

ZERO | Waste

Proposed Strategies Report Gainesville City Commission



SEPTEMBER 2, 2021

kessler consulting inc.
innovative waste solutions

Welcome and Introductions

Michael Heimbach, Sustainability Manager
City of Gainesville Public Works



Chas Jordan, Senior Consultant & Project Manager
Kessler Consulting, Inc.

Background

Zero Waste in Alachua County



Defining Zero Waste

The conservation of all resources by means of responsible production, consumption, reuse and recovery of products, packaging, and materials by minimizing discharges to land, water, or air that threaten the environment or human health.

Guiding Principles of the Strategies Report

01

*Keep
Resources
Local*

02

*Foster Job
Growth*

03

*Emphasize and
Support
Upstream
Solutions*

04

*Mitigate
Climate
Change*

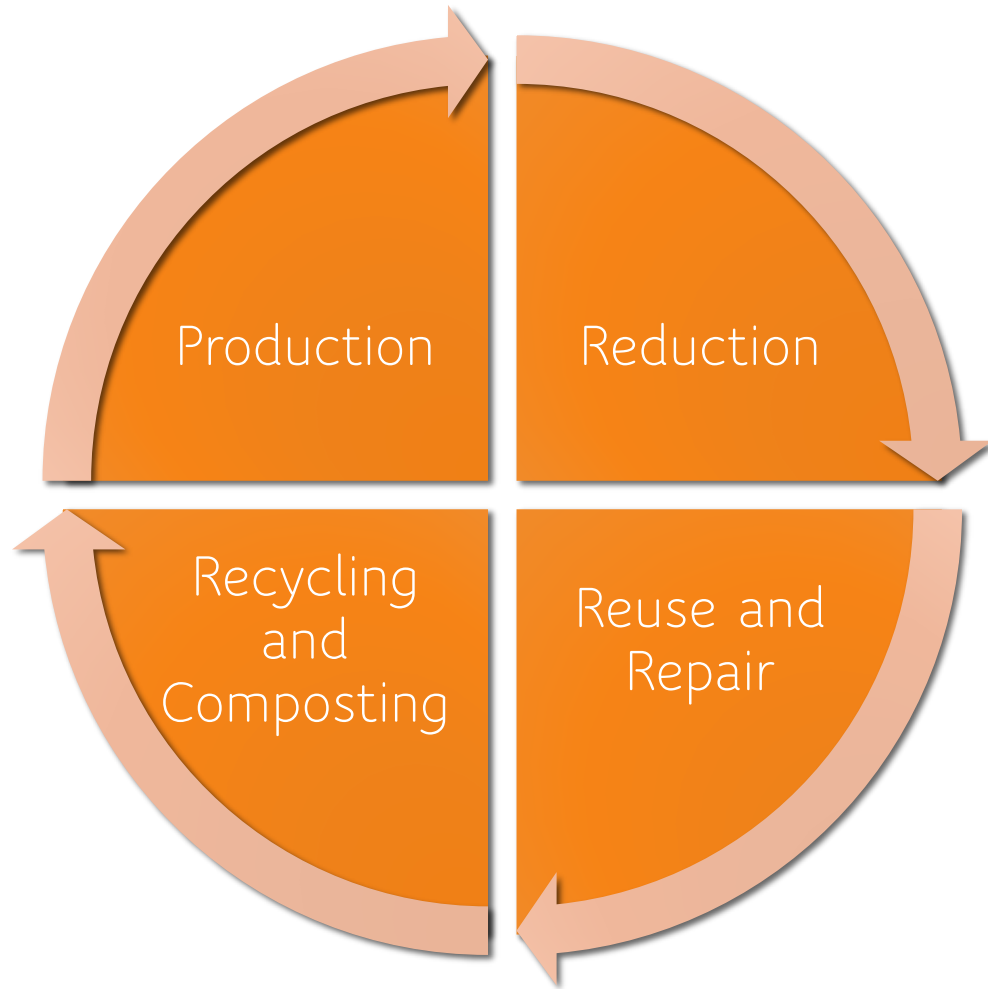
05

*Address
Environmental
Justice and
Create Equity
of Service*

The Linear Economy



Understanding Community-Wide Zero Waste



Source: U.S. Public Interest Research

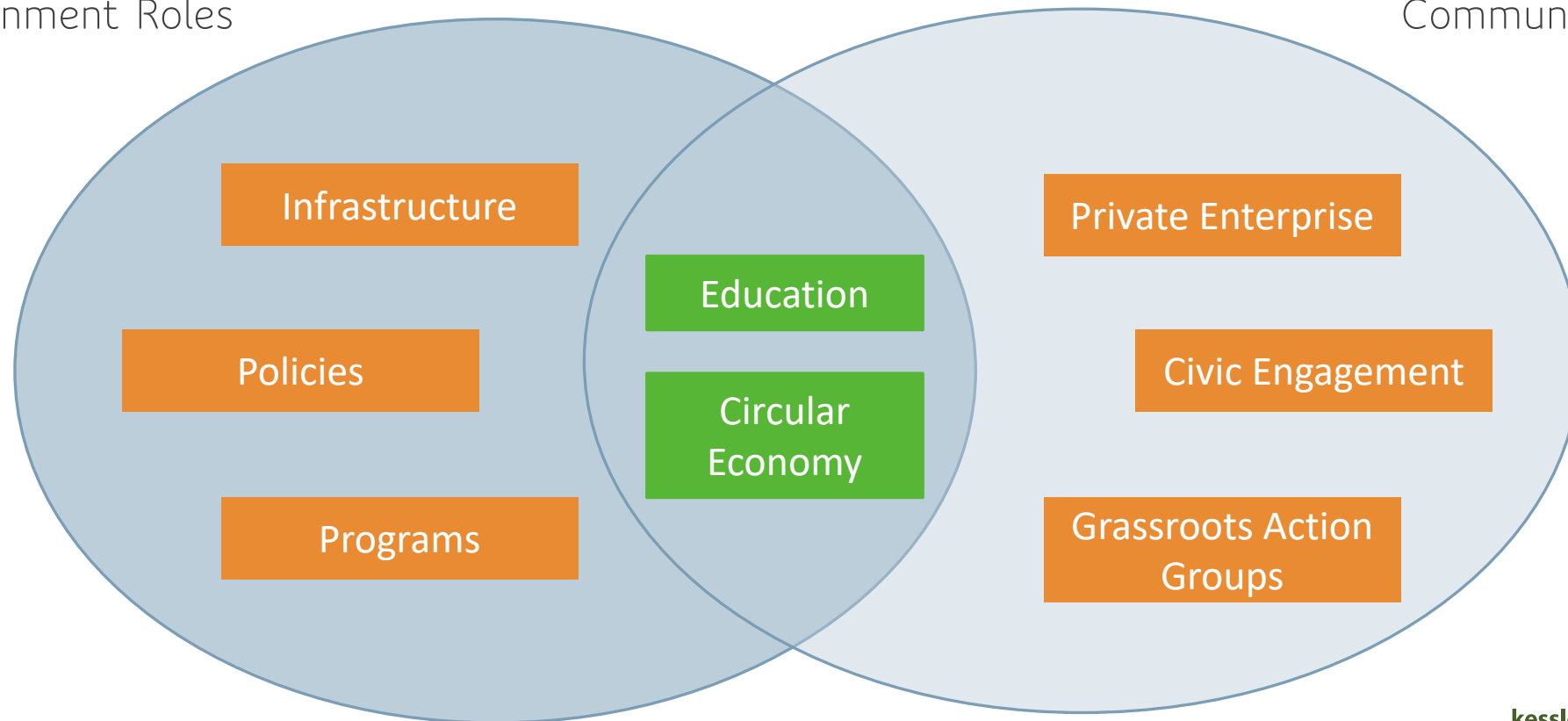


Source: "Three Categories of Zero Waste Solutions" SWANA, CRRRA Zero Waste Training Program (Developed by Kessler Consulting, 2018)

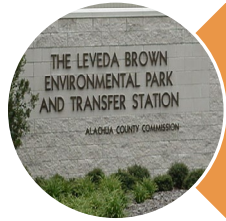
The Players and Their Roles

Government Roles

Community Roles



Alachua County and City of Gainesville Roles



Infrastructure



Policies



Programs

Current Programs and Initiatives

- Pay-As-You-Throw SW rate structures
- Mandated Commercial Recycling
- Multiple Reuse Stores and Facilities
- Hazardous Waste Diversion



Potential Strategies



GENERAL STRATEGIES



ORGANICS MATERIAL
RECOVERY



RECYCLABLES AND
C&D RECOVERY

The background of the slide features a vibrant green surface. On the left, a large, white, three-dimensional recycling symbol is prominently displayed. To the right of the symbol, various pieces of white plastic waste are scattered, including bottle caps, a straw, and a small container. A dark, semi-transparent rectangular box is positioned in the center-right of the image, serving as a backdrop for the title text.

Implementation

Phase 1 Strategies

Section 1. General Recommendations	
In Progress	Establish a Solid Waste Reduction Goal and Formalize by Adopting a Resolution on Zero Waste.
In Progress	Implement Zero Waste Procurement Policy.
In Progress	Reduce Single-Use Accessories in Dining, Take-Out and Delivery of Prepared Meals.
In Progress	Establish Public and Private Partnerships to Facilitate Innovative Research and Develop New Technologies for Managing Solid Waste in Alachua County and City of Gainesville.
	Develop Partnerships with the Private Sector to Implement a Large-Scale Reuse Program.
	Revise Future Contracts and Franchise Agreements with Collections and Processing Vendors to Include Requirements and Incentives Addressing Zero Waste.
Section 2. Organic Material Recovery	
In Progress	Develop a Plan to Phase Organics from Garbage Collection.
In Progress	Expand Food Recovery Networks to Include Alachua and Gainesville Food Pantries.
	Add Incentives to Current Residential Backyard Composting Programs and Expand.
	Establish the Processing Infrastructure Necessary for Diverting Organic Materials from the Waste Stream.
Section 3. Recyclables and C&D Material Recovery	
In Progress	Ban Single-Use Plastics and Polystyrene on City and County Properties and at City and County Events.
In Progress	Expand Existing Mandatory Commercial Recycling Ordinance.
In Progress	Establish Uniform Multi-family Recycling.
	Conduct an Analysis of Recycling and Disposal Fees to Identify Methods for Discouraging the Landfill of Material.
	Expand the Reach of the Business Recycling Toolkit to all Municipalities within the County.
	Support Organizations Working on the Implementation of Take-Back Programs.

Phase 2 Strategies

Section 1.	General Recommendations
	Develop a Community-Wide Zero Waste Recognition and Certification Program.
	Provide Clear, Concise and Consistent Educational Messaging Across the County and City for All Zero Waste Strategy Approaches.
	Evaluate the Waste Reduction Impacts & Potential Capacities for Expansion within Existing Reuse Infrastructure.
Section 2.	Organic Material Recovery
In Progress	Develop Infrastructure for the Collection of Organic Materials.
	Build Upon Recycling Outreach and Education Programming to Include Organic Material Diversion.
Section 3.	Recyclables and C&D Material Recovery
	Revise Building Code Standards or Green Building Ordinances to Address Zero Waste Initiatives for C&D Material Diversion.
	Foster the Expansion and New Development of C&D Reuse and Recycling Facilities for the Region.
	Foster the Development of Regional Reprocessing Facilities.
	Conduct Operational Analysis of Current Material Recovery Facilities (MRFs) to Ensure High Performance Rates that Support Zero Waste.
	Establish Uniform Recycling Messaging and Improve Coordination (during events such as student move-out).

Phase 3 Strategies

Section 1.	General Recommendations
	Create Incentives for Businesses and Institutions to Adopt Policies Focused on Reduction of Problematic Materials.
Section 2.	Organic Material Recovery
	Market Final Compost Product Throughout Community and Provide Education on Importance of Soil Restoration.
Section 3.	Recyclables and C&D Material Recovery
	Adopt New Ordinances Banning Specific Recyclables from Entering Local Transfer Stations, Landfills, and Incinerators.
	Adopt an Ordinance to Incorporate Reusable and Recyclable Materials into Local Government Road Construction and Maintenance Projects.
	Conduct a Feasibility Study on the Development of a Regional CHaRM Facility for Processing Bulky Materials.
	Consider the Use of Waste-to-Energy to Address Difficult to Recover Materials and Waste Streams.
	Adopt a Single-Use Plastic Bag Ban.
	Create a Single-Use Plastics Ban (plastic food ware, Styrofoam) and Litter Reduction Ordinance.
	Create Processes for Stakeholder Involvement Throughout Decision Making and Implementation Phases.
	Establish Dedicated Staff for Zero Waste Outreach and Education Activities at the County and City.

Zero Waste Plan or Policy

Concept Presented by Commissioner Hayes-Santos in 2016

Zero Waste Commitment Made in 2017

Case Studies:

1. Austin, TX
 1. 90% Diversion by 2040
 2. Approval of a Resource Recovery Master Plan
2. Fort Collins, CO
 1. 75% Diversion by 2020, 90% Diversion by 2025
 2. Approval of a Waste Diversion Policy and Climate Future Plan
3. Phoenix, AZ
 1. "40 by 20" 40% Diversion by 2020
 2. Zero Waste Circular Economy by 2050





Zero Waste Procurement Policy

Supporting circular economy efforts and strengthening markets for recyclables by committing to purchase products made with recycled content and supporting businesses that reduce non-recyclable materials for packaging and manufacturing.

Case Studies:

1. Portland, OR:
 1. Sustainable Policy Dealing With:
 1. Consumption Reduction
 2. Life Cycle Costing
 3. Use of Sustainable Materials

Zero Waste Procurement Policy

Gainesville Partnership Options:

1. Association for Plastic Recyclers:
 1. Utilizing their Post Consumer Resin Product Vendor List for selecting contractors or vendors.
2. State Contracts:
 1. Florida Department of Management Services – Climate Friendly Preferred Products List
3. Northeast Recycling Council (NERC):
 1. “Buy Recycled Policy” samples for use by the City
4. EPA:
 1. Recycled Content Tool
 2. Comprehensive Procurement Guideline for Paper Products





Waste Generation Tracking and Management

Select waste tracking mechanism(s) that thoroughly evaluates and measures waste data across both the organization and its municipal solid waste programs. Selected tracking systems should provide tools and insights into determining whether waste reduction targets are being met.

Examples:

1. EPA Waste Wise Partnership
2. Re-Trac Municipal Measurement Program
3. Florida's SMM Tool

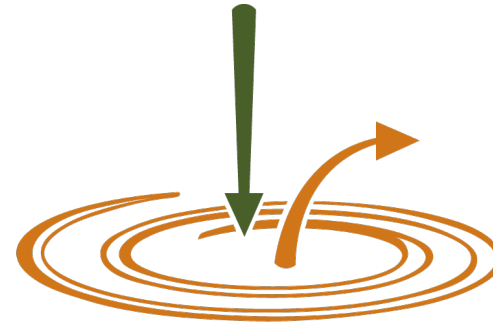
Waste Generation Tracking and Management



1. Track waste generation
2. Track waste reduction activities, through waste prevention, reuse, recycling and composting measures
3. Track percentages and weights of recycled products purchased
4. Set waste reduction goals and targets
5. Calculate cost savings for waste prevention actions
6. Generate Summary Reports, applying waste reduction data into useful tools to meet organizational objectives.



Questions and Answers



kessler consulting inc.
innovative waste solutions



Kessler Consulting, Inc.
Chas Jordan: cjordan@kesconsult.com
(813) 971-8333
www.kesconsult.com

kessler consulting inc.
innovative waste solutions