



ERCC Workshop:
Overview of State
Electronics
Recycling Laws

E-Scrap Virtual



What is the ERCC?

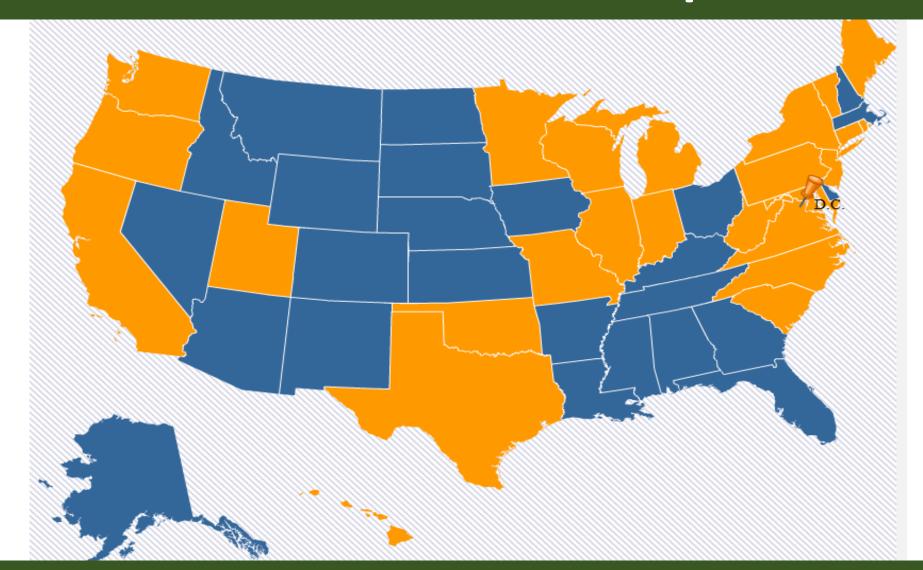
- Forum for coordination and info exchange, joint decision-making
- Address cross cutting issues in state electronics recycling laws
- Members
 - Voting: State/local government
 - Affiliate: industry, non-profits, trade associations, others
- Managed by National Center for Electronics Recycling (NCER) and Northeast Recycling Council (NERC)



Activities of ERCC

- eCycleRegistration.org
- Compliance Calendar
- Information sharing calls
- Market share data joint purchasing
- Brand/Manufacturer tracking database
- Coordinating state program concerns on key market issues
- Coordinated responses to non-compliant companies
- Gathering data on per capita collection rates and other key performance measures
- State consumer awareness surveys

Which States Have E-Scrap Laws?



States highlighted in <u>orange</u> have some type of electronics recycling *program* law

25 State Program Laws + DC

2003: California

2004: Maine

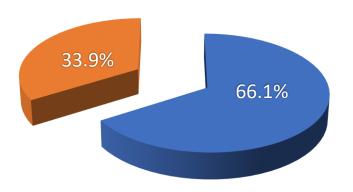
2005: Maryland

■2006: Washington

2007: Connecticut, Minnesota,

Oregon, Texas, North Carolina

Percentage of Population Covered by E-Scrap Law



■2008*: New Jersey, Oklahoma, Virginia, West Virginia, Missouri, Hawaii, Rhode Island, Illinois, Michigan

2009: Indiana, Wisconsin

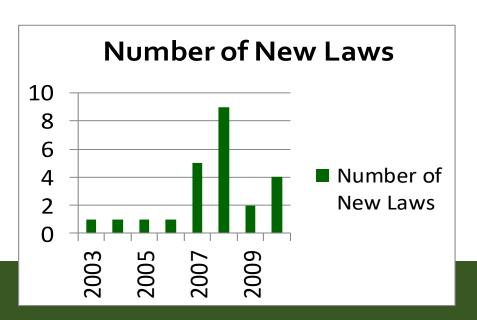
2010: Vermont, South Carolina, New York,

Pennsylvania

2011: Utah

-2014: DC

2015-2020 - none





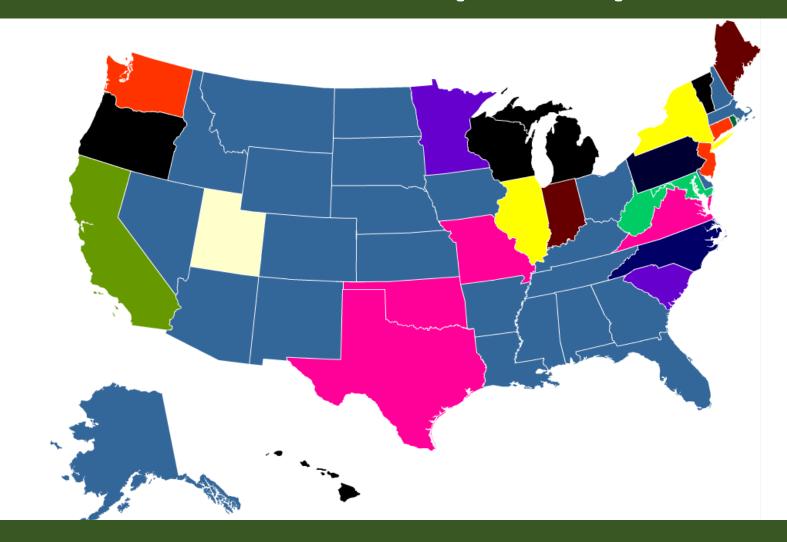
How State Laws Differ



Covered Products

- Minimum: Monitors, Laptops
- Maximum: + TVs, Computers, Printers, Keyboards, Mice, Small Servers, Personal Audio, Mobile Phones, VCR/DVD, DVRs, cable/satellite boxes, 3D printers
- Most in between with "big five" TVs, desktops, laptops, monitors, and printers

Product Scope Map



Some states cover a wide variety of electronic products under their law. Others are more narrow and may only include laptop computers and monitors. Go to ecycleclearinghouse.org for more details.



How State Laws Differ



Covered Entities

- Who can use (free) recycling system?
- All Cover <u>Households/Consumers</u>, then variations on:
 - Small businesses fewer than 10 or 50 or 100
 - Schools K-12 or all
 - Non-profit organizations 501c3 or all
 - Government agencies small local or all
 - Large businesses



How State Laws Differ



Program Funding

24 states + DC = some form of producer responsibility in law

- Manufacturer fee 2 states
- Manufacturer Market share 12 states
- Manufacturer Return share & market share –
 2 states
- Manufacturer Clearinghouse with Market Share within Return Product Categories – 1 state
- No financing specified, but manufacturers run their own programs – 8 states



Shared Costs:Consumers, Collectors, Recyclers

What costs are covered and do consumers pay drop-off fees?

- Separate fee on sale of new products 1 state
- Some specify only certain costs covered by manufacturers – i.e. only transportation and recycling costs
- Others silent on how what aspects of costs covered by manufacturers, allows costs to collectors
- Some explicitly prohibit drop-off fees by consumers, others allow them to subsidize system costs
- Non-covered devices can have fees for drop-off in states where other fees prohibited

Types of Financing

ARF - Electronic Waste
Recycling Fee, assessed on
the sale of covered
electronic products

FEE - Manufacturer Annual Registration Fees (can be reduced by establishing an approved take-back program)

SHARE - Manufacturers must finance a program to collect & recycle a share of covered products, either collectively or independently, calculated by market share of new sales

LBS. SOLD

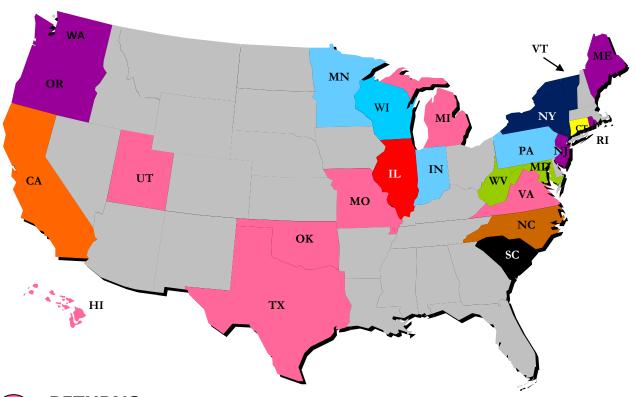
Manufacturer pays registration fee and for collection and recycling of covered electronic devices based on their yearly sales to households

LBS. SOLD SHARE

Manufacturers are a assigned a market share percentage based on total weight sold into the state. A separate per capita goal is used for collection targets. (IL uses return share for IT devices)

Convenience

Manufacturers must cover a statewide program, but no specific financing is set. In practice, the manufacturer clearinghouse uses a combo of lbs sold share within return share product categories



RETURNS - Manufacturers must develop and implement their own recycling programs for their own returned products. No goals except MI has voluntary market weight-based goal

RETURNS + TV MARKET SHARE- IT Manufacturers pay for costs of their own branded products collected plus a pro rata share of orphan products. TV manufacturers pay based on their market share percentage of all TVs returned.

IT FEE + TV MARKET SHARE- IT Manufacturers pay for a staged fee based on market level of collection service provide. TV manufacturers pay based on market share %.



Grouping the States – 6 Models

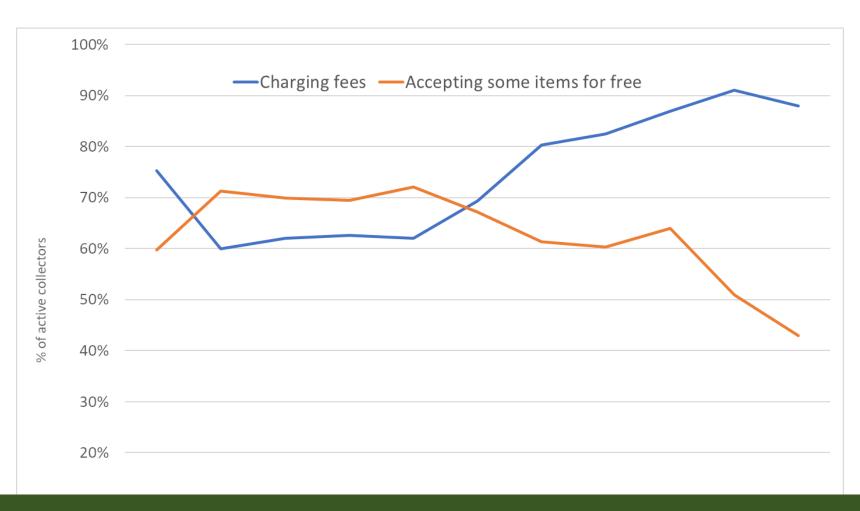
- **1.** <u>Pounds targets</u> OEM individual lbs goals, some without convenience metric
 - DC, IN, MN, NY, NJ, WI, (MI), (NC), (SC)
- **2.** <u>Default and opt-out</u>, usually with convenience goals, collective programs
 - OR, RI, VT, WA
- 3. <u>Limited take-back programs</u>
 - MD, MO, (NC), (MI), (SC), OK, TX, VA, UT, WV
- **4.** Recycler approval by state, then bill manufacturer
 - CT, ME
- 5. Advanced Recycling Fee (CA)
- **6.** <u>Clearinghouse Model</u> IL (as of 2019) no lb targets, but must provide statewide coverages to local governments who opt in



Case Study: Wisconsin Model 1: Lbs Sold/Share

- Covered products: computers (desktop, laptop, tablet), printers, TVs, monitors, others over 7"
- Manufacturer Responsibilities: Register, report brands and pay fee; know their annual lbs target, find recyclers or mgmt. groups to meet
 - Individual manufacturer recycling targets directly based on weight sold in state
 - Contract with registered recyclers to pay for number of pounds equal to or greater than recycling target; weight must come from registered collectors
- How are costs shared?
 - Manufacturers (or collectives/brokers representing OEMs) privately negotiate a per-lb price/details with reg. recyclers
 - Recyclers determine how much they need to charge collectors for different items/services to make up for costs not covered by manufacturers or weight collected beyond manufacturer targets
 - Collectors determine how much to charge residents to accept electronics for recycling

Wisconsin collectors charging fees and accepting some items for free





Case Study: Vermont Model 2: Default/Opt Out

- Covered Products: computers, monitors, TVs, printers, and computer peripherals (e.g., mouse, keyboard, scanner) from Vermont Households, 501c3 Charities, School Districts and Small Businesses with 10 or fewer employees
- Manufacturer responsibilities Register prior to sale
 - Report covered brands, pay admin fee
- Make Program Choice
 - Default plan/program or propose opt-out plan = State Standard Plan (SSP)
 - No recycler choice with default, (or collective)
 - Can meet convenience and lbs goals with opt-out, but...
 - Since 2015 all manufacturers in SSP
- How are costs shared?
 - Manufacturers billed by VT ANR for all costs of collector compensation, transportation and recycling costs along with program admin; based on market share
 - NO consumer drop-off fees for covered devices



Case Study: Virginia Model 3: Limited Takeback

- Covered products computers and monitors
- Manufacturer Responsibilities: register and submit takeback plan for own brand computers and monitors
- How are costs shared?
 - Manufacturers must offer free takeback for own brands only (can go beyond); mail-back is used primarily, few drop-off options supported



Case Study: Maine Model 4: Recycler Approval, Bill Manufacturer

- Covered devices: TVs, portable DVD, game consoles, computer monitors, laptops, tablets, e-readers, 3D printers, printers, digital picture frames, and other visual display devices with screens of at least 4"
- Manufacturer Responsibilities: register, pay admin fee and accept/pay bills from approved consolidators
- How are costs shared? Manufacturers invoiced for "handling, transport and recycling" of their share of covered devices
 - Silent on how collection, but not in approved costs for manufacturers; drop off fees allowed



Case Study: California Model 5: Advanced Recycling Fee

- Covered devices: displays TVs, monitors, laptops; greater than 4"
- Only/first state with ARF collected at sale, remitted to state by seller
 - Currently \$4-\$6 depending on screen size
- Collection and recycling costs covered by fund from fees, can be adjusted up or down
 - Currently 66 cents/lb CRT; 87 cents non-CRT; of which 26 cents for collection
- Manufacturer role limited to reporting



Case Study: Illinois Model 6: Manufacturer Clearinghouse

- Covered Products: Computers and Small-Scale Servers, Computer Monitors, Keyboards & Mice, Printers, Fax Machines, and Scanners, TVs, DVD Players/VCRs, Converters, Cable/Sat Receivers, Portable Digital Music Players and Video Game Consoles
- Manufacturer Responsibilities: register, pay fee and make own program or join Clearinghouse
 - Either must cover ALL counties who "opt-in" to program, min # of sites per county by population density
 - All manufacturers in Clearinghouse, which divides up counties among group plans, first 3 years
 - No lbs targets, but must cover all covered lbs coming in
- How are cost shared: manufacturer programs cover bulk transport and recycling costs; drop-off fees are allowed



Illinois Model

- Instead of pounds targets, moves to convenience standard starting in 2019
 - Minimum number of collection sites on population density basis
- Counties and certain municipalities "opt in" to the manufacturer program under CERA
- Each manufacturer must provide an "e-waste program" to transport/recycle residential CEDs for the ENTIRE ROSTER of counties (at least minimum number of sites) who opted in independently......



Illinois Clearinghouse

<u>OR</u>

- Through a "manufacturer clearinghouse" – collection of manufacturers representing 50% or more of the total collection obligations
- 2019-21 ALL registered manufacturers participating through Clearinghouse
- Electronics Recycling Representative Organization (ERRO) moved forward to create a CERA Clearinghouse for IL
 - ERRO non-profit with manufacturer board, no staff
 - Issued RFP in 2018 for a Clearinghouse Administrator



Key Facts IL

2019 Clearinghouse Program

- 58 Counties/jurisdictions submitted optin forms
- 2019 Total population covered 89% of IL population
- 87 Registered Manufacturers

2020 Clearinghouse Program

- 61 jurisdictions opted-in
- 2020 Total population covered –88% of IL population
- 95 Registered Manufacturers

Total CY 2019 LBs Recycled: 29.5 million lbs

- % Opt-In Programs: **51.2%**
- % Private Programs: 48.8%



What the IL Clearinghouse Does Do

- POES help manufacturers collectively meet the requirements to implement a statewide "manufacturer e-waste program" in Illinois through a joint Plan
- DOES administer manufacturer obligation percentages within the Program Plan, request existing relationship preferences, and then allocate opt-in counties to individual manufacturers or groups
- DOES set rules for manufacturer or designated group participation
- DOES establish an auditing program for verifying reported pound totals and collector practices
- DOES compile information required and submit Program Plan to IEPA



What the IL Clearinghouse Doesn't Do

- <u>DOES NOT</u> contract with recyclers, collectors or other service providers (all contracts made by group plans)
- <u>DOES NOT</u> decide which collection site/s or events will be included in the final Program Plan
- <u>DOES NOT</u> decide which entities (collectors, super-collectors, recyclers) are used in meeting the required minimum sites for convenience standard (all entities must meet requirements in law and those by contract)
- DOES NOT mandate whether assigned groups/manufacturers agree to include all proposed sites/events from opt-in forms, including those beyond minimum required under convenience



Why Not A Federal Program?

- Attempt in early 2000's –
 4 years of negotiations but no agreement
 - States started own laws, rest is history
- Congress: limited activity
 - Years ago R&D moved far, but failed
 - Export restriction bill introduced several times
 - Some discussion of eco-fees, but no legislation introduced
- Off and On Attention in Administration
 - Interagency Task Force Report in July 2011
 - Focuses on Federal Agency actions, purchases
 - Export Studies
 - Push for recycler certification R2 and e-Stewards



Key Challenges & Common Issues

- What products should be covered, and how can programs adapt?
- How to balance equity and costs for manufacturers, collectors and recyclers
 - Pounds goals, convenience, cost sharing?
- Multi-year challenge of CRT glass and markets
 - Declining, but still dominant weight from households
 - Downstream markets change, some recyclers have left with stockpiles
- Plastics
- Batteries



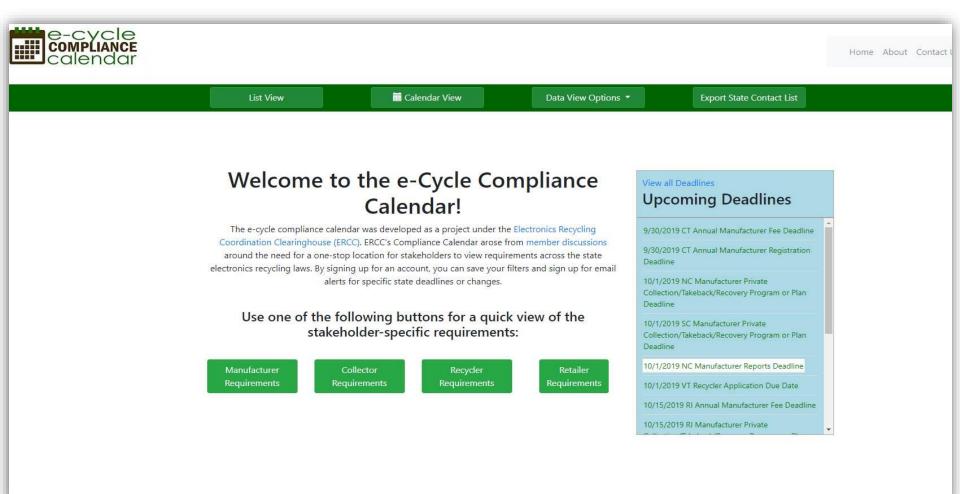
ERCC Compliance Calendar

- Desire for a comprehensive and public resource for tracking the complicated requirements under state electronics recycling laws
- Multi-year effort to develop
- Site was made possible by a contribution from the Consumer Technology Association (CTA)
- Free resource for all with need for info on state laws

Compliance Calendar

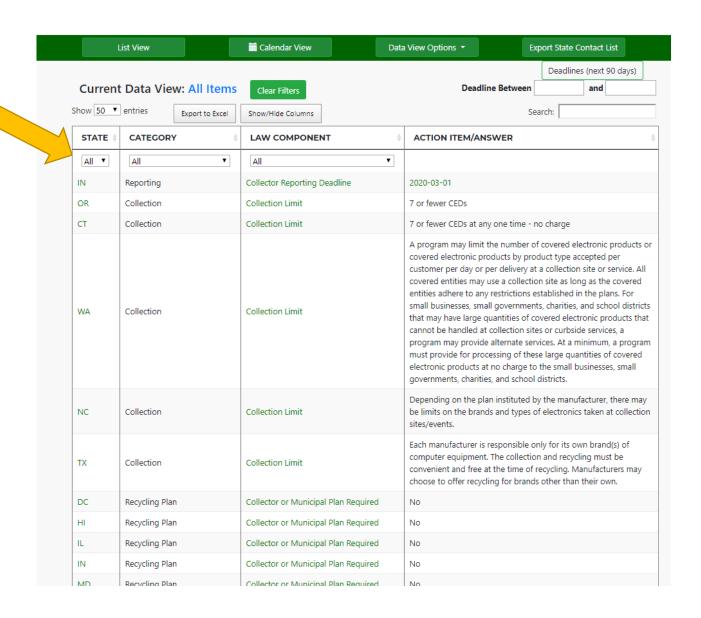
Newest ERCC Project and a one-stop location for stakeholders who need to view and track requirements across the 25 state electronics recycling laws.

www.ecyclingcompliance.org



List View:

Change filtering options like "state" here





ERCC Voting Members

Connecticut DEEP
Hawaii DOH
Maine DEP
Maryland DOE
Michigan DEQ

Minnesota PCA

New Jersey DEP

CalRecycle

North Carolina DENR
Oregon DEQ
Pennsylvania DEP
Rhode Island DEM
South Carolina DHEC
Vermont DEC
Wisconsin DNR
Washington DC DOEE



Affiliate Members

- Best Buy
- Brother
- CTA
- Dell
- DNA Group
- Dynamic
- ERI
- Funai
- HP
- LG
- MRM
- Panasonic
- PA Recycling Markets Center
- Product Stewardship Institute

- Re-Teck
- Rhode Island Resource Recovery Corporation
- Ricoh
- RLGA
- Samsung
- SERI
- Sims
- TCL North America
- Tongfang
- URT
- Vintage Tech
- Vizio



Consider Membership Today!

- States based on population
- Affiliates based on revenue, rates for non-profits and others



Thank You! Electronics Recycling Coordination Clearinghouse

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www.ecycleclearinghouse.org www.electronicsrecycling.org