

HOW TO STAND OUT IN THE ITAD WORLD

SUSTAINABLE ITAD

- MAXIMIZES AND LEVERAGES THE VALUE OF ELECTRONICS
- > FINANCIALLY RESPONSIBLE
- > PROTECTS BRAND EQUITY
- PROTECTS PEOPLE AND THE PLANET
- ► HELPS LOWER AN ORGANIZATION'S ENVIRONMENTAL IMPACT, ITS CARBON FOOTPRINT, AND SUPPORTS ESG AND SUSTAINABILITY GOALS













HOW TO GET TO SUSTAINABLE ITAD

1

STANDARDS

Identify and Document Best Practices to meet the goal 2

CERTIFICATION

Create accountability to the Best Practices

3

COMMITMENT

to Best Practices by everyone

ELECTRONICS SUSTAINABILITY STANDARDS





EN 50625-1 EN 50625-2-1 EN 50625-2-2 EN 50625-2-3 EN 50625-2-4 CLC/TS 50625-4 EN 50614







BUILDING GLOBAL CAPACITY THROUGH ELECTRONICS SUSTAINABILITY CERTIFICATIONS







N. America & Brazil

103 Facilities

http://e-stewards.org/find-arecycler/ 16 EU Member States

162 Certified Operators

https://www.weeelabex.org/ope rators-list/ **40 Countries**

1000+ Facilities

https://r2directory.org



What Makes R2 Different?



 Addresses all aspects of responsible refurbishing and recycling of used electronics at all points in the revers supply chain.

Returns

- Resell

- Reuse

Brokering

- Recycling

- Free to download R2 Standard
- Free training & educational resources
- **SERI** Team Support

















REPAIRS

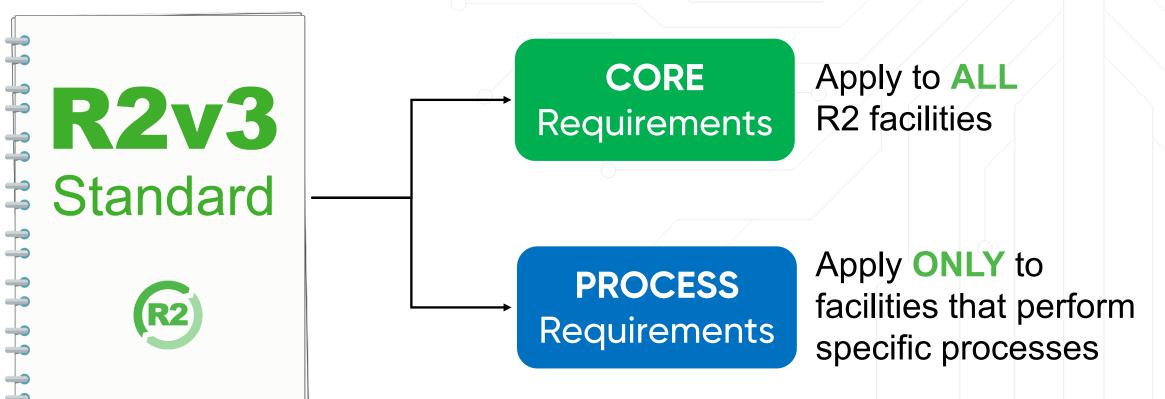
TRADE-INS

UPGRADES

REMARKETING

RECYCLING

R2 is Structured to adapt to many different business models







CORE REQUIREMENTS

APPLY TO ALL R2 CERTIFIED **FACILITIES**

- 1. Scope
- 2. Hierarchy of Responsible Management Strategies
- 3. EH&S Management System*
- 4. Legal and Other Requirements
- 5. Tracking Throughput
- 6. Sorting, Categorization and Processing
- 7. Data Security
- 8. Focus Materials
- 9. Facility Requirements*
- 10.Transport





PROCESS REQUIREMENTS

APPLY ONLY TO FACILITIES ENGAGED IN THESE SPECIFIC PROCESSES Appendix A - Downstream Recycling Chain

Appendix B - Data Sanitization

Appendix C - Test & Repair

Appendix D - Specialty Electronics Reuse

Appendix E - Materials Recovery

Appendix F - Brokering

Appendix G (pending) - PV Panels





Core 7, Appendix B

Reduces Risk

- Data breaches
- Noncompliance
- Liability



- Strong Data Security Controls
- Data sanitization plan
- Effective data sanitization methods & quality controls
- Data Protection Representative

ADDITIONAL Requirements in Appendix B

- Traceability by device
- Sanitization Software w/electronic records
- Enhanced quality controls & data audits
- Enhanced security controls & video monitoring





Appendix C

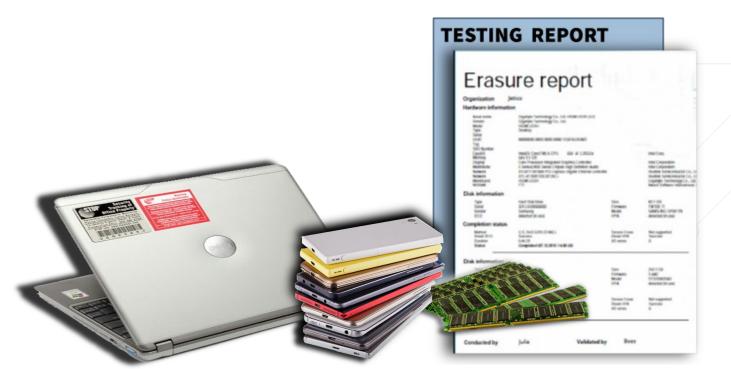
Strong REUSE

requirements to ensure quality

Quality Management Certification







- R2 Reuse Plan detailing...
 - Testing procedures
 - Quality assurance plans
 - Qualifications & Training
- Sanitization per Appendix B
- Detailed testing records



REC

LEVEL OF FUNCTIONALITY

anctioning eq	arpinent and components are not subject to compare and its control,
Category	Product Functionality Description
F1	Collectible or Specialty Equipment (Core Requirement 6.(e)(3)(A)) Collectibles are rare, vintage, and no longer manufactured or supported by the OEM Specialty equipment are rare and specialized equipment not generally available in retail May have broken or missing parts
F2	Verified Specialty Electronics (Appendix D) Verified removed from operation with no known defects in functionality No physical damage or defects No corrosion No missing parts Part numbers and serial numbers verified accurate
F3	 Key Functions Working (Appendix C – Test and Repair) A subset of the primary functions of the device that an ordinary user of the device expects to function are verified working through manual or software tests Software may not be loaded or configured Hardware required for key functions to be tested may have been removed after testing (e.g. Hard Drive) May be missing components or parts not essential to key functions Secondary functions may not be tested or working May not include Focus Materials (e.g. Battery) that are not working or not tested All missing components or parts will be listed for each item
F4	Hardware Functional (Appendix C – Test and Repair) All hardware is tested and verified working through manual or software tests No missing or damaged components or parts Software not loaded or configured No hardware defects
F5	Refurbished (Appendix C – Test and Repair) All functions tested and verified working through software tests Loaded and configured with legally licensed software for full operations Software test results are available No hardware or software defects
F6	Like New (Appendix C – Test and Repair) All functions tested and verified working through software tests Repaired with OEM original parts Loaded and configured with original manufacturer's legally licensed software for full operation Meets OEM specifications for full original functionality Software test results are available Zero defects

Core 5, Appendix A

Strong Accountability throughout the entire reuse/recycling chain

Annual Verification of each vendor in the downstream chain

Tracking flow of equipment, components, materials throughout the *entire* downstream until final processing*

*Documented as working & sanitized **OR** commodity materials ready to be reintroduced into the manufacturing stream







Knowledge Base





Getting Certified

- Download R2 Standard / REC / Code of Practices
- m Intro to R2 webinars
- Summary of R2v3
- % Key Steps in the Certification Process
- % Find a Consultant





Transitioning to R2v3

- R2v3 Formal Interpretation #1.0 -Data Sanitization Software
- ☐ IMPORTANT MESSAGE for R2 facilities and consultants about auditor availability and transition
- A Successful Transition to R2v3 -Webinar & Resource Guide

R2 Training - CORE Requirements

Translation instructions for R2 videos

▶ Core 3- Environmental, Health &

Code of Practices & Program

Information

Download R2 Standard / REC / Code

R2v3 Formal Interpretation #1.0 -

of Practices

Definitions & R2v3 Overview

▶ Core 1- Scope

▶ Core 2- Hierarchy

▶ Core 4- Legal & Other

Podcast 10 - What Have We



Video Library

- Translation instructions for R2 videos
- ▶ Intro to R2 Translations
- ▶ Definitions & Overview
- Code of Practices
- ▶ Core 1 -- Scope
- ▶ Core 2 -- Hierarchy





R2 Training - PROCESS Requirements

- Translation instructions for R2 videos
- R2v3 Appendix Applicability Guidance
- R2v3 Appendix Determination Tool
- The Scoop on Scope: What you need to know about scope for your R2 certification
- Appendix E Applicability Guidance





- ▶ SERI R2v3 Auditor Course





Auditor Training & Resources

- Audit Tools
- Auditor Videos

(Appendices)

Common Nonconformances in R2v3 Audits February 27, 2023

Preview SERI License Agreement

RECENTLY ADDED...

SERI R2v3 Auditor Course: July 10, 11, 12

Applicability Guidance

Applicability Flowchart

(online) May 1, 2023

Appendix E

March 30, 2023

Appendix E

March 30, 2023

March 30, 2023

R2v3 and IH Monitoring: A Quick

Resources

March 29, 2023

Primer and Kev

SERI R2v3 Auditor

June 1 (online)

March 24, 2023

Advisory 22 – Transition Plan for

R2v3 (version 1.4) March 16, 2023

Podcast 19 - Most

Course: May 30, 31,

R2v3 Appendix

R2v3 Appendix Applicability Guidance March 30, 2023

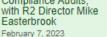
Determination Tool

Common questions about Industrial Hygiene requirements March 29, 2023

Guidance

February 9, 2023

Podcast 18 - Legal Compliance Audits. with R2 Director Mike Easterbrook







Podcast Library

- Podcast 1 Using the R2 Appendix **Determination Tool**
- Podcast 2 Helpful hints when scheduling your Internal Audit
- Podcast 3 Writing your Data Sanitization Plan
- Podcast 4 Writing Your R2 Reuse



Common Questions & Answers about R2v3

- Click Here to Submit Your Question
- Podcast 6 Finding Guidance in SERI's Knowledge Base



40+ Training Videos





R2 Guidance & Knowledge Base

Powerful search tool

Search for guidance by keyword or topic

A Quick Video Tour of the Knowledge Base → Click Here



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- % Find a Consultant



Transitioning to R2v3

- R2v3 Formal Interpretation #1.0 -Data Sanitization Software
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Video Library

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- ▶ Definitions & Overview
- Code of Practices
- ▶ Core 1 -- Scope
- Core 2 -- Hierarchy
- Core 2 Environmental Health 9

RECENTLY ADDED...

SERI R2v3 Auditor Course: July 10, 11, 12 (online)

May 1, 2023

Clarification on Appendix E Applicability

March 30, 2023

Appendix E Applicability Flowchart Guidance

March 30, 2023

R2v3 Appendix Determination Tool

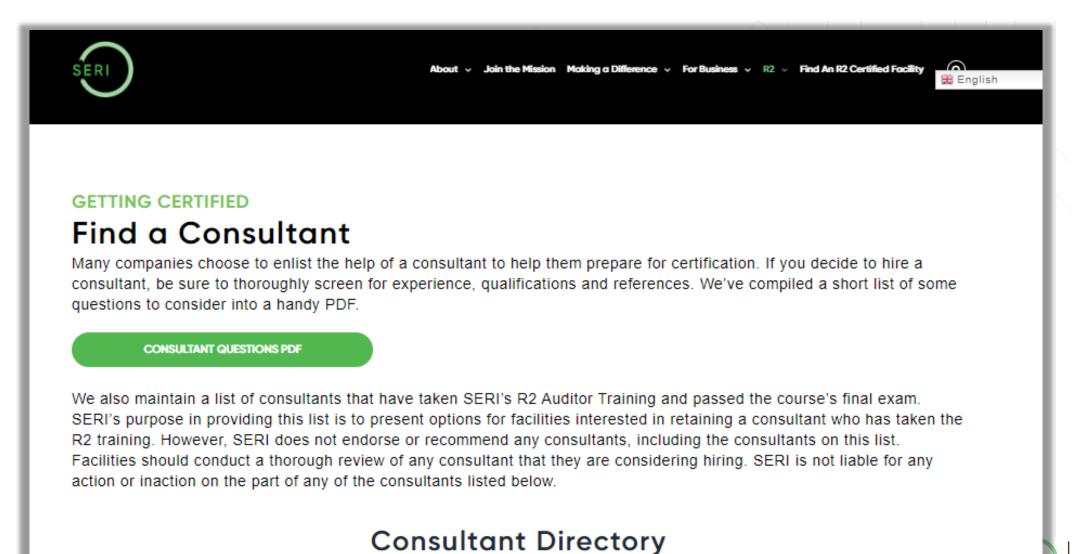
Online Training Classes



- Intro to R2 webinars
- R2v3 Auditor Training



R2 Trained Consultants





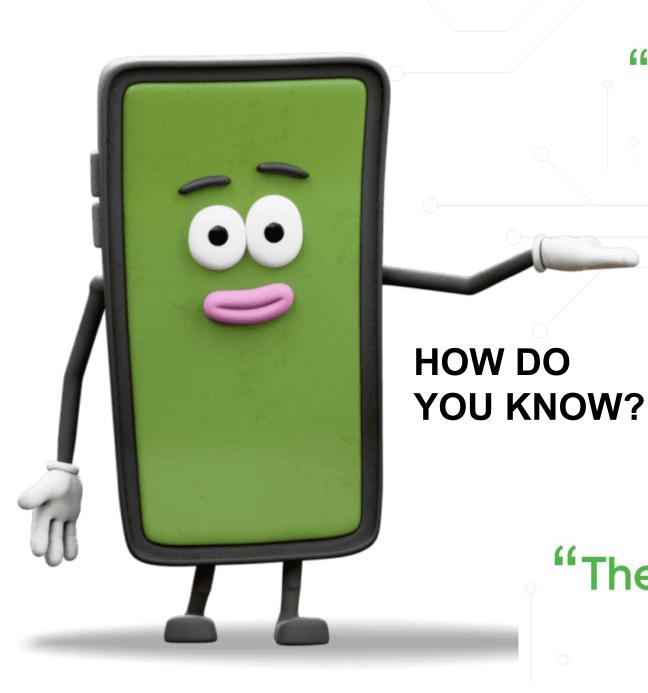
Live SERI support











"Trust us...
we do it right"

"I got a guy!"

"Don't worry...

your data
is safe with us"

"They'll take it all, for free!"





SUSTAINABLE ITAD FACILITIES

https://R2Directory.org

eogra earch		Advanced Search	Name		
	FICATE	FACILITY FEAT	URES:		W SEARCH RESULTS OGRAPHICALLY:
Si	eturns/ V AD/Rem -Scrap/R	Moved SS WORKFLOW Varranty/ Trade-Ins arketing decycling Medical/ Commercial	ued (Region Country State/Pro City/Town	
R2V3 PROCESS REQUIREMENTS APPENDIX DESCRIPTION		ION		business workflow	
0	Α	Downstream Recyclin	ng chain		VVOIRIIOVV
Õ	В	Logical Data Erasure	4		OR specific
0000		Physical Destruction			•
0	C	Test & Repair			capabilities
0	D	Speciality Equipment			•
0	E	Materials Recovery			
0	F	Brokering			
0					
Ŏ	RSION	DROP OFF			
Ŏ	RSION	DROP OFF			
R2 VE	RSION				



SUSTAINBLE ITAD in EUROPE



























MOST WIDELY ADOPTED CERTIFICATION for SUSTAINABLE ITAD

617 Facilities36 Countries





1020 40 FACILITIES | COUNTRIES

REGIONS