

3RP

REDUCE.REUSE.RECYCLE



Our Team

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Introduction to E-waste

WHAT IS E-WASTE?

E-waste refers to discarded electronic devices like smartphones, computers, and appliances that are no longer in use.

WHY IT MATTERS

Rising e-waste harms the environment and depletes resources.

OUR GOAL

To explore innovative and sustainable solutions for managing e-waste effectively through recycling, reuse, reduce.

Problem Statement

Waste from Multiple Sources

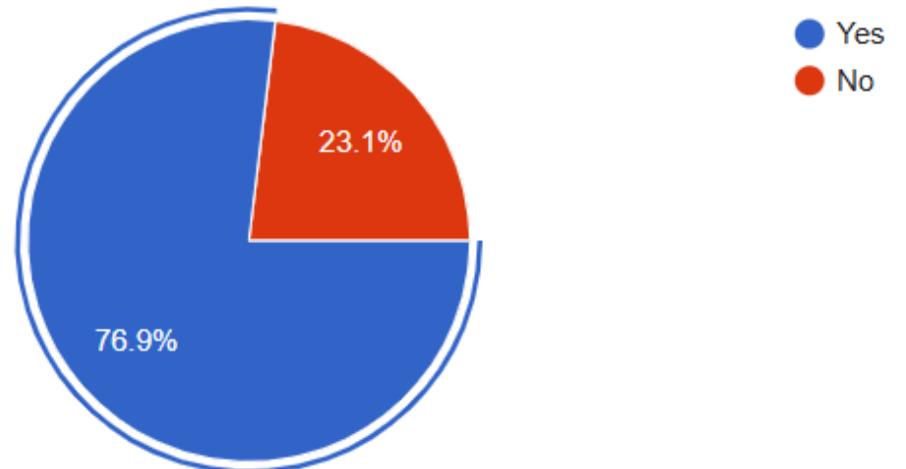
- Waste is produced from various sources, such as:
 - Residential and commercial waste
 - Industrial byproducts
 - E-waste (electronics)
 - Plastic and glass waste
- Key Statement: The rapid rise of e-waste harms the environment with toxic materials and depletes resources. Traditional waste management methods are ineffective, calling for sustainable solutions.

SURVEY

Are you aware of what e-waste is?

13 responses

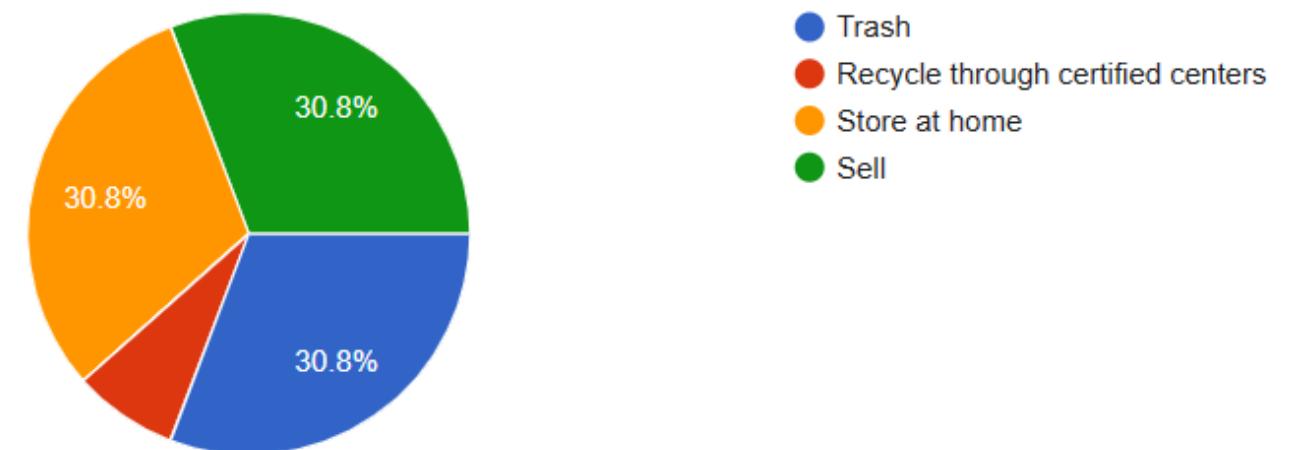
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How do you typically dispose of old electronics (e.g., phones, computers)?

13 responses

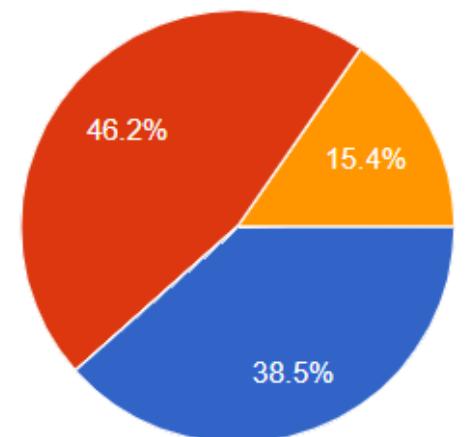
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How important do you think it is to recycle e-waste and metal waste?

13 responses

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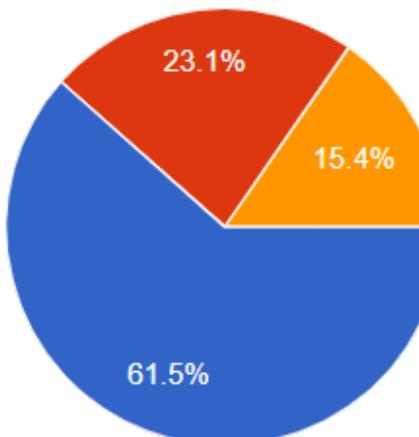


- Very important
- Somewhat important
- Not important

Are you thinking that e-waste recycling is necessary

13 responses

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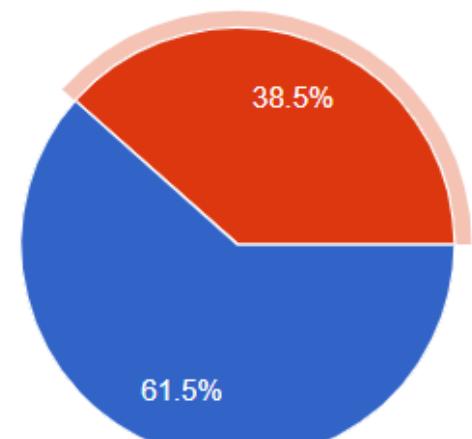


- yes
- no
- maybe

Are you aware that metals like gold, silver, and copper can be recovered from e-waste?

13 responses

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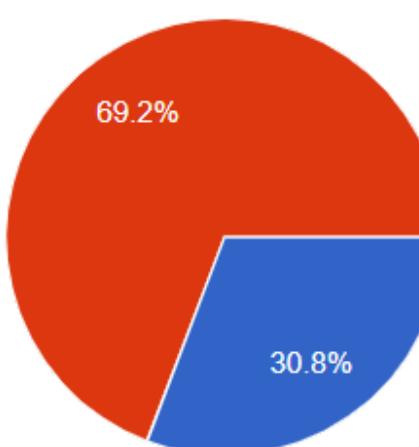


- Yes
- No

What are the barriers you face when recycling e-waste or metal waste? (Select all that apply)

13 responses

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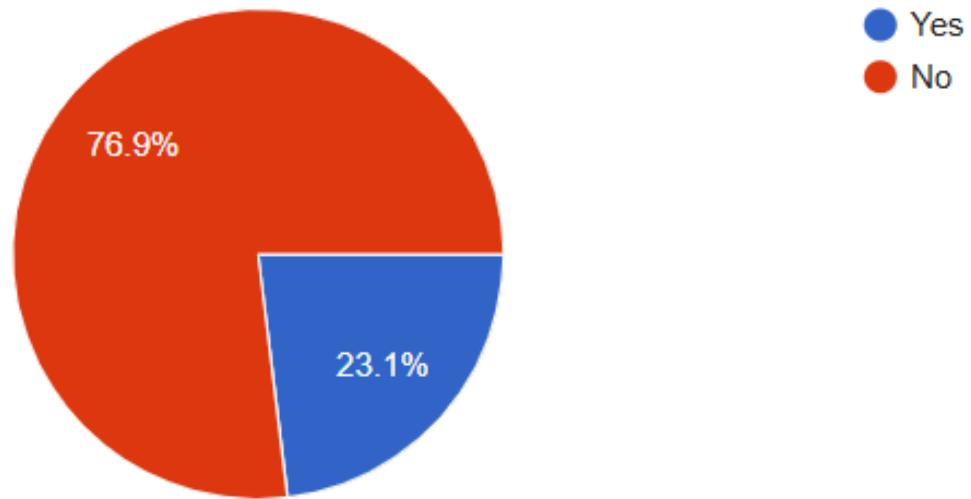


- Lack of awareness
- No nearby recycling centers
- Inconvenience
- Costs involved

Do you know any organizations or facilities near you that recycle e-waste or metal waste?

13 responses

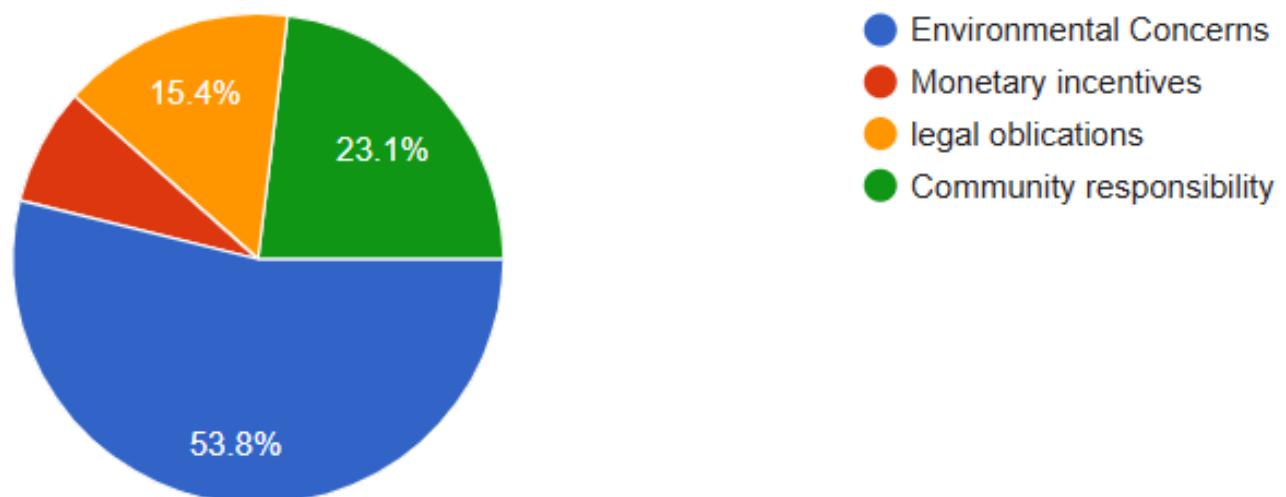
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What motivates you to recycle e-waste or metal waste?

13 responses

 Copy chart



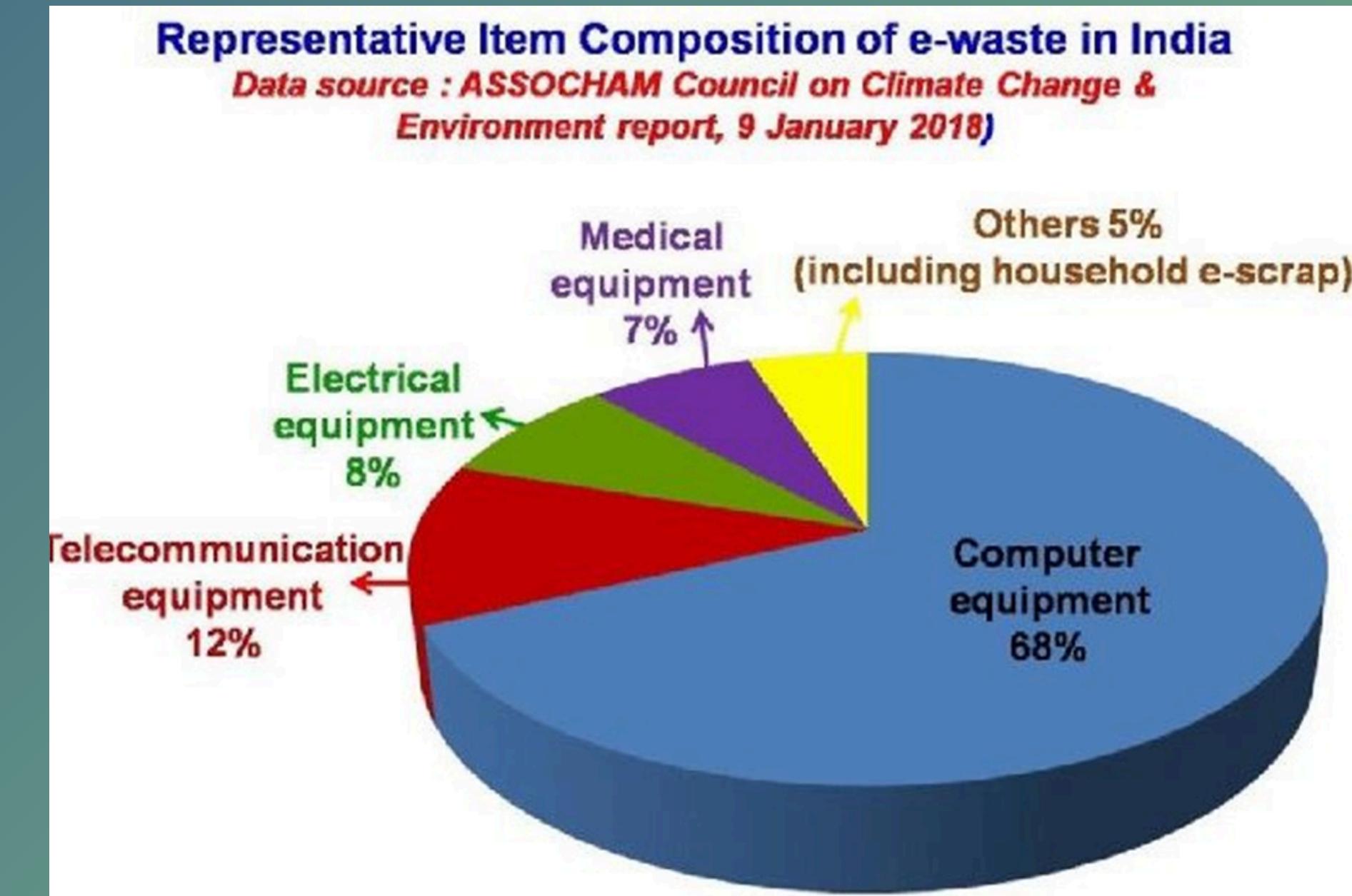
Challenges with Existing Solutions

- Landfills and incineration fail to manage e-waste effectively.
- Toxic materials like lead and mercury pollute the environment.
- Segregating metals and plastics is complex and costly.
- Existing methods do not address the environmental impact adequately.



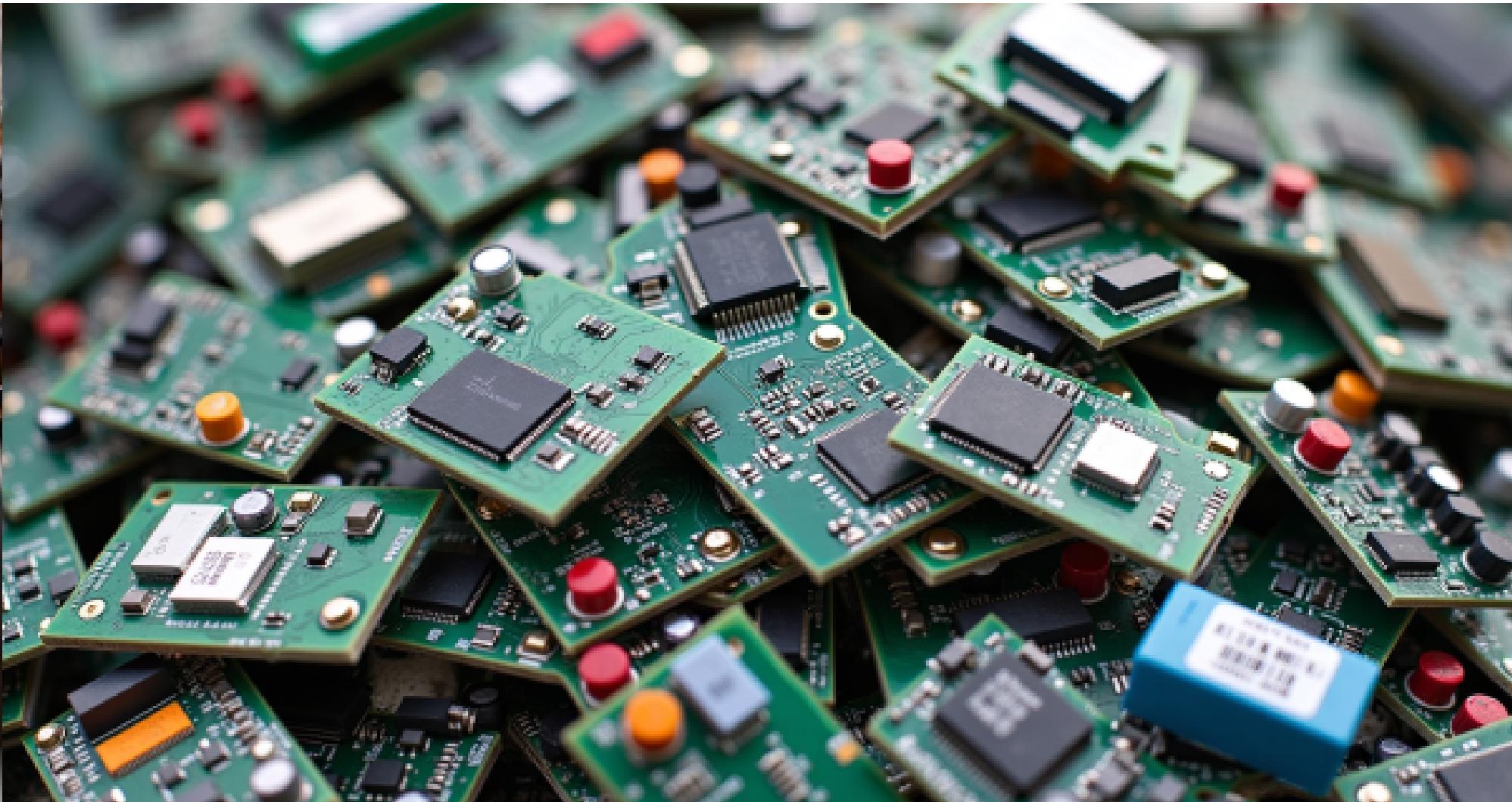
WASTE COMPOSITION BREAKDOWN

- E-WASTE INCLUDES VARIOUS MATERIALS:
 - CONSUMER ELECTRONICS (E.G., LAPTOPS)
 - SMALL APPLIANCES (E.G., MICROWAVES)
 - BATTERIES
 - PLASTICS
- MATERIALS IN E-WASTE:
 - PRECIOUS METALS (GOLD, COPPER)
 - TOXIC COMPONENTS (LEAD, MERCURY)
 - RECYCLABLE PLASTICS AND GLASS
- PROPER SEGREGATION IS CRUCIAL FOR EFFECTIVE RECYCLING.



Challenges with Existing Solutions

- Traditional methods like landfills and incineration are inadequate for managing e-waste because:
 1. Toxic Materials: Electronics contain hazardous substances (e.g., lead, mercury) that contaminate land and water.
 2. Complex Recycling: Separating metals and plastics from e-waste is costly and difficult.
 3. Environmental Harm: These methods fail to address the toxicity and environmental damage caused by improper disposal.
- Key Point: The inefficiency and environmental impact highlight the need for specialized e-waste recycling.



Benefits of E-Waste Recycling: Metal Extraction

- **Valuable Metals:** Recover gold, silver, copper, and palladium for reuse.
- **Environmental Impact:** Reduces harmful mining activities, preserving ecosystems.
- **Energy Savings:** Recycling uses less energy compared to mining raw metals.
- **Economic Growth:** Creates jobs and generates revenue from extracted materials.



Benefits of E-Waste Recycling: Reuse of Components



- Reusing Components: Reduces demand for new parts, lowers costs, and extends material lifespan.
- Waste Reduction: Prevents landfill accumulation, minimizing environmental harm.
- Resource Conservation: Saves finite resources and reduces production needs.
- Recycling Metals: Recovers valuable metals (gold, silver, etc.), reduces mining impact, and saves energy.
- Economic Benefits: Creates jobs and generates revenue from recycled materials.

E-WASTE MANAGEMENT PROCESS

STEP-1

Collection and segregation of e-waste from various sources.

STEP-3

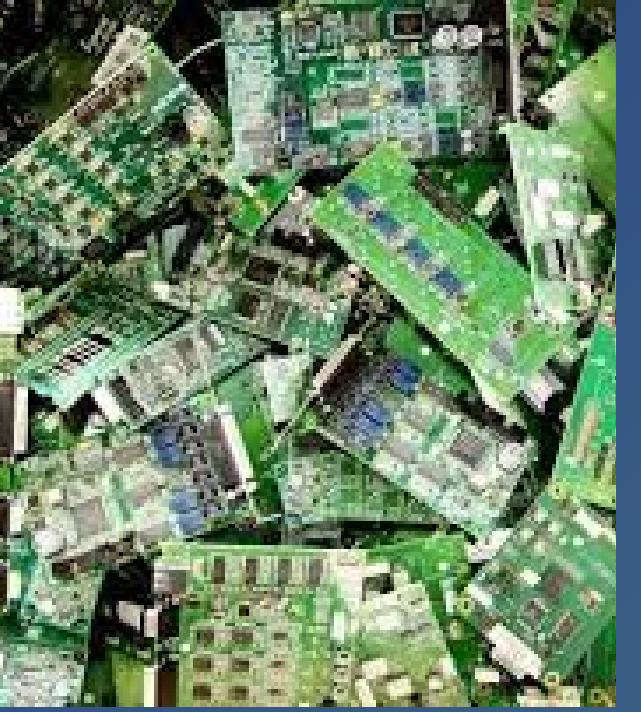
Collaboration with recycling companies and industries to refine and process materials.

STEP-2

Sorting components into reusable parts and recyclable metals.

STEP-4

- Ensuring compliance with safety and environmental regulations to prevent pollution.



STEP 1

Collection: Devices gathered from consumers, industries, and disposal centers.



STEP 2

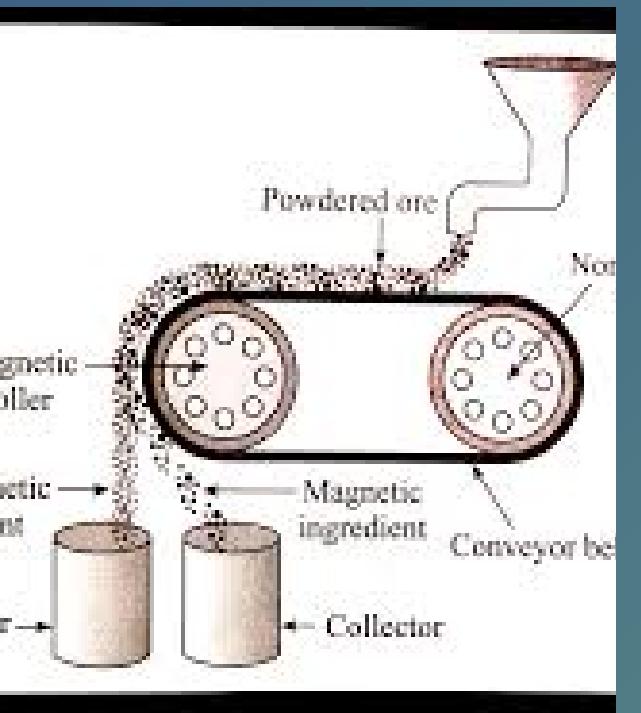
Disassembly: Components separated manually or mechanically.

STEP 3

Shredding: Devices broken into smaller pieces.

STEP 4

Magnetic Separation: Ferrous metals (e.g., iron, steel) removed with magnets



STEP 5

Chemical Extraction: Eco-friendly recovery of non-ferrous metals.
{eg.gold,cooper}

Metal Extraction Process From E-Waste

Parts Reuse Process from E-Waste

STEP-01

Inspection and testing of components to determine their functionality and usability.

STEP-02

Identification of working parts such as microchips, screens, capacitors, and batteries.

STEP-03

Refurbishment of reusable components by cleaning, repairing, or upgrading them if needed.

STEP-04

Repurposing components in devices or selling as replacement parts.

STEP-05

Resale: Refurbished parts and devices are sold to consumers, businesses, and manufacturers.

ECONOMIC IMPACT OF E-WASTE RECYCLING

JOB CREATION



RECYCLING AND
REFURBISHMENT CREATE
EMPLOYMENT.

COST SAVINGS



REDUCES RAW MATERIAL
COSTS FOR
MANUFACTURERS.

REVENUE GENERATION



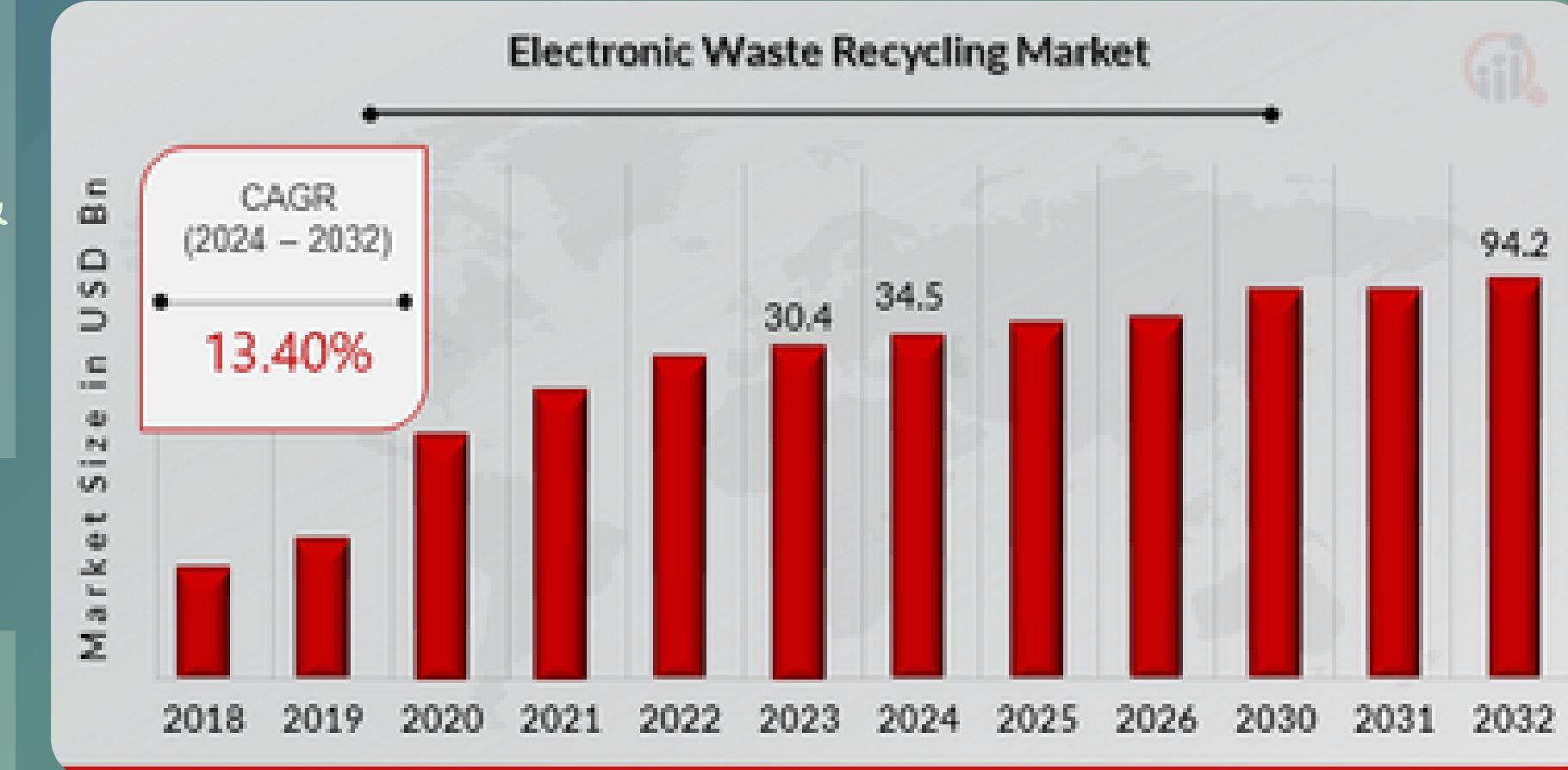
EXTRACTED METALS &
REFURBISHED PARTS
GENERATE PROFITS.

MARKET GROWTH



E-WASTE RECYCLING IS
A BOOMING INDUSTRY.

Electronic Waste Recycling Market



SUCCESSFUL CASE STUDIES IN E-WASTE RECYCLING

SWEDEN & CIRCULAR ECONOMY – 99% OF WASTE IS RECYCLED OR REUSED.



DELL'S TAKEBACK PROGRAM - COLLECTS & RECYCLES OLD DEVICES WORLDWIDE.

JAPAN'S E-WASTE POLICY – TOKYO 2020 OLYMPIC MEDALS MADE FROM RECYCLED ELECTRONICS.



INDIA'S INITIATIVES – GROWING E-WASTE RECYCLING STARTUPS LIKE ATTERO RECYCLING.

Technological Innovations in E-Waste Recycling

AI-Powered Sorting

Identifies and separates valuable materials efficiently.

Robotic Disassembly

Automates dismantling of electronic devices.

Eco-Friendly Metal Extraction

Uses bioleaching & hydrometallurgy to recover metals.

Blockchain for E-Waste Tracking

Ensures transparent & responsible recycling.

WEBSITE DESIGN

3RP

Home About Services How It Works Services

CONTACT

E-Waste solutions

Join the recycling revolution

VIEW SERVICES

SUSTAINABLE E-WASTE SOLUTIONS

Transforming waste into value

3RP is dedicated to sustainable e-waste management in Visakhapatnam. We specialize in extracting valuable metals like gold, silver, copper, and aluminum from electronic waste. Our team refurbishes functional spare parts from discarded devices, promoting a circular economy. By implementing eco-friendly recycling techniques, we aim to minimize electronic waste and create economic value from discarded materials. Join us in making a positive impact on the environment while conserving resources.

[Get in touch](#)



OUR PROCESS

Transforming e-waste responsibly

**Metal extraction**

Recover valuable metals from electronic waste responsibly.

[Learn more](#)

Spare parts resale

Refurbish and resell functional electronic components.

[Learn more](#)

GET IN TOUCH

We're here to help you with e-waste solutions!

Name *

Jane Smith

Email address *

email@website.com

Phone number *

555-555-5555

Message

(Large text area for message input)

I allow this website to store my submission so they can respond to my inquiry.*

SUBMIT

Get in touch

3rp@gmail.com

Location

[Visakhapatnam, AP IN](#)

Hours

Monday	9:00am – 10:00pm
Tuesday	9:00am – 10:00pm
Wednesday	9:00am – 10:00pm
Thursday	9:00am – 10:00pm
Friday	9:00am – 10:00pm
Saturday	9:00am – 6:00pm
Sunday	9:00am – 12:00pm

OUR PROCESS

Transforming e-waste responsibly

**Metal extraction**

Recover valuable metals from electronic waste responsibly.

[Learn more](#)

Spare parts resale

Refurbish and resell functional electronic components.

[Learn more](#)

**Metal extraction**

At 3RP, we prioritize the extraction of valuable metals from electronic waste to combat the escalating e-waste crisis. Our advanced techniques allow us to recover precious metals such as gold, silver, copper, and aluminum from discarded circuit boards and components. This process not only mitigates environmental harm but also contributes to resource conservation. By reclaiming these metals, we help reduce the need for new mining, which can be detrimental to the planet. Join us in transforming electronic waste into a valuable resource through responsible metal extraction.

3RP

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E-Waste solutions

Transforming waste into value

SHOP

Transforming waste into resources



3RP

Transforming waste into resources



Metal extraction
Recover valuable metals from electronic waste efficiently.
[Read more](#)

Spares parts resale
Renew and resell functional components from discarded electronics.
[Read more](#)

Sustainability focus
Promote responsible recycling and reduce e-waste impact.
[Read more](#)



Processor (Intel Core i5 10th Gen)
A refurbished Intel Core i5 processor extracted from recycled laptop; tested and in working condition.
[Read more](#)



Laptop RAM (8GB DDR4)
Recovered and tested 8GB DDR4 RAM module for laptops.
[Read more](#)



Laptop Screen (15.6" LCD Display)
A 15.6-inch LCD screen salvaged from recycled laptop; fully functional and without scratches.
[Read more](#)



Motherboard (Laptop Motherboard)
A fully functional laptop motherboard, refurbished from e-waste.
[Read more](#)



Gold (99.9% Pure)
Refined and refined 99.9% pure gold extracted from circuit boards, connectors, and microchips; ideal for industrial use, jewelry making, or investment.
[Read more](#)



Silver (99.9% Pure)
High-quality recycled silver (99.9% pure), recovered from keyboards, circuit boards, and switch contacts; suitable for industrial applications, electronics, and jewelry making.
[Read more](#)

**PROCESSOR (INTEL CORE i5 10TH GEN)**

\$120

Looking for a cost-effective way to upgrade your PC? This **Intel Core i5 10th Generation processor** is a powerful and efficient CPU, carefully salvaged from high-performance laptops and desktops. It has been thoroughly tested to ensure **smooth functionality and optimal performance**, making it perfect for gaming, multitasking, and professional applications. With **Turbo Boost technology**, it delivers high-speed processing while maintaining energy efficiency. Whether you're building a new system or upgrading an old one, this processor provides a **reliable, high-performance computing experience** at a fraction of the cost.

E-WASTE SOLUTIONS

Sustainable recycling and reuse practices

**Metal extraction >**

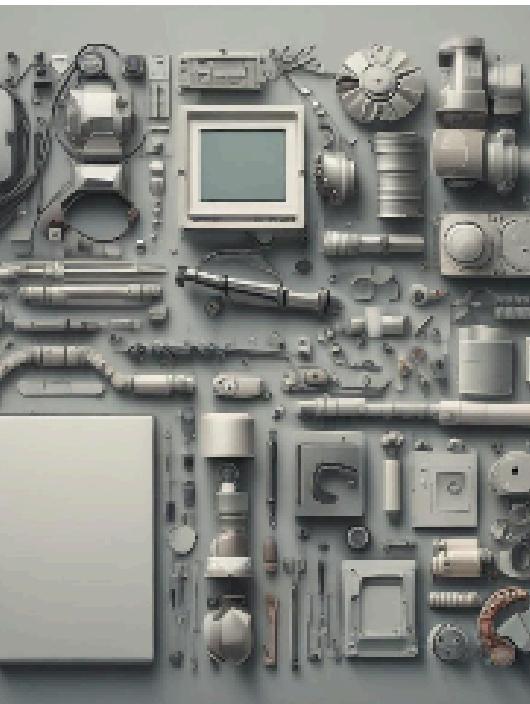
Recover valuable metals from electronic waste.

**Spare parts resale >**

Refurbish and resell functional electronic components.

**Sustainability focus >**

Promote responsible recycling and reduce environmental impact.

**SPARE PARTS RESALE**

3RP takes pride in identifying and refurbishing functional components from discarded electronics. Our team meticulously inspects items such as chips, capacitors, screens, and connectors, ensuring they meet high-quality standards for resale. By giving a second life to these parts, we not only reduce electronic waste but also provide affordable solutions for businesses and individuals seeking reliable replacements. Our commitment to sustainability drives us to promote responsible reuse practices, enabling a more efficient use of resources. Partner with us to make a positive impact on the environment while finding the components you need.

[Schedule appointment](#)

Select a date and time *

Saturday, April 05, 2025

< | > April 2025

Mon Tue Wed Thu Fri Sat Sun



No availability, try another day

((GMT+05:30) Asia - Calcutta)

Name *

Jane Smith

Email address *

cmail@website.com

Phone number *

555-555-5555

Which service or services are you interested in?

- Metal extraction
- Spare parts resale
- Sustainability focus

Message

SUBMIT

THANK YOU!!