



Forum on Solar Recycling An Industry Perspective

June 15, 2011

Robin Brack - Sr. Director of EHS

SoloPower, Inc.

Overview

- Testing/Classification
- Recycling/Auditing
- Value of Materials
- Legislation/Regulation



The Flexible Approach to Solar™

Testing - CIGS

- Toxicity Classifications
- Federal Limits
 - TCLP
- California Limits
 - STLC, TTLC

What About the Prep?





How to Recycle?

- Ability to recycle limited by test results
- May pass leachate and fail totals
- If test results show hazardous waste, materials must be handled by a TSDF
- How many recyclers are TSDFs?
- Some materials do not lend themselves to recycling
- Some materials have little to no market value



Recycler Audit

- ISO Audit Protocols
 - Records Audit
 - Documented Processes
 - Auditable Processes
- Physically Visit Facilities
 - Unannounced
- Final Resting Place
 - Where does it ultimately go



Value of Materials

- Low Iron Solar Glass
- Magnetic Steel
- Plastics
- ‘Precious’ Metals
 - Indium
 - Gallium
 - Copper
 - Selenium
 - Silver



Legislation/Regulation

- E-Waste Model
 - Federal/States
 - Universal Waste Status
- Incentives for Manufacturers
 - Mature Business vs Start-up
- Incentives for Recyclers
 - Failed E-Waste Model
 - Need for Simplicity



Industry Standards



Established in 1974, SEIA works to expand the use of solar technologies, strengthen research and development, remove market barriers, and improve education and outreach for solar.



International
Organization for
Standardization

