

# How Are Electronics Recycled?

## A Step-By-Step Guide

Electronics recycling involves disassembling, sorting, and refining discarded electronic devices to recover valuable materials while minimizing environmental impact.

This guide will break down how electronics are recycled in a certified electronics recycling center.



### 1. Collect Electronics

To kickstart electronics recycling, gather old gadgets from homes, offices, schools, hospitals, agencies, and more. For businesses, set up a recycling plan and rally your team to make collection effortless.



### 2. Transport Electronics to Certified Recycler

To safely dispose of electronics and protect your data, transport them to a certified recycler that is eco-conscious and compliant. You can drop off your devices or use a pickup option.



### 3. Shred Electronics

Electronics are manually dismantled and examined before being shredded at recycling facilities. The shredded pieces are then sorted.



### 4. Sort Electronics

Why shred before sorting?

Shredding electronics before sorting is important because it facilitates efficient separation of various materials, including hazardous substances like cathode ray tubes, ensuring safe recycling and disposal.



### 5. Dust Extraction

During the recycling process, electronic fragments are subject to a dust extraction process on a conveyor belt to prevent environmental damage by collecting dust particles.

### 6. Magnetic Separation

After dust extraction, magnets are used to separate ferrous and non-ferrous metals from other materials. This step is crucial as the metal is recycled separately from plastic.

### 7. Water Separation

After magnets separate metal from other materials, hydraulics are used to safely and efficiently separate glass from plastic during the recycling process. Similar to metal and plastic, glass is also recycled differently.



### 8. Purification

To enhance recycling quality, waste undergoes further analysis and refinement. Metal pieces are often cleaned of rust and paint before melting in-house. Some facilities use chemical reactors to extract rare earth elements, preventing environmental contamination.



### 9. Prep for Resale

When electronics are broken down to their simplest form, elements are either recycled or repurposed by category within the same facility or sold to other facilities for the same purpose.



**Ready to recycle your electronics? Trust Great Lakes Electronics for secure data wiping and proper recycling. Contact us at 888-392-7831 or request a quote today!**

