

# Don't Waste This Opportunity:

Policy Recommendations for a Path to  
Zero Waste and Good Jobs for Boston



Boston Zero Waste Task Force

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## Boston Zero Waste Task Force:

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## **Boston: Current Landscape**

Boston is a national leader on many fronts: the information economy, health care, energy efficiency. However, the city's waste diversion rate has been subpar for many years compared to cities with leading programs; residential recycling rates have failed to surpass 20% despite an uptick following recent investments in single stream collection. Factoring in the better performing commercial sector yields an approximate 30% rate, compared to a national average of 34%. While reported rates in various cities are sometimes reflections of different indicators, several comparably sized cities have seen dramatic results using policy innovations, such as Austin (>40%), Seattle (60%), and San Francisco (80%).

Communities have little incentive to prioritize waste diversion if its benefits, especially those related to economic opportunity, do not accrue in Boston. And the commercial sector- which comprises well over half the city's waste- currently operates in an open market system. Businesses each must contract for collection separately. This happens largely without City regulation and with minimal state oversight, leaving little room for incentivizing improvement.

Aside from what is recycled, almost all of Boston's residential waste is currently incinerated, resulting in significant public health costs and greenhouse gas emissions. Along with many toxic substances, waste-to-energy incinerators emit more CO<sub>2</sub> per unit of electricity produced than coal plants.<sup>1</sup> And disposal, whether by incineration or land-filling, produces ten times fewer jobs than recycling,<sup>2</sup> while destroying materials that could create new economic opportunity in Boston communities: for every item burned or buried, a new one must be extracted, processed and manufactured from raw materials. Recycling and waste collection and sorting can be dangerous and often lack health and safety protections. Industry workers also often face minimum wage jobs with no room to advance. It is time for Boston to adopt a new paradigm.

## **Enter "Zero Waste"**

Zero Waste (ZW) is a re-envisioning of how society relates to production, consumption and disposal of the products and materials we use every day. Often defined as 90% or more diversion, its goal is to end toxic and unnecessary waste materials through systemic redesign, channeling remaining discards into reuse or recycling for the creation of new products. It requires coordination between engaged producers and consumers, governments and citizens, neighborhood activists and neighbors. As we are starting to see in community after community, ZW initiatives are working and producing significant benefits.

The benefits of reduced disposal, and increased recycling and organic waste processing are well-established: For every ton recycled instead of disposed, the City would save \$56.<sup>3</sup> With

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<sup>1</sup> US E.P.A. <http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html>

<sup>2</sup> "More Jobs, Less Pollution: Growing the Recycling Economy in the United States," Tellus Institute, 2011

<sup>3</sup> "Boston's Trash and Recycling Contracts," Boston Public Works Department informational presentation, 9/13

240,000 tons of residential waste currently disposed annually,<sup>4</sup> the City has an opportunity to create a new revenue stream through increasing its share of proceeds from sales of recyclables. A major recent study showed that increasing the national recycling rate to 75% from a current average of 34% would create 1.5 million new well-paying, local, long-term jobs.<sup>5</sup> Cities with top diversion programs understand that organics are among the largest components of the waste stream, with the methane they release during decay also a potent climate agent. Additionally, organics processing has proven to be a significant creator of green economic activity.

In places like Austin and Seattle, policy infrastructure overhauls have set the stage for dramatic growth in waste diversion and significant positive impacts on city budgets. While no two cities' political and economic landscapes are identical, there is much to be learned from best practices elsewhere. Boston has the chance to create a unique, world-class model of waste policy by embracing the principles of Zero Waste, alongside strong worker and environmental protections. By allocating reasonable resources for staffing, education, engagement and enforcement, Boston can draw up a citywide vision and begin Zero Waste planning, providing a robust program for this least developed aspect of the city's Climate Action Plan.

## How do we get there?

If, as advocates have requested, Boston extends the expiring current solid waste contracts until 2015, this will afford us time to improve the contracting process and lay the groundwork for ZW policy. **Within the year, the city must initiate a city-wide educational and Zero Waste Master Planning process.** Potential funding sources include RFP winners, and state and private grants. The Plan should identify materials in the waste stream that can be diverted and ways to boost participation, as well as build up the existing reuse sector and markets for diverted materials.

For a successful ZW program, public input should inform every stage of the process, using traditional outreach methods such as community meetings as well as social media platforms. A facilitator should be contracted to **elicit a community-led consensus** that brings together a full range of stakeholders and delivers a world-class Zero Waste plan. As diversion increases, the City can ensure jobs created stay local, providing strong incentives for residents to educate each other on its benefits, and for neighborhoods not diverting at high levels to do so.

Finally, the City should accurately **account for climate emissions from the solid waste sector** by using a product lifecycle assessment. If the true climate impact of this sector were understood by policymakers, the issue would undoubtedly escalate in priority, and an updated calculation of savings would result in improved implementation funding for solid waste diversion.

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<sup>4</sup> "Boston's Trash and Recycling Contracts," Boston Public Works Department informational presentation, 9/13

<sup>5</sup> "More Jobs, Less Pollution: Growing the Recycling Economy in the United States," Tellus Institute, 2011

## About the Task Force

The Boston Zero Waste Task Force was convened in June 2013 by member groups of the Boston Recycling Coalition, as a means to recommend Zero Waste policies for the City of Boston informed by a full range of stakeholders. Until now, the voices of key stakeholders in the city's waste, recycling and composting system - and consequently their interests - have been absent from policymaking. This Task Force has met six times since June 2013, and represents small startups, large businesses and institutions, policy experts, environmental advocates, municipal agencies and both current and hopeful future workers. A full list of members is attached.

Members of this Task Force also offer our services to the City in the event that we can be of service during a Zero Waste planning process. Comprised of stakeholders representing diverse residential, commercial, institutional and labor constituencies, this body has weighed the implications of a range of policy options and reached a consensus. We recommend the following policies and timeline for adoption by the City of Boston.

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The Task Force recommendations are aimed at four primary goals:

1. Develop policies to move Boston's overall diversion recycling rate to 50% by 2020, 75% by 2030, and Zero Waste by 2040.
2. Establish a city-wide Zero Waste planning process that prioritizes meaningful community engagement and emphasizes the creation of good, green jobs to achieve the above goal.
3. Scale up programs for diverting food and yard waste, and provide incentives and assistance to promote inclusion of small, local businesses.
4. Guarantee workers living wages and safe work conditions in the city's waste and recycling contracts.

## ***Short-Term (1 year: 2014)***

### Zero Waste Planning:

- The City will **set a formal goal of achieving Zero Waste**, with benchmark goals along the way, and hire an independent expert consultant to facilitate a planning process, as has been successful in cities around the country. The City will then convene a Zero Waste Master Planning process, and engage diverse stakeholders in the visioning, including:
  - state and city solid waste staff;
  - industry, labor and worker representatives;
  - Zero Waste and clean technology experts;
  - large property owners, managers, and tenants;
  - large waste generators;
  - elementary, secondary, vocational and college representatives;
  - community, environmental and religious organizations; and
  - officials from other municipalities with successful diversion programs

### Contracting:

- **Replace the current Invitation for Bids (IFB) on hauling, recyclables processing, composting, and disposal contracts with a Request for Proposals (RFP) process, which allows for weighting other desirable factors than lowest price.** RFPs should be written to promote increased diversion, climate mitigation, local hiring, etc. Smaller, responsible local businesses run by women and minorities should be allowed to compete through provisions for subcontracting, or the division of one waste district (ideally the one with lowest diversion rates) into smaller innovation districts. While increased diversion will save money through lower disposal costs, the recyclables processing contract can also be written to encourage competition among bidders for highest returns to the city from sales income, proceeds of which should be earmarked for diversion education and implementation).
- **Ensure that the city's Living Wage Ordinance applies to workers providing services under recyclables processing contracts**, in line with the other contracts, since they too are providing a service. The next round of contracts must also require safety protections, and prevent subcontracting of poorly-paid temporary workers.

### Organic waste:

- Continue and expand the farmers' market composting pilot launched in 2013.
- **Initiate a curbside composting pilot** in one waste district, to be expanded citywide.
- Assist organic waste collection and processing startups with business development.
- Help procure city land for windrow composting, vermiculture or anaerobic digestion.
- Convene an organics stakeholder roundtable to map infrastructure development

### Collection frequency

- Boston should **increase the ease of recycling** by shifting collection frequency where needed, so that trash and recycling collection both occur once per week.

### Hazardous waste

- **Expand the opportunities for drop-off of hazardous materials and appliances**- both the frequency of collection, and number and dispersion of collection locations. Explore policies requiring producers of hazardous materials to take them back or pay for recycling them. Provide residents with information and increased access to donation and reuse programs, so that less furniture and fewer usable appliances are placed curbside for trash collection.

## ***Medium Term (1 - 5 years: 2015-2020)***

### Zero Waste Plan Implementation:

- The City will now be implementing the Plan, ensuring that as strategies are developed, community input and engagement is prioritized. If the policies set out in a Zero Waste plan are to be successful, buy-in from neighborhoods and businesses alike will be essential. The City will follow regular benchmarks instituted by the Plan, and conduct ongoing evaluations to enable adjustments when necessary for maximum effectiveness.

### Organic Waste:

- Boston should **aggressively scale up its organics infrastructure**, and support the development of an organics plan for residential and commercial organic waste that uses the range of technologies and methods available. The residential curbside composting pilot should expand citywide, and the City should help small businesses exempt from the Fall 2014 organics ban prepare for the expected future need for compliance with connections to local organics haulers and processors. We recommend the City also build on the existing body of research with feasibility studies for **community-scale anaerobic digestion (AD)** facilities, as a method of processing clean organic waste into renewable energy while growing the local green economy. This could include helping assemble private, municipal, state and/or federal resources, including renewable energy development funds, and delineating a strong public health and safety regime. AD can both process organic waste, and also turn the biogas produced into electricity-- for powering neighborhood facilities or selling back to the power grid as a new revenue stream. At the commercial level, the City should act on the finding of practitioners that pairing improved recycling with organics diversion has the greatest environmental, economic and operational benefits for generators, to educate businesses on regulations and their benefits. Boston has a chance to create a new model using both small and large-scale infrastructure, that accomplishes both environmental and economic goals.

### Residential mandates

- Boston should elicit desired changes in residents' behavior by instituting a mandate to separate recyclables and/or organic waste from trash. Haulers can be empowered to refuse trash pickup if they see more than a specified percentage of divertible materials in trash bins, as in Seattle, where organics are now covered as well. Providence, RI doubled its diversion rate in one year with a 'no bin, no barrel' policy requiring residents to put out recycling bins in order for trash to be collected.

### Commercial mandates

- Boston should help drive up business diversion by instituting a commercial mandate, as recommended by the Boston Climate Action Leadership Committee.<sup>6</sup> Requiring that they each play by the same rules removes any competitive disadvantage to instituting recycling, and also lowers disposal costs. The City will need to play an important role in assisting businesses with compliance, and providing incentives to divert.

### Multi-family housing:

- Require Boston Housing Authority complexes to install recycling and compost facilities, and all new multi-family construction to include recycling and organic waste collection. Assess the feasibility of covering these buildings under residential contracts. Provide educational materials so residents understand why and how to recycle and compost.

### Neighborhood ambassadors:

- Neighborhood leaders can be **effective agents of positive change**, and should be recruited to serve as local 'ambassadors' promoting diversion and educating neighbors on its benefits, among other desirable outcomes. Boston should develop a network of such volunteers who coordinate to educate and motivate their neighbors. Ambassadors could also play an enforcement role, conducting informal curbside inspections on collection days and educating residents who are not in compliance.

### "Save Money and Reduce Trash":

- One of several solutions mentioned in Boston's current Climate Action Plan<sup>7</sup> that could dramatically reduce disposal and increase diversion, is SMART: Save Money and Reduce Trash (also known as "Pay As You Throw"), which incentivizes diversion and makes visible to residents the high cost of trash disposal or solid waste disposal. Boston should pilot SMART through a City Council resolution and contract language alterations. We suggest a hybrid model for our city, where all residents are guaranteed one bag of trash picked up weekly, with succeeding bags charged a fee. Recycling would be paid for

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<sup>6</sup> "Sparkling Boston's Climate Revolution," 2010

[http://www.cityofboston.gov/Images\\_Documents/BCA\\_full\\_rprt\\_r5\\_tcm3-19558.pdf](http://www.cityofboston.gov/Images_Documents/BCA_full_rprt_r5_tcm3-19558.pdf)

<sup>7</sup> "A Climate of Progress," 2011 [http://issuu.com/ees\\_boston/docs/a\\_climate\\_of\\_progress\\_-\\_cap\\_update\\_](http://issuu.com/ees_boston/docs/a_climate_of_progress_-_cap_update_)

through fees on trash. There could also be rewards for producing even less trash. SMART requires thoughtful implementation for success, including adequate education ahead of rollout, planning for impacts on low-income residents and multi-family buildings, and prevention of illegal dumping by people evading fees. However, the results in communities around the country have been nothing short of remarkable.

#### Reuse:

- When it comes to jobs creation, reducing climate emissions, and saving municipalities money, reuse ranks even higher than recycling.<sup>8</sup> Removing still-useful items from the waste stream can dramatically reduce climate emissions, while reducing costs for government, individuals, and organizations. The City should **create and fund a reuse coordinator position**, to help develop and support local reuse businesses, and promote access to already existing frameworks, such as donation programs. The City should also help expand on existing donation programs for moving days at local colleges; a robust public awareness campaign and coordination among immediate stakeholders will lead to a substantial drop in disposal and benefit local reuse nonprofits and businesses. The City should help maximize the rental, repair, donation, salvaging and 'freecycling' of goods that are still usable, by assisting reuse startups across city neighborhoods through zoning, permitting and access to financing; development of training programs in vocational schools and community colleges; and public education.

#### Schools:

- Require Boston Public Schools to implement systems ensuring **recycling and composting are no harder than throwing materials in a trash bin**. Through proper education, and receptacles placed side by side accompanied by clear and consistent signage, Boston Public School children will learn how to recycle in the classroom, eventually encouraging their families to recycle at home.
- Develop and implement a **sustainability curriculum**, including a unit on reuse, recycling, and composting. Look to practices of other communities such as Cambridge, where sustainability initiatives in schools are widespread.

#### Single stream:

- The City should require recyclables processing contractors to report on residual percentages and contamination, to show the true recycling rate and to analyze what is not being recycled. This feedback loop would be important for the city to learn how to improve education and to allow for requiring better processing when necessary. Hauling and processing contracts also should include a requirement to adopt best practices for single stream implementation.<sup>9</sup>

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<sup>8</sup> <http://ec.europa.eu/environment/waste/framework/index.htm>

<sup>9</sup> <http://conservatree.org/learn/SolidWaste/bestpractices.shtml>

## ***Long Term (5 years +: 2021 and beyond)***

### Zero Waste Plan Implementation:

- Boston will have surpassed 50% diversion, and have in place the proper funding, staffing and policy framework to reach the Plan's ongoing diversion benchmarks.

### Extended Producer Responsibility:

- In order to reach Zero Waste, producers of what has the potential to become waste need to be engaged to pursue responsible practices. Boston should join forces with other cities and states to enter into collective negotiations with producers of particularly problematic goods or materials, including electronic waste, to either eliminate the problem or take responsibility for recycling their products. The goal of Zero Waste is possible only through redesign of the entire system, from production to disposal.

### Bag and styrofoam ban:

- As communities around the world have begun to do, Boston should implement a ban on single use plastic bags and polystyrene containers for retail use, and assist retailers with other options. The environmental and public health damage from incinerating these items, water pollution, and threats to wildlife is severe, while alternatives are plentiful.

### Manufacturing and remanufacturing locally:

- The City should help retain recyclables and reusable items in the region by collaborating with workforce development agencies, regional planning bodies, state agencies and other relevant parties to build the infrastructure needed for large-scale manufacturing and remanufacturing industries based on discarded materials. Boston is well-placed to help launch a mini-industrial revolution across our region, with its many idle 'gateway communities,' by stimulating remanufacturing capacity and demand for locally manufactured goods made from recycled feedstock. This smart investment comes with handsome rewards: dramatic climate emissions reductions from reduced transportation of goods from abroad, and by far the highest number of new, well-paying jobs produced by any sector associated with solid waste processing.<sup>10</sup>

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<sup>10</sup> "More Jobs, Less Pollution: Growing the Recycling Economy in the United States," Tellus Institute, 2011