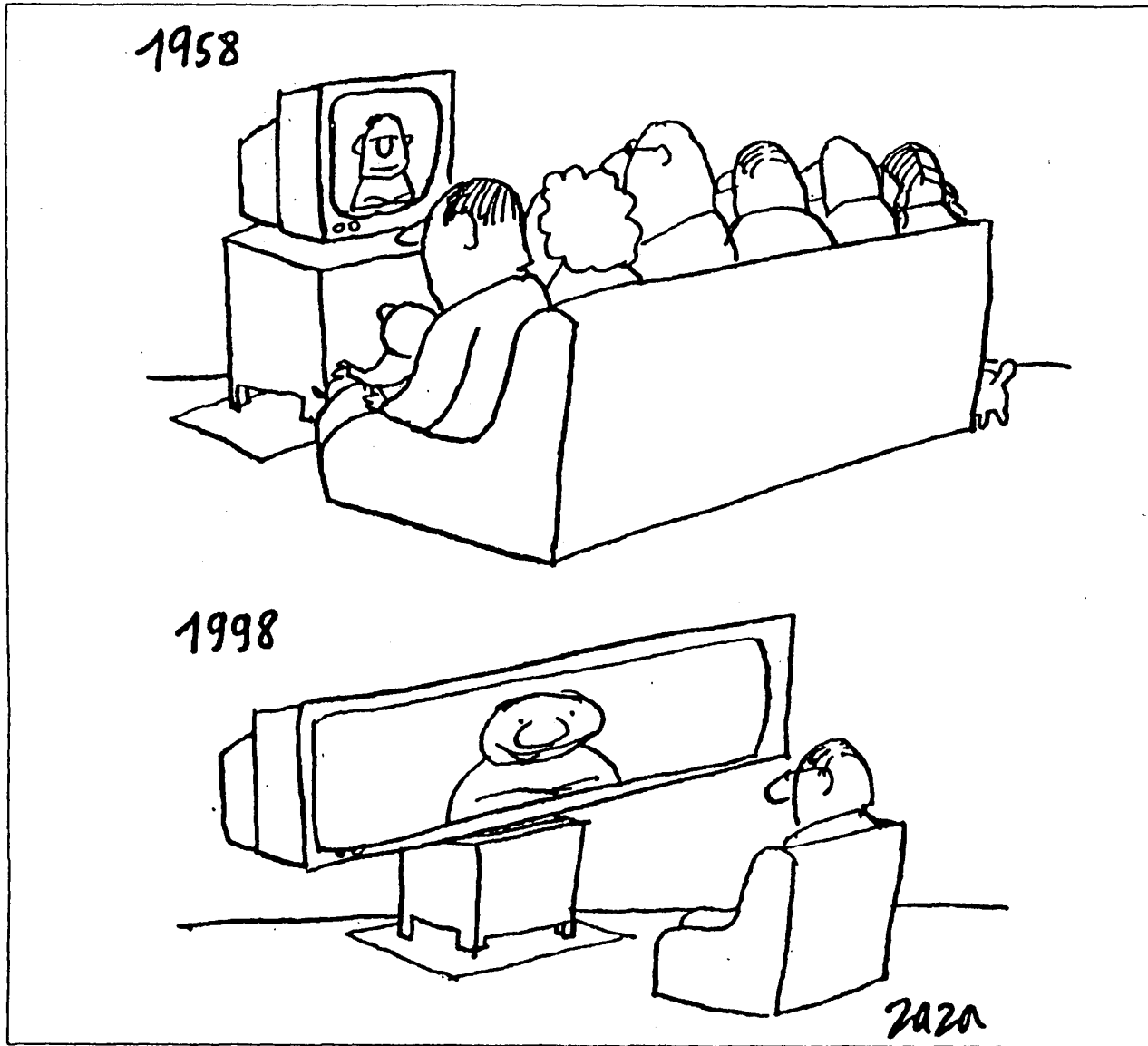


Putting EPR and IPR in Context

Reid Lifset
School of Forestry & Environmental Studies
Yale University

INSEAD WEEE Directive Seminar
28 November 2006



Ad in *Newsweek*
August 20, 2001

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Charles B



Charles B, 27
Last Login: 11/15/2006

"hey, where can i get it for the best price?"

- [\(3\) Strips](#)
- [Send message](#)
- [Appoint as Guru](#)

Charles Owns (5) [\[View All\]](#)

I Own	Review/Describe	Tags	Price (US\$)
digital gudgets and accessories [sony vaio] car	sony vaio laptop,hd tv,lg machine honda 98		1300.00
phones [p990]	n90,p990		350.00
gadgets	ipod,mp3 player,camcorder		
clothings,phones,car,accessories [phone]	nokia n series phone,rocawear jeans,sony ericsson phone w810i		280.00
Total			\$1,930.00

United Kingdom

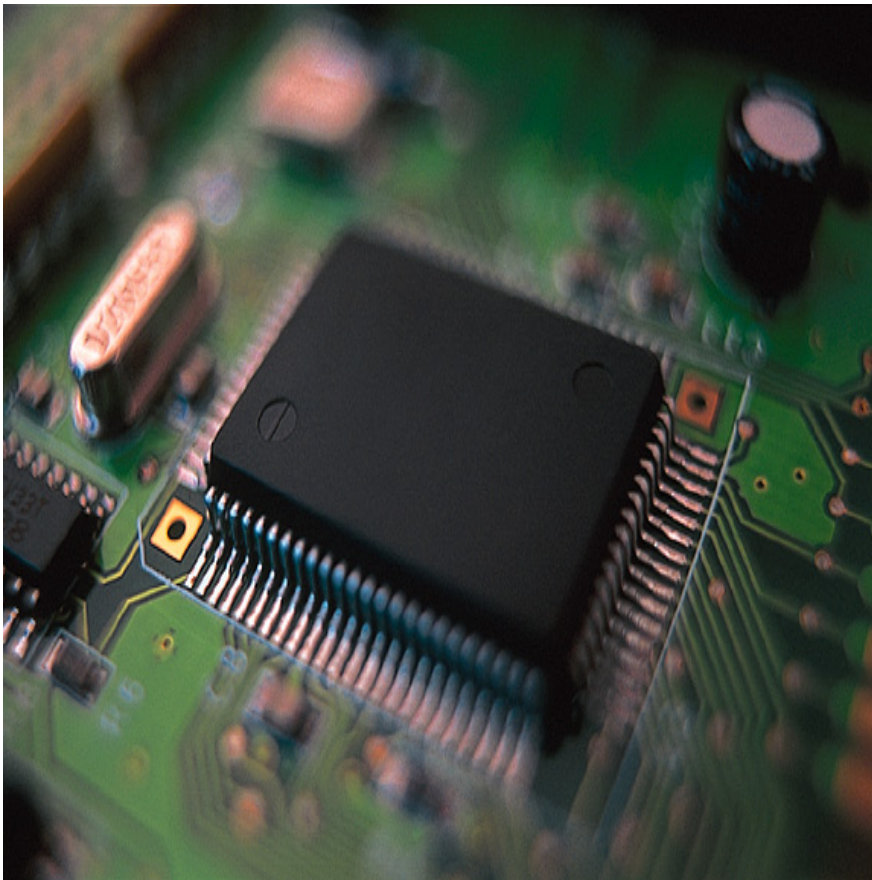
Interests chatting,soccer,having fun

About Me i'm simple,cool,loves to make fun and love

Charles's Shopping Style

I'm an expert in: Cars, Cell Phones, Gifts, Electronics, Jeans, Digital Camera, Shoes

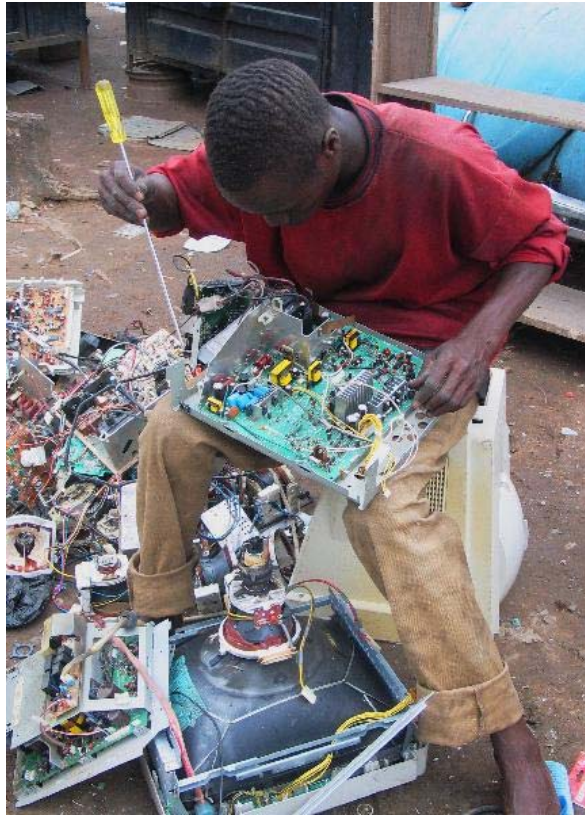
Resource Impacts by Life Cycle Stage



The 1.7 Kg Microchip Paradox

- Fossil energy + chemicals to produce 2 g microchip \geq 1.7 kg
- Desktop PC: 83% of LC energy is in production

Environmental Threats by Life Cycle Stage

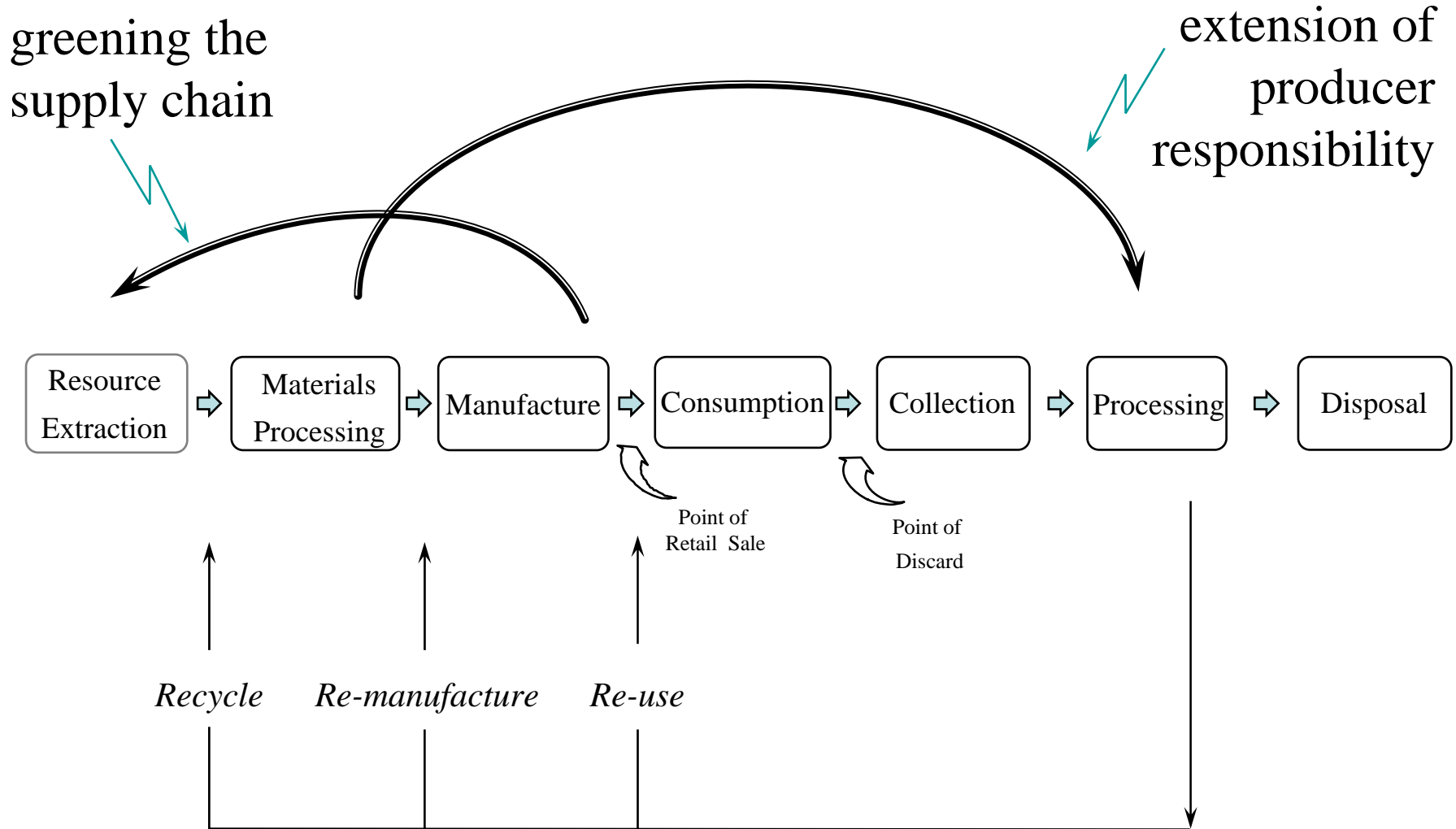


- In modern, well-managed disposal facilities, risk is limited
- Health risk related to recycling
- EoL of used EEE?

History of EPR

- Frustration with other policy approaches
- Emerged in packaging and “conventional” recyclables
- Adoption by EU
- Limited adoption in US
- Diffusion to Asia, Latin America
- Application to EEE, ELV and HHW, carpet
- Rise of PROs
- Emergence of IPR as refinement of EPR

EPR and the Product Life Cycle



Definition of IPR

- Responsibility by producer for own products (van Rossem et al. 2006)
 - *Financial IPR* – producer pays for cost of EoL mgmt of own products
 - *Physical IPR* – producer has control over fate of own discarded products
- Must allow differentiation of EoL costs
- Can not apply to historical wastes
- Primarily a B2C, not B2B challenge

Routes to IPR

- Dedicated own infrastructure
- Shared infrastructure among limited group of producers
- Financial responsibility within collective EPR system

IPR requires ID of products

- At least by brand
- Possibilities
 - Point of end user discard
 - At product aggregation
 - At recovery facilities
- Technological facilitation
 - RFID
 - Bar codes
 - Green ports

Central Challenges of IPR

- Capturing economies of scale
- Minimizing cost of identification of EoL products
- Role of municipalities

Implications

- WEEE problem is not going to disappear
- Product lifespan extension?
- Policy design is crucial:
 - Recycling must be well managed
 - Incentives for green design must be central
 - IPR requires level playing field
- EPR as vehicle of EoL instructure development?

Sustainability is the Goal

- Creation of *ongoing* incentives for green design
- Financial viability of EPR schemes
- Avoidance of quick fixes...and unintended consequences

Thank You