



# City of Berkeley ZERO WASTE COMMISSION Regular Meeting

Tuesday, February 28, 2023 at 6:00 p.m.

## **PUBLIC ADVISORY: THIS MEETING WILL BE CONDUCTED EXCLUSIVELY THROUGH ZOOM VIDEOCONFERENCE AND TELECONFERENCE**

Pursuant to Government Code Section 54953(e) and the state declared emergency, this meeting of the City of Berkeley Zero Waste Commission will be conducted exclusively through teleconference and Zoom videoconference. The COVID-19 state of emergency continues to directly impact the ability of the members to meet safely in person and presents imminent risks to the health of attendees. Therefore, no physical meeting location will be available.

**To access the meeting remotely: Join from a PC, Mac, iPad, iPhone, or Android device, please use this URL to join the meeting:**

<https://us02web.zoom.us/j/82587046286>

If you do not wish for your name to appear on the screen, then use the drop-down menu and click on "rename" to rename yourself to be anonymous. To request to speak, use the "raise hand" icon by rolling over the bottom of the screen. **To join by phone: Dial 1-669-900-9128 and enter Meeting ID: 82587046286#.** If you wish to comment during the public comment portion of the agenda, Press \*9 and wait to be recognized by the Chair. Note: Your phone number will appear on the videoconference screen.

## **MEETING AGENDA**

### **PRELIMINARY MATTERS:**

- 6:00 pm      1. Call to Order by Chair and Roll Call by Secretary
- **Christienne de Tournay (Chair)**, appointed by CM Sophie Hahn, District 5
  - **Steven Sherman (Vice Chair)**, appointed by CM Rashi Kesarwani, District 1
  - **Natalie Calhoun**, appointed by Mayor Jesse Arreguin
  - **Rachel Doughty**, appointed by CM Terry Taplin, District 2
  - **Antoinette Stein**, appointed by CM Ben Bartlett, District 3
  - **VACANT**, appointed by CM Kate Harrison, District 4
  - **Sandra Curtis**, appointed by CM Susan Wengraf, District 6
  - **VACANT**, appointed by CM Rigel Robinson, District 7
  - **VACANT**, appointed by CM Mark Humbert, District 8
- 6:05 pm      2. Approve Meeting Agenda and Order of Agenda Items
- 6:10 pm      3. Approve Draft Action Minutes:
- January 24, 2023 Regular Meeting\*

- 6:15 pm 4. Public Comment on Items Not on the Agenda  
*Speakers are allotted up to two minutes. Speakers may be allotted less time at the discretion of the Chair.*
- 6:25 pm 5. Commissioner Announcements  
*Commissioners may make general announcements; no action will be taken.*
- 6:30 pm 6. Staff Updates:
- Zero Waste Rate Schedule City update on Council 2/28 work session
  - Progress Report on Zero Waste Strategic Plan
  - SB 1383 Implementation
  - SUDs Ordinance Enforcement

**DISCUSSION AND ACTION ITEMS:**

*Members of the public may provide comments at the end of each discussion item and prior to the vote of the Commission on any action items. Speakers are allotted up to 2 minutes.*

- 6:45 pm 1. Woolsey Garden Presentation
- 7:05 pm 2. Lithium Ion Battery Discussion
- 7:25 pm 3. MFD Resources: Compost Kitchen Pails & Batteries
- 7:35 pm 3. Commission Officer Elections
- 7:40 pm 4. Update from Rates Sub-Committee
- 7:45 pm 5. Return to In-Person Meeting in March
- 7:50 pm 3. Discuss Future Agenda Items
- a. FoodWare Presentation
- 8:00 pm 4. Adjournment

**INFORMATION ITEMS:**

*Information items may be moved to discussion but no action will be taken.*

- StopWaste Grant Solicitation: <https://www.stopwaste.org/at-work/stopwaste-grants>
- Zero Waste Commission 50<sup>th</sup> Proclamation

**COMMUNICATIONS:**

*Communications from the public are included as links or attachments in the agenda packet.*

- Zero Waste Strategic Plan Presentation

**\*Indicates material included in the agenda packet**

**\*\* Indicates material to be available at the meeting**



**ADA Disclaimer:** This meeting is being held in a wheelchair-accessible location. To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services Specialist at 981-6418 (V) or 981-6347 (TDD) at least three business days before the meeting date. Please refrain from wearing scented products to this meeting.

**SB 343 Disclaimer:**

Any writings or documents provided to a majority of the Commission regarding any item on this agenda will be made available for public inspection at the Public Works Department located at the address below.

**Communications Disclaimer:**

Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. Please note: e-mail addresses, names, addresses, and other contact information are not required, but if included in any communication to a City board, commission or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission or committee for further information.

**Commission Secretary:**

Julia A. Heath, Recycling Program Manager,  
Zero Waste Division, 1201 2<sup>nd</sup> St. Berkeley, CA 94710  
510-981-6357  
[jheath@cityofberkeley.info](mailto:jheath@cityofberkeley.info)

## MINUTES

The meeting was convened at 6:03 p.m. with Chrise de Tournay, Chair, presiding.

### ROLL CALL

Present: Chrise de Tournay, Steven Sherman, Natalie Calhoun, Rachel Doughty, Sandra Curtis  
LOA: None  
Absent: Antionette Stein

**STAFF PRESENT:** Julia A. Heath, Leticia Jauregui, Kerry Rivers

**MEMBERS OF THE PUBLIC PRESENT:** 9

**PUBLIC COMMENTS (on non-agenda items):** 1

### ACTION MINUTES:

**1. Approval of the January 24, 2023 Regular Meeting Agenda**

Action Taken: M/S/C (de Tournay/Curtis) to approve the meeting agenda for January 24, 2023 with no one modification

Ayes: Unanimous; Abstain: None; Absent: Stein

**2. Approval of the November 29, 2023 Regular Meeting Minutes**

Action Taken: M/S/C (Sherman/Doughty) to approve the November 29, 2023 meeting minutes

Ayes: Unanimous; Abstain: None; Absent: Stein

**3. Public Comment**

Discussion only. No Action Taken.

Urban Ore will be moving to an employee owned co-op model

Omega Salvage will be closing permanently

**4. Commissioner Announcements**

Discussion only. No Action Taken.

[Northern California Recycling Association Recycling Update March 28, 2023](#)

[Center for Regenerative and Collaborative Design](#)

[Zero Waste International Alliance in Costa Rica](#)

**5. Staff Updates**

**•Zero Waste Rates**

Action Taken: The Commission decided to form a sub-committee to review City's Rate proposal including Sherman, Doughty and Curtis

Ayes: Unanimous; Abstain: None; Absent: Stein

**•Zero Waste Strategic Plan**

Discussion only. No Action Taken.

**•SB 1383 Implementation**

Discussion only. No Action Taken.

•**Zero Waste Division staffing changes**

Discussion only. No Action Taken.

**6. Abbe & Associates presentation on Zero Waste Strategic Plan**

Discussion only. No Action Taken.

**Public Comment: 3**

**7. 50 years Proclamation of the ZW Commission**

Discussion only. No Action Taken.

**Public Comment: 1**

**8. Discuss future agenda items**

- Request to standing item for staff or Abbe & Associates to provide progress reports on the Zero Waste Strategic Plan
- Review 2022 Work Plan, acknowledge accomplishments, decide on schedule for completing 2023 Work Plan
- Presentation by Woolsey Garden

**Public Comment: 0**

**9. Adjournment at 8:00 p.m.**

M/S/C (de Tournay/Doughty) to adjourn the meeting.

Ayes: Unanimous; Abstain: None; Absent: Stein

The next regular meeting of the Zero Waste Commission will be held on Tuesday, February, 28 2023 at 6:00 p.m. by virtual videoconference/teleconference. The link to access the virtual meeting will be posted to the Community Calendar: [www.cityofberkeley.info/communitycalendar/](http://www.cityofberkeley.info/communitycalendar/)

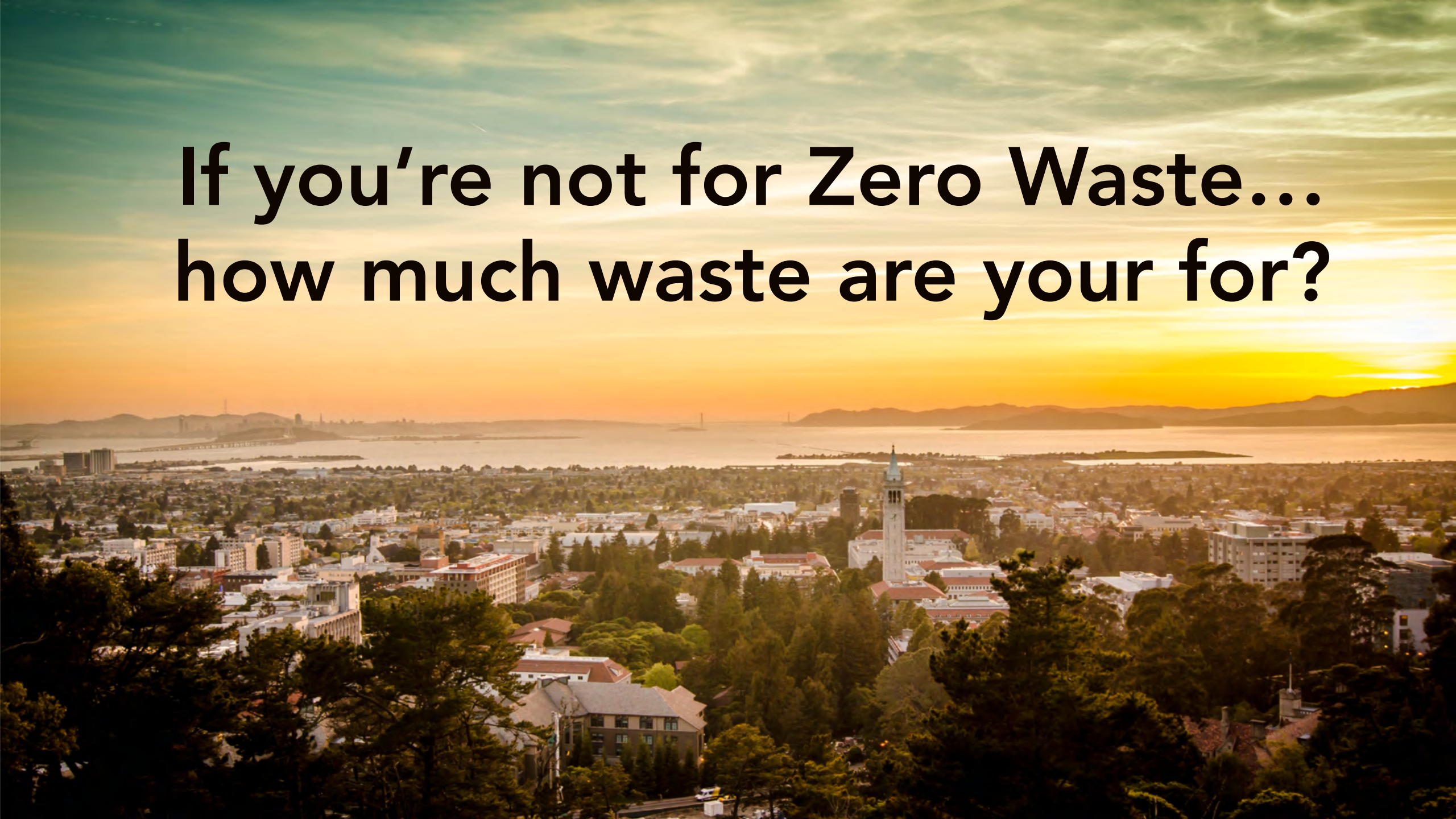
Respectfully Submitted:

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Julia A. Heath, Secretary



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





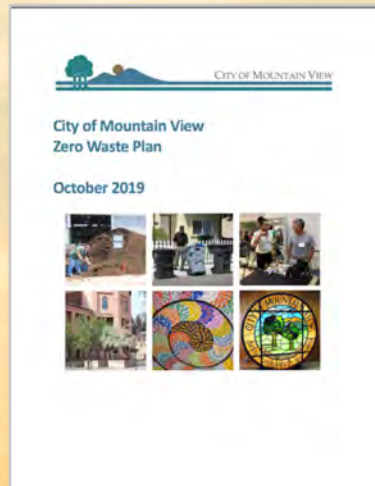
# Zero Waste Strategic Plan

- Background
- Team
- Scope
- Schedule





# Recent Relevant Work





# Key Team Members



**Ruth Abbe**  
Project Manager



**Christienne de Tournay**  
Assistant Project Manager



**Portia Sinnott**  
Materials Characterization



**Gary Liss**  
Policy & Program Analysis



**Kevin McCarthy**  
Facility Integration



**Garth Schultz**  
Financial Analysis



**Steven Sherman**  
Operations Analysis



# Scope of Services

1. Review and Summarize Current Policies and Programs
2. Materials Composition Study
3. Review of the Zero Waste Division Operations
4. Outreach and Stakeholder Engagement
5. Transfer Station Feasibility Study Integration
6. New or Revised Zero Waste Programs, Policies and/or Ordinances
7. Zero Waste Program Outreach and Education Program Recommendations
8. Zero Waste Division Staffing
9. Develop Financial Analysis Showing Implementation Costs
10. Draft and Final Zero Waste Strategic Plan



# 1. Review and Summarize Current Policies and Programs

- Current material flows and diversion rates for reuse, recycling, organics recovery, and landfilling
- A summary of the existing policies, programs, and infrastructure
- Roles and responsibilities of the state, StopWaste, City, City contractors, and private operators

FACT SHEET: Solid Waste Facilities - The System Infrastructure

## Fact Sheet: Solid Waste Facilities - The System Infrastructure

COUNTING DOWN TO ZERO WASTE PLAN  
A Solid Waste Integrated Resources Plan (SWIRP)  
City of Los Angeles Department of Public Works  
Bureau of Sanitation

### Establishing a Baseline Year for Planning the Future Infrastructure



In February 2006 the City Council adopted the Recovering Energy Natural Resources and Economic Benefit from Waste for LA (RENEW LA) Plan, which is the 20-year blueprint plan that will help reduce the City's reliance on landfills by maximizing recycling and reuse, and converting much of the solid waste that currently goes to landfills into clean energy and/or valuable raw materials. An understanding of the private and public solid waste infrastructure and services currently used within the City of Los Angeles (City) is essential for planning future infrastructure development. The City consequently hired a consultant<sup>1</sup> to conduct interviews with transfer stations, landfills, and green waste processing facilities that accept waste from within the City, as well as incorporate data from the California Integrated Waste Management Board (CIWMB), the City's Bureau of Sanitation (BOS), and from earlier reports including the City of Los Angeles Year 2000 AB939 Report (2001) and the City of Los Angeles Waste Characterization and Quantification Study Year 2000 (2002). The tonnages of the various materials described in this fact sheet are based on year 2006 data.

In 2006, approximately 3.65 million tons of solid waste was generated in the City. The quantities associated with the three sub-streams are as follows:

Source	Solid Waste
Single-family residential (BOS)	963,000
Commercial/multifamily	2,388,000
Self-haul/other	299,000
<b>Total</b>	<b>3,650,000</b>

### Overview of the City's Solid Waste Generators

In order to better understand the generation and ultimate disposal of solid waste generated in the City, we can classify the solid waste according to who generated the waste and who brought it to the disposal facility.<sup>2</sup> The three major sub-streams of the waste are single-family residential, commercial/multifamily, and self-haul/other.

- Single-family residential is defined as solid waste collected by the Bureau of Sanitation (BOS) from single-family residences and up to four multi-family units. It typically arrives at the solid waste facility in BOS operated collection vehicles (e.g., automated side loader trucks).
- Commercial/multifamily is defined as waste collected by a permitted private waste-hauling company from businesses, institutions, public venues, and multi-family buildings<sup>3</sup> such as apartments and condominiums. It typically arrives at the solid waste facility in private/commercially owned collection vehicles (e.g., front loaders) or in roll-off containers or compactor units.
- Self-haul/other is defined as all waste that is brought to solid waste facilities by the resident or business that generated it. This includes all waste other than that brought to the facility by the BOS or by commercial haulers whose primary business is hauling waste.

In 2006, approximately 3.65 million tons of solid waste was generated in the City.<sup>4</sup> The quantities associated with the three sub-streams are as follows:

<sup>1</sup> Cascadia Consulting conducted a study, Existing Waste Flows and Facilities, for BOS in 2006 to identify waste flows and facilities for the City of Los Angeles.  
<sup>2</sup> To understand how the waste flows, it is tracked by who brought it to the disposal facility (single-family, commercial/multifamily, and self-haul/other). For purposes of program planning and diversion modeling, self-haul/other tons are reallocated based on where the material is generated (single-family, multifamily, commercial and construction and demolition debris sites).  
<sup>3</sup> Permitted haulers serve multifamily complexes with five or more dwelling units, while BOS serves multifamily complexes with four or fewer dwelling units.  
<sup>4</sup> The BOS provided tonnages for the single-family residential sub-stream. Estimates for the disposed waste from commercial/multifamily and self-haul/other sub-streams were developed based on total 2006 tonnage figures from the California Integrated Waste Management Board (CIWMB) Disposal Reporting System and on commercial per employee and multifamily per household disposal rates calculated in the City of Los Angeles Waste Characterization and Quantification Study Year 2000 (2002).

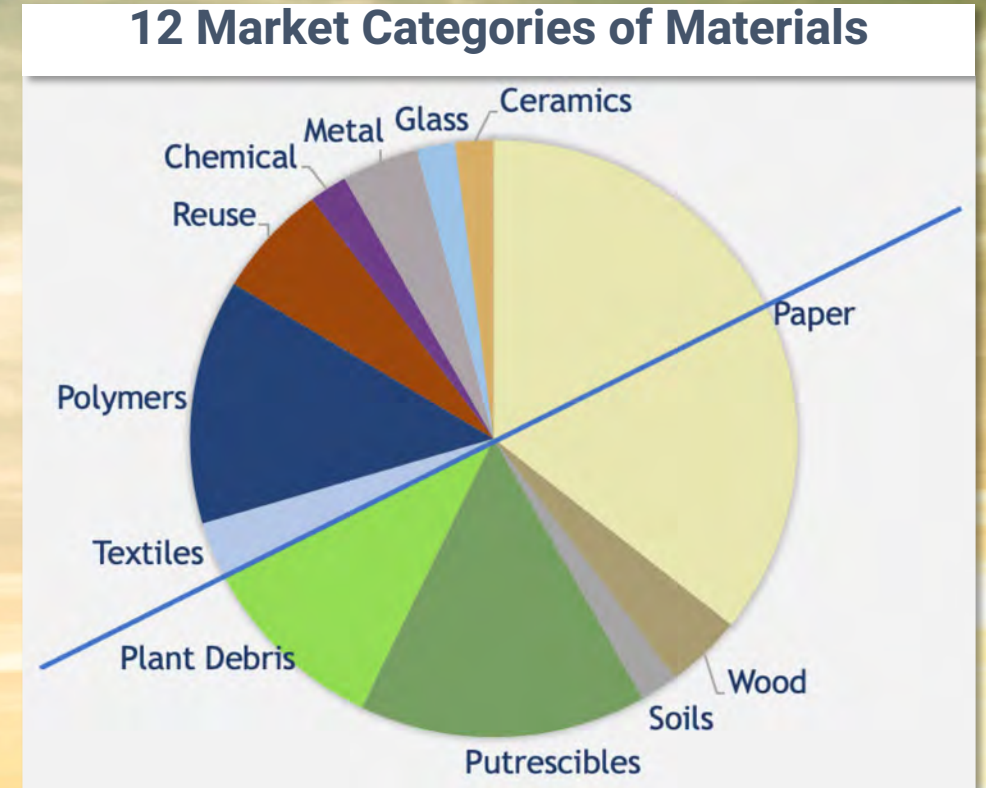
**ZERO WASTE PLAN**  
The City's Integrated Resource Plan

Sample fact sheet prepared by our team for the City of Los Angeles Zero Waste Plan



## 2. Materials Composition Study

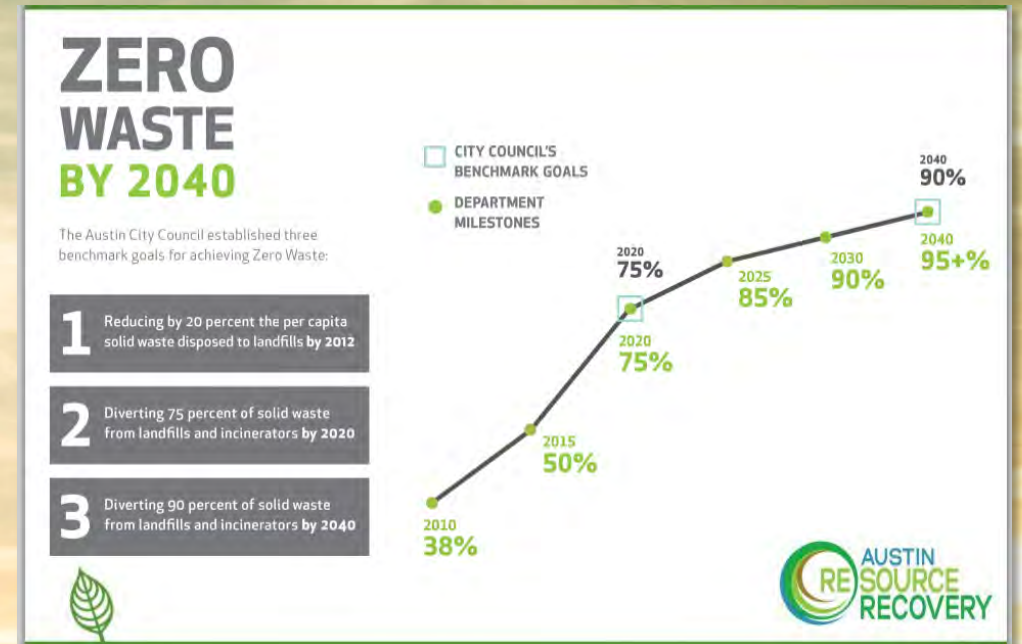
- Refuse materials delivered by both City curbside collection and third-party vehicles
- Green/food and plant debris materials delivered by both City curbside collection and third-party vehicles
- Construction and demolition materials by both City curbside collection and third-party vehicles
- Miscellaneous materials currently accepted for reuse or recycling



Codified by Urban Ore and Richard Anthony Associates  
Note that 50% of discarded materials are compostable

# 3. Review of the Zero Waste Division Operations

- System analysis summary
- Service opportunities summary
- Refined list of the Zero Waste initiatives for further consideration by the community



Benchmark goals prepared by our team for the City of Austin Zero Waste Plan



# 4. Outreach and Stakeholder Engagement

- 20 Listening Sessions
- 3 Online Town Halls
- 3 Public Workshops to be held across the City
- 3 Interviews or Meetings with City staff (not directly involved in the project)
- 3 Meetings with the Zero Waste Commission
- City Council study session or 3 Interviews or Meetings with City Council staff



Public Workshops in Broomfield



# 5. Transfer Station Feasibility Study Integration

- High-level project description and preliminary costs and schedule for implementation of the facility redevelopment
- Documentation of proposed changes to the conceptual design resulting from the Zero Waste planning process or environmental review milestones





# 6. New or Expanded Zero Waste Programs, Policies and/or Ordinances

- Completed Zero Waste Planning Checklist
- 20-30 Strategy Impact Analyses (2-3 pages each) for Zero Waste initiatives
- Presentation materials for community outreach



Los Angeles Solid Waste Integrated Waste Management Plan

# 7. Zero Waste Program Outreach and Education Program Recommendations

- Current education, outreach and technical assistance program summary
- Strategy Impact Analyses (2-3 pages) summarizing recommend program enhancements, staffing levels and costs



Door-to-Door Outreach in Oakland



# 8. Zero Waste Division Staffing

- Description of Zero Waste Division current staffing levels, functions and responsibilities
- Summary of benchmark survey results documenting current staffing levels and costs for similar operations

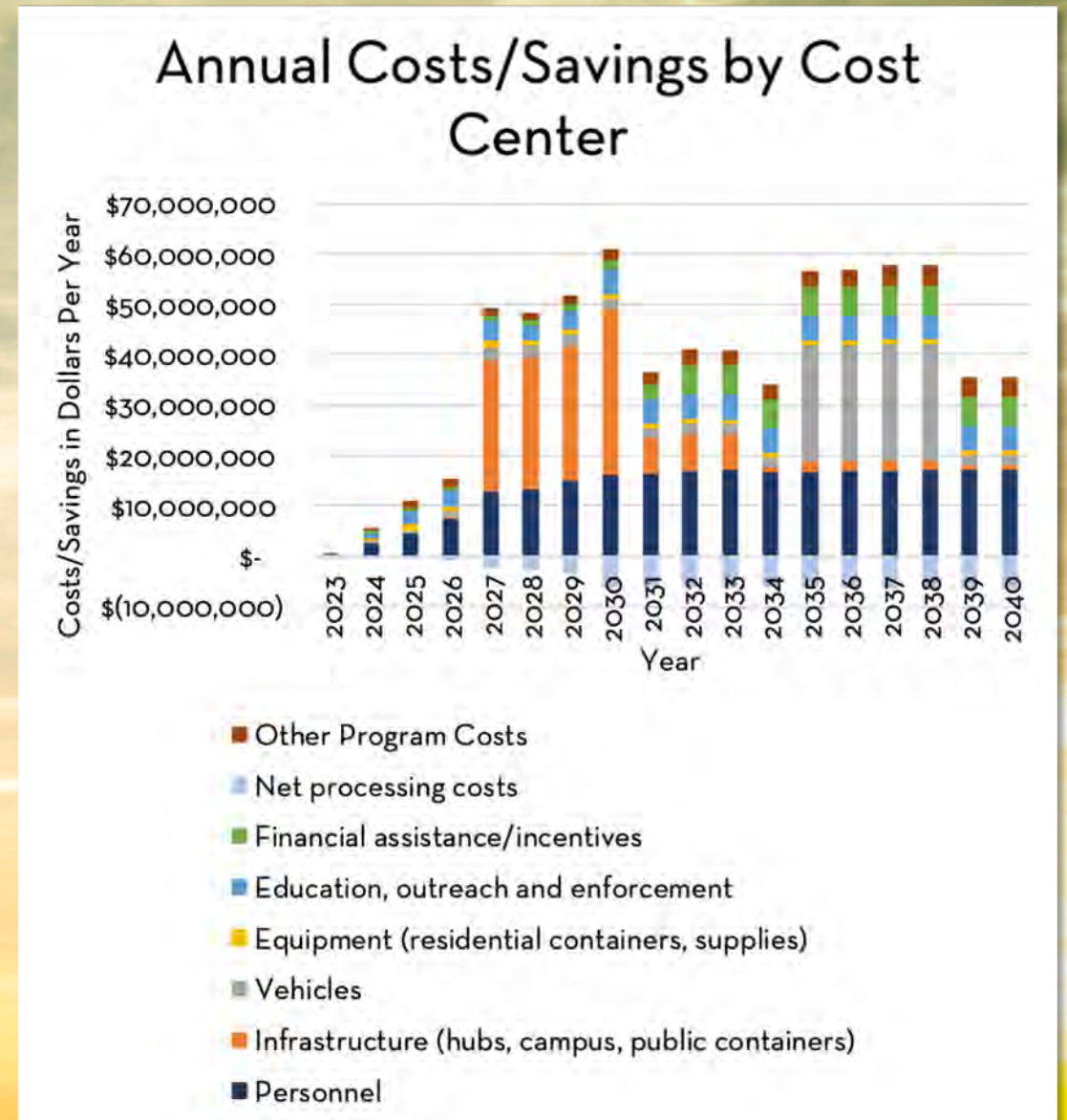


Lid Flipping in Sunnyvale



# 9. Develop Financial Analysis Showing Implementation Costs

- Information request on current rate structure information and prior rate structure analysis
- Summary of Zero Waste Strategic Plan implementation costs
- Evaluation of rate impacts and rate structure recommendations





# 10. Draft and Final Zero Waste Strategic Plan

- Outline
- Table of Contents, Figures and Tables
- Executive Summary
- Draft Plan, Final Draft Plan
- Presentation Slides











**RECOGNIZING THE CITY OF BERKELEY ZERO WASTE COMMISSION'S  
50 YEARS OF GROUNDBREAKING ENVIRONMENTAL LEADERSHIP**

- WHEREAS,** for fifty years the Zero Waste Commission has been at the forefront of the zero waste and recycling revolution, creating a visionary path for Berkeley, and helping shape a global movement around sustainable waste management practices; and
- WHEREAS,** through its activities, policies, and community activism the Commission has fostered Berkeley's culture of waste reduction, reuse, and recycling; and
- WHEREAS,** the Berkeley City Council voted on April 18, 1972 to create a Solid Waste Management Commission charged with developing a plan for the reduction of solid waste; and
- WHEREAS,** in 1976 the Commission wrote its first Solid Waste Management Plan, leading to the City of Berkeley's adoption of a first-in-the-nation 50% recycling goal; and
- WHEREAS,** in 1983 the City took a bold step forward by building a new recycling center near Gilman Street and closing the Berkeley landfill on what is now Cesar Chavez Park; and
- WHEREAS,** the Commission played a key role in developing and implementing partnerships between Community Conservation Centers, The Ecology Center, Urban Ore, and the City of Berkeley, providing innovative, locally-based waste reduction services; and
- WHEREAS,** the Commission has continued to push the City to be a national and international leader on solid waste reduction, ending use of throw-away plastics, and recycling; and
- WHEREAS,** in 2005 the City Council unanimously adopted the Commission's recommendation to set a 2020 zero-waste goal and to rename the Commission as the Zero Waste Commission, to reflect this new commitment; and
- WHEREAS,** the Zero Waste Commission continues to play a vital role in groundbreaking policies to advance its mission through outstanding leadership and innovation.

**NOW, THEREFORE, BE IT RESOLVED** that I, Jesse Arreguin, Mayor of Berkeley, do hereby declare the City's gratitude and recognition of

**THE BERKELEY ZERO WASTE COMMISSION**

for 50 years of visionary leadership, advancing the cause of waste reduction and environmental stewardship for Berkeley.

Jesse Arreguin  
Mayor



December 13, 2022



Please send this to your Commissioners.

Jim McGrath  
Former Chair, San Francisco Regional Water Quality Control Board

<https://www.greenpeace.org/usa/news/new-greenpeace-report-plastic-recycling-is-a-dead-end-street-year-after-year-plastic-recycling-declines-even-as-plastic-waste-increases/>

Most plastic simply cannot be recycled, a new Greenpeace USA report concludes. *Circular Claims Fall Flat Again*, released today, finds that U.S. households generated an estimated 51 million tons of plastic waste in 2021, only 2.4 million tons of which was recycled.

WASHINGTON, DC (October 24, 2022)—Most plastic simply cannot be recycled, a new Greenpeace USA report concludes. *Circular Claims Fall Flat Again*, released today, finds that U.S. households generated an estimated 51 million tons of plastic waste in 2021, only 2.4 million tons of which was recycled.

The report also finds that no type of plastic packaging in the U.S. meets the definition of recyclable used by the Ellen MacArthur Foundation's New Plastic Economy (EMF NPE) Initiative. Plastic recycling was estimated to have declined to about 5–6% in 2021, down from a high of 9.5% in 2014 and 8.7% in 2018. At that time, the U.S. exported millions of tons of plastic waste to China and counted it as recycled even though much of it was burned or dumped.

By EMF NPE standards, an item must have a 30% recycling rate to receive the “recyclable” classification. Two of the most common plastics in the U.S. that are often considered recyclable – PET #1 and HDPE #2, typically bottles and jugs – fall well below the EMF NPE threshold, only achieving reprocessing rates of 20.9% and 10.3%, respectively. For every other type of plastic, the reprocessing rate is less than 5%.

While PET #1 and HDPE #2 were previously thought of as recyclable, this report finds that being accepted by a recycling processing plant does not necessarily result in them being recycled – effectively negating the recyclability claim.

**Lisa Ramsden, Greenpeace USA Senior Plastics Campaigner, said:** “Corporations like Coca-Cola, PepsiCo, Nestlé, and Unilever have worked with industry front groups to promote plastic recycling as the solution to plastic waste for decades. But the data is clear: practically speaking, most

plastic is just not recyclable. The real solution is to switch to systems of reuse and refill.”

According to the report, which is an update to [a 2020 report](#), mechanical and chemical recycling of plastic waste fails because plastic waste is extremely difficult to collect, virtually impossible to sort for recycling, environmentally harmful to reprocess, often made of and contaminated by toxic materials, and not economical to recycle.

**Ramsden said:** “Single-use plastics are like trillions of pieces of confetti spewed from retail and fast food stores to over 330 million U.S. residents across more than 3 million square miles each year. It’s simply not possible to collect the vast quantity of these small pieces of plastic sold to U.S. consumers annually. More plastic is being produced, and an even smaller percentage of it is being recycled. The crisis just gets worse and worse, and, without drastic change, will continue to worsen as the industry plans to triple plastic production by 2050.”

**Ramsden continued:** “We are at a decision point on plastic pollution. It is time for corporations to turn off the plastic tap. Instead of continuing to greenwash and mislead the American public, industry should stand on the right side of history this November and support an ambitious Global Plastics Treaty that will finally end the age of plastic by significantly decreasing production and increasing refill and reuse.”

Over 99 percent of plastic is made from fossil fuels, and as big brands continue their addiction to this harmful material, they are fueling climate impacts and jeopardizing communities in the name of profits. All over the world, communities of color face disproportionate health impacts from the plastics industry, whether through incinerators, landfills, petrochemical facilities, polluted waterways, or the harmful plastic packaging pushed on communities.

The report urges companies to take several additional steps to mitigate the systemic problems associated with plastic recycling, including phasing out single-use plastics, committing to standardized reusable packaging, and adopting a Global Plastics Treaty to help set international standards.

## **How we conducted this study**

The original comprehensive, objective survey of acceptance of plastic items at U.S. residential material recovery facilities for curbside recycling has been continually updated since its creation in October 2019 and was reverified in August 2022. The survey was performed and verified by technically qualified volunteers of The Last Beach Cleanup: two registered professional chemical engineers and a recycling industry expert. The acceptance information was found in the public



Internal

domain and is publicly shared to promote transparency and establish a traceable account of facts related to “recyclable” claims and labels for plastic products.

# # #

**Contact:** Tanya Brooks, Senior Communications Specialist at Greenpeace USA, [\(+1\) 703-342-9226](tel:+17033429226), [tbrooks@greenpeace.org](mailto:tbrooks@greenpeace.org)