



IT manufacturer perspective on hardware take-back law

Meeting targets in the future based on US and EU experience

Jeff Kuypers / Nov 5, 2013

Hewlett-Packard (HP) hardware take-back quick intro

Examples of HP's commitment to managing used products

Experienced

HP has operated formal product take-back programs since 1987

Global

HP offers used product management services, including recycling, in 70 countries

Proactive

HP is developing capabilities in emerging markets, such as “East Africa Compliant Recycling”

Relevant for consumers

HP has increased drop-off sites to over 3,700 throughout the US, regardless of whether laws require such programs



Situation: multiple state laws require manufacturers to meet volume targets (e.g., 80% of sales weight)

Objective today: increase awareness regarding volume target sustainability concerns. We will:

1 Observe what is collected to meet US take-back targets

2 Tie a collection trend to impact on measuring future take-back performance

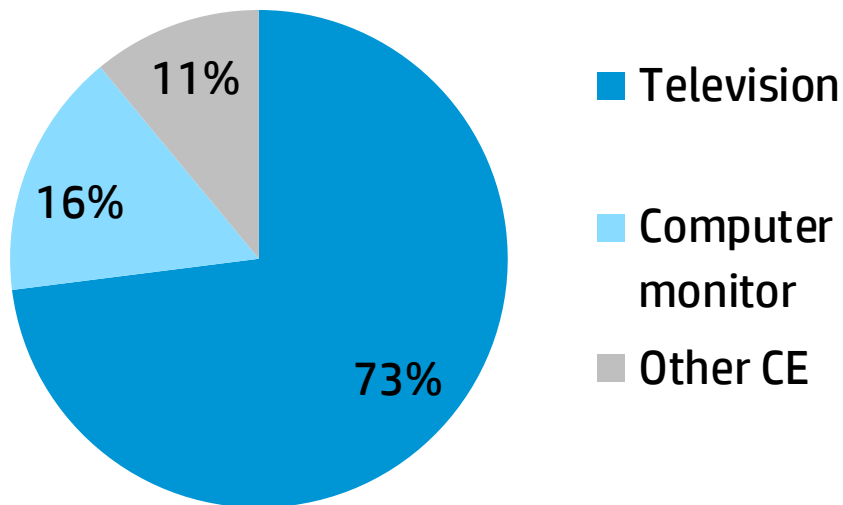
3 Suggest new approaches, motivate thought RE measuring future performance

Share parallels from Europe

Example product mix, 2012 industry take-back

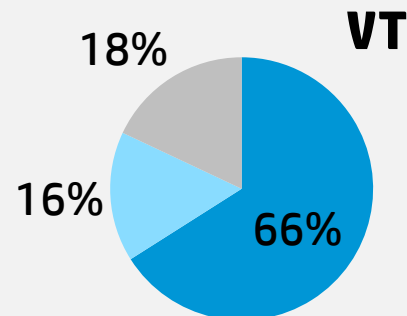
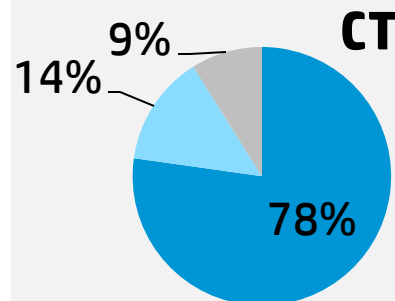
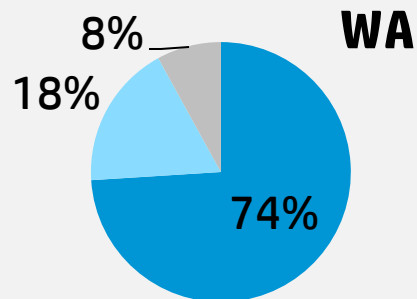
Approx 89% TVs & monitors by weight

Overall estimate, mix of covered devices available to mfrs



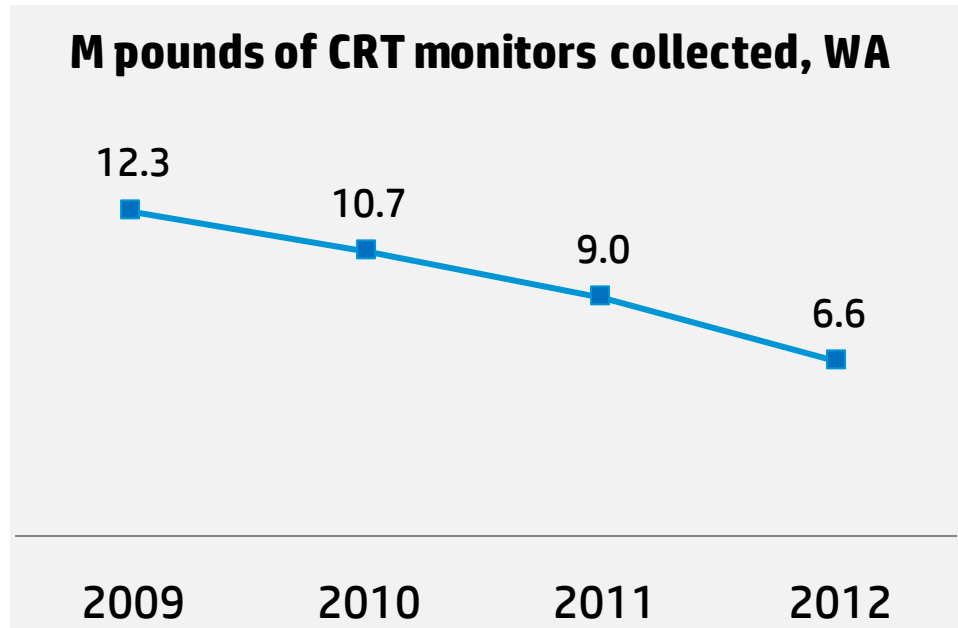
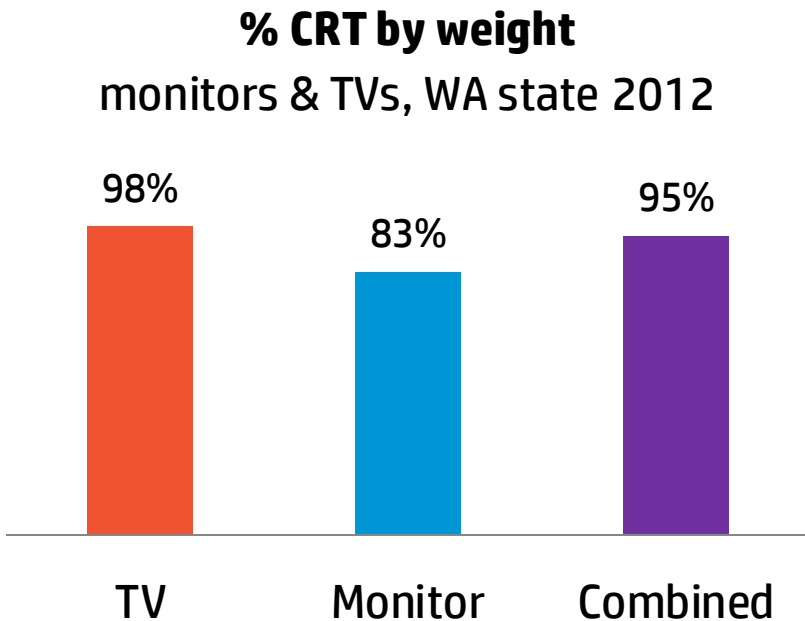
Example states without volume caps

(mfr programs must collect year-round)



TV & monitor product mix:

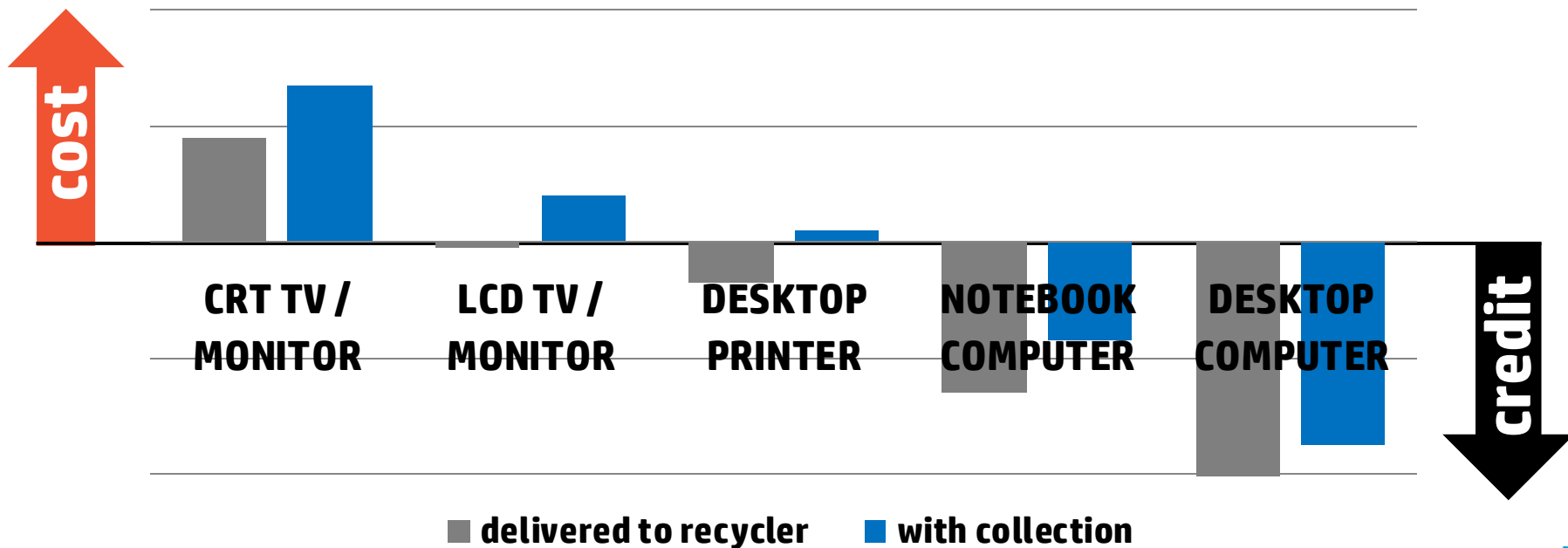
Mostly CRTs today; CRT monitor decline has begun



Electronics recycling cost or value

Approximate based on HP experience in US & EU

Relative cost / pound estimate



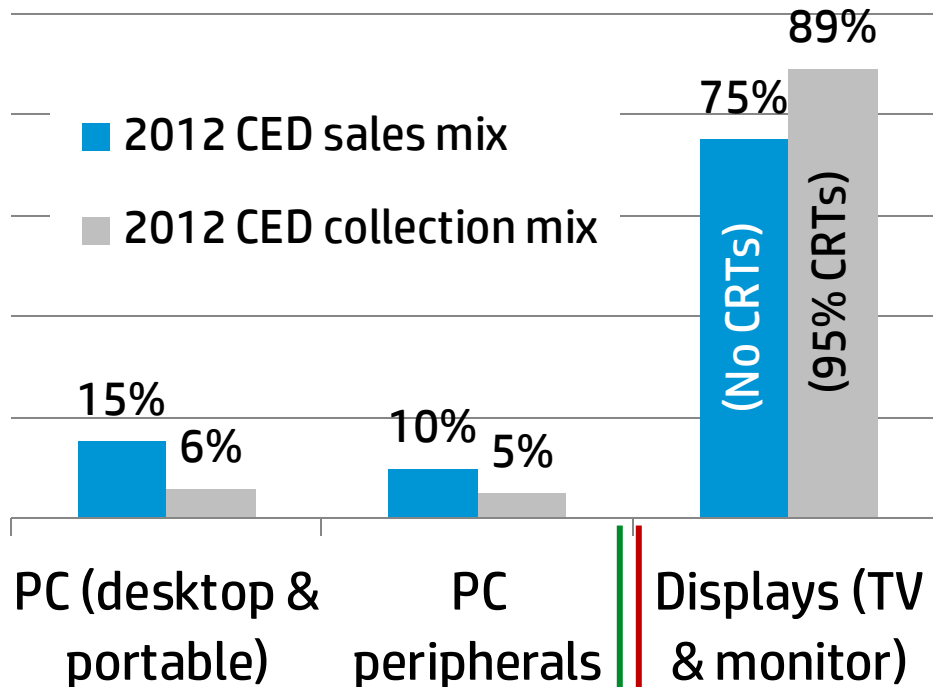
Value leads to diversion from manufacturer programs

Estimated % by weight of typical CEDs sold vs collected:

CED = “covered electronic device” in law

NOTE: TV peripherals not included → omitted in most state laws, though sales may top covered PC peripherals*

Products with recycling value diverted, harder for OEMs to get back



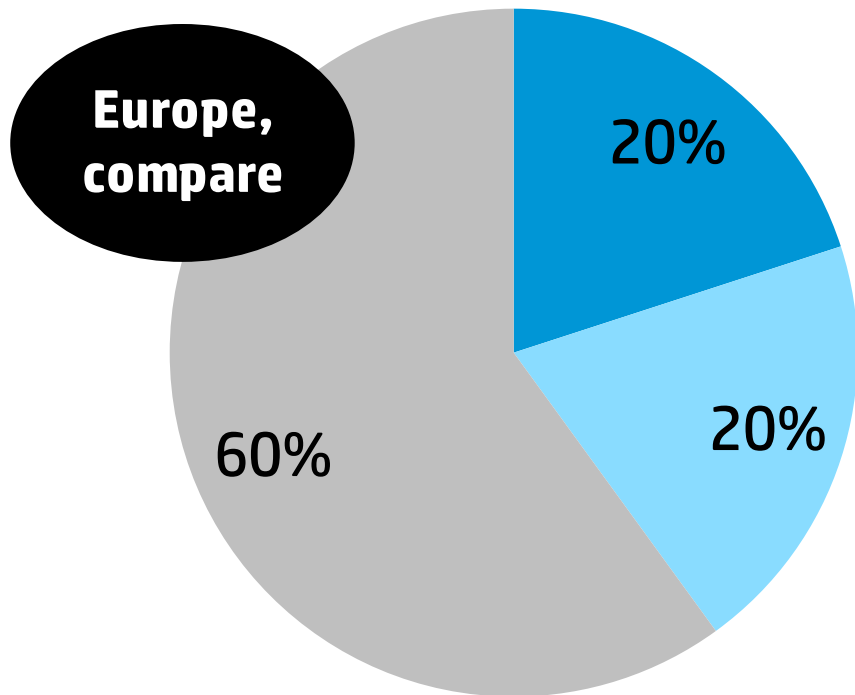
Products with recycling cost (e.g., CRTs) not diverted, easier for OEMs to get back

* HP analysis of syndicated market research consumer sales data and high volume unit sales weights indicates TV peripheral sales (game console, video recorder / player, STBs, audio) was nearly 2X the weight of PC printers sold in the US in 2012.

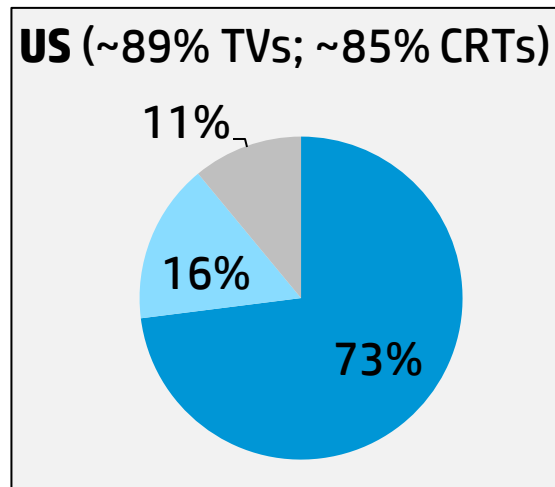


Electronic equipment collection mix in EU

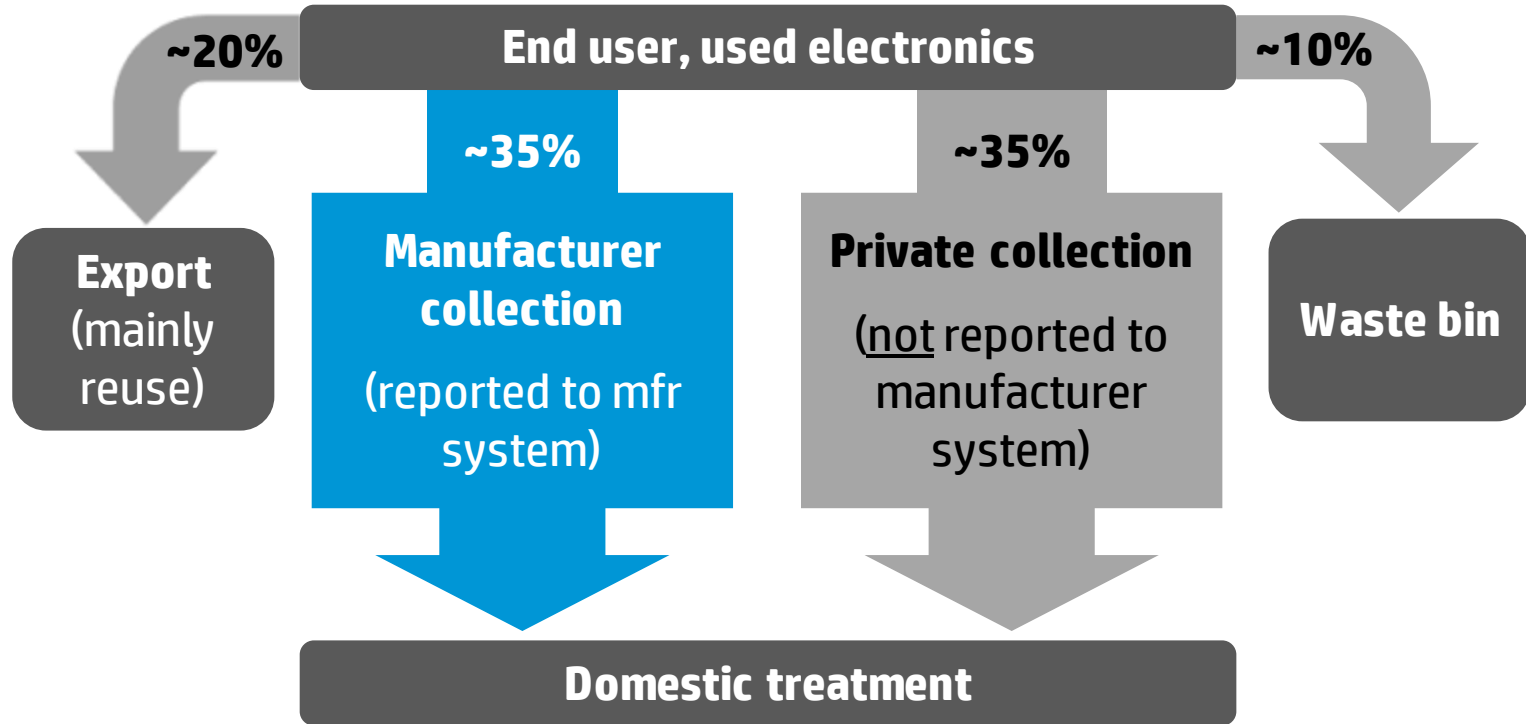
~ 40% electronic equipment is TVs & monitors; ~ 30% CRTs



- Televisions
- Computer monitors
- Other CE



Europe: higher value mix, higher diversion (US future)



Suggestions for further thought

How to measure & manage volume performance in the future

Like EU direction, track data for all flows

- Recyclers to report all flows processed for both mfr and non-mfr sources
- Total collected is what state / jurisdiction uses to measure overall success

Separate volume goals and penalties

- Measure costly (e.g. CRT-related devices) vs more valuable devices separately
- If not meeting goals for valuable devices, provide alternatives to monetary penalties on mfrs, such as:
 - Validate or work to increase take-back public awareness, and/or
 - Demonstrate reasonable accessibility of programs

Thank you

