E-Waste Recycling Overview

3R TECHNOLOGY

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
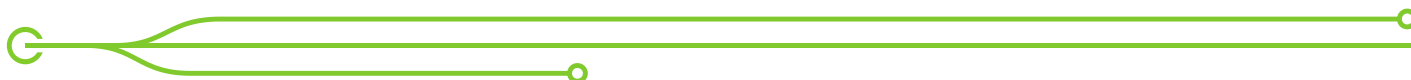

Basel Action Network (BAN)

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?

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**
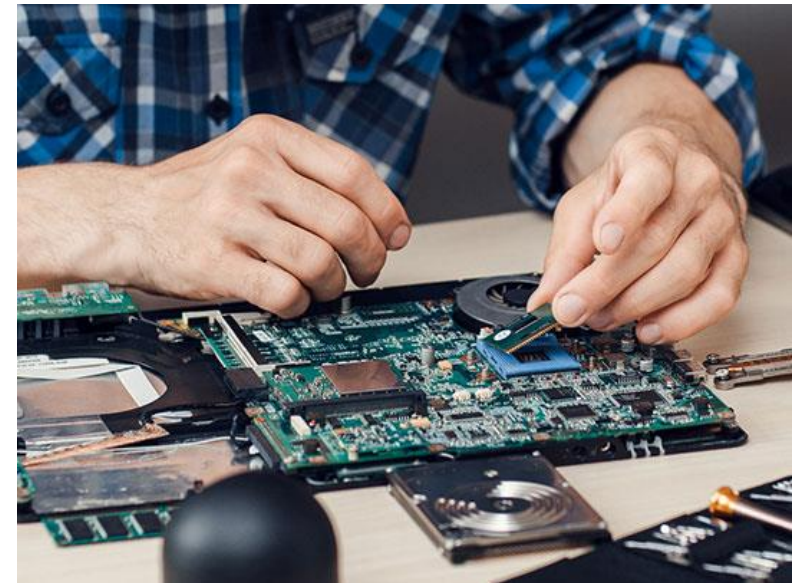- **Data Destruction**
- **Customer Portal**

Does the recycler reuse?

- **Recycling is not reuse (It's taking it apart)**

- **Remarket (Get paid for it)**

- **Donate (Give it away)**

3R

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!

- Charles Brennick

- charles@3rtechnology.com

- 206-413-8071