

E-Waste Recycling Overview

About 3R Technology

- Founded in 2003.
- We are an IT Asset Disposition company
- Two reuse stores (Georgetown and North Seattle).
- Recycled over 3 million pounds of e-waste in 2019



Why is E-waste a problem?



There's a lot of e-waste

- E-waste is the fastest growing municipal waste stream in America, according to the EPA.
- E-waste represents 2% of America's trash in landfills, but it equals 70% of overall unsafe waste.
- An estimated 50 million tons of E-waste are generated globally each year.
- The USA discards 30 million computers each year
- Only 12.5% of E-waste is currently recycled.



E-Waste Contains Hazardous Materials

Lead

Cadmium

Mercury

Chromium Polyvinyl Chloride (PVC)



It gets exported

- Some is sent to China and Africa where there are fewer environmental laws.
- Not illegal to export.
- Less economic incentive to export these days and more oversight.



What to look for when choosing an e-waste recycler

- **Certifications**
- **Data Destruction**
- **Logistics**
- **Reporting**
- **Reuse Options**



Electronics Recycling Certifications



**Basel Action Network
(BAN)**

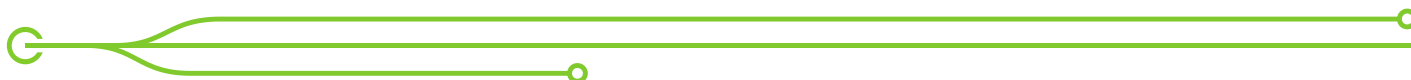


**Sustainable Electronics International
(SERI)**

Certification Requirements



- Pass annual 3rd party audits
- Restrictions on exporting e-waste.
- ISO 14001:2015
- ISO 45001:2018
- Emergency Plans
- Data Destruction Requirements



DATA DESTRUCTION

DATA WIPE: Software is used to securely wipe hard drives that get reused.

- What software is used?

HARD DRIVE SHRED: Hard drives are mechanically shredded into small bits.

- Offer onsite shred?



KillIDisk for Industrial Systems

ERASE CERTIFICATE



Company information
Business name: **KillIDisk for Industrial Systems**

Technician information
Name: **Software user** Date: **April 22, 2016**
Time: **16:21**

Erasure results information
Erase Method: **One Pass Zeros, 1 passes**
Verification: **100%**
Started: **22/04/2016 16:20:47** Duration: **00:00:30**
Status: **Erasing 4 disk(s) process completed successfully.**

Disk
Name: **ATA ST32000542AS** Sectors: **3907029168**



NAID Certification

- Administered by the National Association for Information Destruction
- NAID does unannounced audits
- Require companies to meet certain data destruction procedures, regulations and insurance levels.



Logistics

- Can the company do safe pickups?
- When?
- National coverage?



Reporting

- Settlement Reports
- Data Destruction
- Customer Portal



Rocket Testers

Navigation

- Dashboard
- Schedule Order
- Orders
- Inventory
- Asset Vision
- Reports

ELECTRONICS RECYCLED
Pounds
1,380.00

ORDERS SCHEDULED
Projects
2

04:41 PM
Wednesday, September 11, 2019

Order #	Order Date	Reference	Carrier	Received Date	Settle Date	Receipt Weight	Asset Count	Facility	Location	Status
O-12947	05/09/2019		Our Trucking	05/09/2019	05/21/2019	500	0	3R Technology	Seattle (1111 1s...	Completed
O-12946	05/09/2019		Our Trucking	05/09/2019	05/09/2019	1000	0	3R Technology	Seattle (1111 1s...	Completed

System Users

John Doe



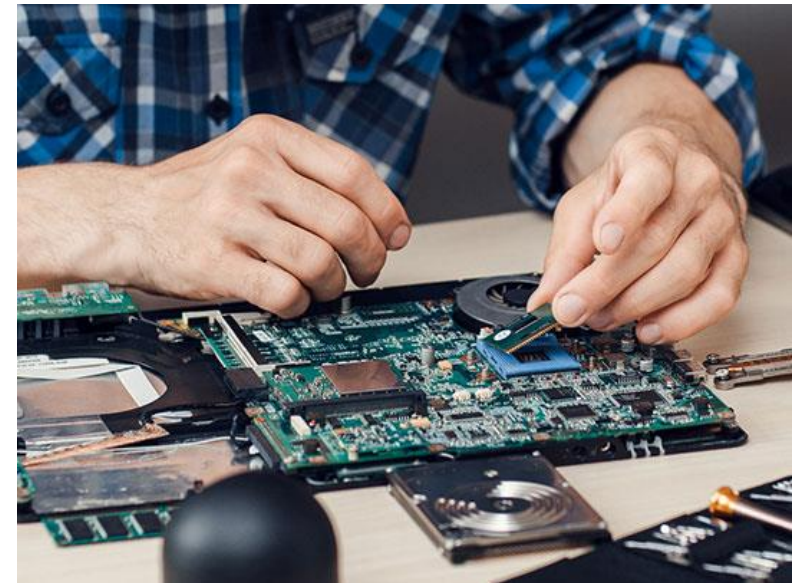
Does the recycler reuse?

- **Recycling is not reuse (It's taking it apart)**
- **Remarket (Get paid for it)**
- **Donate (Give it away)**



Remarket

- Not all computers can get reused.
- Look for companies that do retail sales since they will pay more (store, online)
- Some companies pay outright and some do profit share



Donate

- Does the charity/nonprofit have a computer reuse program?
- Do they erase data?
- Do they have a need for used tech?



Conclusion

- E-waste contains hazardous materials
- Use criteria when choosing an E-waste recycler
- Ask questions. Certifications are good, but not fool proof.



Thank You!

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