ERI®

People. Planet. Privacy.™

NERC

Northeast Recycling Council

Examining the Intersection of Batteries and Electronics

October 7, 2025

EXAMINING THE INTERSECTION OF BATTERIES AND ELECTRONICS

Our Company

- Founded in 2002 & Headquartered in Fresno, CA
- 725 employees
- 15 AI Robots
- Largest Material Resource Recovery, ITAD, Mobility and Data Destruction/Processing provider in the U.S.
- Eight U.S. Facilities servicing every ZIP code in the U.S. with fully integrated global reach/partner network
- Fully integrated end-to-end solution providing in-house data destruction, processing, remarketing, recycling, logistics, and electronics legislative compliance services
- Most collapsed and direct downstream footprint in the industry with direct-to-smelter relationships
- Innovative and proprietary robotics and artificial intelligence (AI) equipment, technology and software
- Top U.S. market share and brand leader
- Over 2.5 billion pounds recycled and remarketed (approximately 200 million pounds annually)
- Clients across all major industries and all levels of government

Headquartered in Fresno, CA, USA

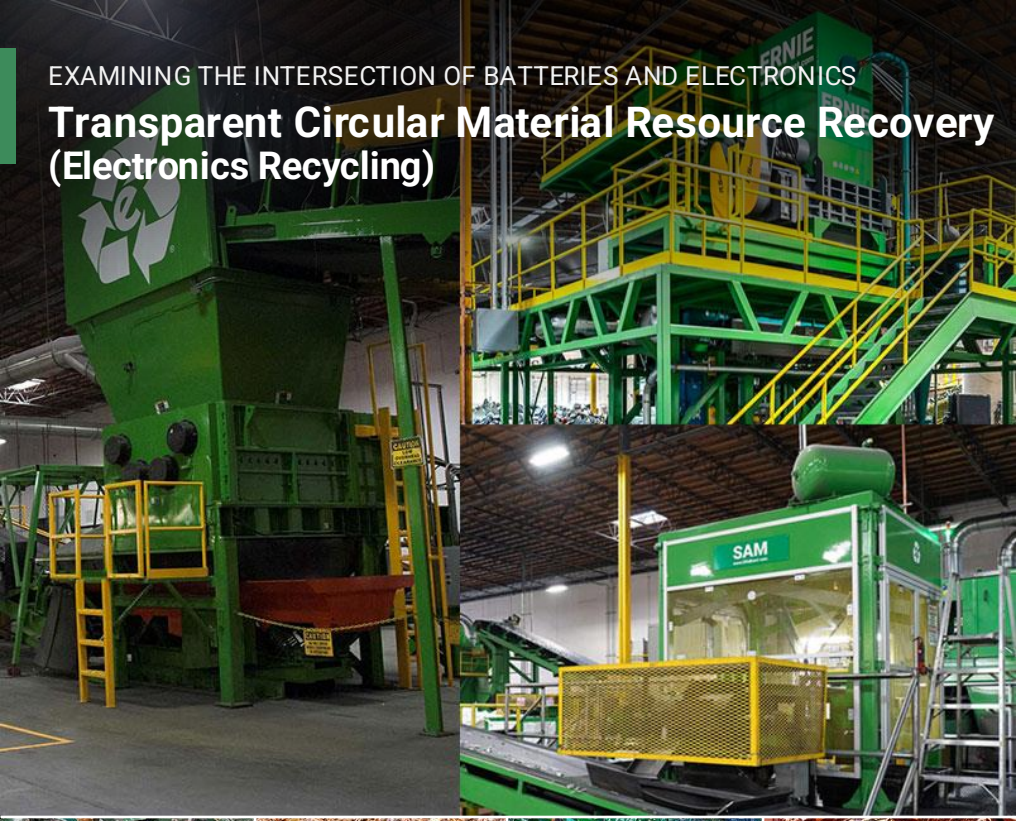
Servicing every ZIP code in the U.S. with global reach / partner network

Eight (8) U.S. Processing Facilities
Fresno, CA • Kent, WA • Flower Mound, TX • Goodyear, AZ
Plainfield, IN • Holliston, MA • Lincoln Park, NJ • Norcross, GA

Global partner network covering over 130 countries.

EXAMINING THE INTERSECTION OF BATTERIES AND ELECTRONICS

Transparent Circular Material Resource Recovery (Electronics Recycling)




Precious Metals – High Grade


Precious Metals – Fines


Precious Metals – Low Grade


Copper


Plastic


Aluminum


Steel


TV & Monitor Boards

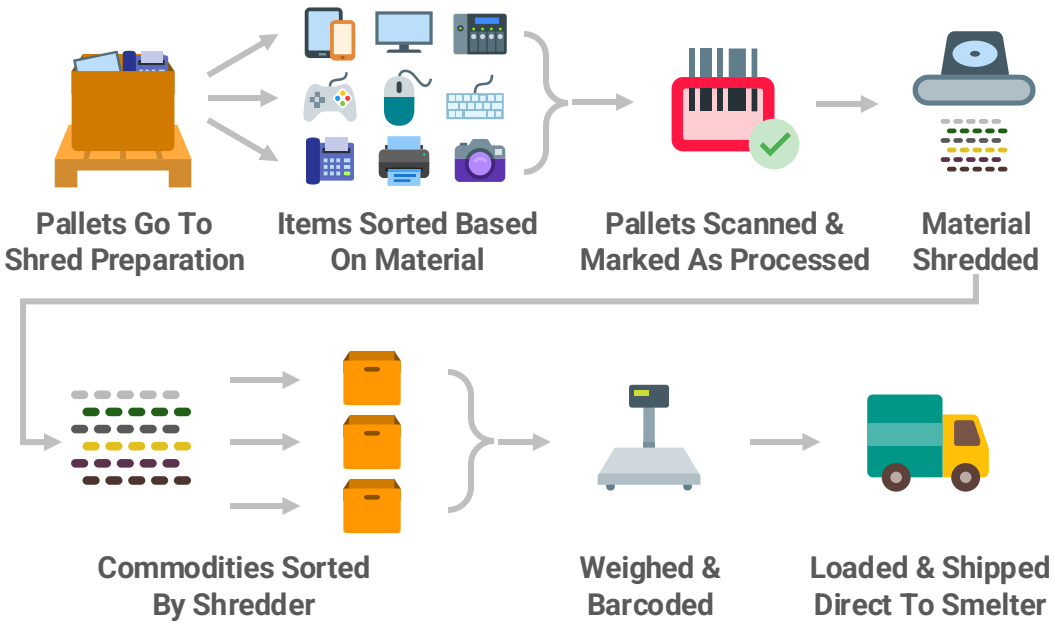

Brass


Copper Motors


Transformers


Stainless Steel

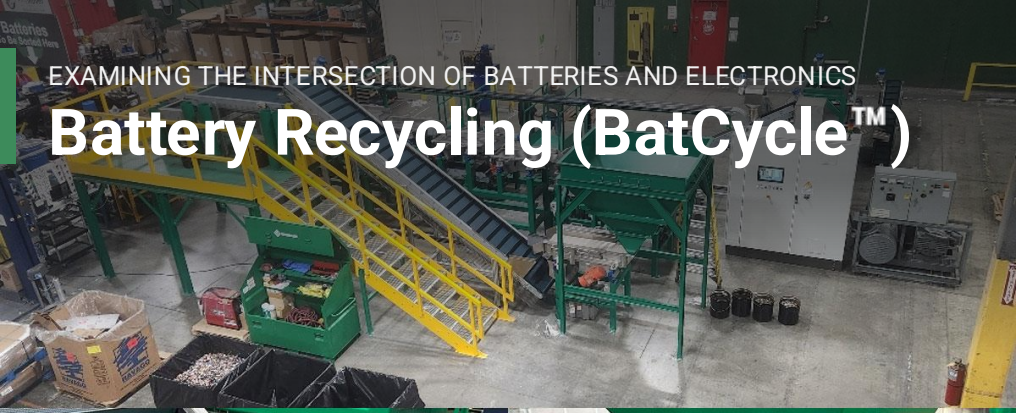
- Largest electronics shredding capacity in the world
- ERI's fully integrated solutions allows for transparent circular material resource recovery
- ERI recovers domestic sources of critical materials* including copper and aluminum for full circularity and transparency
- Focus materials, including batteries, are responsibly handled and processed for full circular material resource recovery
- All material resources are only sent to approved audited vendors and vetted through ERI's Downstream Vendor Management Program



* Critical Materials as defined by the US Energy Act of 2020

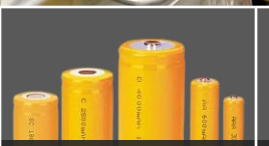
EXAMINING THE INTERSECTION OF BATTERIES AND ELECTRONICS

Battery Recycling (BatCycle™)



Alkaline

Lithium Metal



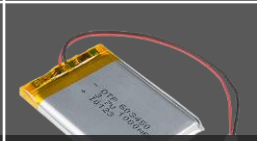
Nickel Cadmium

Nickel Metal Hydride

Lithium Ion Consumer Packs

Lithium Ion Cell Phone

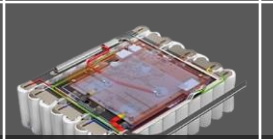
Lithium Ion Laptop



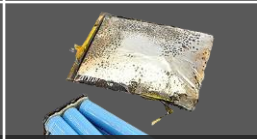
Lithium Ion Polymer

Lead Acid

Mercury Containing



Medium/Large Format



DDR

ERI accepts and recycles all battery chemistries at our facilities nationwide. ERI processes alkaline batteries in-house using our proprietary BatCycle technology and works with our strategic downstream partners to circularly process other battery chemistries for complete critical material* resource recovery including Cobalt, Lithium, Nickel, Manganese, and Graphite.

Battery Services

Loose Battery Collections

- ERI will accept loose batteries sorted by chemistries at our facilities nationwide.
- Batteries must be sorted by chemistry, properly packaged in accordance with Universal Waste and US DOT standards. (bagging or taping individual batteries)

Mixed Battery Collections

OneDrum™ is a turnkey all-in-one battery recycling solution that allows the placement and transportation of large volumes of consumer single-use AND rechargeable batteries in one drum without sorting by chemistry, individually bagging, or taping any battery terminals.

Damaged, Defective, Recalled (DDR) Batteries

- ERI recommends DDR batteries be shipped individually to prevent risk.
- ERI offers individual kits for the safe shipping and transporting of DDR batteries.
- These kits include heat shields for the safe shipping, that utilize a special permit to allow for DOT approved shipping.

Custom Services

ERI can provide additional custom options for shipping of large format or other battery recycling requirements.

* Critical Materials as defined by the US Energy Act of 2020

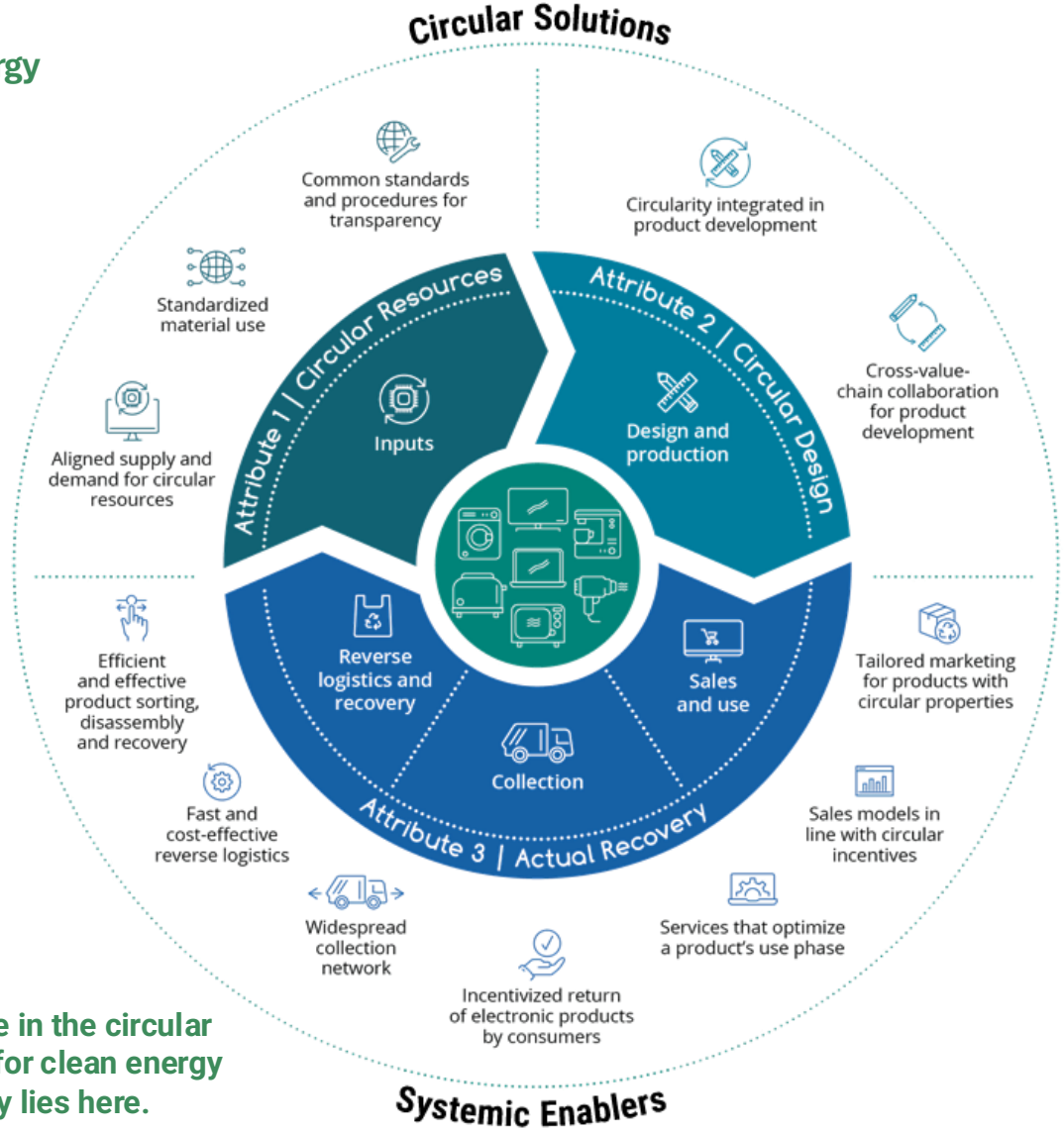
Clean Energy/Electrification/Energy Demand Requirements

A Domestic Supply Chain for Critical Minerals and Materials (CMMs) for Clean Energy Technologies is Necessary

"Increasing U.S. processing capacity alone would bolster the supply chain [for critical minerals], and coupled with recycling, is the most promising pathway to securing the supply chain for minerals where the United States does not have significant reserves from which to extract."

- 100-Day Reviews Under Executive Order 14017

- To date, DOE has announced more than $3 billion in awards to support next-generation chemical processing facilities to reclaim critical minerals and materials from recycled EV batteries.
- Many of the companies that operate these facilities (e.g., Redwood Materials, Cirba Solutions, etc.) cannot yet procure enough black mass feedstock from second-life EV batteries alone.
- Companies like Redwood Materials operate "reverse gigafactories." They can't open up facilities throughout the nation to ease the logistical costs of collecting products.
- Technical innovations that improve the logistics and processes involved with collecting, sorting, and dismantling electronics and the batteries they contain *before* they reach downstream processors are critical to ensuring abundant black mass feedstock.
- Given its national footprint, its expansive collection capabilities, and its client base covering all sectors of the economy, ERI is well positioned to help meet the country's clean energy goals.



ERI's place in the circular economy for clean energy technology lies here.

Fire Incidents caused by batteries over the past few years!

Just **ONE** battery can cause a thermal reaction that can result in damage during transportation, and could contribute to loss of facility, or life

Identify and separate batteries that pose an increased risk of producing a dangerous evolution of heat, fire, and short circuit.
Damaged, Defective, and Recalled batteries must not be shipped with conforming batteries.

What is an Embedded Battery Device

According to CA SB1215: "battery-embedded product" means a product containing a battery from which the battery is not designed to be easily removed from the product by the user of the product with no more than commonly used household tools.

Already Covered by SB20


Laptops


Tablets


Smart Watches


EarBuds


Cell Phones


Smart Speakers


Power Banks


Controllers


Keyboards/Mice


Video Equipment


Personal Care

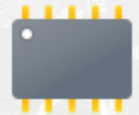

Office Equipment


Wearables


Toys


Cards


E-Mobility


BIOS

What is not an Embedded Battery Device

According to CA SB1215: "battery-embedded product" means a product containing a battery from which the battery is not designed to be easily removed from the product by the user of the product with no more than commonly used household tools.

Already Covered by SB20

Laptops

Smart Watches

EarBuds

TVs/Monitors

Cell Phones

Smart Speakers

Controllers

Wearables

Keyboards/Mice

Toys

Video Equipment

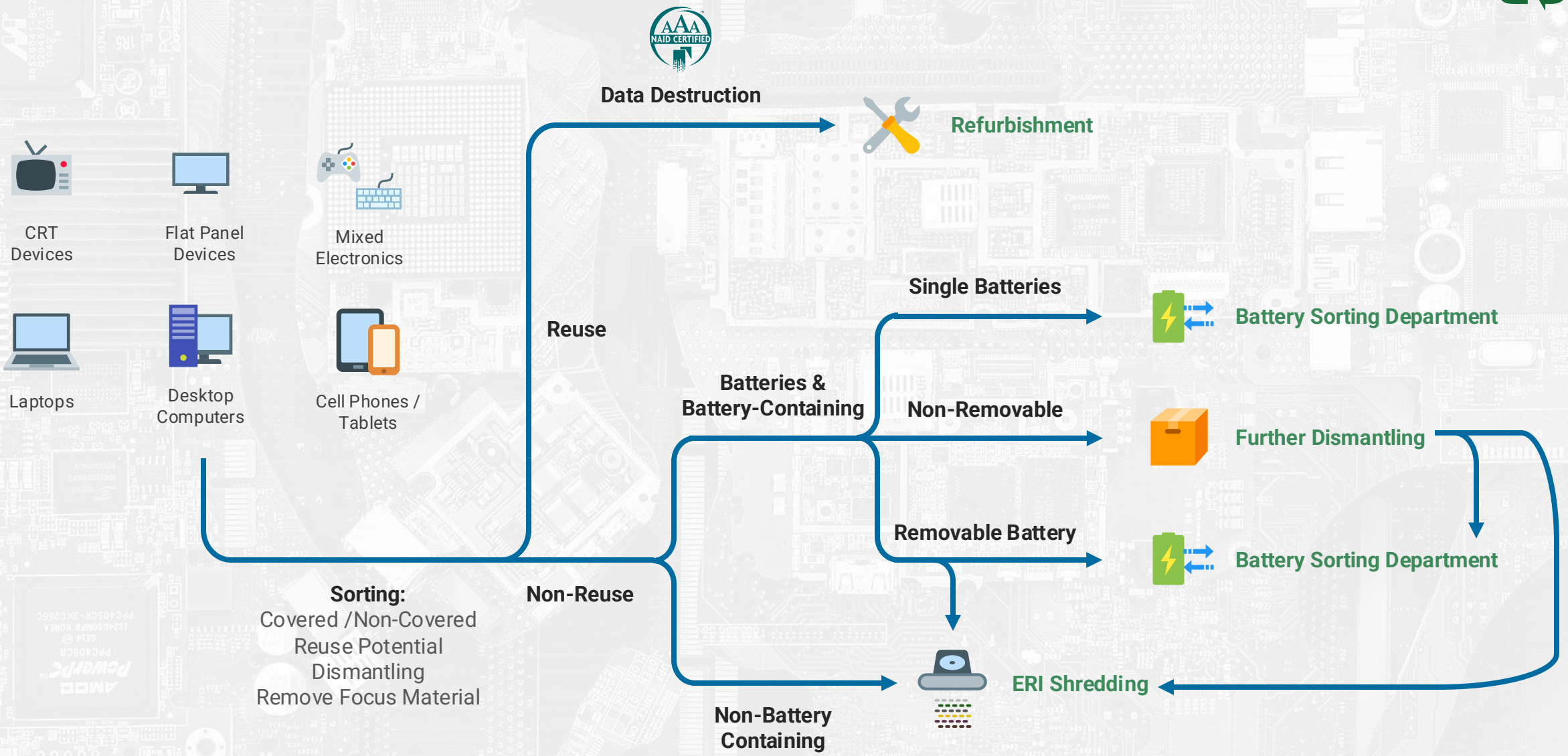
Personal Care

Cards

Office Equipment

E-Mobility

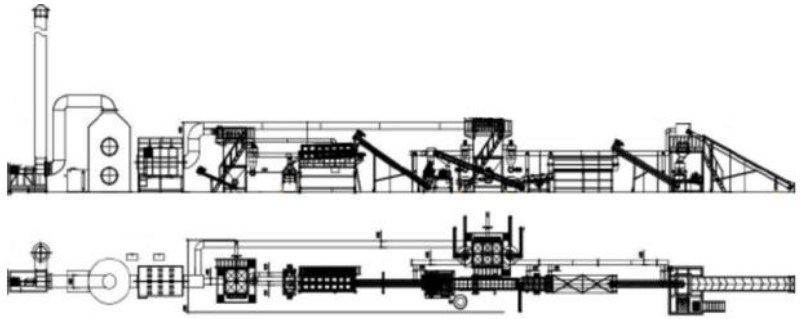
Processing Flows



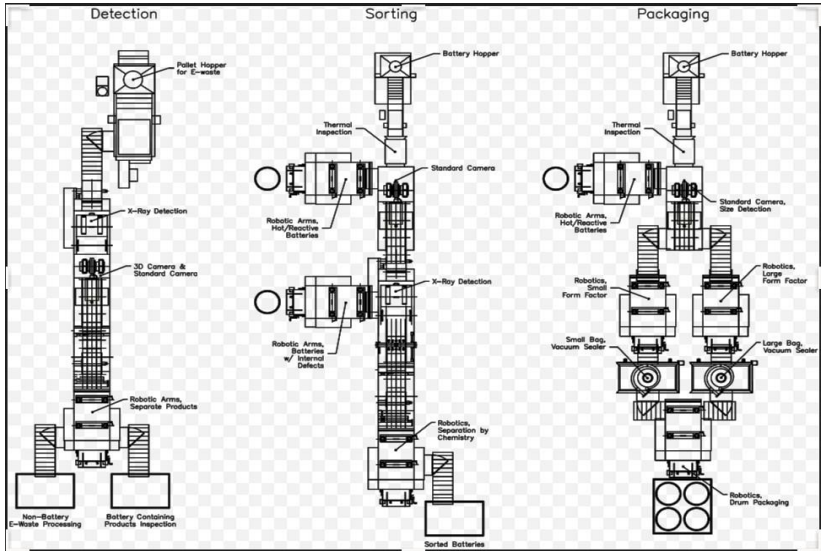
Technological Innovation

New E-Waste Sorting and Shredding Facilities Support a Domestic Supply Chain for Critical Minerals and Materials (CMMs)

- ERI is now expanding its existing recycling footprint to sort and process the increase e-waste expected from increased battery processes.
- New and/or expanded ERI facilities could provide sever cutting-edge services including:
    - X-ray and thermal imaging technology to identify and safely sort battery types by chemistry;
    - Specialized equipment to process alkaline batteries used to power everyday devices;
    - ERI's proprietary mechanical process for recycling tough-to-recycle solar panels.
- These services would capture several critical minerals and materials, including graphite, cobalt, lithium, zinc, manganese, nickel, cadmium, carbon, steel, brass and copper.



Equipment Diagram for Alkaline Battery Recycling Process



Preliminary Equipment Diagram for X-Ray and Thermal Imaging Process

Case Study: Staples Recycling Services

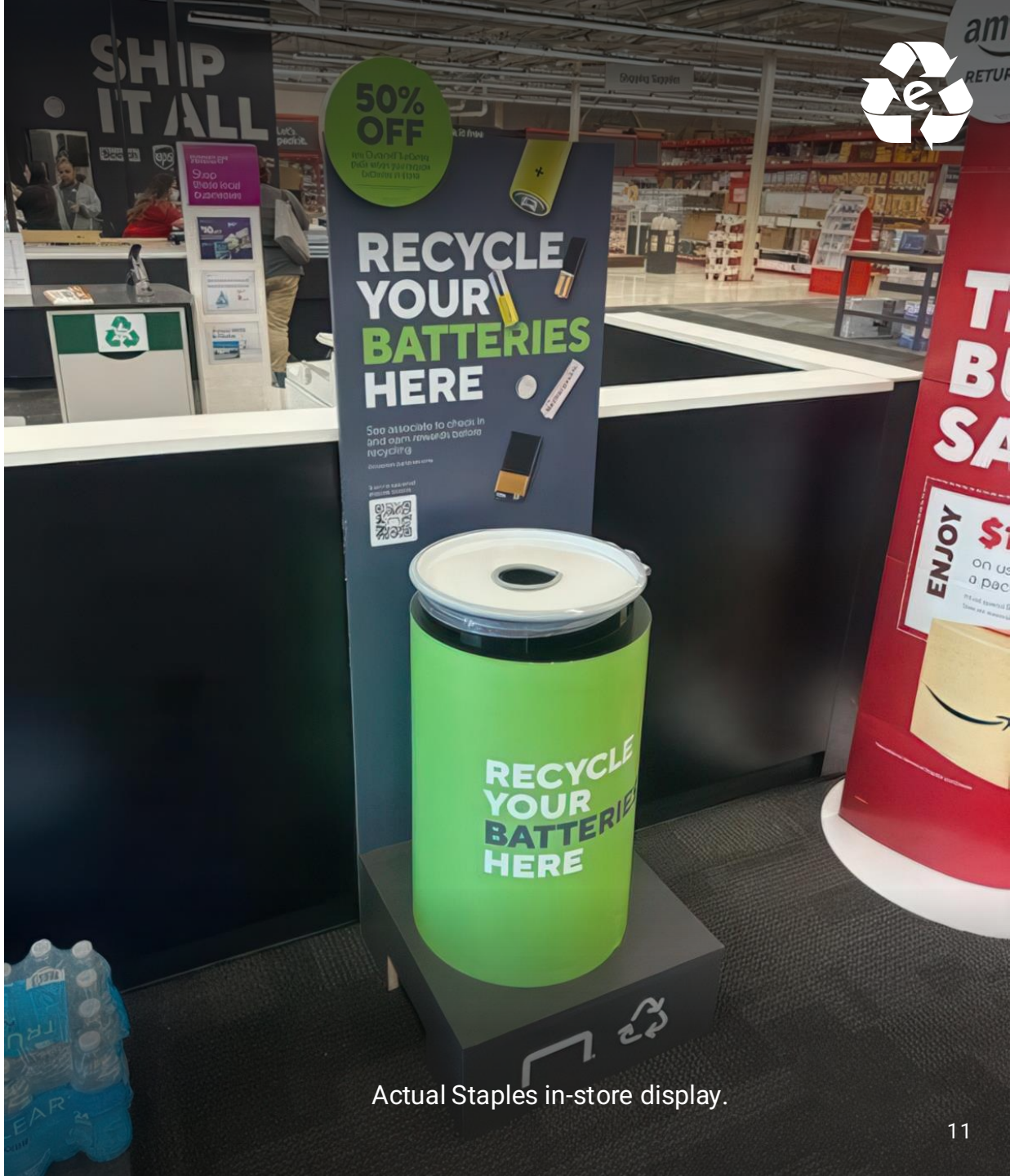
Staples Succeeds through Recycling Services with ERI

Staples began with partnering with ERI nationwide to accept electronics at stores for recycling at over 1,000 locations. Staples offers promotions and brings consumers into stores by offering this service.

Since the launch, Staples has expanded the program:

1. B2B Tech Recycling Kits
2. B2B ITAD Services
3. Online box program for consumer/small business recycling
4. Consumer Trade-in Program
5. All Battery Recycling Program

ERI offers custom branded proprietary box programs for our clients.



Actual Staples in-store display.

RecycleNation.com – Search. Find. Recycle.

RecycleNation features the world's largest free recycling database, offering over 100,000 unique data points for recycling more than 50 types of items, all available to the public at no cost.

Since 2007, RecycleNation has guided over 10 million consumers in locating recycling centers for various items, contributing to a cleaner, greener, and more sustainable planet.

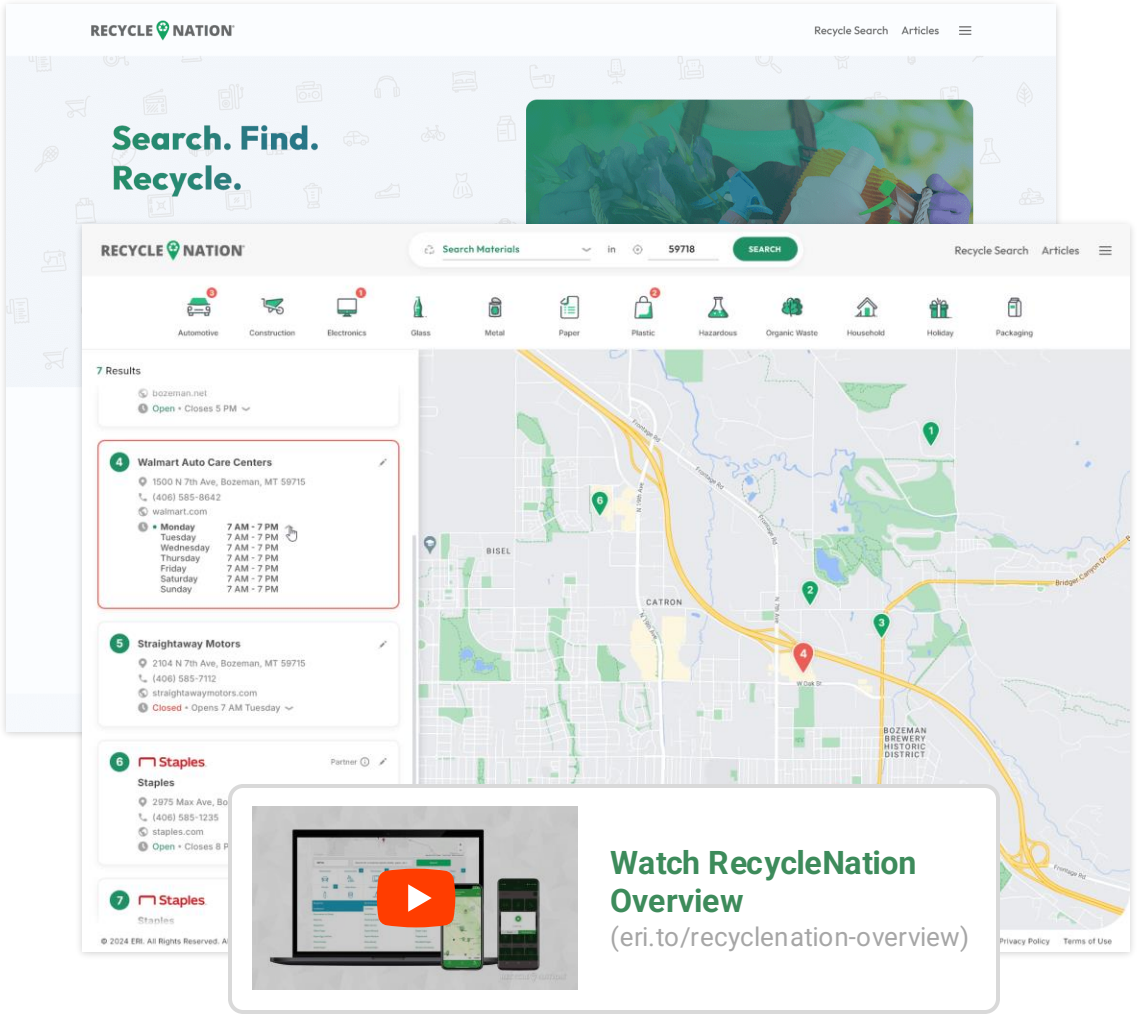
Each month, RecycleNation supports more than 300,000 unique visitors in meeting their recycling needs through our comprehensive database and tools.

Our fast, mobile-friendly website enables users to easily find recycling locations and resources on any device. Designed for seamless navigation, it provides access to recycling information anytime, anywhere—no app or account is needed.

As the leading technology tool in the U.S. for environmental sustainability, RecycleNation actively promotes circular economy practices for a greener future.

New & Improved Features

- Improved reporting and tracking capabilities of recycling locations, visitors, and materials
- State and federal regulatory tracking, registration reminders & guidance
- Automated location data validation, discrepancy reporting, new location importing
- Contact management, data update notifications
- Event management & search engine inclusion



RecycleNation.com was ranked #1 Recycling tool on the internet.
eri.to/rn-feedspot

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