

ZERO WASTE

San Francisco continues to lead the nation toward zero waste. Zero waste means products are designed and used according to the waste reduction hierarchy (reduce, reuse then recycle or compost) and principle of highest and best use, so no material goes to landfill or high-temperature destruction. While the U.S. has long generated the most waste per capita in the world and only diverts about a third of its discards from landfills and incinerators, San Francisco achieved 78% diversion in 2009, exceeding its goal of 75% by 2010.

The Challenge

The plan below outlines the strategy over next three years toward achieving our audacious, ultimate goal of zero waste by 2020. San Francisco disposed 444,398 tons in 2010. This was 7% below the year before and the least amount on record. But it's still a long way from zero waste, which will be even more challenging if the consumer economy takes off again.

Impact Opportunities

About 35% of what we still landfill is compostable (primarily food scraps) and 30% is recyclable (mostly construction and demolition debris and paper). Capturing all of this material through our current programs would decrease landfill to only 10% of generation. We need to increase consumer responsibility (such as through reducing unnecessary consumption and enforcing our Mandatory Recycling and Composting Ordinance), deal with single refuse chutes in buildings and further develop low-temperature, mechanical/biological mixed-material recovery processes.

The remaining disposal is largely composite items (about 7%, 34,000 tons per year), plastic film (5%, 25,000), textiles/apparel (4%, 18,000), asphaltic roofing (4%, 17,000), hazardous waste (mostly treated/painted wood, 3%, 14,000), diapers (2%, 10,000), carpet/upholstery (2%, 8,000), animal by-products (1%, 7,000), furniture (<1%, 3,000), expanded polystyrene (<1%, 1,000), rubber (<1%, 1,000) and ceramics (<1%, 1,000). Programs can be created for such materials, but require funding and are aided by the cooperation of manufacturers and retailers. Producer responsibility policies are needed to engage brand owners in redesign and recovery, and achieve true zero waste.

Our Role

The Zero Waste program has instituted a wide array of policies and convenient services. We encourage all sectors to follow policy and use our services properly. Our primary focus is securing everyone's compliance with the Mandatory Recycling and Composting Ordinance. We continue to adjust financial incentives for generators and service providers. The program promotes waste prevention and environmentally preferable purchasing. We will also continue pushing for additional local and state legislation increasing consumer and producer responsibility.

GOAL #1

Decrease disposal 10% (about 44,000 tons) annually to achieve zero waste by 2020 and protect ecosystems, conserve resources and energy, and reduce pollution and climate change.

Objective A: Decrease residential disposal by 15,000 tpy (tons per year).

ACTIONS:

1. Reduce waste on such items such as diapers, textiles, plastic bags and auto-delivery newspapers and flyers (Outreach, 12-14).
2. Increase reuse at the Public Recycling & Disposal Area by 140 tpy, and award and manage grants to nonprofits diverting over 2,500 tpy of reusables and other materials while creating green jobs (12-14).
3. **Working closely with Environment Now and Outreach, decrease disposal by 13,600 tpy by educating residents, enforcing mandatory and visiting 60,000 households, initiating composting at 800 apartment buildings and 1,100 3-5 unit buildings, thereby reducing disposal by 1 pound per week at apartments and 2 pounds per week for curbside households (12-14). Develop recycling and composting plan and implement in Section 8 Housing (Outreach, EN, 11-13).**
4. Increase beverage container redemption convenience for San Franciscans by working with Recology, grocers, neighbors, CRV center operators, the Police Department and District Attorney, to reduce poaching and ameliorate the concerns of residents (12-14).
5. Each year train or contact directly with 100 event producers to assure that 100 events exceed 50% diversion and 25 events exceed 75% diversion and identify 5 events that have no recycling or composting and work to assist them (Outreach, 12-14).
6. Work with Recology to restore Fantastic 3 recycling processing residuals below 10% while optimizing market prices (Outreach, EN, 12-14).

Objective B: Decrease commercial disposal by 25,000 tpy.

ACTIONS:

7. Promote waste prevention (e.g., double-sided printing and copying, food redistribution) and purchasing recyclable/compostable products with recycled content such as through presentations, the Green Business program and promoting SF Approved (Outreach, Toxics, 12-14).
8. **Reduce disposal by 17,000 tpy (12,000 tpy ZW/EN, 5,000 tpy Outreach) through bringing recycling and composting to the remaining commercial accounts (600 new recycling and 2,500 new composting accounts annually) by conducting outreach (such as presenting at merchant associations and property management companies), providing assistance, and coordinating with service providers, owners/managers, employees, janitorial companies, unions and others (Outreach, EN, 12-14).**
9. **Reduce disposal by 10,000 tpy by continuing to implement the Construction and Demolition Debris Recovery Ordinance by maintaining 10 registered facilities and 400 registered transporters; conducting outreach, in-field monitoring, and increased enforcement; working with Department of Building Inspection (DBI); promoting material reuse and source-separation; identifying additional material markets; revising Environment Code Chapter 14 (with DBI, SFPUC, DPW, transporter groups); drafting Regulations for C&D Section of Environment Code Chapter 7 and revising**

specifications for municipal construction projects; training City employees and contractors; and participating in disaster debris recovery planning (Green Building, EN, 12-14).

Objective C: Decrease City government disposal by 4,000 tpy and further facilitate departments leading by example.

ACTIONS:

12. Advance waste prevention through compliance with Mayor's Executive Directive 08-02 to reduce paper use by 20% by working with departments to institutionalizing such practices as paperless paystubs, electronic distribution of forms at all City departments, and installing 58 electric hand dryers (12-14).
13. Decrease purchase of new items and increase reuse and recycling of office furniture, equipment and supplies, and divert 1,500 tons of scrap metal and surplus per year through managing and promoting the Virtual Warehouse and metal recycling contract by making presentations to 500 employees annually who are moving, renovating or unfamiliar with these services and further developing relationships with Real Estate, OCA and the Recreation and Park Department. Increase Virtual Warehouse overall transactions, ones that provide 30 days notice and the proportion of items redistributed to departments by 15, 20, and 20% respectively. Demonstrate cost savings and/or revenue generation of at least \$500,000 per year from the Virtual Warehouse and scrap metal (12-14).
- 14. Reduce disposal 4,000 tpy by facilitating compliance with the Resource Conservation Ordinance, conducting 50 site visits, making recommendations and improving programs, ensuring every City facility is equipped with recycling and composting containers, training 75 Zero Waste coordinators, presenting on zero waste principles and procedures to 1,000 City employees, ensuring all departments report on recycling and composting in their Climate Action Plan, providing feedback or soliciting support from 15 key department Directors or upper managers and assisting departments in saving \$100,000 annually (12-14).**
15. Facilitate compliance with the Precautionary Purchasing Ordinance and Extended Producer Responsibility Resolution to promote purchasing reusable, recyclable/compostable products and products with recycled content by assisting OCA with incorporating environmental specifications in 3 bid processes, working with departments to reduce packaging and increase takeback, training 200 end-users on City purchasing requirements and environmental benefits of preferable products, collecting sales data and evaluating progress (Toxics, 12-14).
- 16. Develop strategies to divert 4000 tons of street sweepings that passed toxicity testing to composting and assist the SF Public Utilities Commission in developing sewage sludge diversion contingencies (12-14).**
17. Showcase key department efforts as models of zero waste to encourage other agencies and the private sector (12-14).

ACTIONS (for all 3 sectors):

- 18. Implement the Mandatory Recycling and Composting Ordinance by educating all generators about its requirements, providing assistance and encouraging DPH and DPW enforcement where necessary (Outreach, EN, 12-14).**
- 19. Work with DBI to implement the administrative bulletin and Green Building Ordinance requiring adequate and convenient space for recycling and composting in new buildings, and convert or close trash chutes in existing buildings (Green Building, 12-14).
- 20. Test and evaluate low-temperature, mechanical/biological processing technologies (such as autoclaves, presses and anaerobic digestion), increase material types recycled and composted, and further develop markets and create green jobs (12-14).**
- 21. Keep the ecofinder updated, and improve and expand web-based and other information that motivates people to achieve zero waste (Outreach, 12-14).

GOAL #2	Advance towards zero waste by holding producers and consumers responsible for their waste.
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Objective A: Require diversion program participation in all sectors.

ACTIONS:

- 22. Work with the Mayor’s Office, Board of Supervisors and others to support State legislation mandating recycling and composting at apartments and businesses, and regionally to ban materials such as cardboard from landfills (Outreach, 12-14).

Objective B: Decrease use and encourage re-engineering of disposable products, increase reuse, recyclability, compostability and recycled content of selected categories, and secure producer participation or funding for recovery.

ACTIONS:

- 23. Work with the Mayor’s office, Board of Supervisors and others to introduce and support local and State policies targeting problem products (e.g., plastic film, textiles/apparel, asphaltic roofing, disposable diapers, carpet/upholstery) and improving labeling of compostable products. (Outreach, Toxics, 12-14).**

GOAL #3	Assist with landfill agreement, refuse rate and other processes.
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Objective A: Help secure any disposal capacity needed beyond the current Altamont agreement while incentivizing achieving zero waste by 2020.

ACTIONS:

- 24. Aid in negotiating new landfill agreements and obtaining Board of Supervisors approval prior to the next comprehensive rate process (12).

Objective B: Help set refuse rates, incentives and program funding leading to zero waste by 2020.

ACTIONS:

25. Assist in preparing for and completing public processes on rates, the special reserve, Department of Public Works costs and producer responsibility (Toxics, 12-14).