

INTEGRATED SOLID WASTE MANAGEMENT PLAN UPDATE

Mahalo for joining us!

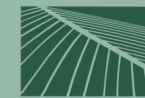
**THE MEETING WILL START  
SHORTLY**



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# Integrated Solid Waste Management Plan Update: Statewide Recycling Programs

**State of Hawai'i Solid and Hazardous Waste Branch (SHWB)  
Office of Solid Waste Management (OSWM):** Lane Otsu and Michael Burke

**Tetra Tech:** Cesar Leon, Christine Arbogast, and Jisela Herrera

**PBR HAWAII:** Catie Cullison, Sunny Rosario, and Ramsay Taum

October 26, 2023

## Task Force Roll Call & Introductions

- Taskforce members – roll call
- State of Hawai‘i Department of Health staff
- Consultants
- Guest Speaker



## Agenda

- Task Force Roll Call (5 min)
- General Public Comment Period (5 min)
- Integrated Solid Waste Management Plan Update Purpose (10 min)
- Wrap-Up Li-ion Batteries (30 min)
  - Opportunity for public comment on Li-ion Battery discussion
- Introduction – Problem Statement (15 min)
  - Discuss problem statements
  - Opportunity for public feedback on problem statement
  - Task Force Discussion
- Potential Solutions (30 min)
  - Subject Matter Speakers



Please note, this meeting will be recorded

## Agenda, cont'd.

- Break (10 min)
- Comparative Analysis (15 min)
- Opportunity for Public Comment on Potential Solutions (10 min)
- Discussion on Potential Solutions (60 min)
  - Task Force thoughts
  - Task Force response to questions
- Meeting Summary (10 min)
- Next Steps / Action Items (10 min)



## Sunshine Law



- The Sunshine Law is Hawai'i's open meeting law
- The purpose is to help ensure the public can meaningfully participate in the government processes, such as this plan revision
- All ISWMP Taskforce meetings are open to the public, and will follow the State's Sunshine Law
- NOTE to Taskforce: Discussion on Taskforce business outside the public meeting is prohibited. This includes in-person communications as well as phone, email, and social media communications

## Meeting Ground Rules

- Acknowledge the contributions of others
- Raise hand to speak
- Mic off, unless speaking
- Engage with an open mind
- Listen, then respond
- Respect others and their ideas



# General Public Comment Period



## • Topics of Interest

- Integrated Solid Waste Management Plan Update
- Solid Waste Material Streams Potential Solutions
  - Tires
  - Li-Ion Batteries
  - Statewide Recycling Programs
  - Organics (next topic)
- Potential Solutions Categories
  - Extended Producer Responsibility
  - Government Programs and Subsidies
  - Free Market Solutions
  - Education and Outreach
  - Less Wasteful Alternatives





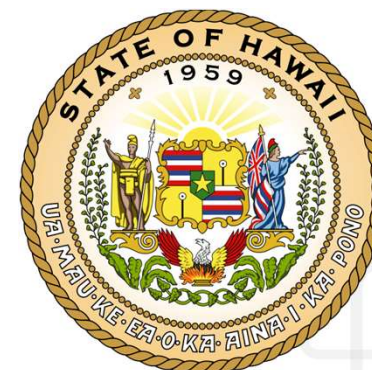
## *Public Comments*

Opportunity for public comments on the meeting agenda

## Purpose of Taskforce and Plan Update



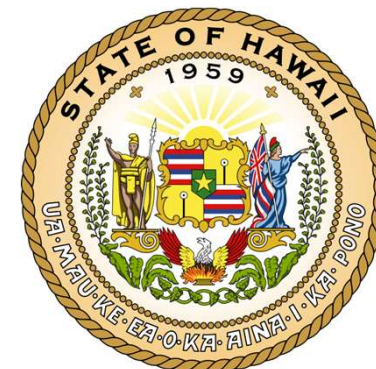
- State law mandates an Integrated Solid Waste Management Plan with regular updates and convening this Taskforce (HRS Chapter 342G)
  - *Revise and update material contained in previous plan*
  - *With comment from the Taskforce, address other issues of statewide concern regarding integrated solid waste management*
- Expectation of the Taskforce regarding potential solid waste solutions
- Recommendations from the Taskforce



## Purpose of Taskforce and Plan Update (continued)

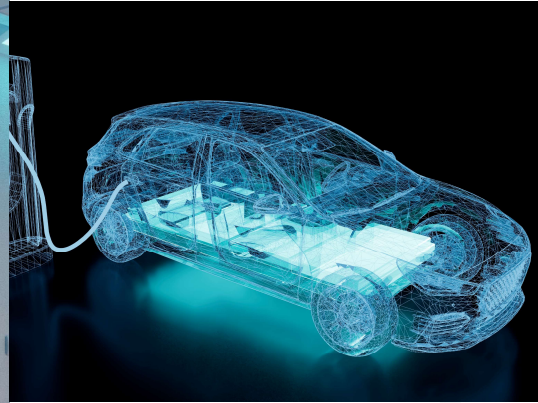


- The State identified ten solid waste stream topics for inclusion in an update to the Statewide ISWMP, including:
  1. Tires
  2. Batteries
  3. PV Panels
  4. Organics
  5. C&D Waste
  6. Packaging
  7. Carpet
  8. Mattresses
  9. Statewide Recycling Programs
- Information received from taskforce meetings for each solid waste stream will be used to update the existing ISWMP





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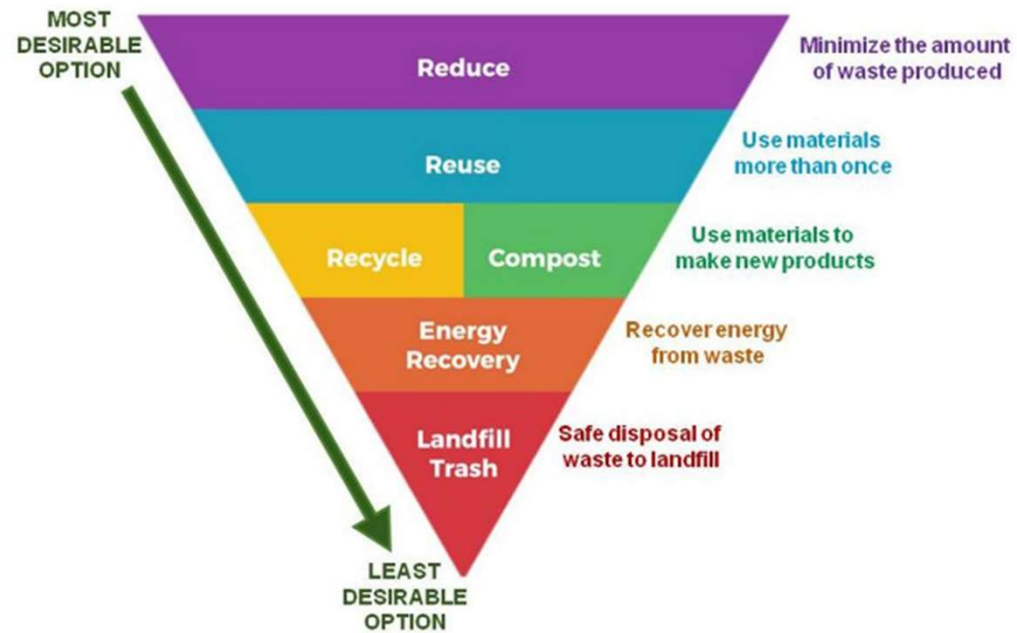


Li-ion Batteries

# Potential Solutions Wrap Up

# Sustainable Materials Management

## EPA Waste Hierarchy



# Solid Waste Management Stream: Solution Categories



## Extended Producer Responsibility (EPR)

- Manufacturers and/or distributors are compelled to address impacts of their own products on the waste stream.
- EPR also extends to retailers, consumers, and a state or local government's existing infrastructure to find cost-effective solutions.



## Government Programs and Subsidies

- Includes revisions to existing statutes and adjustment to existing State programs and personnel.
- Implementing new government regulations and/or prohibitions.
- Examples: Advance Disposal Fee, Deposit Program, and Expanded Government Services.



## Free Market Solutions

- Includes identification of new or expanded local market opportunities for recycling.
- Considers Hawai'i's remote geography and related logistic and infrastructure challenges.



## Outreach and Education

- Identification of potential outreach opportunities.
- Identification of potential education opportunities.



## Less Wasteful

- Identification of less wasteful alternatives.

## Li-ion Batteries – Potential Solution to Consider

- Extended Producer Responsibility
  - AB 2440 (California)
  - SB 5144 (Washington)
  - Collaborate with National Stewardship Action Council
  - Create a local stewardship council
- Government Programs and Subsidies
  - Maui County Li-ion battery recycling research project
  - Maui County Li-ion battery recycling pilot program (2024)
  - Maui County Green Grants Program
  - Maui County Recycling Grants Program
  - Battery collection events
  - Junk Vehicle Disposal Assistance Program
  - \$375 million loan – Rochester, NY Hub (US Dept. of Energy)
- Free Market Solutions
  - Li-ion battery recycling facility (Gilbert, AZ)
- Outreach and Education
  - NYS Rechargeable Battery Law
  - Public Outreach and Collateral Development



# Li-ion Batteries – Task Force Meeting Options Identified



- Extended Producer Responsibility
  - Product Manufacturing
  - Li-ion battery registration
  - Local Stewardship Program
- Government Programs and Subsidies
  - Pursue funding opportunities (i.e., US Dept. of Energy)
- Free Market Solutions
  - Recycling infrastructure development
- Outreach and Education
  - Li-ion fire prevention education
  - Establish PIG to continue Li-ion battery discussion
- Resource Reduction Alternatives
  - Hydrogen Fuel-Cell Vehicles





*Guests and members of the public, please share your thoughts. Do you envision the proposed solutions as ones that are implementable in Hawaii? What challenges do you foresee? Do you have other thoughts?*

Opportunity for public comment on Lithium-Ion Battery discussion



*Task Force members: Share your thoughts on solutions presented. In your opinion, which show most promise?*

Each Task Force member share your opinion.  
Thank you!



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Problem Statements

# Statewide Recycling Programs

## Solid Waste Stream Topic: Statewide Recycling Programs

**Deposit Beverage Container Program (HI-5 Program)** – Since January 2005, the HI-5 program has assisted residents with recycling **billions of containers**. In prior years' audits, it has been noted that the program has failed to develop and execute procedures to verify the **accuracy and completeness of data** used to support claims of the deposit and container fees paid to the program by the distributors as well as deposits and handling fees paid to the redemption centers. Without these procedures, the program relies on **self-reported data** and accepts that cash receipts from the distributors and payments made to redemption centers are accurate and complete. **Act 12 requires DOH to develop and implement procedures to verify the accuracy and completeness of data** reported by beverage distributors and redemption centers as recommended in the Office of the Auditor's biennial reports. This includes **periodic audits** of certain deposit beverage distributor and redemption center reports that have been submitted to the DBC program. Existing redemption value may not be enough to cover program expenses or be attractive for recycling markets. DOH will be revising the program's administrative rules to implement Act 12's requirements as well as updating the segregated rate to maintain the accuracy of the redemption rate.

## Deposit Beverage Container Program – Overview

- **HRS Chapter 342-G** sets requirements for deposit beverage containers recycling regarding recordkeeping, distributor registration, reporting, and auditing.
- \$0.05 deposit fee for eligible containers
- \$0.01 nonrefundable fee

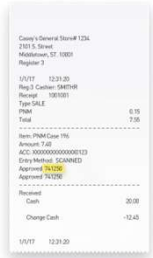
### How does the Hawaii Beverage Container Law work?



*For each bottle or can labeled with "HI 5-cent Dep.," there will be a 5-cent refundable deposit and 1-cent nonrefundable container fee. The deposit is refunded when the bottles are turned in for recycling. The fee is used to pay for the system.*



# Deposit Beverage Container Process



Consumers pay:



5¢ deposit



1¢ container fee



## HI-5 Fund

Unredeemed deposits help pay for the HI-5 Program

HI-5 fund pays:



5¢ deposit returned to consumers who redeem their containers



2-4¢ paid to recycling companies for processing and shipping



# Deposit Beverage Container Program

## What beverages are considered “in” and subject to the deposit?

### Container Material Type

Aluminum

Bi-metal

Glass

Plastic *Note: PET and HDPE only. Look for these symbols on the bottom of the container*

### Container Size

68 fluid ounces or less



## What are some examples of what is “in”?

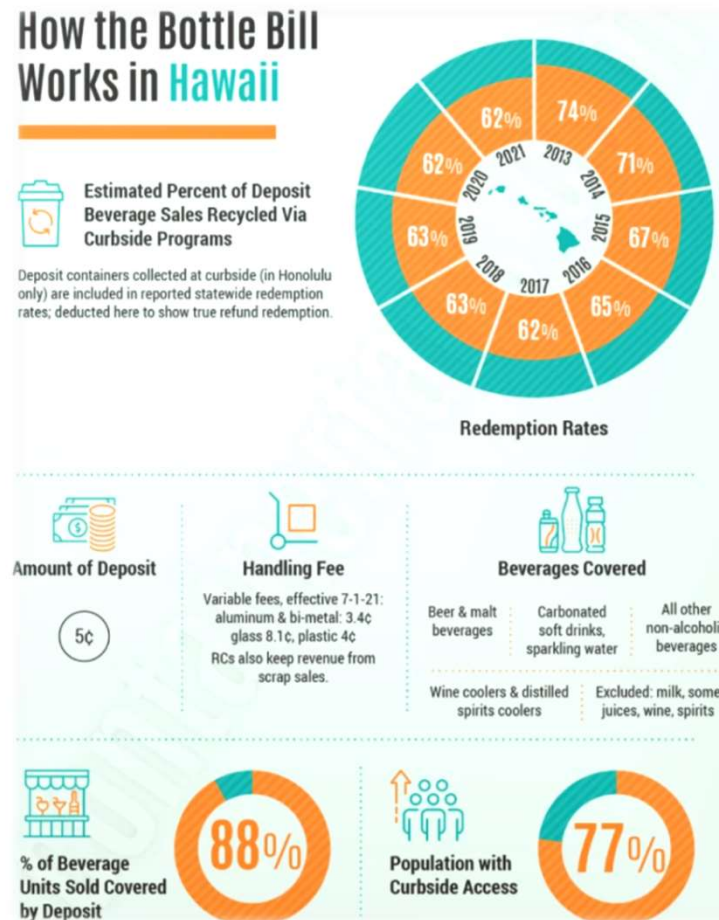
If a beverage meets the criteria below, it will need to be labeled with the HI 5¢ deposit:

Beverage	Example <i>(these are only examples – not a complete list)</i>
<b>Soda</b>	Coke, Pepsi, Blue Sky, Hansens, Collins Schwepps
<b>Water</b>	Menehune, Dasani, Crystal Lake, Evian
<b>Juice</b>	Hawaiian Sun, Aloha Maid, V8, Odwalla, Ocean Spray, Martinelli’s
<b>Coffee &amp; Tea</b>	Kona Latte, Starbucks Frappuccino, Brisk Tea, Nestea
<b>Sport Drink</b>	Gatorade, Cytomax, Powerbar Performance
<b>Drink Mixer</b>	Bloody mary, margarita, sweet and sour mixer
<b>Mixed Spirit</b> <i>(contain less than 15% alcohol)</i>	Margarita, pina colada, daiquiri, low alcohol liqueurs
<b>Mixed Wine</b> <i>(contain less than 7% alcohol)</i>	Arbor Mist, low alcohol sake, cider
<b>Beer and Malt Beverages</b>	Coors, Budweiser, Miller, Smirnoff, Mike’s Hard Lemonade

## What are some examples of what is “out”?

Beverage	Example <i>(these are only examples – not a complete list)</i>
<b>Milk</b>	Whole, 2%, 1%, skim, chocolate milk
<b>Wine</b>	Red, white, dessert wines, Chardonnay, Merlot, Cabernet, Moscato
<b>Spirit</b> <i>(contain 15% or more alcohol)</i>	Brandy, gin, rum, tequila, vodka, whiskey, scotch
<b>Medical Food</b>	Pedialyte, Ensure, Glucerna, Joint Juice
<b>Infant Formula</b>	Enfamil Lacto-Free, Similac, Isomil Soy Formula with Iron
<b>Concentrate</b>	Any frozen, powder, or liquid concentrate you add water to in order to drink
<b>Syrup and other flavorings</b>	Any syrup you add water to in order to drink, grenadine syrup, lemon juice, lime juice

# Deposit Beverage Container Program





# Deposit Beverage Container Segregated Rates for Weighing

PLASTIC		ALUMINUM	BI-METAL	GLASS
Small sizes 17 oz. or less Sorted	Mixed sizes 68 oz. or less	Okay to crush	Beverage cans with seams along side	
26.3 containers per lb.	18.8 containers per lb.	32 containers per lb.	5.9 containers per lb.	2.4 containers per lb.
=	=	=	=	=
<b>\$1.315</b>	<b>\$0.94</b>	<b>\$1.60</b>	<b>\$0.295</b>	<b>\$0.12</b>
Customers may request hand counts for up to 200 bottles or cans.				

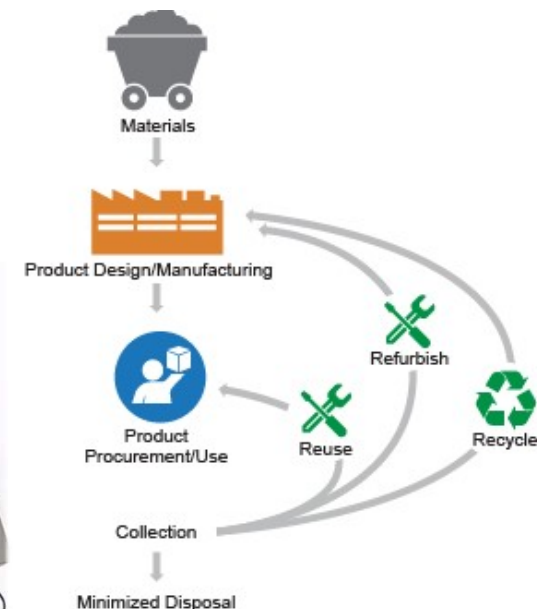
## Solid Waste Stream Topic: Electronic Device Recycling Program

**Electronic Device Recycling Program** – Since its inception in 2009, one of the key challenges to electronic waste recycling program was the **lack of infrastructure**. However, major changes to the program that took effect in January 2023 aim to increase public convenience and to collect more electronic waste for recycling.



## Electronic Devices Recycling Process

- The Hawai'i Electronic Device Recycling and Recovery Law (**HRS Chapter 339D**) requires electronic device manufacturers to operate recycling programs.
- Covered electronic devices:
  - Computers
  - Computer printers
  - Computer monitors
  - Portable computers
  - Televisions



## Solid Waste Stream Topic: Glass Advance Disposal Fee Program

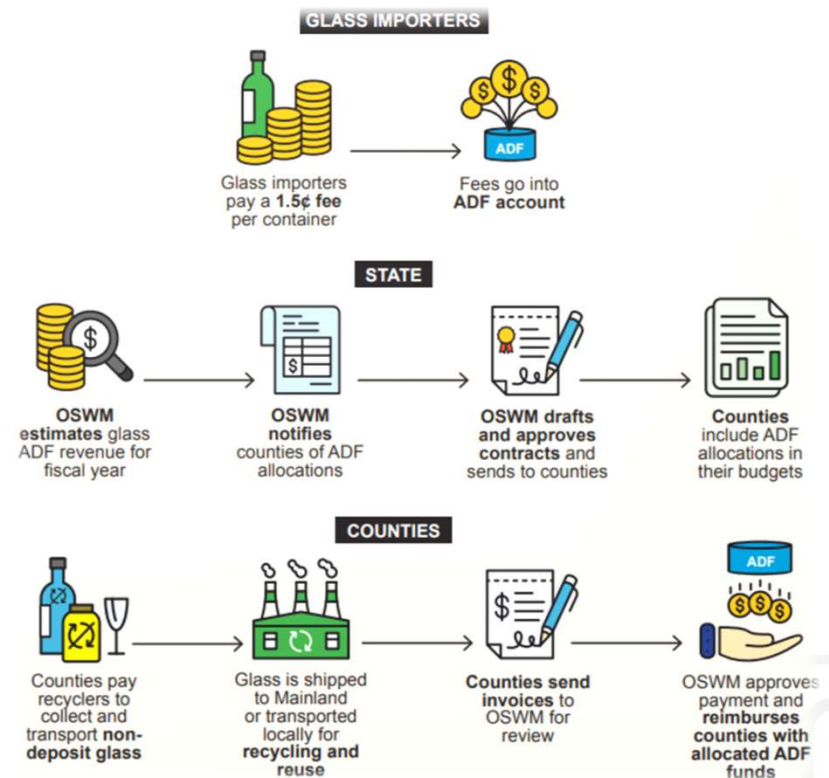


**Glass Advance Disposal Fee Program** – The 1994 act that established the glass container recovery law also contained **goals of a 25 percent glass recovery rate** by the end of **1996, 50 percent** by the end of **1998**, and thereafter, the **maximum recovery rate practicable**. The glass advance disposal fee rate was tied to achievement of these recycling goals. However, when the **Deposit Beverage Container Program** was established in 2002, the Legislature **removed the glass recovery goals**, leaving the program with **no baseline recovery rate or target recovery goals** against which to measure its progress and success.



# Glass Advance Disposal Fee Program

- **HRS 342G-82** sets requirements for glass container recycling regarding recordkeeping, importer registration, funding, reporting, and County program requirements.
- Requires manufacturers, importers, and distributors of glass containers in Hawaii to pay a 1.5-cent per container fee



## Summary of Problem Statements

- **HI-5 Program**

- Accuracy and completeness of data
- Current redemption value may not be enough to cover program expenses or be attractive for recycling markets

- **Electronic Devices Recycling Program**

- Lack of infrastructure

- **Glass ADF Program**

- No baseline recovery rate/target recovery goals to measure program progress and success

*Guests and members of the public, please share your thoughts. Do you know of additional problems associated with the Statewide Recycling Programs in Hawaii?*

Opportunity for public feedback on problem statement



*Landfill disposal of potentially recyclable materials (i.e., electronics, deposit beverage containers, and non-deposit glass) can negatively impact the environment and affect human and wildlife health, leading to enormous costs.*

Receive feedback from Task Force on problem statements





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# Potential Solutions

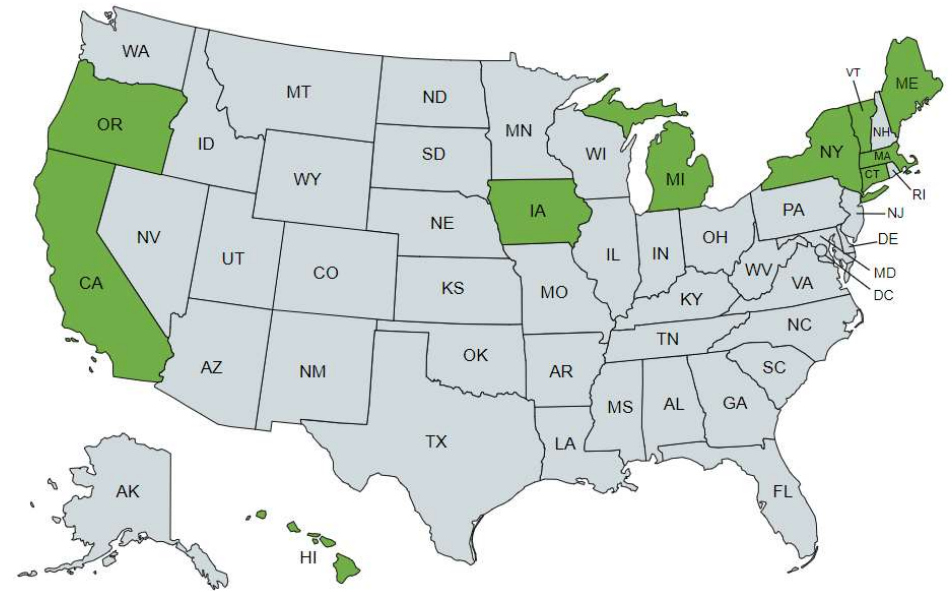
Potential Solutions  
Overview



Leading with Science®

## Federal Government – DBC (HI-5) Program

- No nation-wide bottle bill in the United States
- Ten states (plus Guam) have implemented their own bottle deposit program

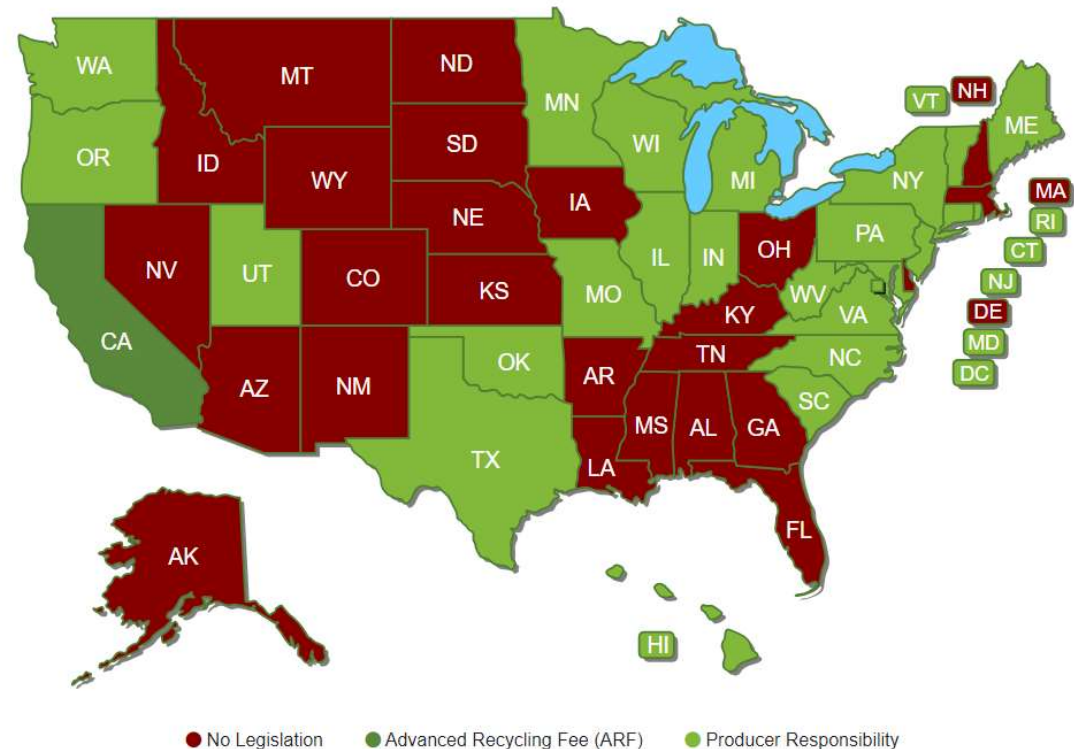


# Bottle Bills by State

State	Redemption Rates (a)										Estimated Percent of Deposit Beverage Sales Recycled Via Curbside Programs (b)	Amount of Deposit	Handling Fee	Beverages Covered	% of Beverage Units Sold Covered by Deposit (c)	Population with Curbside Access (d)
	2013	2014	2015	2016	2017	2018	2019	2020	2021							
Michigan	95%	94%	93%	92%	91%	89%	89%	73%	75%★		4%	10¢	None. No redemption centers.	- Beer & malt beverages - Carbonated soft drinks, sparkling water, kombucha - Wine coolers & distilled spirits coolers	55%	61%
Maine	90%				84%				76%★		4%	Wine & liquor ≥ 50mL: 15¢ All others: 5¢	4.5¢	- All beverages except dairy products and unprocessed cider.	92%	67%
Oregon	71%	68%	64%	64%	73%	81%	86%	77%	81%★		4%	10¢	None; Co-op funds redemption centers in partnership with retailers.	- All beverages except wine, distilled liquor, dairy milk and plant-based milk, and infant formula.	88%	95%
Vermont	76%								78%★		4%	Liquor: 15¢ All others: 5¢	Brand-sorted containers: 4¢ Commingled brands: 3.5¢	- Beer & malt beverages - Carbonated soft drinks & sparkling water - Wine coolers - Liquor	46%	76%
California	74%	71%	72%	72%	68%	66%	67%	62%	61%			<24 ounces: 5¢ ≥ 24 ounces: 10¢	Handling Fee of \$0.00950 per container paid to handling fee sites only. Processing payments for glass, PET, and HDPE average \$0.009 per container to redemption centers, curbside programs and other programs. All RCs and programs also keep revenue from scrap sales.	- Beer & malt beverages - Carbonated soft drinks & sparkling water - All other non-alcoholic beverages - Wine coolers & distilled spirits coolers - Excluded: milk, some juices, wine, spirits	88%	91%
Hawaii	74%	71%	67%	65%	62%	63%	63%	62%	62%			5¢	Variable fees, effective 7-1-21: aluminum & bi-metal: 3.4¢ glass 8.1¢, plastic 4¢ RCs also keep revenue from scrap sales.	- Beer & malt beverages - Carbonated soft drinks & sparkling water - All other non-alcoholic beverages - Wine coolers & distilled spirits coolers - Excluded: milk, wine, spirits	88%	77%
New York	62%	64%	65%	66%	65%	64%	64%	64%	70%		5%	5¢	3.5¢	- Beer & malt beverages - Carbonated soft drinks & sparkling water - Bottled water including flavored water - Wine coolers	78%	95%
Iowa	78%			65%								5¢	1¢	- Beer & malt beverages - Carbonated soft drinks & sparkling water - Wine coolers - Wine & Liquor	63%	66%
Massachusetts	66%	66%	59%	56%	57%	52%	50%	43%	38%		10%	5¢	Redemption centers: 3.25¢ Retailers: 2.25¢	- Beer & malt beverages - Carbonated soft drinks & sparkling water	40%	77%
Connecticut	57%	53%	51%	49%	52%	50%	50%	44%	46%		10%	5¢ (increases to 10¢ on 1/1/24)	Beer: 2.5¢ Other beverages: 3.5¢ Liquor "nips" have 5¢ sales fee	- Beer & malt beverages - Carbonated soft drinks & sparkling water - Bottled water - Other non-carbonated beginning 1/1/23	77%	86%

## Federal Government - Electronics Recycling Program

- No federal legislation requiring electronics recycling in the U.S.
- Twenty-five states (plus the District of Columbia) have implemented their own electronics recycling laws



## Federal Government – Glass ADF Program

- No federal legislation requiring non-deposit glass (i.e., wine, hard liquor, and milk/dairy product bottles) recycling in the U.S.
- Two states have deposit fees for wine bottles (Maine and Iowa)
- Two states have deposit fees for liquor bottles (Maine and Vermont)



**Subject Matter Expert**



# **Integrated Solid Waste Management Plan Update Task Force Briefing: Statewide Recycling Programs**

Speakers: Terry Telfer and Walter Alcorn

**Bio:** Terry Telfer, President, Reynolds Recycling

Walter Alcorn, Vice President, Environmental Affairs and Industry Sustainability, Consumer Technology Association





**Terry Telfer**  
President, Reynolds Recycling

# Subject Matter Expert



# TOPICS TO HELP THE HI-5 PROGRAM







## RE-ENERGIZE HI-5 PROGRAM

- ❑ Report annually to Hawaii Residents with the results of their recycling efforts.
- Encourage, Inform and energize Hawaii Residents about their recycling effects.
  - Table below shows energy saving statistics -

<u>TON OF ALUMINUM</u>	<u>TON OF GLASS</u>	<u>TON OF PLASTIC</u>
<b>14,000 KWH OF ENERGY</b>	<b>42 KWH OF ENERGY</b>	<b>5774 KWH OF ENERGY</b>
<b>39.6 BARRELS OF OIL</b>	<b>.12 BARRELS OF OIL</b>	<b>16.3 BARRELS OF OIL</b>
<b>10 CUBIC YARDS OF LANDFILL SPACE</b>	<b>2 CUBIC YARDS OF LANDFILL SPACE</b>	<b>30 CUBIC YARDS OF LANDFILL SPACE</b>

- Utilize media such as radio, television and newspaper
- Reynolds recommends raising the deposit to 10 cents per container.



## Improving Consumer Trust in the Program.

- ❑ New Segregated Rate study to fight perception that the system is cheating the consumer.
- Deal with the discrepancies caused by increases in small and lighter weight plastic containers. **This may require a 3<sup>rd</sup> Tier.**
- Annual or Bi-annual review of segregated rates for accuracy.





## INCREASE CUSTOMER CONVENIENCE

- ❑ At the peak of the HI-5 Program the Recycling Industry had 119 locations State-Wide with a 78% recycling rate.
  - Today there are 54 locations State-Wide with a 56% recycling rate.
- ❑ Rural Subsidies to support locations with lower population densities: such as Hauula, Kahuku, and Waimanalo.
- ❑ Grocery stores need to actually support the HI-5 Deposit Program.
  - Enforcement on Oahu stores without recycling nearby with no hardship exclusions.
  - Recycling can be done outside of stores in parking lots if not able to be performed inside of the stores.





## **ASSIST RECYCLERS TO KEEP UP WITH INFLATION**

- ❑ State of Hawaii uses recommendations from the Crowe Report (published 6/23) to determine handling fees for the 10/23-10/24 period.
- Report does not accurately reflect current inflation, salary and other conditions.
  - No increase in handling fees to assist with employee costs effective January 2024.
    - State of Hawaii mandated 16.6% increase of minimum wage in January 2024 are not taken into account.
    - Increase in wages also impacts Worker's Compensation and TDI premiums by 12%.
    - 25% increase of Medical benefits.



## ASSIST RECYCLERS TO KEEP UP WITH INFLATION

*(CONTINUED)*

- Commodity prices are always unstable.
  - Commodity prices declined drastically after March of 2023.
    - Aluminum prices dropped 44%.
    - Plastic prices dropped 45%.
- Property insurance increase due to abnormal climate changes causing natural disasters.





## SUPPORT GRANT PROGRAMS

- ❑ Current Handling Fees/Commodity values are not adequate to keep up with costs of daily wear and tear on recycling equipment.
- Last grant program was awarded in 2008.
- In the last 15 years there has not been adequate program support to improve quality for Recycling companies.
  - Deteriorating equipment – tractors, trailers, forklifts, skid steers, etc.
  - **New Tractors cost \$200,000 each, new trailers logoed and delivered to Hawaii, cost around \$60,000 each etc.**





Walter Alcorn

Vice President, Environmental Affairs  
and Industry Sustainability, Consumer  
Technology Association

**Subject Matter Expert**

# CTA Slides for Hawaii Solid Waste Management Programs Task Force Meeting

October 2023





## Background

### Extended Producer Responsibility (EPR)

- Hawaii mandates EPR for electronics manufacturers of TVs and computer equipment
  - Manufacturers must arrange and pay for recycling of a % of the weight of all products they sell into Hawaii the previous year
    - 2023: Manufacturer recycling targets are 50% of the weight sold in 2022
    - 2024: Manufacturer recycling targets are 60% of the weight sold in 2023
    - 2025: Manufacturer recycling targets are 70% of the weight sold in 2024
- Legal mandates are on manufacturers, not counties

### Resource Reduction Alternative

- Electronics recycling is a once a year or two action (at most), need to find better ways to integrate with other recycling programs.

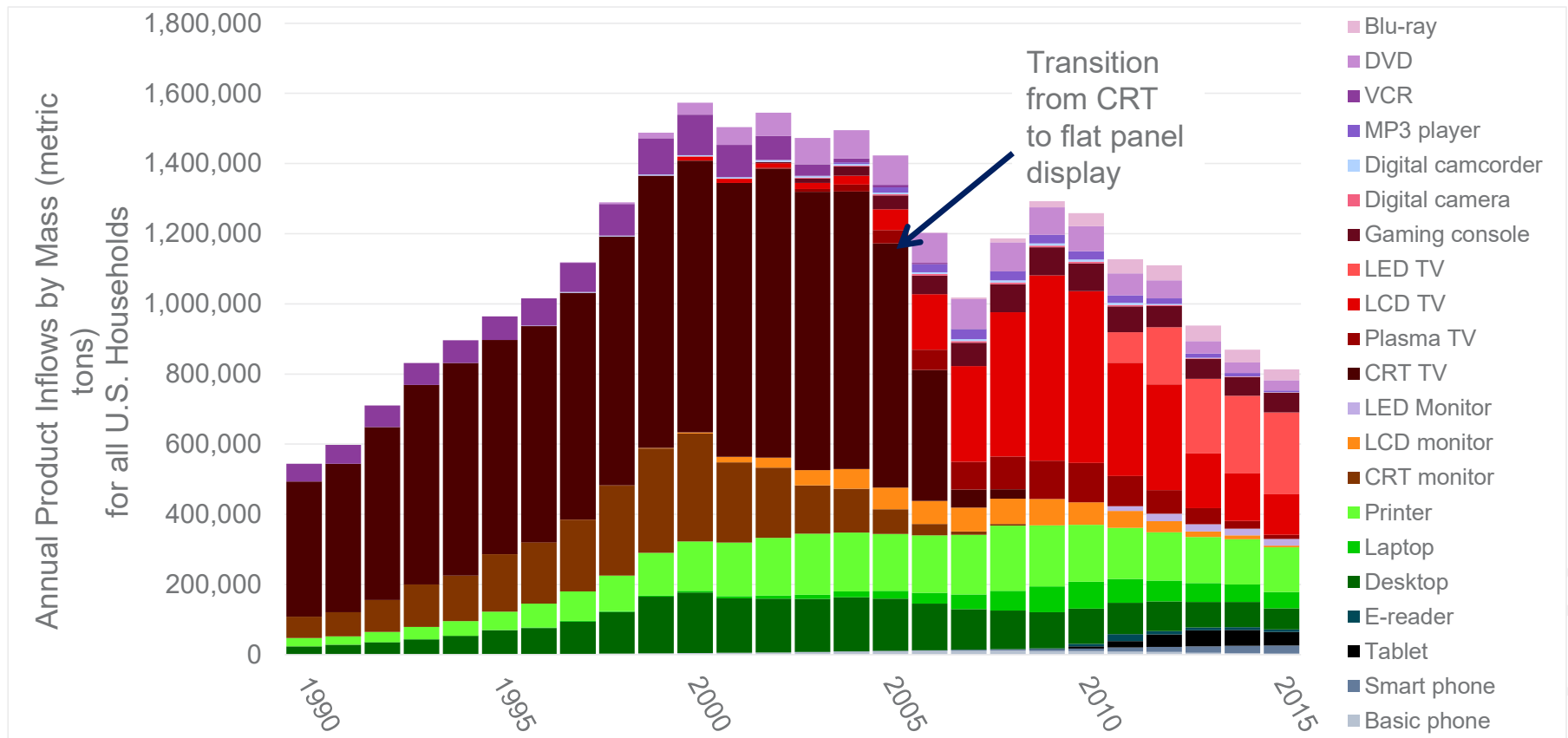
## Background

### Challenges

- Recycling targets are increasing as returns decrease, sales weights are flat
- Collection convenience is not great, even under the 2022 law update
  - Only 11 of the 25 zip codes have regular free drop off for residents and business according to <https://health.hawaii.gov/ewaste/e-waste-collection-locations/>
  - The law allows manufacturers to cover the other 14 zip codes through consumer-paid pickups that range from \$150 - \$400 per pickup.
  - Non-routine collection events are also held in some areas.

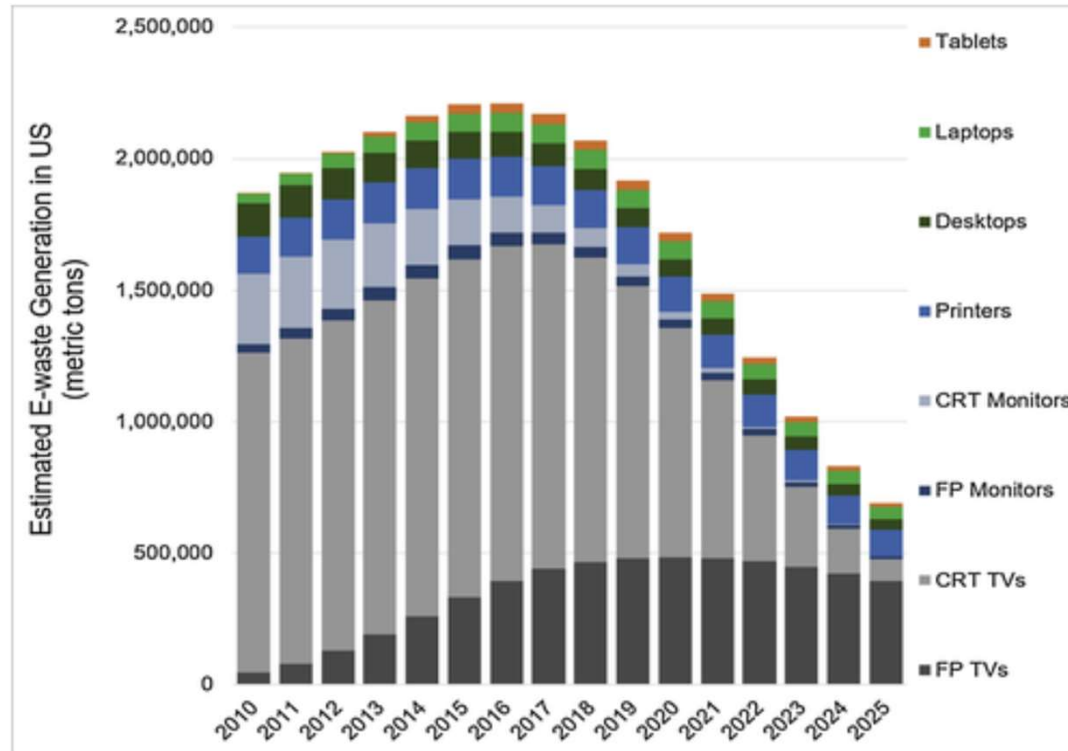


# Net weight of products put on market



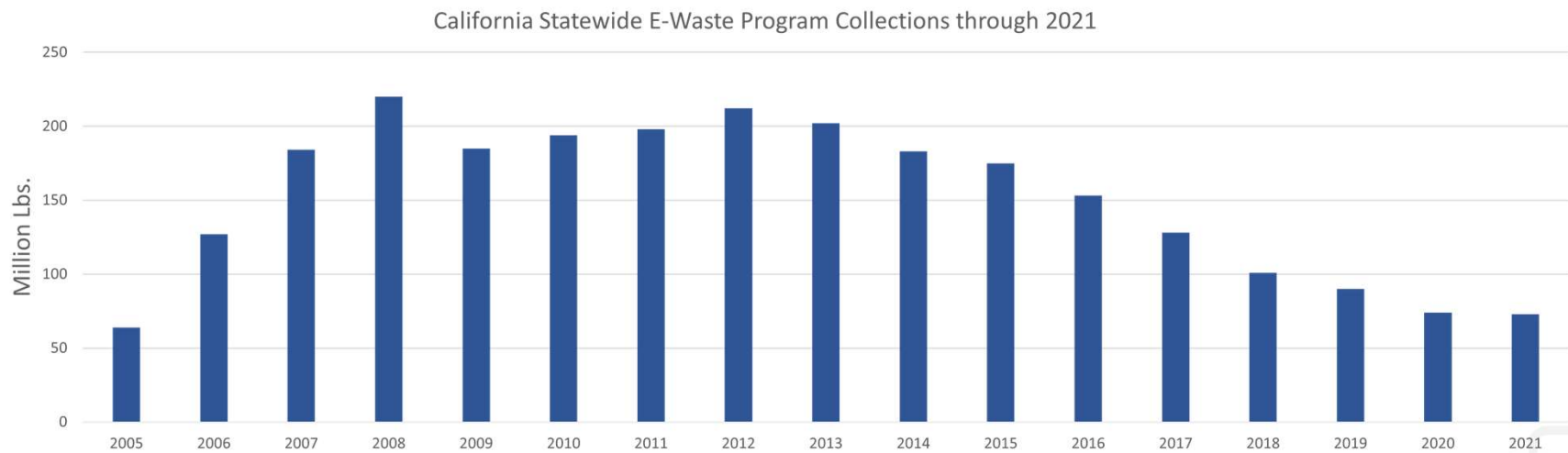
Source: CW Babbitt, Rochester Institute of Technology, Golisano Institute for Sustainability, 2018

# U.S. E-Waste Trend



Source: Althaf, S, CW Babbitt, and R Chen. "Forecasting Electronic Waste Flows for Effective Circular Economy Planning." *Resources, Conservation and Recycling* 151. (2019): 104362. Print.

# Real World E-Waste Results



Source: CalRecycle, [Quarterly Updates of CEW Recycling Program](#).

# Break

10 minutes





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Out-of-State

# Comparative Analysis

## Extended Producer Responsibility (EPR)



EPR is “an **environmental protection strategy** aimed at decreasing total environmental impact from a product and its packaging, by ensuring that the producers of the product take responsibility for the entire lifecycle of their products through the take-back, recycling, and final disposal of their products, including its packaging.”



## Extended Producer Responsibility (EPR) – DBCs

- Break Free From Plastic Pollution Act (2021)
  - Producers with annual revenues greater than \$1 million
  - Producers with more than one ton of covered products
- Covered products:
  - **Containers\***
  - Packaging
  - Paper
  - Food service products



## Extended Producer Responsibility (EPR) – Electronics

### State of Hawai‘i:

- HRS Chapter 339D

### State of Washington:

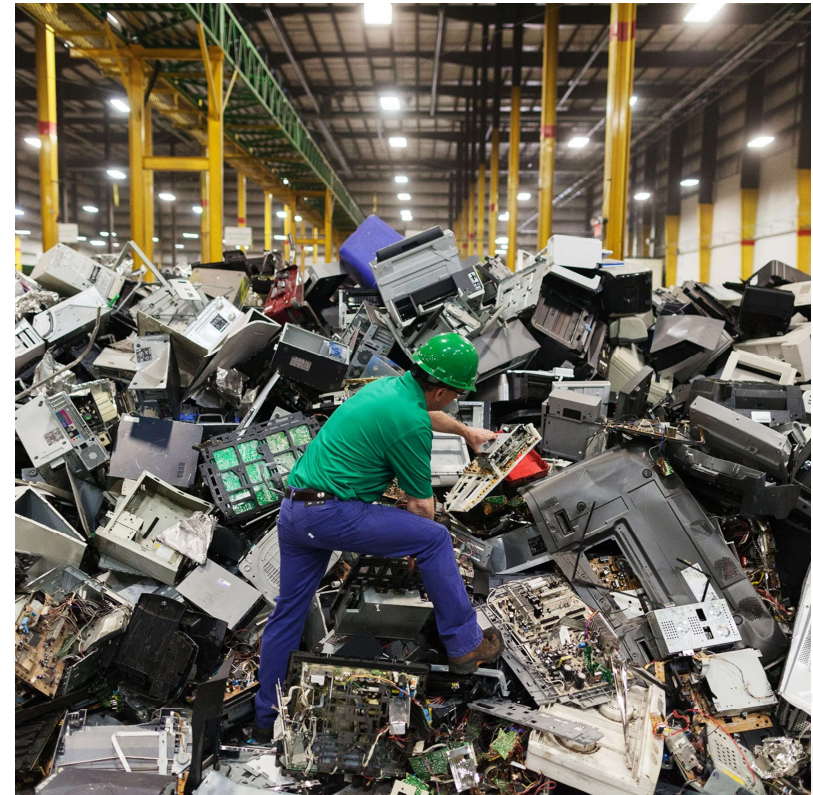
- SB 6428

### State of Wisconsin:

- Electronics Recycling Rule

### State of California:

- The Electronic Waste Recycling Act (SB 20, Sher, Chapter 526, Statutes of 2003)



# Extended Producer Responsibility (EPR) – Non-Deposit Glass

## State of California

- SB 1013



## Government Programs and Subsidies

- State will explore updates or improvements to:
  - Existing infrastructure;
  - Policies and regulations;
  - Grants
  - Outreach and education opportunities.



## Government Programs and Subsidies - DBCs

### State of Hawai'i :

- Act 176
- HRS Chapter 342G-102
- Act 285
- Bottles4College Program

### Hawai'i Counties:

- Honolulu County:
  - Honolulu City Ordinance, Chapter 9-1.11 (glass)
  - Honolulu City Ordinance, Chapter 9-3.1 (glass)
- Hawaii County
  - US EPA \$1.5 mil grant
- Maui County:
  - Recycling Grant Program

### State of California:

- Recycled Fiber, Plastic, and Glass Grant Program



# Government Programs and Subsidies - Electronics

## State of Hawai'i :

- HRS Chapter 339D

## Hawai'i Counties:

### • Maui County:

- Tri-annual event at Hana Landfill
- Monthly collection events in Lahaina
- Molokai-Naiwa Landfill & Recycling Center

## State of California:

- Electronic Waste Recycling Act



## Government Programs and Subsidies – Non-deposit Glass

### State of Hawai‘i :

- HRS 342G-82

### Hawai‘i Counties:

- Honolulu County:
  - Honolulu City Ordinance, Chapter 9-1.11 (glass)
  - Honolulu City Ordinance, Chapter 9-3.1 (glass)
- Maui County:
  - Recycling Grant Program

### State of California:

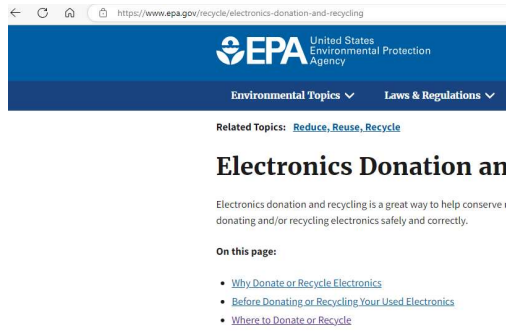
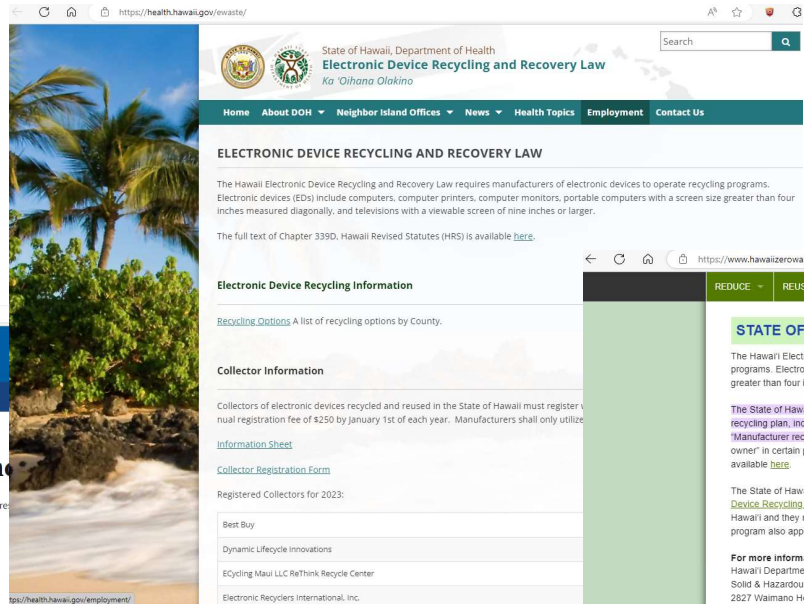
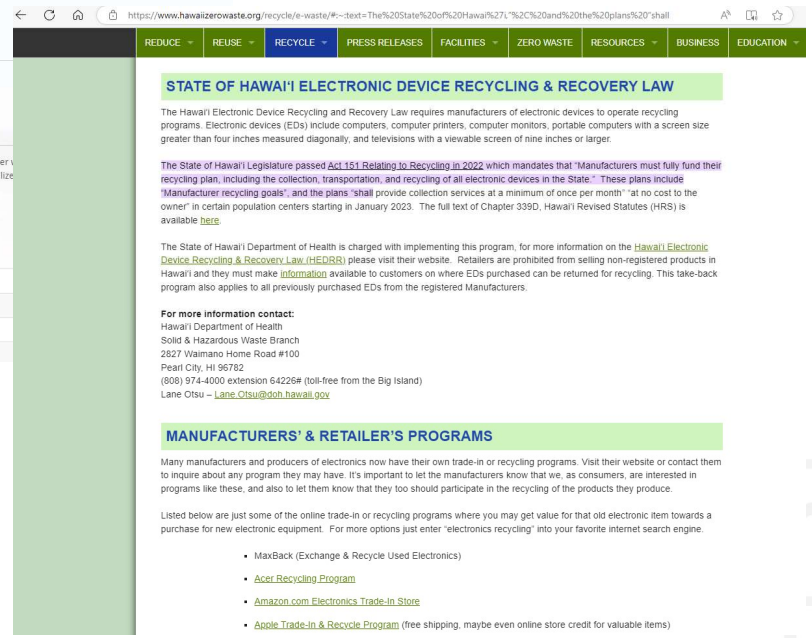
- Recycled Fiber, Plastic, and Glass Grant Program

## Free Market Solutions – Non-deposit Glass





# Education and Outreach Opportunities

**Electronics Donation and Recycling**

Electronics donation and recycling is a great way to help conserve resources and/or recycling electronics safely and correctly.

**On this page:**

- [Why Donate or Recycle Electronics](#)
- [Before Donating or Recycling Your Used Electronics](#)
- [Where to Donate or Recycle](#)

**Why Donate or Recycle Electronics?**

Electronic products are made from valuable resources and materials, including metals, plastics, and glass, all of which require energy to mine and manufacture. Donating or recycling consumer electronics conserves our natural resources and avoids air and water pollution, as well as greenhouse gas emissions that are caused by manufacturing virgin materials.

In 2006, U.S. Geological Survey (USGS) estimated that:

- Recycling one million laptops saves the energy equivalent to the electricity used by more than 3,500 U.S. homes in a year.
- For every million cell phones we recycle, 35 thousand pounds of copper, 772 pounds of silver, 75 pounds of gold and 33 pounds of palladium can be recovered.

Read more in USGS's publication [Recycled Cell Phones—A Treasure Trove of Valuable Metals \(pdf\)](#).

**Related Information**

- Check out our [Secret Life of a Smart Phone infographic](#).
- Our [Certified Electronics Recyclers](#) page explains what it means to be a certified recycler.

**STATE OF HAWAII ELECTRONIC DEVICE RECYCLING & RECOVERY LAW**

The Hawaii Electronic Device Recycling and Recovery Law requires manufacturers of electronic devices to operate recycling programs. Electronic devices (EDs) include computers, computer printers, computer monitors, portable computers with a screen size greater than four inches measured diagonally, and televisions with a viewable screen of nine inches or larger.

The full text of Chapter 339D, Hawaii Revised Statutes (HRS) is available [here](#).

**MANUFACTURERS' & RETAILER'S PROGRAMS**

Many manufacturers and producers of electronics now have their own trade-in or recycling programs. Visit their website or contact them to inquire about any program they may have. It's important to let the manufacturers know that we, as consumers, are interested in programs like these, and also to let them know that they too should participate in the recycling of the products they produce.

Listed below are just some of the online trade-in or recycling programs where you may get value for that old electronic item towards a purchase for new electronic equipment. For more options just enter "electronics recycling" into your favorite internet search engine.

- [MaxBack \(Exchange & Recycle Used Electronics\)](#)
- [Acer Recycling Program](#)
- [Amazon.com Electronics Trade-In Store](#)
- [Apple Trade-In & Recycle Program](#) (free shipping, maybe even online store credit for valuable items)

# Education and Outreach Opportunities (DBC's)

## State of Hawai'i:

- Promote collection events through communication outlets (i.e., newspapers, radio, social media)
- Collaborate with NGOs to organize collection events
- Develop additional education and outreach collateral
- Kōkua Hawai'i Foundation
  - Plastic Free Hawai'i School Art Contest
  - Environmental Education Events and Project Grants
  - 3Rs School Recycling Program Drives

## State of Oregon:

- LD 1909

## State of Connecticut:

- RecycleCT
  - Educational Videos
  - School Grant Programs
  - RecycleCT Wizard



## Education and Outreach Opportunities (Electronics)

### Hawai'i Counties:

- Website Information
- Promote e-waste Collection Events

### Kaua'i County:

- Electronic waste recycling event
- Recycling Education Community Events
- School e-waste Collection Contests
- Social Media Advertising

### State of Washington:

- WAC 173-900-980

### State of Maryland:

- eCycling Television and Radio commercials
- "Rethink Recycling" Sculpture Contest



# Resource Reduction Alternatives – DBCs



## Resource Reduction Alternatives – Non-Deposit Glass

### State of Hawai‘i:

- Support local reduce/reuse alternatives

### State of Oregon:

- HB 2443 “Wine Growler Law”

### Other:

- Wine bottle alternatives
  - Cardboard
  - Flax fiber





*Share your thoughts on materials presented. What opportunities would you like to encourage to enhance the existing statewide recycling programs?*

Public Comment



*Task Force Members: Share your thoughts on the information presented. What opportunities for improvements to the Statewide recycling programs do you suggest?*

Question for Task Force Response. Each Task Force member share your opinion. Thank you!

## Meeting Summary

- Summarize discussion points, wrap up





## Next Steps / Action Items

- Potential Solutions
- Next Task Force Meeting





## Questions?

State of Hawai'i  
Integrated Solid Waste Management Plan  
Update