



NRC Adoption of Zero Waste Definition

Presentation to Metropolitan Washington Council of Governments
Recycling Committee, December 1, 2016

By Gary Liss, Vice-President
National Recycling Coalition

www.nrcrecycles.org

916-652-7850 gary@garyliss.com

What is Zero Waste?



What is Zero Waste?



Source: Ecocycle



Vision (v'zh'ən) *noun*

1. The ability to see [unnecessary waste]
2. A thing of beauty [a clean Fresno]
3. Intelligent foresight ["Zero Waste"]

Zero Waste - A new way of life

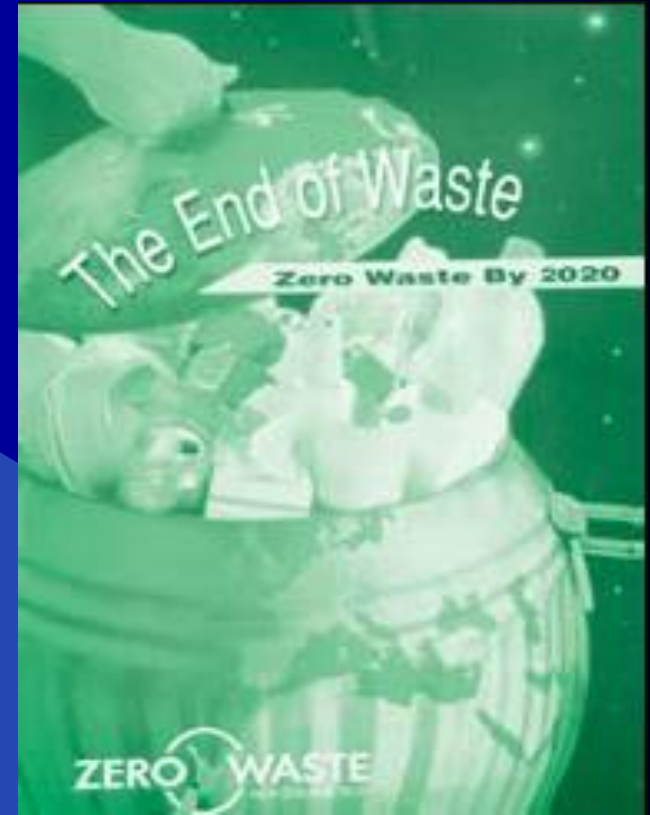
This Zero Waste Vision
brought to you by the
City of Fresno - Recycling Team
Recycling Hotline - 621-1111



What is Zero Waste?



Zero Waste: Ride the Wave to Sustainability



Federal Register Comments to EPA on Definitions 2011*

- **Strong support for updating definitions**
- **Most comments on the definition of Zero Waste (+40)**

We encourage EPA to **adopt this [Zero Waste International Alliance] Definition of Zero Waste, or one that closely captures the importance of shifting from burning or burying** our discarded resources to realize the tremendous benefits of creating jobs, helping residents and businesses be more efficient and save money, and reduce liabilities and greenhouse gases to help address climate change. **This is the single most important action that you could take without any costs involved to help foster this bold new way to manage our resources.**

- From numerous state, local, NGO, and individual comments

* Source: Timonie Hood, USEPA Region 9, Talk to NCRA RU18, 3-19-13

Zero Waste =

Reduce

Reuse

Recycle

**Focus first on reducing and reusing,
then recycle, compost, digest and
redesign the rest**

What is Zero Waste?



ZWIA Definition of Zero Waste*

- Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where **all discarded materials are designed to become resources for others** to use.
- Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and **not burn or bury them**.
- Implementing Zero Waste will **eliminate all discharges to land, water or air** that are a threat to planetary, human, animal or plant health.

ZWIA Definition of Zero Waste

- **90% diversion from landfills, incinerators and environment measure of performance**
- **Capitalize Zero Waste as a defined term**
- **Summary:**
 - **No Burn**
 - **No Bury**
 - **No Emissions**

NRC & ZWIA

Zero Waste Definition

- **NRC Board adopted the Zero Waste definition developed by ZWIA**
- **NRC encourages members, stakeholders and others to adopt this definition (email me if you do)**
 - **Adopt ZWIA Definition of Zero Waste, in business and community Zero Waste Plans, Sustainability or Climate Change Plans**



- **Supports ZWIA definition of no waste to landfill, incineration and the environment**
- **Drives the development of new markets and new ideas towards A Zero Waste Economy**
- **Focuses on upstream policies and practices beyond diversion or recycling**
- **Emphasizes strong total participation: training of all employees, ZW relationships with vendors and customers**

Why Zero Waste Certification?

- **To maintain value of “Zero Waste”**
- **This is ultimate in Green credential – need to maintain support of environmental leaders**
- **If Zero Waste allowed to include burning and burying, term will lose value and be meaningless**

Why Zero Waste Certification?

- **Business wants protection against claims of fraud**
- **Need to comply with Federal Trade Commission Green Marketing Guidelines**
- **Protect Brand from Inappropriate use**
- **Zero Waste advocates are starting to counter false claims in media**

SWANA on Zero Waste

- **They have members that support Zero Waste and they have members that support Waste-to-Energy**
- **They want to support all their members**
- **They have agreed not to call Waste-to-Energy Zero Waste**

US Conference of Mayors Zero Waste Resolution

- **June 2015 adopted a resolution on Zero Waste**
- **Recognized that Waste-Based Energy and Landfilling should be counted as Disposal in waste diversion calculations**

USZWBC Scorecard

Facility Totals (Pre Certification Estimates)			Points
Bronze: 31-37 points Silver:38-45 points Gold: 46-63 points Platinum 64-81 points			81
Overview of Categories & Points			
Redesign	4	Leadership	6
Reduce	7	Training	8
Reuse	7	ZW Analysis	5
Compost (Re-earth)	7	Upstream Management	4
Recycle	3	Hazardous Waste Prevention	5
ZW Reporting	4	Closed Loop System	4
Diversion (Min 90%)	5	Innovation	3
ZW Purchasing	9	Total Points	81

Businesses are Leading the Way to Zero Waste (>90% diversion)

- Anheuser-Busch, several
- Albertson's (100 in So. CA)
- American Licorice*
- Ann, Inc.*
- Delaware North, Yellowstone Pk.*
- Del Mar Fairgrounds
- Disneyland Circle D Corral*
- Earth Friendly Products*
- Fetzer Vineyards*
- Frankie's Bohemian Café, SF
- General Motors (117 plants)
- Hilton Hotel, SF
- Honda
- Microsoft*
- Miller/Coors
- New Belgium Brewery*
- Nutiva*
- Piazza Produce*
- Pillsbury
- Scoma's Restaurant, SF
- Sierra Nevada Brewing Co.*
- Subaru
- Toyota
- Vons-Safeway
- Whole Foods Markets, SD*
- Xerox Corp
- 2800 Businesses in Japan

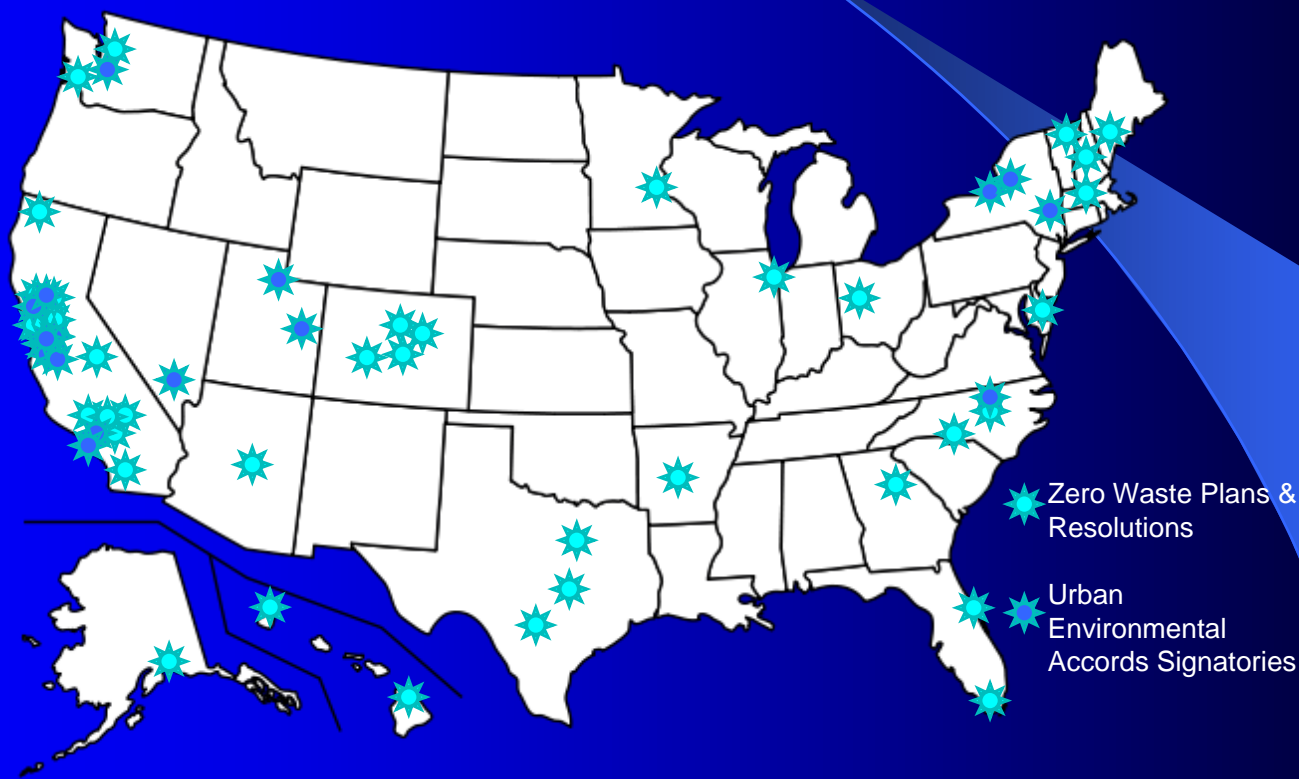
*Certified by USZWBC

More examples at www.uszwbc.org



Zero Waste USA

Inspiring Communities to Embrace and Achieve Zero Waste



Zero Waste Communities in U.S.

ZW Community Planning Checklist

Zero Waste Brain Trust, 2011 - 2015

Zero Waste Community Planning Checklist – created by The Zero Waste Brain Trust in 2011. Last updated 3/7/2015

www.zerowasteusa.org

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USE THIS CHECKLIST TO EXPLORE NEXT STEPS AND NEW DIRECTIONS - FOR POLICIES, PROGRAMS AND FACILITIES

Check off all high diversion and Zero Waste initiatives that have been implemented in your community. Highlight subsets in use in **green** and those in development in **yellow** – e.g., √ -- Bans (**sale**, collection, **disposal**). All those not checked are opportunities to include in your community's Zero Waste Plan - after review via a comprehensive and open public participation process.

Note: This List is not intended to be comprehensive. Visit the Zero Waste USA [Website](http://www.zerowasteusa.org) for examples from other communities, Suggestions, corrections and enhancements are welcome via the [Contact Page](#).

Sector	Policies	Programs	Facilities
Community-Wide	<input type="checkbox"/> Zero Waste goal: By ____; Set in ____ <input type="checkbox"/> Precautionary Principle <input type="checkbox"/> Environmentally preferable procurement policy <input type="checkbox"/> Product Policies <input type="checkbox"/> -- Bans (sale, collection, disposal) <input type="checkbox"/> -- Take backs (voluntary, mandatory) <input type="checkbox"/> -- Minimum content	<input type="checkbox"/> Zero Waste grants (collection, processing, market development) <input type="checkbox"/> Zero Waste revolving loan fund (collection, processing, market development) <input type="checkbox"/> Market Development (local, regional, state, international) <input type="checkbox"/> Lead By Example (public receptacles, employee training, government facilities, Zero Waste events and venues)	<input type="checkbox"/> Resource Recovery Park <input type="checkbox"/> Research & Development Facility <input type="checkbox"/> Museum of Bad Design
Residential	<input type="checkbox"/> Mandatory Participation (recycling, composting) <input type="checkbox"/> Universal Service (recycling, composting) <input type="checkbox"/> Rate structure incentives <input type="checkbox"/> Service Provider payment incentives <input type="checkbox"/> Service Provider minimum requirements	<input type="checkbox"/> Behavior change marketing <input type="checkbox"/> Outreach (presentations, directories, door-to-door outreach, recycling ambassadors) <input type="checkbox"/> Technical assistance (training, site visits, events) <input type="checkbox"/> Reuse collection <input type="checkbox"/> Recycling collection (single family, multifamily, bulky) <input type="checkbox"/> Food donations (food bank, soup kitchen) <input type="checkbox"/> Backyard composting <input type="checkbox"/> Organics collection (yard debris, food scraps) <input type="checkbox"/> Every other week trash collection <input type="checkbox"/> Separate diaper and animal waste collection	<input type="checkbox"/> Reuse Warehouse <input type="checkbox"/> Center for Hard to Recycle Materials <input type="checkbox"/> Recycling processing <input type="checkbox"/> Yard trimmings processing <input type="checkbox"/> Food scraps composting <input type="checkbox"/> Food scraps digestion <input type="checkbox"/> Wood recycling facility (pallets, dimensional lumber, logs) <input type="checkbox"/> Mixed waste processing (MRBT) after source separation
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Continued

Helping communities plan for less waste

- [Learn About the Planning Tool](#)
 - [Go to the Planning Tool](#)
 - [Go to the Policy and Program Impact Estimator](#)
- Waste is a valuable resource. Communities can recover the lost value of material discards by setting up systems for reuse, recycling, and composting.*



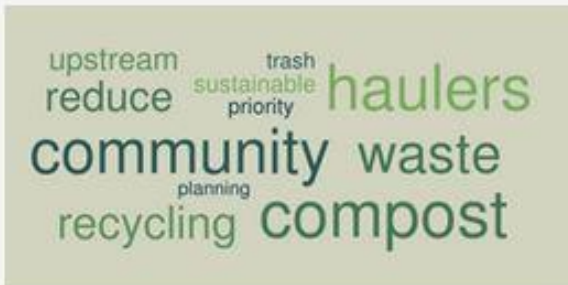
Charting a Path Towards Zero Waste

The Managing and Transforming Waste Stream

reduce the amount of waste disposed in landfills and pro
Access city and county ordinance, contract, and franch



About the Tool



Managing Waste



[planning tool](#)

- [Filter descriptions and rankings in the planning tool](#)
- [Community implementation examples and resources](#)



**National Standards Certification Board for
Certified Sustainable Resource
Management Professionals
Reduce, Reuse, Recycle to Zero Waste**

Pieces of Zero

- **Comprehensive recycling programs**

- As convenient as trash
- Multi-material
- Available to all generators



- **Organics diversion**

- Yard trimmings
- Food scraps
- Compostable paper

- **C&D diversion**

- **Policies**

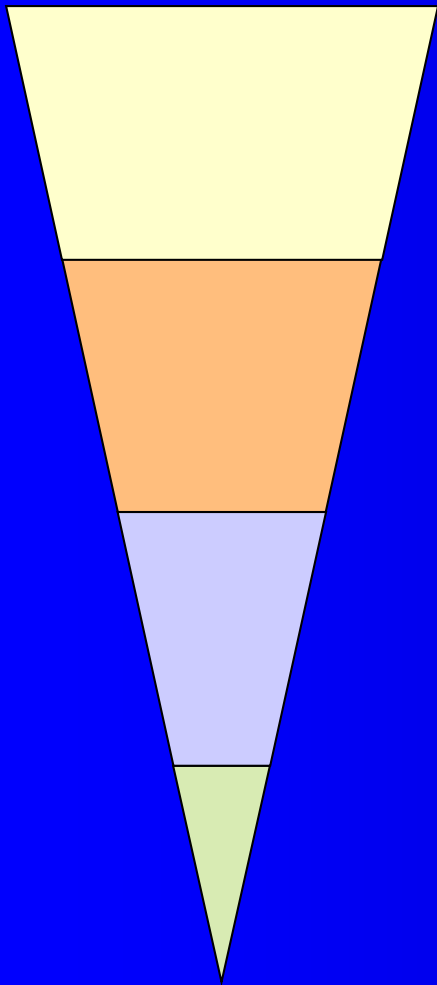
- “New rules”
- Tiered Pricing
- Disposal bans
- Mandatory
- Product Policies

- **Outreach & TA**

- **Infrastructure**

- Reuse
- Resource Recovery Parks

ZW Hierarchy of Highest & Best Uses



- Reduce, Refuse & Return
- End Subsidies for Wasting
- Product & Packaging Redesign
- Clean Production and Takebacks
- Reuse, Repair and Remanufacture
- Recycle, Compost and Digest
- Regulate (Bans, Biological energy recovery, landfills with pre-processing)
- Not OK: Incineration, Bioreactor LFs

Source: Zero Waste International Alliance Adopted March 2013

Zero Waste Infrastructure

Social Infrastructure

- **Alignment of Goals**
 - Local Government
 - Generators
 - Service Providers
- **Rate Structure Signals**
- **Community-Based Approaches**
- **New Rules and Incentives**
- **Culture Change**
- **Technical Assistance**



Miss Alameda Says
“Compost!”

Zero Waste Infrastructure

Physical infrastructure

- **Universal access to recycling and composting collection services**
 - Residential
 - Commercial & Industrial
 - Institutional & Schools
- **Processing capacity**
 - Recycling
 - Food scraps
 - Construction & Demolition processing



The Zero Waste Economy

Designing a Full-Cycle System—Upstream AND Downstream

Design for the Environment, Not the Dump

All products must be recoverable through reuse, recycling or composting



Shifting Subsidies

Stimulating green practices rather than favoring waste and pollution



Changing the Rules

Removing market barriers and inequities to support sustainable industry



Jobs, Jobs, Jobs

Redesign and recovery create more jobs than resource destruction



Clean Production

More resource efficient and recoverable, less toxic to workers, environment and consumers



Retail Stores

Opportunity for consumer education and product take-back



Consumer Buying Power

Creating market demand and a new manufacturing standard



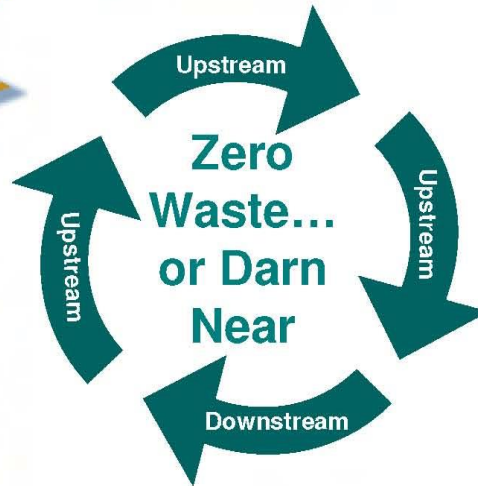
Producer Responsibility

Manufacturers are part of the solution, taking back their own products or supporting recovery infrastructure



Resource Recovery Parks

Community center for total recovery—reuse, recycling and composting—material exchange, and education





**If you're not for Zero Waste,
how much waste are you for?**