpassed regulatory and logistical expertise.

Firmly established as the **industry leader in appliance and related electronics recycling**, Recleim operates in **20 states**.



**Top Environmental
Services
Companies**

Recycling technology unmatched in North America

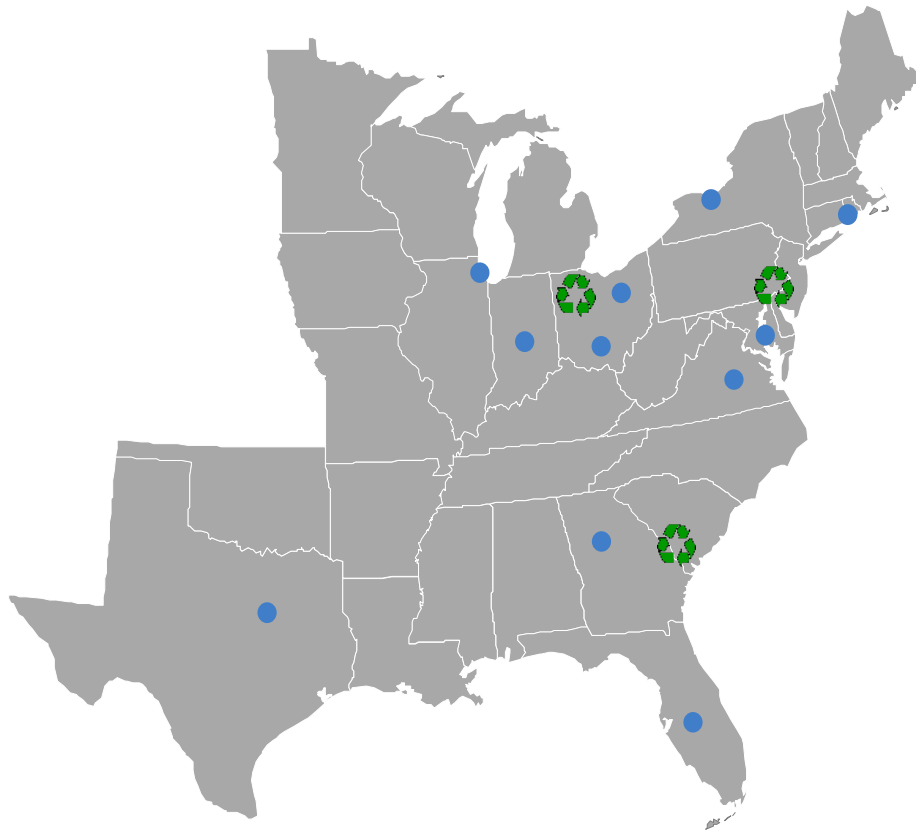
What We Do

Recleim delivers three services:

- 1. Collection / Transportation**
- 2. De-manufacturing, Recycling and Commodity Sales**
- 3. Customer Engagement and Loyalty**



Collection / Transportation



De-manufacturing
Facility



Cross-dock Facility

Recleim oversees the transportation of appliances from customers' homes and retailers to plant locations across the country.

Recleim leverages its own resources, as well as the resources of its extensive network of vetted logistics partners, to service clients from Maine to Miami.

As a trusted service partner to the largest manufacturers, retailers, and utilities in the country, Recleim has a proven track record of ensuring the logistical operation always delivers.



De-manufacturing Technology Unmatched in North America

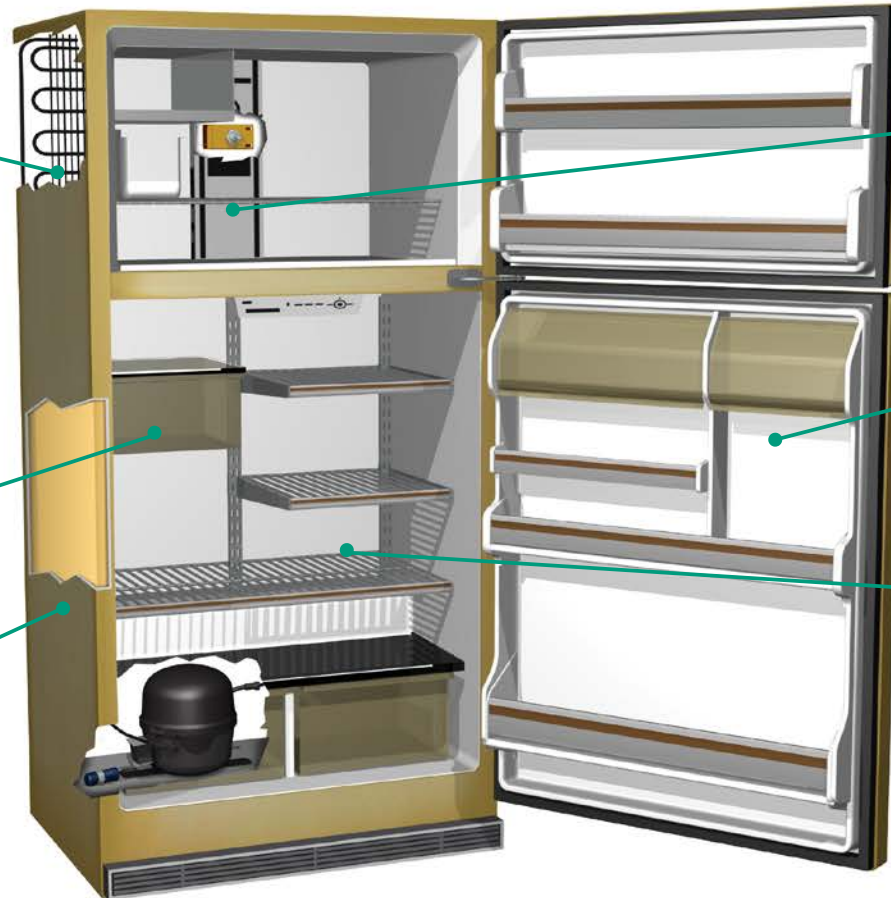
The power of de-manufacturing

OIL is extracted with refrigerants using a specialized sealed system. It is separated, cleaned and reused in industrial equipment.

REFRIGERANT is extracted with oil using a specialized sealed system. It is separated and destroyed on-site in a closed-loop system using a catalytic process.

GLASS can be recycled and used as an aerator in potting soil and aggregate material in certain types of concrete.

FOAM INSULATION is shredded with the shell of the appliance and all of the gases are collected. The foam is pulverized into a powder and pelletized. Greenhouse gases and Ozone Depleting Substances (ODS) that were used as blowing agents are destroyed on-site through a catalytic process.



MERCURY CONTAINING DEVICES are removed and shipped to a qualified handler for proper destruction.

PLASTICS can be recycled into products such as cell phones, computer cases and other molded components.

METALS are shredded and separated by type. The steel can be recycled into products such as construction rebar, the copper can be used to make electrical wire and the aluminum can be used to make beverage cans.

This process applies to refrigerators, freezers, ranges, cooktops, ovens, dishwashers, washers & dryers and HVAC units.

De-manufacturing Technology Unmatched in North America

Avoided CO2e Potential for CFC Containing Refrigerator or Freezer

CFC destruction	lbs/unit	GWP*	Tons CO2e
CFC-11 (foam) destruction	1	4,680	2.1
CFC-12 (refrig) destruction	0.5	10,720	2.4
Total Metric Tons of CFC-related CO2e per unit			4.6

CO2 lbs/kWh (est)	
Coal	Nat Gas
2 lbs/kWh	1 lbs/kWh

Energy Savings ~5,600 net lifetime kWh**	11,200	5,600
Metric Tons CO2 Avoided Energy	5.1	2.5
CFC Tons CO2e	4.6	4.6
TOTAL Tons CO2e/Unit	9.7	7.1

Typical Refrigerator Composition		
Material	Weight (lbs)	%
Ferrous Metals	101	50.5%
Non-ferrous Metals	7	3.3%
Plastic	45	22.5%
Compressor	18	9.0%
Other	29	14.7%
Total	200	100%

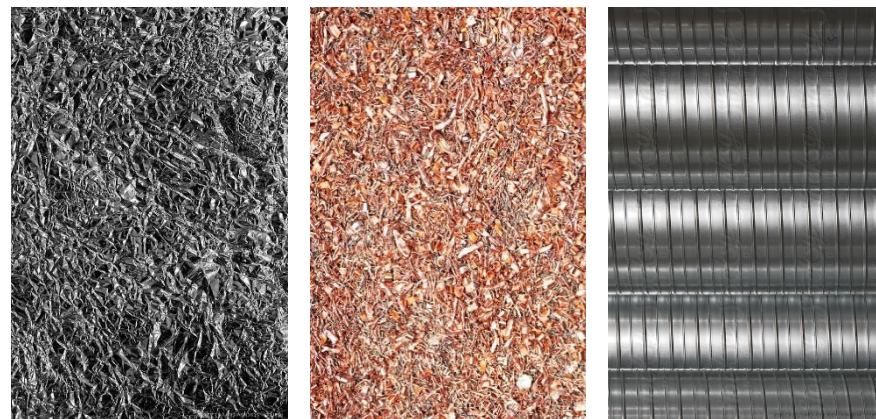
*Global Warming Potential = multiple of CO2 impact (Source: USEPA)

Metric Tonne	=	2200	lbs
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**700 net kWh/year x 8 year measure life = 5,600 lifetime energy savings

Recycling & Commodity Sales

Recleim's processed byproduct includes fractions of steel, aluminum, copper, plastic and foam pellets.

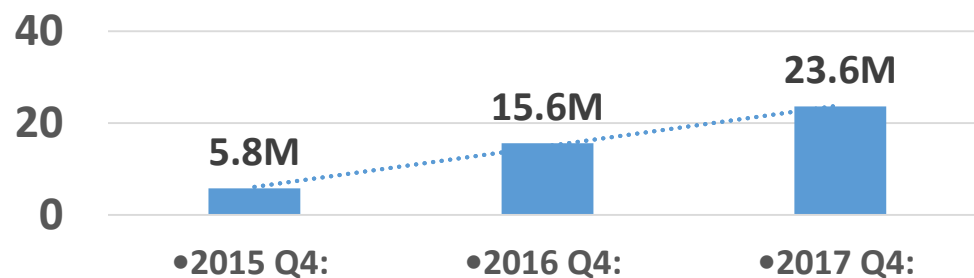


Byproduct is sold to and reused by Nucor Steel, Panasonic, and other downstream recyclers and commodity buyers worldwide.



Panasonic
ideas for life

Pounds Processed



Why we do it.

**To Help Businesses Do Good -
While Doing Well.**

- 1. Environmental Impact**
- 2. Social Impact**
- 3. Making it Easy for Businesses
to become Leaders of Change**

Responsibly recycling one refrigerator can prevent the equivalent of up to 10 tons of co2 from entering the atmosphere, which is equal to taking two cars off the road for one year.

Recleim Today and Tomorrow

- Second processing plant opened in Lima, OH Q3 2017
- Third processing plant acquired from ARCA partnership Q3 2017. Re-furbished and re-started Q4 2017
- Fourth processing plant development during 2019 in Dallas, TX metro area
- Opened logistics hubs in GA and OH in 2017 to support inventory movement
- Opened logistics hubs in TX and IN in 2018
- Analyzing additional locations in NJ, AR, MS, and LA for 2018-2019



Recleim SC

- Original flagship de-manufacturing operation
- Employs between 110-140 depending on season/shift schedule
- Services refrigeration from multiple manufacturing clients from SE states and utility appliance recycling programs in SC and GA
- Services non-refrigeration, HVAC and vending from multiple manufacturing and retail clients



Recleim OH

- Second greenfield plant for Recleim
- Located in Lima OH
- 100+ new jobs when fully staffed – currently at ~50 jobs
- Services refrigeration from utility appliance recycling programs in OH, IL, IN & MI



Plant Highlights

- | | |
|--------------------------------------|------------|
| ▪ Location: | Lima, Ohio |
| ▪ Initial plant operations: | 2017 |
| ▪ Invested Capital | \$6.0M |
| ▪ Facility square footage: | 75,000 SF |
| ▪ Refrigeration line rated capacity: | 35 / hr. |
| ▪ Employees: | 50+ |

Key Partnerships:



Recleim PA

- Purchased the plant assets from the entity formerly known as ARCA Advanced Processing (AAP)
- Services refrigeration from utility appliance recycling programs in PA, NJ, OH, and MD
- Services non-refrigeration and HVAC from surrounding states
- Recleim now owns of **ALL** facilities in the United States that can capture gases during the destruction process



RECLEIM IN THE NEWS



INSPIRATION CHRONICLES

After a Town Suffered a Terrible Tragedy, These Entrepreneurs Brought It Back to Life

A deadly train accident and its aftermath devastated Graniteville, South Carolina. Then two unlikely entrepreneurs came to town.

For more information on the genesis of Recleim check out [this article](#) in *Inc Magazine*, December 2015

And for more information on the growth of Recleim check out [this article](#) in *Inc.com*, 2017



Recleim Energy Efficiency ARP Mission

- Provide next generation, best-in-class, cost-effective Appliance Recycling Program (ARP) delivery for energy efficiency program sponsors – “ARP 2.0”
- Significantly enhance efficacy of de-manufacturing, materials re-use and ODS/GHG destruction using state-of-the-art processes
- Don't try to do too much in too many places



Recleim Current Energy Efficiency Clients

State	Utility	Start of Unit Collections
Georgia	Georgia Power	January 2017
Illinois	ComEd	April 2016
Michigan	Large investor-owned utility	January 2017
New Jersey	NJ Clean Energy Program	July 2018
Ohio	AEP Ohio	January 2017
Ohio	American Municipal Power Efficiency Smart (30 municipal utilities in Ohio)	June 2017
Ohio	Dayton Power and Light	January 2017
Ohio	FirstEnergy Ohio	February 2017
Ohio	City of Westerville	April 2017
Pennsylvania	PPL Electric Utilities	June 2016
Pennsylvania	UGI	July 2016

Implementation Overview

Implementation Summary

Function	Description
Marketing	SWMD with Recleim assist (as needed)
Customer Service	Recleim HQ-based call center in Atlanta metro area; web enrollment also available for enrollment
Collection	By Recleim or Strategic Contract Solutions (diverse subcontractor) crews based in Columbus, Akron and Lima
De-manufacturing	Refrigerant/oil evacuation and handling, chassis de-manufacturing including insulation blowing agent capture for destruction – at Lima, OH
Reporting/ Tracking	Comprehensive WAN system and Dashboard reports hosted by Recleim
Program management	SWMD and Recleim

A. Midwest ARP Summary Results

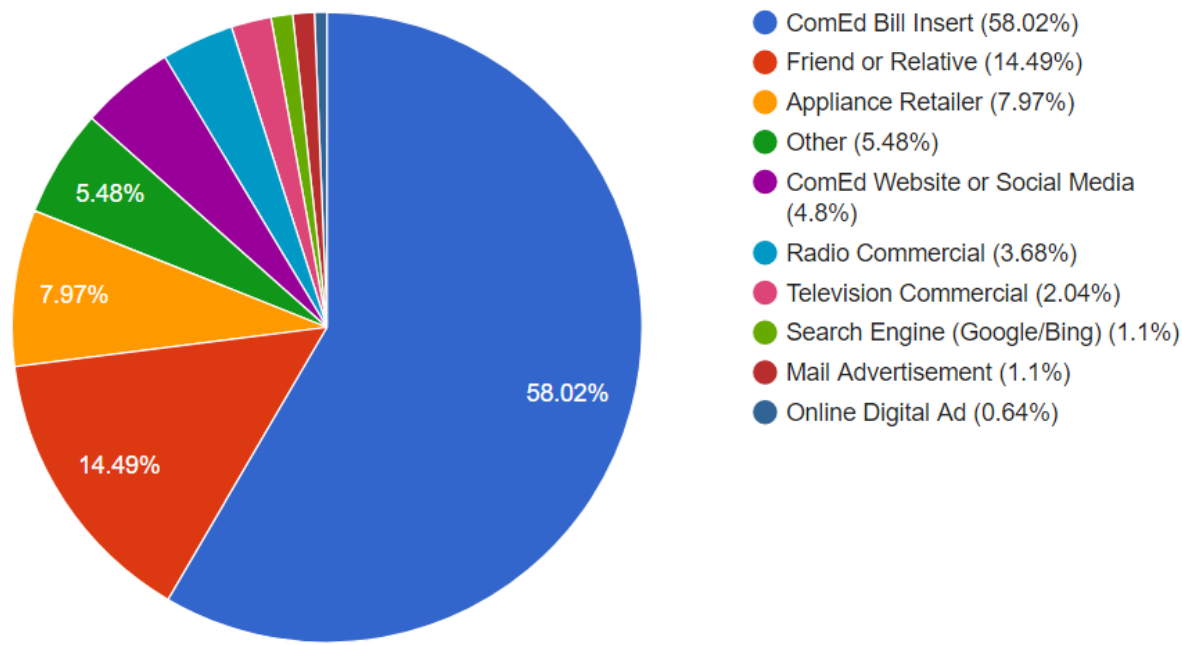
- Actual unit volumes collected in IL, MI, OH, January-December 2017

Utility	REF + FRZ	RAC + DH	Special Unit	Total
AEP Ohio	13,608	0	0	13,608
American Municipal Power Efficiency Smart	240	0	0	240
ComEd	53,771	2,237	500	56,508
Michigan IOU	22,297	2,576		24,873
Dayton Power & Light	5,402	735	0	6,137
FirstEnergy, Ohio	29,692	2,502	0	32,194
Westerville	235	0	0	235
Total	125,245	8,050	500	133,795

Recleim 2018 utility ARP units = over 160,000

C. Customer Recruitment

- Customer enrollment choices
 - Call center (Recleim's "Program Support Center" or "PSC")
 - Web enrollment via the SWD website
- Details for each enrollment type are provided on the next two pages



Sample of "how heard" statistics gathered by Recleim's enrollment systems

C. Customer Enrollment – Recleim PSC

- Opened state-of-the-art call center on April 4th, 2016 in Atlanta
 - Linked nodes in SC and WA for overflow, geographic and language diversity
- Call center statistics for April 2016 – August 2017 (17 months):
 - 183,525 calls presented
 - 92% of all calls answered in 30 seconds or less
 - Average time to answer: 18 seconds
 - Abandon rate 1.7%
- Call center available 7am-5pm CT Weekdays, 8am-4pm CT Saturdays



C. Customer Enrollment – Web Enrollment

- Web orders through utility web site to utility-branded web order system
 - Available 24/7
 - Customer enters zip code – service account number not needed
 - Lists benefits to program participation and program requirements
 - Customer selects a pick-up date
 - Receives confirmation email with link to customer portal

C. Customer Enrollment – Web



1 Eligibility

2 Account Details

3 Unit Details

In partnership with



Schedule an Appointment

Program eligibility requirements

- Eligible appliances:
 - Refrigerators
 - Freezers
 - Room air conditioners
 - Dehumidifiers
 - Other standard kitchen appliances may be collected upon prior approval from Recleim LLC
- Refrigerators and freezers must be empty, defrosted and clean.
- Water supply to appliances must be disconnected in advance of the scheduled pickup.
- Room Air conditioners must be removed from windows prior to the scheduled pickup.
- Appliances must be outside the home near the curb and must be clearly and safely accessible.

☐ I'd like to schedule an appliance pick up.

To reschedule or cancel a previously scheduled pickup, please call **1-877-562-9947** and provide the confirmation code associated with your pickup (see email).

Back

Get Started

C. Customer Enrollment – Web



✓ Eligibility

✓ Account Details

3 Unit Details

In partnership with



Unit Details

1 Add Units

2 Schedule

3 Finish

Choose a Pickup Date:

☒ Aug 19, 2019

☐ Aug 21, 2019

☐ Aug 23, 2019

☒ The refrigerator and/or freezer is emptied, defrosted, and wiped out of foreign matter.

☒ I am the owner of all appliances to be recycled.

☒ I understand that I must provide a clear and safe path with access to all units as pickup crews are not equipped to move items in or around the unit.

Special instructions / Notes for collection crew

D. Customer Interactions (Post-Enrollment)

- Call and email 48 hours before collection
 - To set specific 4-hour window
 - Voice mail left if no answer and call status reportable
 - Email with link to web portal allows customer to check order status 24/7
- Post-pick-up satisfaction survey option – can be done by phone or email survey (SurveyMonkey)



E. Back Room Processes

- Recleim's IT infrastructure completely integrates the participant and unit in chain-of-custody tracking
 - From initial enrollment through final de-manufacturing steps
 - In field, utilizes bar codes and smart phones
 - Used in WAN by call center, collection crews, de-manufacturing staff, and program management
 - Allows for operations monitoring/tracking in real-time (including enrollments and pick-ups)
- Based in Microsoft SQL Server



Concluding Remarks

Recleim Key Differentiators

- Best-in-class customer service systems, including:
 - Call center technology
 - Customer convenience and communications features
 - Fully-branded web services – enrollment
- Most robust, comprehensive unit chain-of-custody and real-time reporting/tracking system
- De-manufacturing process is state-of-the-art in North America
- KPI's are established and monitored intensively for continuous improvement
- Smooth transition to high performance program
- **Result:** goals attainment, high customer satisfaction, and high client satisfaction

Conclusion – Contact Information

Name	Organization	Title	Phone	Email
Sam Sirkin	Recleim	Business Development	503-293-8059	ssirkin@recleim.com
Steve Bush	Recleim	CEO	404-495-4552	sbush@recleim.com