



US Situation

An Overview of the Key Data, Aspects of the
25 State Laws and Other Key US E-Waste
Issues

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National Center for Electronics Recycling

- ▶ Non-profit 501c3
- ▶ Located in Parkersburg, WV
- ▶ Involved in Federal, State & Association Projects
- ▶ Conduct Research, Run Collection Programs
- ▶ Partner with NERC on Electronics Recycling Coordination Clearinghouse
- ▶ Manage Oregon State Contractor Program
- ▶ Our Mission: Dedicated to the development and enhancement of a national infrastructure for the recycling of used electronics in the U.S.



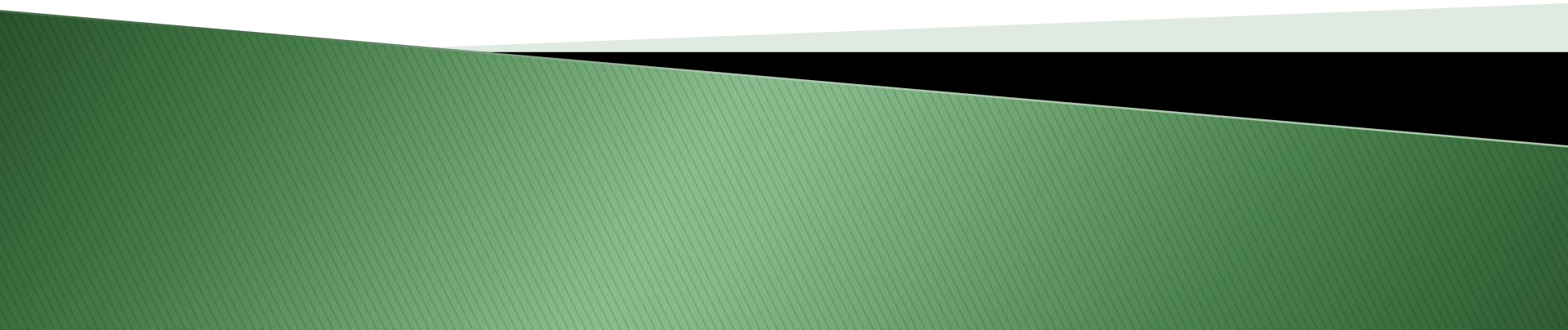
Key Differences with US

- ▶ We don't cover all WEEE – very limited, but growing subset; policy and in programs
- ▶ No federal policy on recycling programs, limited regulations on disposal and export
- ▶ No coordinated data collection mechanism nationally, incomplete state data
- ▶ States have moved policy forward, but differently
- ▶ Established voluntary programs along with mandates

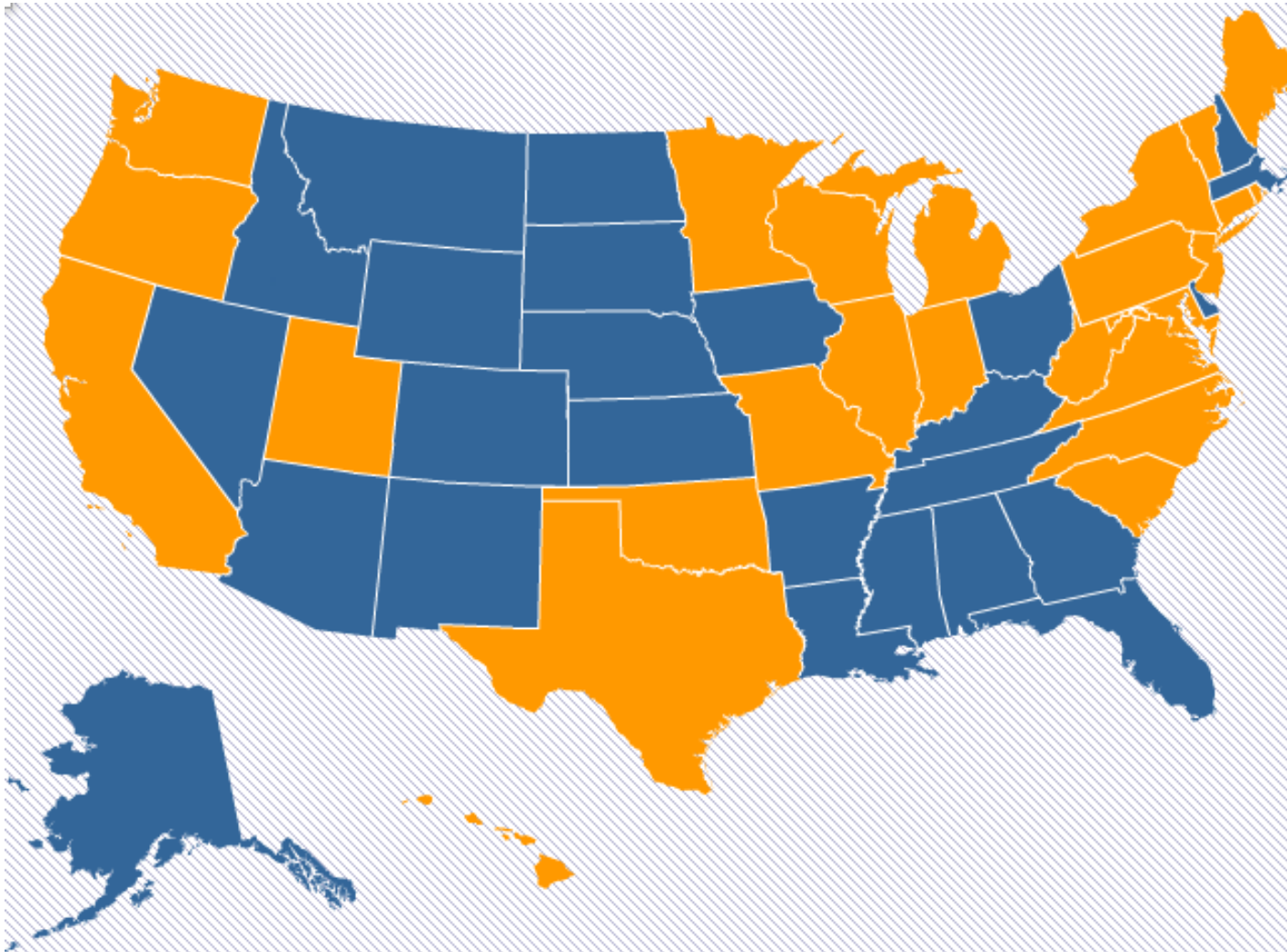




The 25 US State Laws



States With E-Scrap Laws



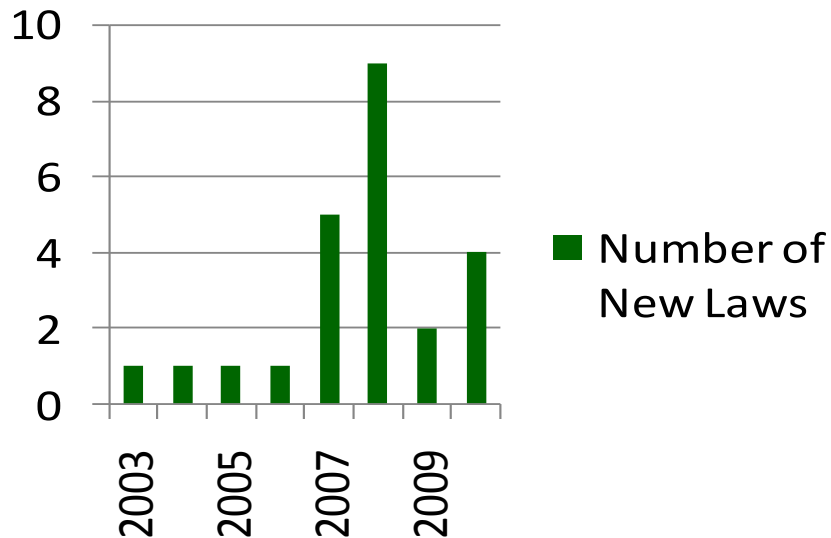
States highlighted in orange have some type of electronics recycling law

25 State Electronics Recycling Laws

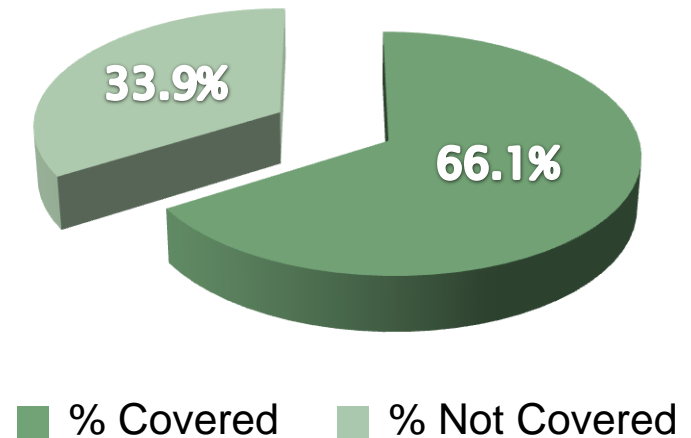
- 2003: California
- 2004: Maine
- 2005: Maryland
- 2006: Washington
- 2007: Connecticut, Minnesota, Oregon, Texas, North Carolina

- 2008*: New Jersey, Oklahoma, Virginia, W. Virginia, Missouri, Hawaii, Rhode Island, Illinois, Michigan
- 2009: Indiana, Wisconsin
- 2010: Vermont, South Carolina, New York, Pennsylvania
- 2011: Utah

Number of New Laws



Percentage of Population Covered by E-Waste Law





Products Covered by 25 Laws

- ▶ Minimum: Monitors, Laptops
- ▶ Maximum: + TVs, Computers, Printers, Keyboards, Mice, Small Servers, Personal Audio, Mobile Phones, VCR/DVD, DVRs, cable/satellite boxes
- ▶ Most in between with “big five” TVs, desktops, laptops, monitors, and printers
- ▶ Trends towards more, but not everywhere



Which Actors Can Use Recycling System (under laws)

- ▶ Who can use (free) recycling system?
- ▶ Original laws set up for households
- ▶ Businesses (medium-large) must handle separately

Data Implications!

- ▶ Required data reporting only under state laws, mostly household collections



Financing Mechanisms

- ▶ Advanced recovery fee – 1 state (CA only)
- ▶ Producer Responsibility (PR): Annual fee or own programs -2 states
- ▶ PR: Return share – 1
- ▶ PR: Market share – 7 (*most like WEEE revisions*)
- ▶ PR: Return share & market share - 7
- ▶ PR: None specified, but manufacturers run their own programs – 6



Policy Results

- ▶ True patchwork of producer responsibility: goals (geographic and volume), requirements vary
- ▶ Very few “compliance schemes”
- ▶ Collection by many actors – some states with very few municipal collection entities
- ▶ 16 states with landfill bans, 3 not in “25”
- ▶ Lot of competition for recyclers to get manufacturer contracts
 - Up to 300 total unique OEMs, but only 30-50 with significant obligations



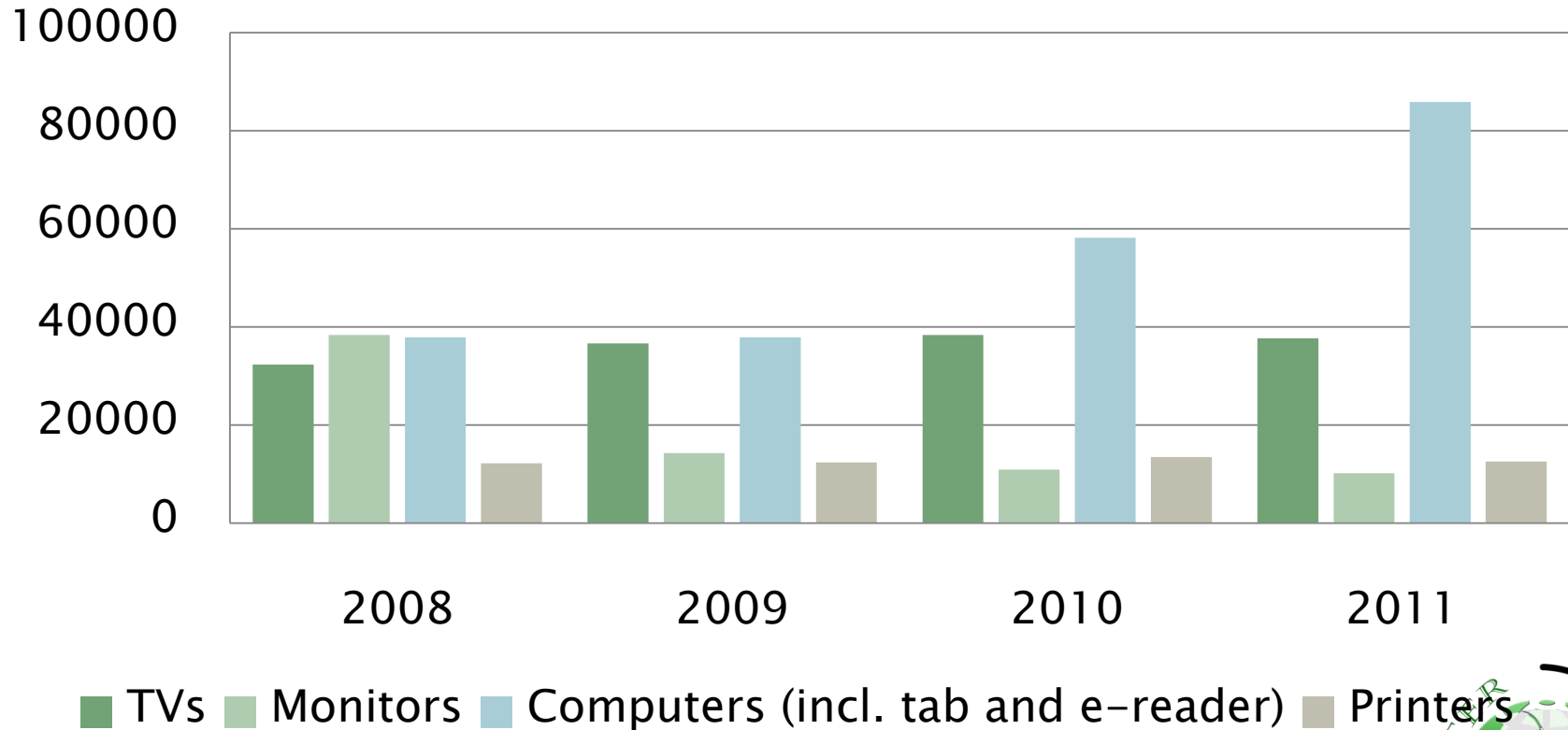


Data

How much is sold (to households)?
How much do we know is coming back?

Units Sold 2008-2011 Household Market

Units in Thousands

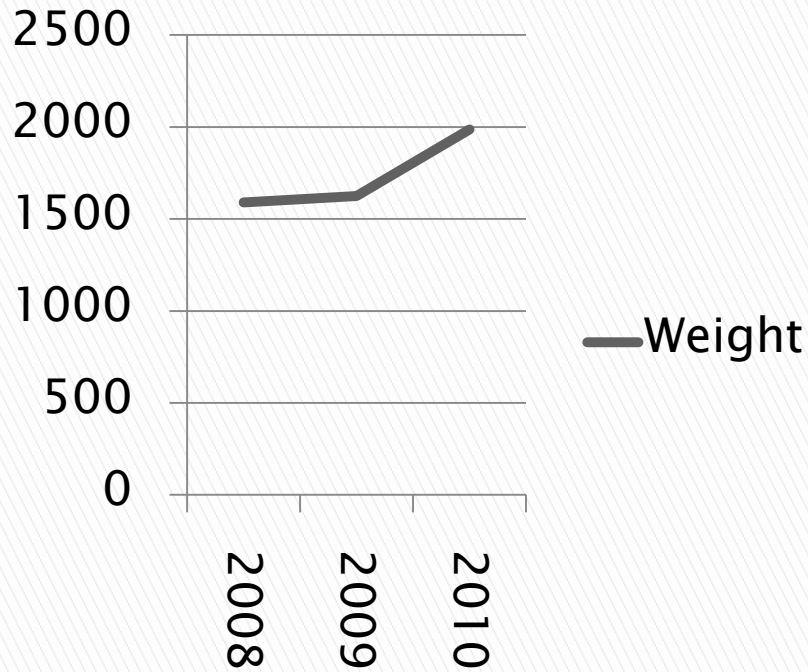


Source: NCER Analysis of iSuppli, NPD, and IDC unit data, January 2008 - December 2011

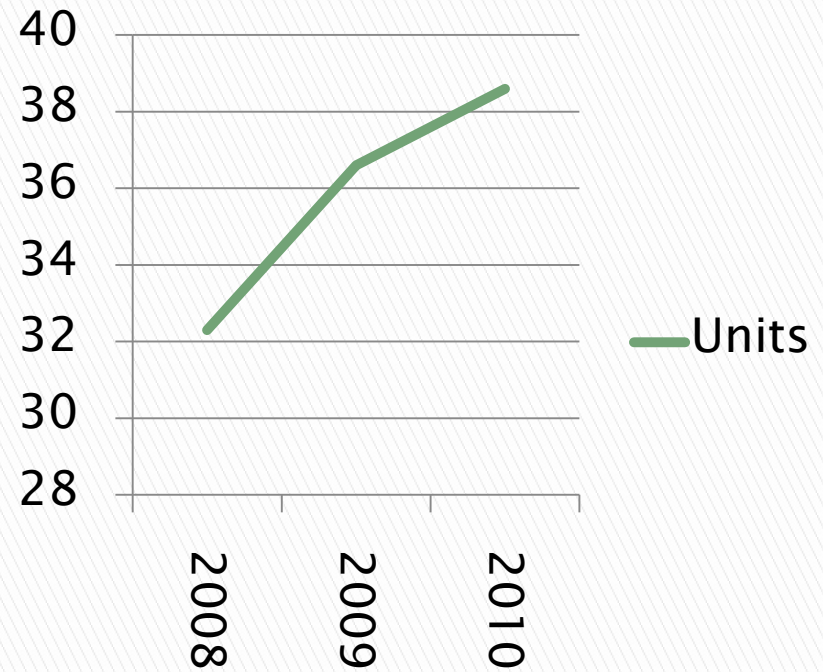


Pounds Sold Can Vary from Units

Weight



Units



TVs Estimated Millions of
Lbs

TV Units in Millions

2010 Per Capita Rates

State	Products Collected	Entities Collected From	2010 Lbs Per Capita
CA	Televisions, computer monitors , laptop	All	4.9
HI	Computer monitors, laptops, printers (no TVs until 2011)	All	2.4
IL	Computer, computer monitor, television, printer, mobile phones, telephone, others	Households only	2.4
IN	TVs, computer monitors, laptops, desktops, printers, computers, peripherals, fax machines, DVD players, VCRs	Households, public schools, small business	2.5
ME	TVs, computer monitors, laptops, printers, video game consoles, dig pic frames	Households (others added 2011)	4.0
MI	Computer, computer monitor, television, printer	Household and small business	0.8

2010 Per Capita Rates

State	Products Collected	Entities Collected From	2010 Per Capita
MN	TVs, computer monitors, laptops, desktops, printers, computers, peripherals, fax machines, DVD players, VCRs	Households	6.7
OR	TVs, computer monitors, laptops, desktops	Households, small bus., non-profit, 7 or fewer	6.3
OK	computer monitors, laptops, desktops	Households	0.7
TX	computer monitors, laptops, desktops	Households	1.0
VA	computer monitors, laptops, desktops	Households	0.6
WA	TVs, computer monitors, laptops, desktops	Households, small gov'ts, small businesses, school district and charities	5.9
WI	televisions, computers (desktop, laptop, netbook and tablet computers), desktop printers, computer monitors; other computer accessories, e-readers, DVD players, VCRs and other video players (i.e., DVRs); and fax machines	Households, k-12 public schools	4.2

2010 Washington Program Case Study

Product Covered	WA Pounds Sold (Est Household)	Pounds Collected Household	% Recycled
TVs	36,987,086	24,873,291	67.2%
Desktops/ Laptops	10,158,973	3,637,878	35.8%
Monitors	3,517,452	10,390,936	295.4%
Total	50,663,510	38,902,105	76.8%

**Washington State 2010 Data
Are WEEE Meeting the Targets?**

YES! 77% of POM... but only 2.7KG/Inhabitant

Why Not a Federal Program?

- Attempt in early 2000's – 4 years of negotiations but no agreement
 - States started own laws, rest is history
- More Attention in Administration
 - Interagency Task Force Report in July 2011
 - Focuses on Federal Agency actions, purchases
 - Export Studies – EPA and USTR
 - Push for recycler certification – R2 and e-Stewards
- Less so in Congress
 - R&D bill not passed in 2010, introduced again 2011, no action in 2012
 - Export bill on both sides introduced, groups urging passage
 - Voluntary National Programs
 - Billion Pound Challenge, national OEM and retailer programs



Other Key Issues in US

- ▶ Certification:
 - Two standards, rapid adoption – R2 and e-Stewards
- ▶ CRT Glass management – landfill as an option?
- ▶ Assessing complete picture of laws, voluntary programs, and B2B activity
- ▶ Leakage from collection
 - Brokers pay more than PR systems
 - Collector Best Practices, certification?
- ▶ Export – limited restrictions for CRTs



Characterizing Transboundary Flows of Used Electronics

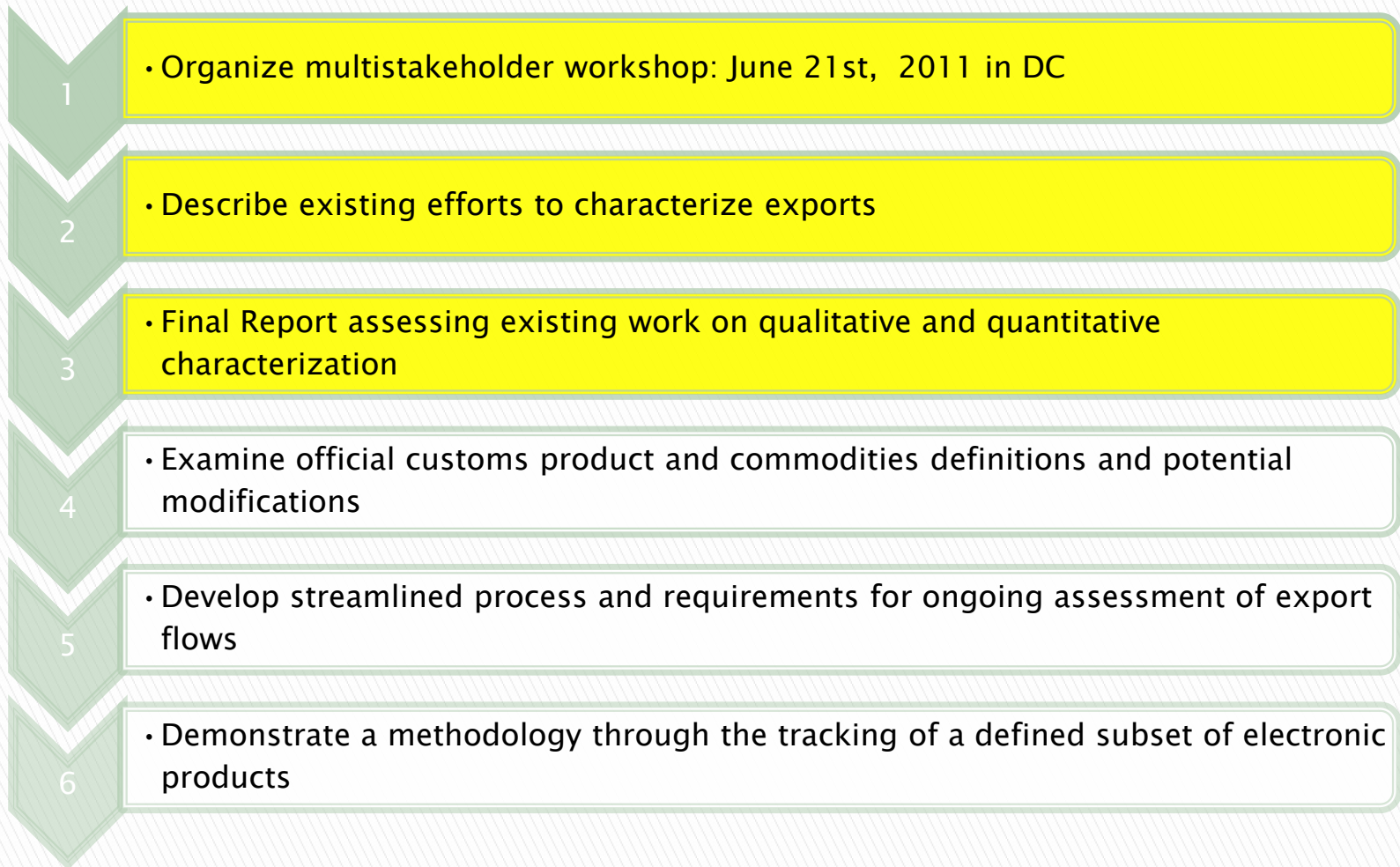


Project funded by



using a grant from





Project Plan
Collaboration is Key

Conclusions/Outlook

- How many more state programs?
 - Trend is down, but who wants to be left out?
 - Harmonization work – voluntary but productive
- ▶ Will Congress move on legislation addressing patchwork?
 - Unlikely in short term, 2012 election year
 - Export restrictions?
- ▶ More to learn in 2012
 - Most states will have at least 1 year of results
 - Standardized metrics help compare performance
 - More data from voluntary programs
 - Better understanding of export flows





Thank You!

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Visit us on the web:

www.electronicrecycling.org

and www.ecycleclearinghouse.org



