

Celestica™

Solid partners.  
Flexible solutions.

# Cradle to Re-birth:

The future of the electronics industry

May 2007

# The Perfect Storm

## *An Inconvenient Truth*

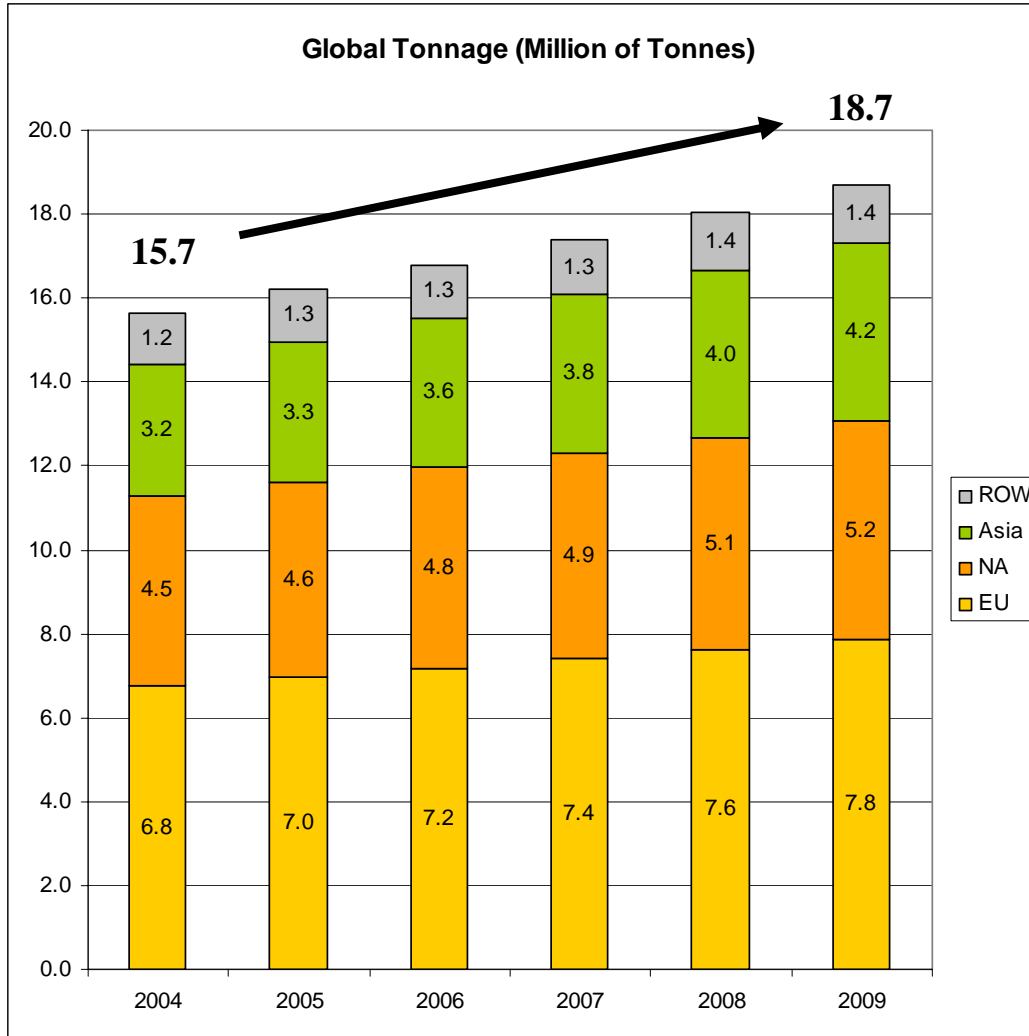
- Global environmental legislation
- Extended producer responsibility
- Corporate social and environmental responsibility
- Non-government Organization (NGO) pressures
- High profile issue

## *The Convenient Truth*

- Double digit electronic market growth rate
- Electronic life cycle reduction
- Grey market concerns
- Electronics Recycling - an emerging industry

**The EMS industry can help!**

# Volume (tonnage) of WEEE



## Share of Global WEEE:

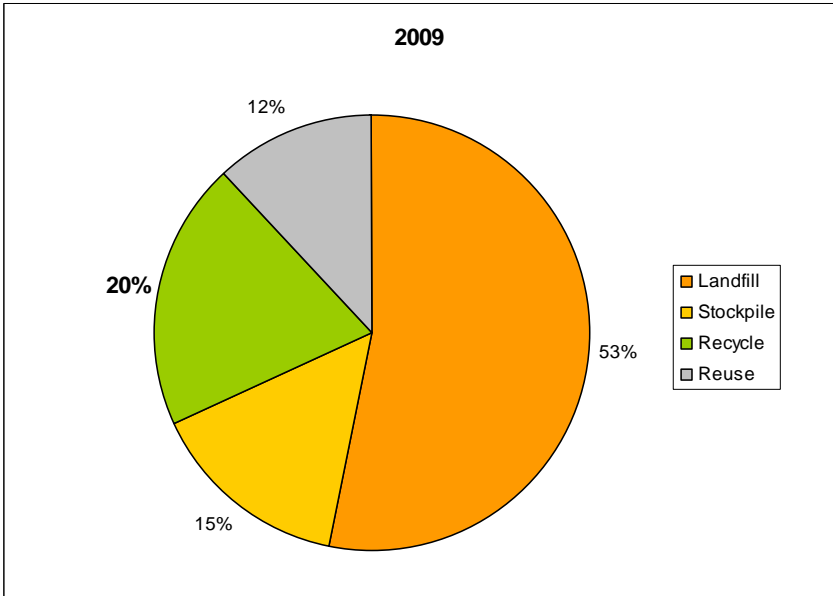
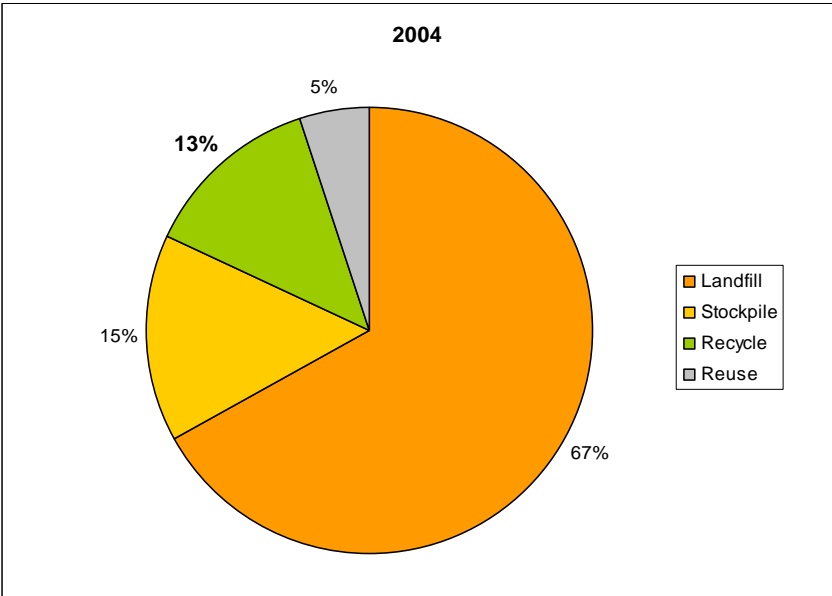
- Europe 42%
- NA 28%
- Asia 23%
- ROW 8%

## Expected annual growth:

- 3% developed countries
- 6% developing countries

**Business Opportunity Report – E128 Electronic Waste Recovery Business (Sept 2005)**

# What happens to the WEEE?



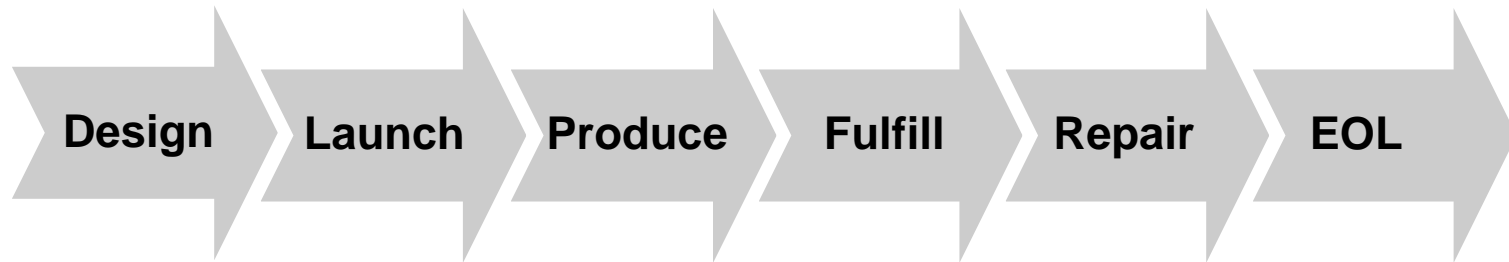
## Business Opportunity Report – E128 Electronic Waste Recovery Business (Sept 2005)

## The Recycling Industry – Some Facts

- > 500 recyclers in USA - fragmented industry
- Industry growing at 8.3% AAGR, but is still considered emerging
- Highest growth in the emerging economies, e.g., China
- Historically 70% of EOL electronics from the west was sent to China
- Traditionally industrial and commercial markets – consumer market is now the fastest growing

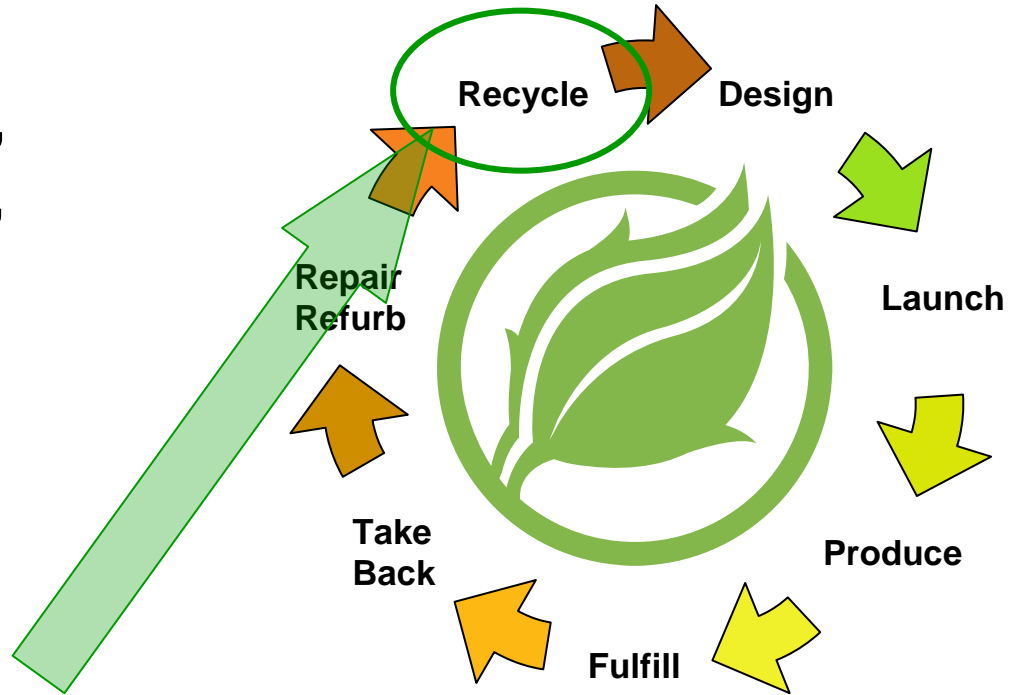
# The Traditional Life Cycle Model

‘Cradle to Grave’



## The New Life Cycle Model

From 'Cradle to Grave'  
to '**Cradle to Re-birth**'



Adding recycling capability  
allows EMS companies to  
support this life cycle model

**So where do the EMS companies fit into this story?**

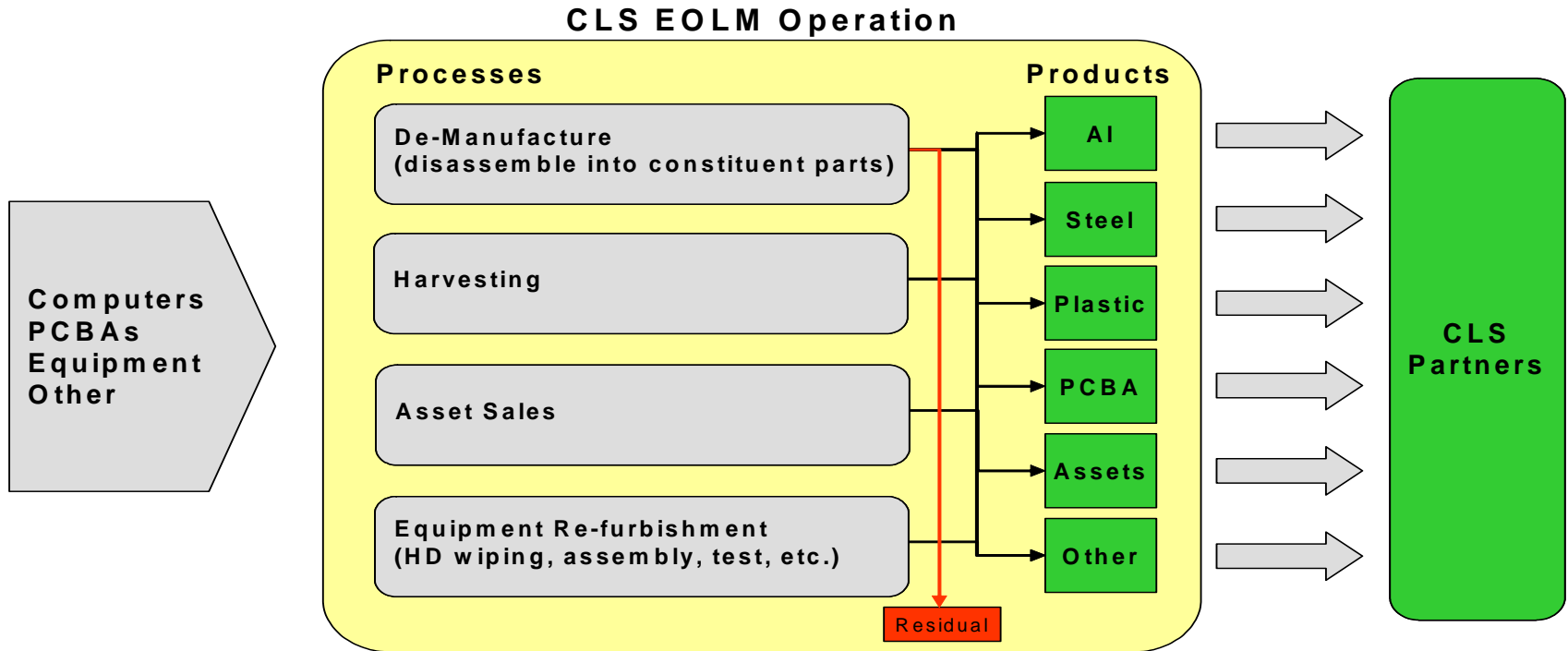
## Voice of the Customer

- Brand protection is the highest priority
- Can not afford issues related to the environment, e.g., NGOs 'attack' on Apple
- Currently need to work with multiple partners globally
- Need a robust and **transparent** solution for end-of-life management

## What do EMS companies bring to the table?

- Global footprint
- Existing logistics network
- Environmental Responsibility / Consciousness
- Skills
- Traceability Solution
- Partner Management

# The Process



- To ensure environmentally responsible handling of end-of-life (EOL) material
- To comply with emerging global, regional and local environmental legislation
- To assist our customers in meeting their environmental responsibilities
- To maximize the recovery of value from EOL materials

# EOLM Pilot Project – A Celestica Initiative

## Toronto Facility



## BUSINESS CHALLENGE

- Site EOL materials were being sent to a recycling partner at a net cost to Celestica
- Insufficient return on materials based on market pricing
- Downstream traceability not being provided

## SOLUTION IMPLEMENTED:

- An EOL team within Celestica site to manage EOL electronics material
- Relationships with secure and responsible recycling partners to maximize resource recovery
- Secure and traceable facility to perform de-manufacturing
- Leverages existing expertise in logistics and environmental legislation
- Net return to pilot site

# Thank you



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