



CITY OF BOSTON ZERO WASTE ADVISORY COMMITTEE

February 6, 2018

Dear Zero Waste Advisory Committee Member,

On behalf of Mayor Walsh, thank you for agreeing to serve on the City of Boston's Zero Waste Advisory Committee.. Reducing waste has many environmental and economic benefits. It is an important component of Boston's Climate Action Plan and our goal of carbon neutrality by 2050.

Our first meeting will take place on Monday, February 12th, from 9:00 AM to 11:30 at Boston City Hall, 5th Flr in the Piemonte Room.

In preparation for the meeting, please find enclosed:

1. Committee and Subcommittee Meeting agendas
2. List of advisory committee members
3. Zero Waste Plan consultants' tasks
4. Zero Waste Plan timeline
5. Zero Waste Principles
6. Zero Waste options

The work of the Zero Waste Advisory Committee is part of a public process. Meetings will be open, and presentations to the Advisory Committee will be posted on our website, <https://www.boston.gov/departments/environment/zero-waste-boston>.

We look forward to seeing you at the first meeting. If you have any questions or concerns, do not hesitate to contact us or Susan Cascino, Director of Recycling Policy, susan.cascino@boston.gov

Sincerely,

Chris Osgood, Co-chair
Chief of Streets and Sanitation

Austin Blackmon, Co-chair
Chief of Environment, Energy and Open Space



CITY OF BOSTON ZERO WASTE ADVISORY COMMITTEE MEETING

FEBRUARY 12, 2018

PIEMONTE ROOM 5TH FLR BOSTON CITY HALL

9:00-10:00

DESIRED OUTCOMES

- For ZWAC members to gain an understanding of their roles
- For ZWAC to understand the Guiding Principles
- To familiarize the ZWAC with the project- team, tasks, timeline
- To familiarize ZWAC with MSW generation in Boston
- To get feedback on ways to engage community and stakeholders: who team should meet with, places to tour, issues to keep in mind for each task

AGENDA

- Welcome and Introductions
- Background of Zero Waste Plan
- Role of ZWAC and subcommittees
- Overview of approach, team, timeline
- Brief Introduction to Zero Waste
- Introduction to Waste Generation in Boston
- Community and Stakeholder Engagement
- Next Steps



CITY OF BOSTON ZERO WASTE ADVISORY COMMITTEE

Name	Company/Organization	Title
GENERAL		
Austin Blackmon	City of Boston	Cabinet Chief for Environment, Energy and Open Space
Chris Osgood	City of Boston	Cabinet Chief for Streets and Sanitation
Alex Papali	Clean Water Action	Energy and Zero Waste Campaigns
Sylvia Broude	Toxics Action Center	Executive Director
Adnan Malek	Youth On Board Boston, Student Advisory Council	Project Coordinator
Steven Moquete	Madison Park HS	Student
RESIDENTIAL		
Lori Luce	Boston Housing Authority	Operations Manager
Gail Livingston	Boston Housing Authority	Deputy Administrator for Housing Programs
Hector Cruz	Winn Management	Property Manager
Dave Anderson	Greater Boston Management	Property Manager
Patricia Alvarez	Southwest Boston CDC	Property Manager
Dave Queeley	Codman Square CDC	Director
Jonathan Kronos	Jamaica Plain Neighborhood Development	Environment Committee
Debra Cave	Eagle Hill Civic Association (East Boston)	Director
Maridena Rojas	Talbot Norfolk Triangle (Dorchester)	TNT Block Steward/HCC



Continued RESIDENTIAL		
<i>Name</i>	<i>Company/Organization</i>	<i>Title</i>
Eve Waterfall	Beacon Hill Civic Association	Green Committee
Martha McDonough	Readville Neighborhood Watch (Hyde Park)	Readville Neighborhood Watch
Sierra Rothberg	Bag Ban Dorchester	committee member
INSTITUTIONAL, COMMERCIAL, INDUSTRIAL (ICI)		
Yve Torrie	A Better City (ABC)	Director of Sustainability Programs
Dennis Carlberg	Boston University	BU Director of Sustainability
Monica Nakielski	Partners Healthcare	Senior Program Manager, Sustainability
Joshua Rollins	Suffolk	Sustainability, senior manager marketing
Salvatore Ternullo	State Street	Environmental Sustainability Group
Fabienne Eliacin	InterContinental Boston Hotel	Environmental Services Coordinator
Chris Flynn	Mass Food Association	Director
Bill Crean	CBRE New England	Director
Bill Rennie	Mass Retailers Association	Director
Brian Hennessey	Massport	Director



CITY OF BOSTON ZERO WASTE ADVISORY COMMITTEE

GUIDING PRINCIPLES FOR IMPLEMENTING ZERO WASTE IN BOSTON

In 2015, the City of Boston with its partners in the Zero Waste Boston Coalition received a grant from the Commonwealth of Massachusetts Department of Environmental Protection to hold a zero waste summit and, based on those discussions, developed a set of guiding principles that would assist the City in reaching a long-term goal of zero solid waste.

VISION

Boston is a leader in waste reduction by 2022.

STATE OF WASTE IN BOSTON

The Boston community generates over 600,000 tons of solid waste annually. About 60 percent of the waste comes from commercial, institutional, and industrial activities. 40 percent of waste is generated by residents. Since FY 2008, when the City launched its “Recycle More, Trash Less” campaign, Boston residents have increased their diversion (recycling) rate from 12 percent to 21 percent in FY 2016. City government operations account for about one percent of all waste, and three-quarters of that is from public schools.

The City’s 2015 Climate Action Plan Update includes the strategy “Make progress toward a waste- and litter-free city,” with the associated action, “Launch a zero waste planning process.”

GUIDING PRINCIPLES

1. *Make Zero Waste a Key Priority*

Boston will create a waste policy that mitigates climate change, reduces climate emissions and other environmental and public health impacts, saves money,



supports economic mobility and creates good jobs for Boston residents. As part of this work, the City will:

Define the Goal

Boston will build from the Zero Waste International Alliance’s definition of zero waste to define the goal.

“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.”

Develop a Strategy

Boston will establish a plan to advance zero waste in all sectors of the Boston community. Implementation of this plan would start in Fiscal Year 2018. The plan will include specific metrics, milestones, and timelines.

Expand Resources For Change

Whether through partnerships, policies or direct funding, Boston will expand support for zero waste engagement, education and enforcement.

Work Collaboratively

Recognizing that this is a shared challenge, Boston will work collaboratively with other communities in the region and other major U.S. cities in this work.

2. Focus First on Wasting Less, Diverting More

Through this plan, Boston will develop and adopt policies that will support waste reduction; significantly increase repair, reuse, recycling, composting, and



remanufacturing; and enable the City to meet its zero-waste milestones. As part of this work, the City will:

Lead by Example

While accounting for roughly only 1% of the city's total waste, the City of Boston recognizes it has an opportunity and responsibility to lead by example.

Consequently, the City will examine and implement policies to reduce, reuse and recycle more. This may include - among other actions - using municipal procurement to support zero-waste goals; evaluating city contracts for waste reduction opportunities; creating model waste reduction and recycling programs at all City properties and facilities, including schools and housing; and engaging all City departments in zero-waste planning and implementation.

Facilitate Residential Waste Reduction

Residential waste accounts for about 40 percent of the city's waste stream, and the City manages contracts that provide waste and recycling services to all Boston residents. The City will work with service providers, Boston residents, and large residential building owners and property managers to identify changes that support zero waste goals. It will also continue discussions with regional stakeholders to develop regional zero-waste solutions.

Engage Large Generators of Waste

60% of waste comes from commercial, industrial and institutional partners. The City will work with the largest waste generators, such as colleges, universities, hospitals, and commercial businesses to waste less and divert more. The City will explore incorporating zero-waste requirements into major permitting, planning, and project reviews.

3. Support This Work Through Local Business

Recognizing that the successful implementation of a zero waste system requires not just local policies but a local industry, the City will work with workers and businesses to ensure that they are prepared to support these new policies.



This may include working with job training programs to include needed zero-waste skills; supporting new and emerging zero-waste jobs for Boston residents, including youth; and drawing on Boston's leadership in technological innovation and research to put discarded materials to their highest and best use. Throughout this work, the City will encourage measures to improve the safety, health, and jobs of workers.

4. Sustain This Work Through Culture Change

Acknowledging that achieving and sustaining zero waste will be a collective accomplishment, the City of Boston will focus on how to build a culture of zero waste, citywide. This will include engaging meaningfully with all stakeholders in a Zero Waste planning process; embracing industry workers, communities of color, low-income communities, and youth as critical Zero Waste partners; conducting large-scale, linguistically and culturally appropriate public education; and growing the next generation of zero-waste leaders by developing youth-specific programs.



CITY OF BOSTON ZERO WASTE ADVISORY COMMITTEE

PERLMUTTER ASSOCIATES--ZERO WASTE PLAN CONSULTANT TEAM

SCOPE OF WORK

1. Facilitate meetings
2. Gather and analyze Boston municipal solid waste data
3. Assess waste reduction and diversion opportunities
4. Conduct cost-benefit analysis of selected opportunities
5. Develop advisory committee's zero waste plan recommendations
6. Conduct market development study
7. Conduct public education case studies



Task	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
1 Kick off ZWAC meeting	█								
2 Data gathering	█	█							
2 Population and business activity	█	█							
2 Generation/diversion assessment	█	█							
6 Business Inventory	█	█							
6 Task 6 Report			█						
5 Subcommittee Meetings				█					
6 Internal Advisors call			█						
3 Opportunity assessment			█	█					
3 Draft memos of recommended programs					█				
1 Community input on recommended programs					█				
7 Summaries of public education programs				█					
1 ZWAC meeting					█				
3 Finalize memo for recommended programs						█			
4 Conduct cost/benefit analysis						█	█		
1 Subcommittee Meetings							█		
5 Draft Final Report							█	█	
1 Subcommittee Meetings								█	
5 Final Report								█	█
1 ZWAC meeting									█



CITY OF BOSTON ZERO WASTE ADVISORY COMMITTEE SUBCOMMITTEE AGENDAS

FEBRUARY 12, 2018

10:00-11:30

**Residential Subcommittee meets in Piemonte Room
Institutional/Commercial/Industrial Subcommittee meets in Room 900**

DESIRED OUTCOMES

- ZWAC understands Subcommittee roles:
 - 1st meeting, waste reduction measures to be further analyzed.
 - 2nd meeting, choose short list of waste reduction measures for cost/benefit analysis
 - 3rd meeting, review of cost/benefit analysis.
- criterion for choosing waste reduction measures
- waste reduction priorities to be further researched

AGENDA FOR SUBCOMMITTEES

- Welcome and Introductions--10 minutes
- Background of Proposed Zero Waste Initiatives--15 minutes
- Review of Posters by ZWAC subcommittee members--30 minutes
- Report Back--10 minutes
- Outreach--10 minutes
- Questions/Next Steps--15 minutes

Boston Zero Waste Plan Options

Residential Policies and Programs



Waste/Packaging Reduction	
1. Bans or fees	Adopt local ordinances that limit or ban sales of toxic or hard to recycle products and product packaging (e.g., Styrofoam).
2. Require items to be reusable, recyclable or compostable	Develop an ordinance to require that all products and packaging sold in Boston be reusable, recyclable or compostable.
3. Retailer take-backs (voluntary, mandatory)	Develop an ordinance to require takeback of items at retail locations. This can be to improve convenience for consumers or to collect materials that are not acceptable in the curbside recycling program (e.g., batteries, pharmaceuticals, compact fluorescent bulbs).
4. Product & packaging fees	Adopt point-of-sale fees for products that are toxic, hard to reuse, recycle or compost and/or certain disposable items to incentivize customer reuse.
5. Statewide packaging and product design	Advocate for statewide packaging policies, including Extended Producer Responsibility.
New Services	
6. Expand organics (food and compostable paper) collection	Expand organics collection to include food scrap and compostable paper (organics) to all residential households.
7. Expand yard waste collection	Expand the number of weeks that yard waste collection is provided.
8. Every other week trash collection	As the City moves closer to Zero Waste, more of the waste materials collected should be recoverable (recyclable or compostable). Provide recycling and organics collection every week and provide trash collection every other week.
9. Reuse collection (e.g., reuse nonprofit goes ahead of cleanup collection trucks)	Add reusable items to by-appointment clean up days and allow non-profits to take turns collecting those goods the day before the collection trucks arrive.
New Rules	
10. Rate structure incentives or trash limits	Transition to Pay-As-You Throw or Save-Money-and Reduce Trash where residents purchase preprinted bags for trash disposal. Consider limiting the amount of trash put out by residents, i.e., no more than one bag/barrel per week. Consider charging fees for bulky items that don't fit in the trash barrel.
11. Mandatory ordinance, reinforcement and enforcement	Provide periodic auditing of residential collection containers and provide outreach and education to residents to ensure that they are aware of the mandatory recycling program and how to comply. Ensure that all customers are auditing once per year with more outreach provided to residents who require more assistance.
12. Provide only recycling service to large buildings	Provide only recycling service (but not trash service) to large buildings. Property managers would subscribe separately to trash collection.
Outreach and Education	
13. Behavior change marketing	Use Community-Based Social Marketing techniques to change behavior: identify barriers, conduct focus groups, evaluate options, conduct pilots, expand behavior-change programs.
14. Conduct outreach and technical assistance	Provide door-to-door outreach to residents, train recycling ambassadors and Zero Waste block leaders, form green teams and conduct presentations with home owner associations and at multifamily complexes.

Boston Zero Waste Plan Options

Institutional Commercial Industrial



Waste/Packaging Reduction	
1. Improve green purchasing procedures	Ensure that all City staff are aware and fully participating in the City's Environmentally Preferable Purchasing Policy. Develop standard operating procedures and education campaign.
2. Zero Waste research initiative	Work collaboratively with industry, government and educational institutions to find new solutions for items that are hard to reuse, recycle or compost, connecting with the latest developments, innovation and innovative funding (including venture capital).
New Services	
3. Modify permit system to require universal collection of recyclable and compostable materials	Require all solid waste haulers to provide collection of recyclable and compostable materials to all of their customers.
4. Consider exclusive contracts or franchises for collection services	Consider transitioning from permit system to exclusive contracts or franchises for collection services (could include dividing the city into collection areas). Provide financial incentives for recycling and composting.
5. Food waste prevention and surplus food donation	Expand on-going outreach to grocery stores, restaurants, school cafeterias and other food generators on opportunities and practices to prevent food waste and surplus food donation. Work with local business and regional industry associations to hold Waste Less Food panels. Incentivize food waste reduction tools such as Lean Path, etc.
6. Expand organics (food and compostable paper) collection	Expand organics collection to include food scrap and compostable paper (organics) to all commercial customers.
7. Reuse exchange	Develop a clever and convenient program that encourages and rewards businesses for institutionalizing internal reuse – reuse closets for office supplies or tools, surplus sales to other businesses – remnants, surplus goods and equipment, donating goods to non-profits and, finally, giving items away.
New Rules	
8. Mandatory ordinance, reinforcement and enforcement	Expand and improve outreach and enforcement of sorting requirements for institutional, commercial and industrial customers.
9. Require deconstruction, recycling and source separation of construction materials	Adopt an ordinance to specify requirements for deconstruction, recycling and source separation of selected materials to increase the diversion rates in place of complete demolition which would no longer be allowed.
Outreach and Education	
10. Waste Prevention Technical Assistance	Expand commercial technical assistance program to include waste prevention and reuse. Provide tools to identify and redesign wasteful practices, products and packaging, and purchasing more environmentally preferred products as well as how to recycle and compost, and right-size collection.
11. Business outreach (presentations, door-to-door outreach, Zero Waste Champions)	Expand outreach and technical assistance to industrial, commercial and institutional generators addressing recycling and/or composting logistics and increasing employee participation.