





# COUNTY OF MAUI Environmental Protection & Sustainability Division

**Recycling, Composting, and Reducing Waste To Scale Down Greenhouse Gases (CARE-16)**

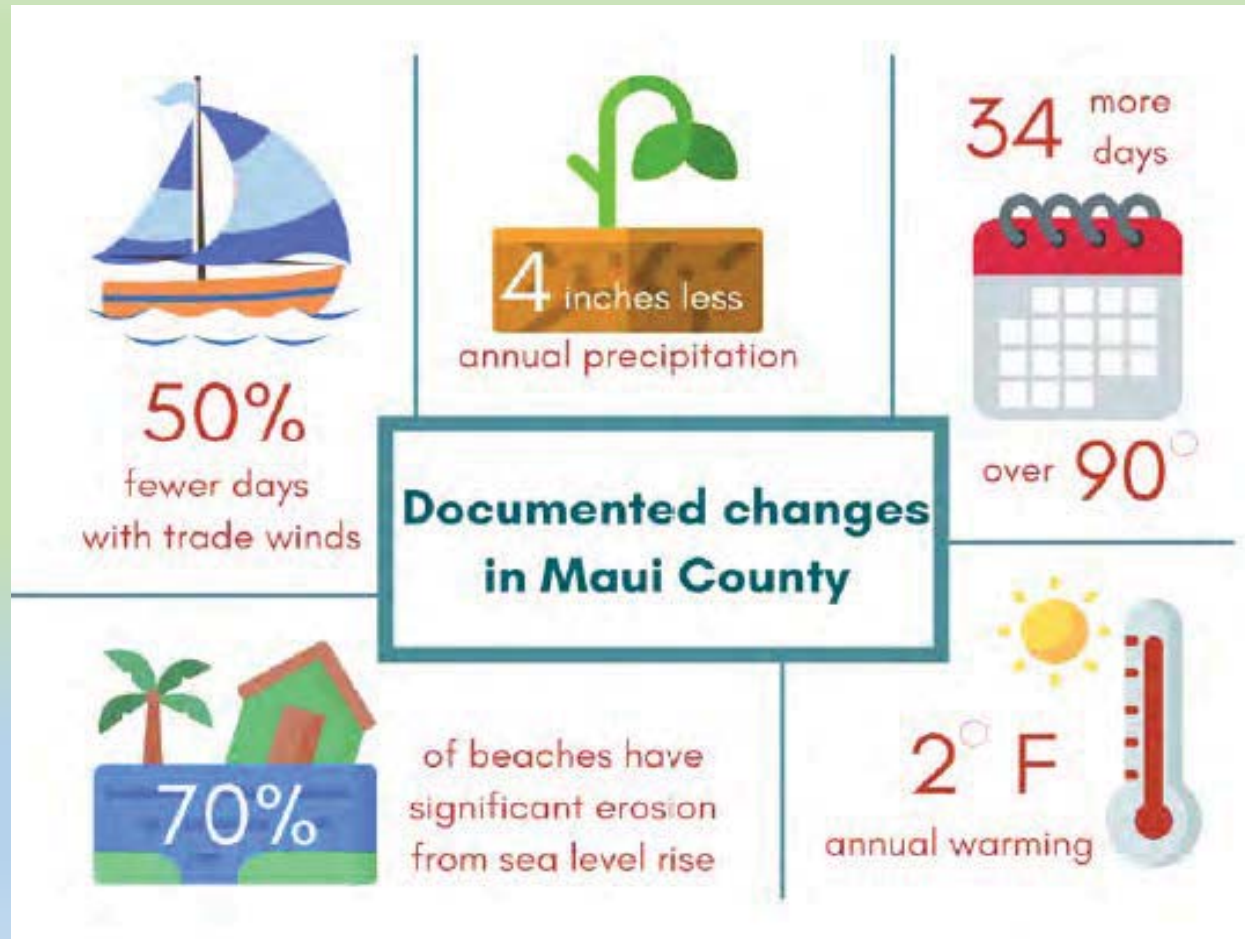
**Recycling Contracts (CARE-68-72)**

Maui County Council

Climate Action, Resilience, & Environment Committee

January 26, 2022

# Climate Change in Maui County



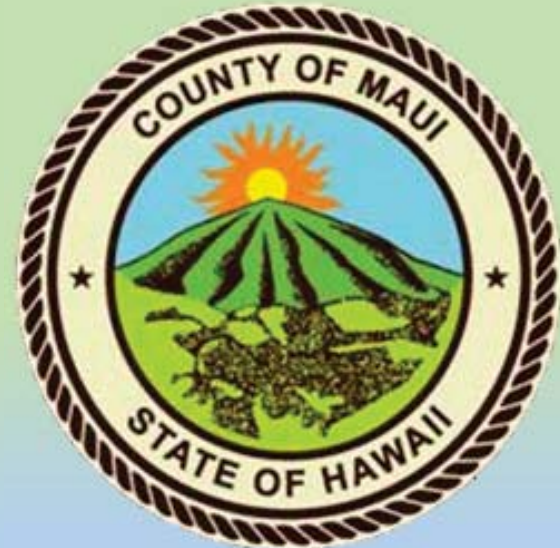
# OVERVIEW

## **Recycling, Composting, and Reducing Waste To Scale Down Greenhouse Gases (CARE-16)**

- Recycling in Maui County
- Climate Goals and Objectives
- Climate Action

## **Recycling Contracts (CARE-68-72)**

- CARE-68: C6539 Eycling Maui: Electronics Recycling
- CARE-69: C6268 Hammerhead Metals: White Goods and AV's
- CARE-70: C6118 Cameron Chemical: UMO
- CARE-71: C6049 Maui Waste Services: County Office Paper
- CARE-72: C6795 Maui Disposal: Dropbox Materials Processing



# WHAT CAN BE RECYCLED IN MAUI COUNTY?

[mauicounty.gov/recycle](http://mauicounty.gov/recycle)

(808) 270-7880

[maui.recycle@mauicounty.gov](mailto:maui.recycle@mauicounty.gov)

**RESIDENTIAL RECYCLING GUIDE A-Z**  
 Your guide to where to take what on Maui.  
 If you don't see what you're looking for here, call the Recycling Hotline at 270-7880.  
[mauicounty.gov/recycle](http://mauicounty.gov/recycle)

<b>APPLIANCES LARGE</b>  <ul style="list-style-type: none"> <li>• Donate items that work</li> <li>• Free drop-off at Hammerhead Metals 280-8844</li> <li>• County curbside pick-up 270-6352 (fee)</li> </ul>	<b>APPLIANCES SMALL</b>  <ul style="list-style-type: none"> <li>• Donate items that work</li> <li>• Hammerhead Metals 280-8844 (fee)</li> <li>• If Hammerhead Metals doesn't take it donate or take to landfill</li> </ul>	<b>AUTO BATTERIES</b>  <ul style="list-style-type: none"> <li>• L-I International 686-4362 or Hammerhead Metals 280-8844 (fee)</li> <li>• Stores accept old batteries when new ones are purchased (fee)</li> </ul>	<b>BATTERIES</b>  <ul style="list-style-type: none"> <li>• Spring Household Hazardous Waste Collection Event: <a href="http://mauicounty.gov/recycle">mauicounty.gov/recycle</a></li> </ul>	<b>CFL BULBS</b>  <ul style="list-style-type: none"> <li>• CFL bulbs: Home Depot 889-7800</li> <li>• Longsight curbside curbside Spring Household Hazardous Waste Collection Event: <a href="http://mauicounty.gov/recycle">mauicounty.gov/recycle</a></li> </ul>
<b>ELECTRONICS</b>  <ul style="list-style-type: none"> <li>• Donate items that work</li> <li>• Computers, Printers, TVs, and Monitors</li> <li>• Recycling fees 280-8844</li> <li>• Call phones: YUMA 242-9811</li> <li>• All other items: Landfill</li> </ul>	<b>GREENWASTE</b>  <ul style="list-style-type: none"> <li>• EKO Compost 672-8844</li> <li>• Kahala Compost 574-3859</li> <li>• Obsolete Transfer Station 889-0832</li> <li>• Hana Landfill 264-6313</li> </ul>	<b>FURNITURE</b>  <ul style="list-style-type: none"> <li>• Donate usable items</li> <li>• Take non-usable items to the landfill 270-6353</li> </ul>	<b>HAZARDOUS WASTE</b>  <ul style="list-style-type: none"> <li>• Spring Household Hazardous Waste Collection Event: <a href="http://mauicounty.gov/recycle">mauicounty.gov/recycle</a></li> </ul>	<b>MAGAZINES</b>  <ul style="list-style-type: none"> <li>• These are NOT recyclable</li> <li>• Reuse and donate</li> <li>• Switch to paperless subscriptions</li> <li>• Opt out of junk mail: <a href="http://DMAchoice.org">DMAchoice.org</a></li> </ul>
<b>MISCELLANEOUS METAL</b>  <ul style="list-style-type: none"> <li>• Donate items that work</li> <li>• Hammerhead Metals 280-8844 (fee)</li> <li>• If Hammerhead Metals doesn't take it, donate or take to landfill</li> </ul>	<b>OFFICE PAPER</b>  <ul style="list-style-type: none"> <li>• This is NOT recyclable</li> <li>• Use both sides of paper</li> <li>• Switch to paperless subscriptions</li> <li>• Opt out of junk mail: <a href="http://DMAchoice.org">DMAchoice.org</a></li> </ul>	<b>OLD MEDICATION</b>  <ul style="list-style-type: none"> <li>• Kaiser medical box exchange program 243-8000 (fee deposit)</li> <li>• Public Department and most pharmacies have programs. Call first</li> </ul>	<b>PACKING MATERIALS</b>  <ul style="list-style-type: none"> <li>• These are NOT recyclable</li> <li>• Reuse when you can</li> <li>• Pack and ship stores reuse materials. Call first</li> </ul>	<b>PAINT</b>  <ul style="list-style-type: none"> <li>• Water based: absorb in kitty litter and landfill</li> <li>• Oil-based paint: Spring Household Hazardous Waste Collection Event: <a href="http://mauicounty.gov/recycle">mauicounty.gov/recycle</a></li> </ul>
<b>PALLETS</b>  <ul style="list-style-type: none"> <li>• Take untreated pallets to EKO Compost 572-8844</li> </ul>	<b>PROPANE TANKS</b>  <ul style="list-style-type: none"> <li>• Take up to 50 gallon tanks to Pan 261-2134</li> </ul>	<b>TIRES</b>  <ul style="list-style-type: none"> <li>• E-H International 686-4352 (fee)</li> <li>• Stores accept old tires when new ones are purchased (fee)</li> </ul>	<b>USED MOTOR OIL</b>  <ul style="list-style-type: none"> <li>Maui Oil Change, *Kahului RAPA, *Wailuku RAPA, *Lafayette RAPA, *Kihali RAPA, *Crescent Transfer Station, *Central Maui Landfill, *Hana Landfill</li> <li>*Also take auto to store</li> </ul>	<b>VEHICLES</b>  <ul style="list-style-type: none"> <li>• Residents recycle autos at no charge</li> <li>• Junk Vehicle Disposal Assistance Program: <a href="http://mauicounty.gov/recycle">mauicounty.gov/recycle</a> 270-8102</li> </ul>

RECYCLE RIGHT AND REDUCE WASTE

**Refuse:** single serving packages

**Reuse:** Bring your own utensils, bag, cup, straw, & more

**Recycle:** what you can

Are You **RECYCLING...** Or **WISH-CYCLING?**

Wish-Cycling is putting non-recyclables in the recycling bin, hoping they can be recycled...they cannot. Please recycle **ONLY** what's allowed.

<b>RECYCLE ONLY PLASTIC BOTTLES WITH NECKS</b> 	<b>RECYCLE ONLY ALUMINUM AND BI-METAL CANS</b> 	<b>RECYCLE ONLY MIXED CARDBOARD</b> 	<b>RECYCLE ONLY NEWSPAPER</b> 	<b>RECYCLE ONLY GLASS BOTTLES AND JARS</b> 
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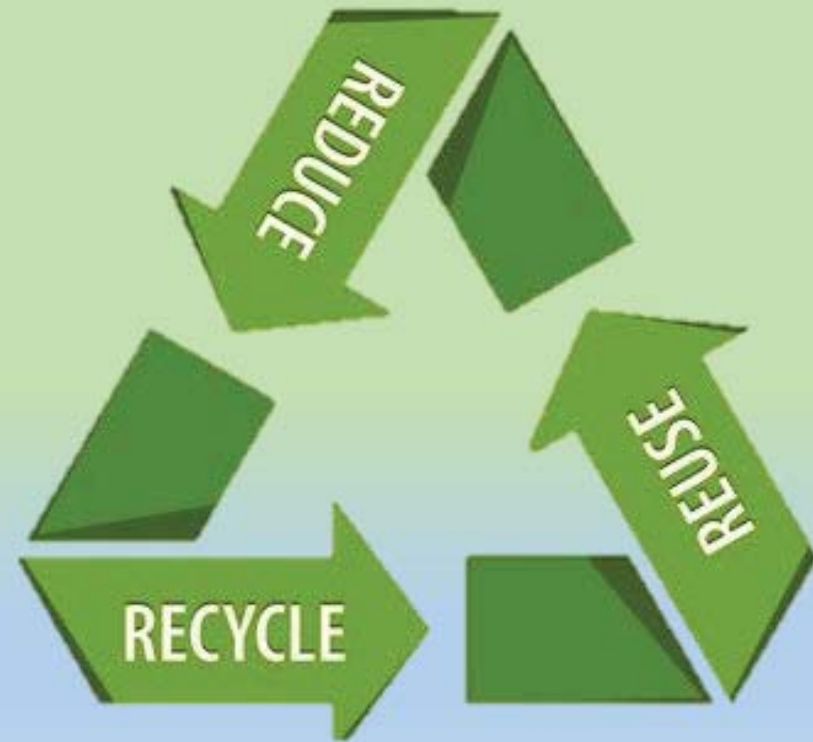
# WHAT CAN BE RECYCLED IN MAUI COUNTY?

- County Programs

- HI-5 DBC Beverage Container Program
- County Office Paper Recycling
- Moving toward GW/Organics solutions
  
- Support of Zero Waste initiatives through grants
- ISWMP

- Private Facilities

- Metals
- C&D
- Composting



# Where Do Our Recyclables Go?



Recycling  
Dropbox  
Centers



Glass, OCC, Newspaper,  
#1 & #2 Plastic Bottles,  
Metal Cans

Recycling MRF  
(Materials Recovery  
Facility)



Sorting and Baling

2671  
Tons/year  
(FY21)



Shipped Overseas



New Recycled  
Products

# Where In the World Do Maui County Recyclables Go?

Our processor is required to report where recyclables from County Residential Recycling Centers are shipped in order to ensure that our recyclables are being recycled.

June 2021:

- OCC (cardboard) - Genesis Resource Enterprise, Inc. – Shanghai, China
- OCC (cardboard) - Greenhills International – Taiching, Taiwan
- PET 7030 Plastic - Newport CH International – Oakland, CA USA
- Glass - Strategic Materials Inc. – Oakland, CS USA

It is important to recycle right because our recyclables are part of a global commodity market.





## **Climate Goal:**

# **Reduce Greenhouse Gases Caused by Municipal Solid Waste**

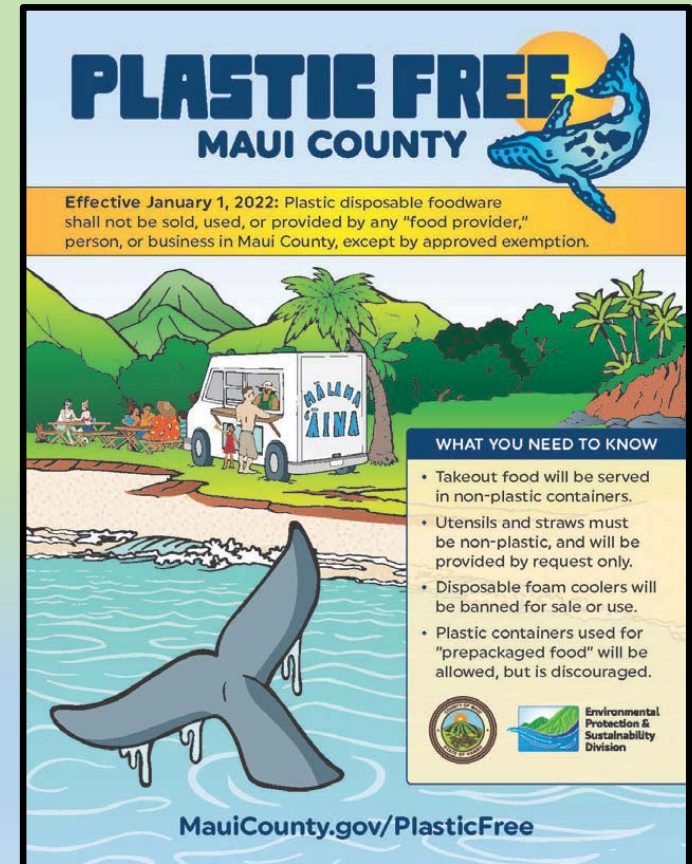
## Objectives:

- Decrease the use of landfills which produce methane and other GHG
- Capture landfill emissions
- Explore sustainable emerging technologies
- Decrease transportation emissions by reducing the need to ship materials in or out for recycling
- Decrease the influx of consumables by prioritizing waste reduction and behavioral change

# Climate Action – Reducing the Carbon Footprint of Maui’s Waste

## 1. Pursue a Zero Waste Maui County

- Zero Waste is: A set of principles and practices that fosters a circular economy of production, conservation of resources, and minimizing landfill disposal, prioritizing reuse/redistribution of resources and the reduction of waste at the source
- Reducing Waste At The Source
  - Bans: Plastic Bags, Polystyrene and Plastics foodware, foam body boards and coolers
  - EPR- Extended Producer Responsibility or Product Stewardship
- Empowering Waste Reduction Practices
  - BYO! Giveaways with Hui Zero Reusable meal container program
- Supporting Local Reuse Systems and Initiatives
  - Recycling Grants: Hui Zero, Trailer of Trash
- Sustainable Waste Management
  - Redesigning waste systems that promote Zero Waste
  - 2021 Integrated Solid Waste Management Plan
- Education
  - Working towards behavioral change



# Climate Action – Reducing the Carbon Footprint of Maui’s Waste

## 2. Reduce and Recycle Our Food Waste

- Maui County’s waste stream consists of **20% food waste** generating high GHG’s as it decomposes in the landfill
- Reduce and divert food waste through education, incentives and mandates
- Carbon sequestration and local agriculture
  - Composting
  - Anaerobic Digestion (WTE) + Composting
  - Other sustainable technologies



# Climate Action – Reducing the Carbon Footprint of Maui’s Waste

## 3. Explore Local Recycling Options for Dropbox Materials

- Economy of Scale – Finding the right balance for business
- Large scale recycling and remanufacturing in Hawai`i has not yet been shown to be economically feasible
- Implement Systemic and Infrastructure Improvements for Local Recycling Options
  - Short term initial investments for long term solutions
  - Multi benefits
  - Take the time to get it right



# Climate Action – Reducing the Carbon Footprint of Maui’s Waste

- **Glass - Local Initiatives**
  - ReVive Glassworks
    - Small-scale glassware upcycling
  - Ridge to Reef Glass-to-Sand Pilot Recycling Grant
    - Possible uses for construction (pipe bedding) and black water filtration systems to replace cesspools
    - Potential for larger scale resource renewal
- **OGG - Cardboard**
  - Study feasibility of composting a portion of cardboard
  - Current global market for OGG is strong
  - Offsets needs for raw materials



# Climate Action – Reducing the Carbon Footprint of Maui’s Waste

- **Newspaper/Mixed Paper**
  - Not compostable: inks, chemicals, etc.
  - Global market is in a good place right now; reduces need for raw materials
  - Focus on promoting digital options to reduce paper use
- **Metals**
  - No viable local options, highest value for recycling
  - Reduces need for metal mining resource extraction



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# Climate Action – Reducing the Carbon Footprint of Maui’s Waste

## Plastics - Consistent global market, but how can it be used locally?

- Precious Plastics/ByFusion ByBlock
  - Smaller scale technologies to use waste plastic to make new products and building materials
- Waste-To-Energy?
  - Incineration is not a climate friendly option
  - Gasification/Pyrolysis/Other Plastic-to-Fuel
  - \*A pilot project must demonstrate economic, sustainable, and scalable viability\*
    - Must be GHG neutral and Zero Waste-compatible
    - Possible benefits include:
      - Reduce volume of waste to landfill
      - Offset petroleum use
      - Addressing marine debris



# Climate Action – Reducing the Carbon Footprint of Maui's Waste

## **We can scale-down GHG emissions caused by MSW by**

- Pursuing a Zero Waste Maui County
- Reducing and Recycling Our Food Waste
- Exploring Local Recycling Options for Dropbox Materials

## **With**

- Planning
- Time
- Investment
- Commitment to Overcoming Barriers



# CARE-68:72: Recycling Contracts

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# County of Maui Environmental Protection & Sustainability Division

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Division Manager  
[mauicounty.gov/recycle](http://mauicounty.gov/recycle)  
Recycling Hotline: (808) 270-7880  
email: [recycle.maui@mauicounty.gov](mailto:recycle.maui@mauicounty.gov)

