

Key Initiatives for Achieving Zero Waste



Zero Waste Initiative	2008-2013 to 75 percent Diversion	2013-2022 to Zero Waste
1. Commercial Redesign	✓	
2. Food Scraps Composting and Recycling (including anaerobic digestion)	✓	✓
3. CDDD Redesign and Enhancements	✓	
4. Residential System Enhancements	✓	✓
5. Landfill Regulations	✓	✓
6. Generator Mandates		✓
7. Extended Producer Responsibility Programs	✓	✓
8. Mixed Waste Recycling	✓ (Commercial)	✓ (Single-Family Residential)
9. Future Development of Energy Conversion Technologies		✓

Table 4, Zero Waste Initiatives

As described in the policies, programs and facilities sections, the City is rolling out several key initiatives for achieving zero waste. A number of these initiatives will be undertaken within the next five years to reach the City’s interim goal of 75 percent diversion by 2013. Some of these initiatives will be

implemented in the long-term over the next 5 to 15 years to reach the City’s long-term goal of zero waste by 2022. Additionally, a few of these initiatives will begin to be implemented in the short-term, but will come to full fruition in the long-term. Table 4 lists the zero waste initiatives and the short-term and long-term schedule for implementation.



Zero Waste Initiatives

1. **Commercial Redesign** – The City has embarked on a new program designed to provide recycling and composting collection services to all businesses and institutions in the City. If the commercial sector is able to realize its full potential, the City’s overall diversion rate could increase to 75 percent. In the short-term, the City will finalize the commercial system design, procure new collection and processing contracts, and roll-out the new system to all commercial businesses citywide.
2. **Food Scraps Composting and Recycling** – The City has a unique opportunity to use digestion capacity at the Water Pollution Control Plant for food scrap diversion. In the short-term the City will evaluate the feasibility of developing commercial collection routes dedicated to food scraps, preprocessing these materials to prepare them for digestion, and managing the digestate through beneficial reuse and composting. In the long-term, the City will consider future options for processing residential food scraps for digestion.
3. **CDDD Redesign and Enhancements** – The City will implement enhancements for improving the CDDD program and increasing diversion of construction and demolition debris from the franchised haulers and from the non-franchised and self-haul sectors.
4. **Residential System Enhancements** – The City’s single-family agreements will expire within the next five to seven years. In the short-term, the City will evaluate new collection and processing options, including co-collecting yard trimmings and food scraps; and separately collecting food scraps for digestion. In the long-term, the City will finalize the new collection and processing system and procure new collection and processing contracts.
5. **Landfill Regulations** – Zero waste policies, including landfill bans and EPR programs, may be needed to reach beyond maximizing recycling to reducing the overall volume of waste. In the short-term, the City will work with its regional



Alternative Fuel Generated From Waste



partners on local and statewide solutions.

6. **Generator Mandates –**
City will evaluate this if programs alone are not achieving required results.
7. **Extended Producer Responsibility –**
The City will advocate for EPR legislation at the state level and engage local businesses in voluntary take-back programs. The City will work with Stopwaste.org and others to determine whether bans of materials, such as cardboard and yard trimmings, will be effective in increasing diversion of these materials.

Ultimately, EPR requirements for the prohibition or mandating take-back of many toxic and hard-to-recycle materials may be necessary to end landfill disposal and achieve zero waste.

8. **Mixed Waste Recycling –** In the future, the City may require processing of all mixed waste loads prior to disposal to ensure that all recyclable and compostable materials are diverted. The City will evaluate the success of its multi-family and City facility mixed waste processing program and determine whether it is appropriate for further expansion to the single-family residential and commercial sectors. The City will also monitor the development of new processing capacity for mixed waste processing planned by the private sector.

9. **Future Development of Energy Conversion Technologies –** Conversion technologies for processing mixed waste to create energy, including synthetic gas generation, are emerging and still in their pilot stage of development. Waste-to-energy and biomass are mature technologies, but difficult to implement in populated areas. As a feature of the Water Pollution Control Plant Master Plan, the City is actively considering anaerobic digestion for FOG and food scraps. In the long-term, the City will evaluate the options for converting residual waste-to-energy and ultimately achieving the goal of zero waste.



Sorting C&D at Zanker Facility