

Sustainable Electronics Recycling Systems in Latin America and the Caribbean

A Proposed Research Collaboration

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StEP: Solving the E-Waste Problem

RELAC Workshop, 17 November 2009



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Context: key outcomes from Cancun workshop

- LAC in early stages - unique opportunity for impact
- Harmonization of system development efforts is essential
- Policymakers want to work with neighboring countries to make informed decisions, but lack the required information
- A multistakeholder group should be created to educate policy-makers on best practices
- Representatives from LAC should lead this process; StEP can provide research and analysis to support decisions

What kind of research would best support
system design?

We need your help to answer this,
but we have some preliminary ideas...



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E-waste management systems have three functions that operate within a financing scheme

Financing Scheme

System Management

Collection

Processing



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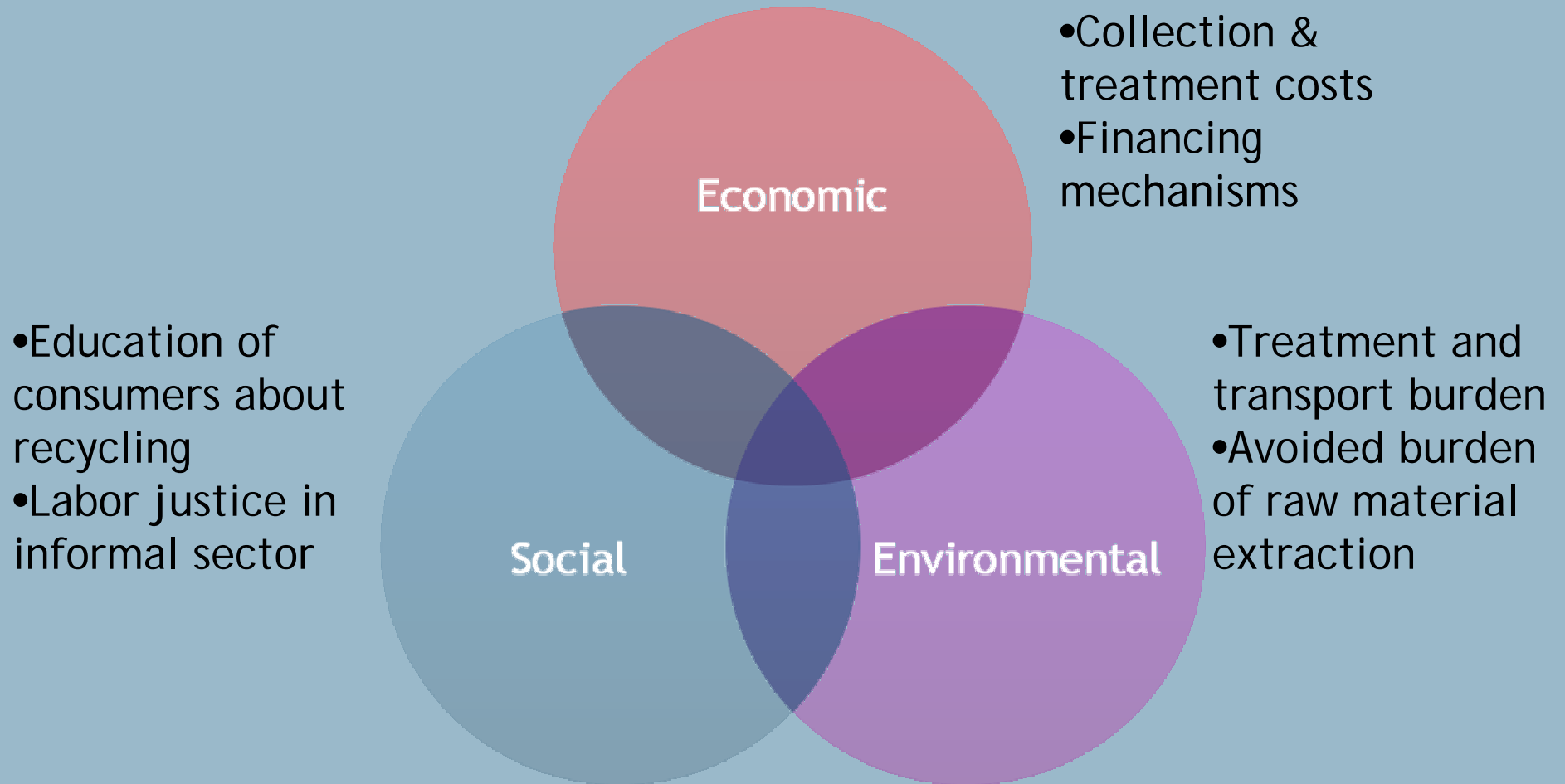
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Sustainable e-waste systems are a balance of three issues



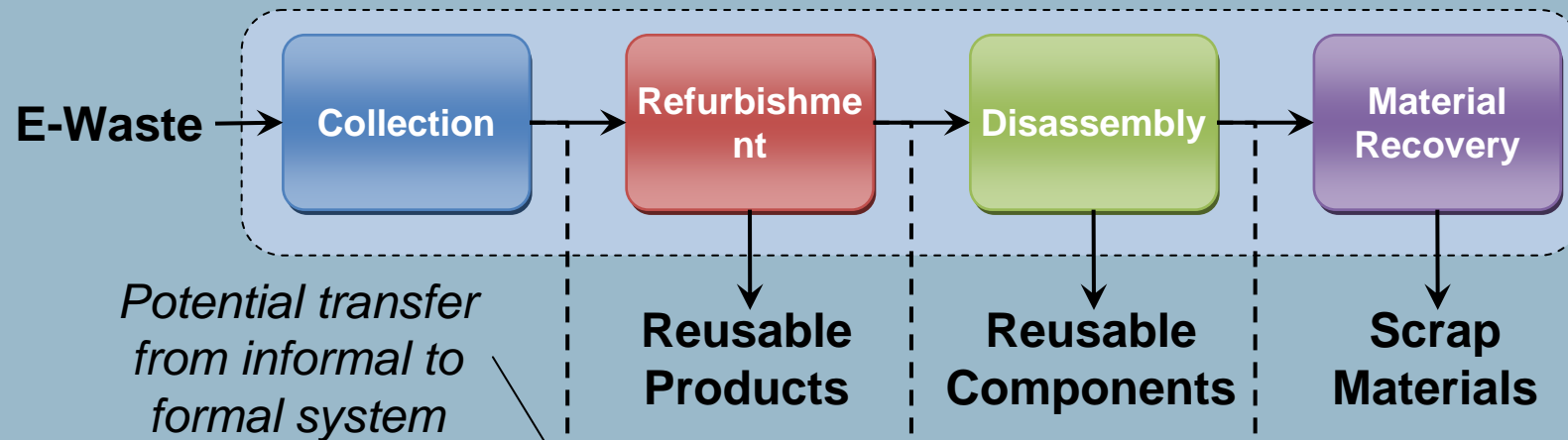
Numerous research possibilities exist

		System Elements			
		Collection	Processing	System Management	Financing Scheme
Sustainability Factors	Social	Informal network jobs			
	Economic			Management costs	Stakeholder roles
	Environmental		Processing impacts		

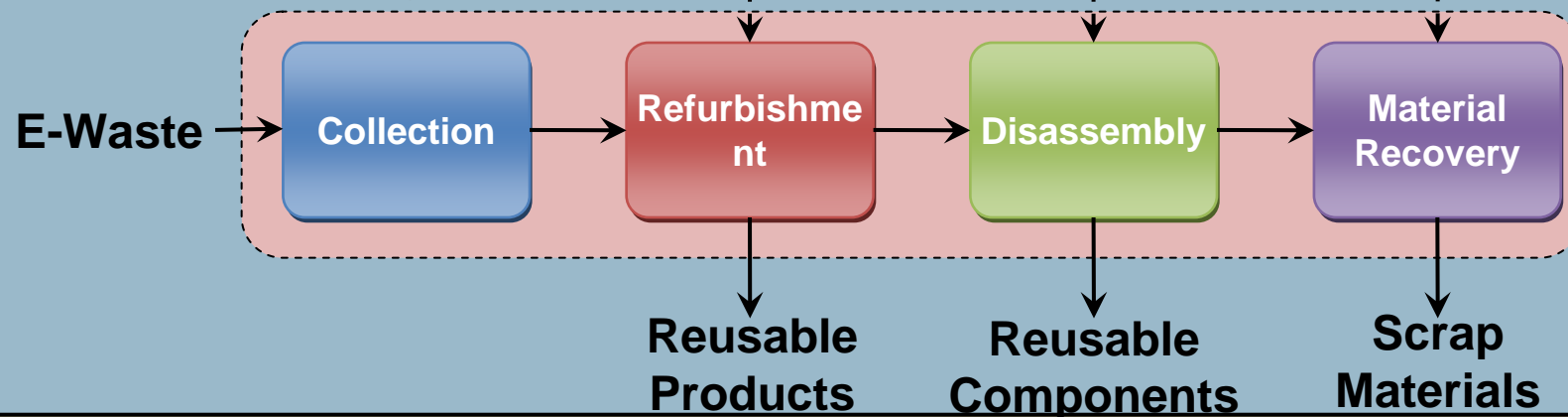


Key research topic: interface between informal and formal networks

Informal E-Waste System



Formal E-Waste System



Key research topic: LAC reverse logistics network for e-waste



Large diversity of contexts exist

Where to locate?:

- Collection points
- Consolidation points
- Processing centers



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What's next? Gather researchers together to discuss research strategies and projects

Key Issues

- Interface between informal & formal networks
- Reverse logistics networks
- Balance economic, environmental, and social dimensions
- Impact of context on outcomes
- Remember objective: support decision-making

Need multidisciplinary team with representation from north and south

Target workshop for spring of 2010



Existing team members

- Massachusetts Institute of Technology
 - Materials Systems Laboratory
 - Center for Transportation & Logistics/
Center for Latin-American Logistics Innovation
 - Green Hub (Dept. of Urban Studies and Planning)
 - Sloan School of Management
 - Empa
 - RELAC
 - StEP: Solving the E-Waste Problem
 - United Nations University
- Need more representation from LAC*

