



WASTE REDUCTION

INTERRELATED ACTIONS



Buildings & Neighborhoods



Energy



Eco Products & Services

As Long Beach faces ever-increasing environmental concerns in areas such as decreasing resources and landfill space, responsible waste management is increasingly vital for the City. It is more important than ever to conserve resources by reducing waste, reusing items, and recycling. Environmentally responsible management of waste is a vital component of sustainability that combines the efforts of both government and residents.

As a municipal government, Long Beach is taking steps to improve its waste management by implementing the 3 R's at every opportunity. The City strives to reduce consumption and waste by implementing programs to facilitate waste reduction, encourage reuse of resources, and provide recycling opportunities for residents and businesses within Long Beach.

One step towards effective waste management is to discontinue wasteful practices that have become rampant in our society. Every day thousands of tons of trash is disposed or littered on the ground in California, but many of those materials could be diverted from being wasted at landfill by reusing or recycling goods, thereby reducing the need for new materials. The increasing scarcity of resources requires that we continually reduce the amount of waste we produce while maximizing recycling and reuse.

Waste generation contributes to greenhouse gas emissions, since vast amounts of energy and water are used to produce consumer materials and packaging that is eventually discarded and buried in a landfill or incinerated. Burying waste in landfills produces carbon dioxide and methane. Incinerating trash can also produce carbon dioxide and other pollutants. Reducing the use of unnecessary products not only reduces the greenhouse gas emissions associated with both the production and the disposal of these goods, but also reduces waste at its source by creating fewer products and less waste.

This section focuses on initiatives and actions to reduce the amount of waste we produce, manage our waste more efficiently and support the market and use of recycled materials. Actions taken to reduce waste will also have benefits in other areas of sustainability by reducing the waste management carbon footprint, conserving natural resources and supporting local eco products and services.

As our City's population grows, landfill space fills up and we recognize the effects that trash, toxic materials, and litter have on our environment and quality of life, it becomes more and more important for our City to effectively manage our waste by reusing, recycling, and disposing in the most environmentally friendly way possible. Society must embrace environmental sustainability in waste management as an essential part of everyday lifestyle and business. Together, we can more sustainably manage waste by reducing, reusing and recycling.

SUSTAINABILITY GOALS

- Annual reduction in average pounds of solid waste generated per person per day
- Increase the number of students participating in TREC to 2,000 per year by 2016.
- Attract and retain of total of 20 RMDZ manufacturing companies by 2020

Together, we can effectively manage waste by reducing, reusing and recycling.





A HISTORY OF LEADERSHIP



NATIONAL LEADER IN SOLID WASTE DIVERSION

In 1989, California mandated that all cities and counties must divert at least 50% of their waste stream into recycling or reuse by year 2000. In the first year on record, 1995, Long Beach had a 12% diversion rate. After implementing its waste management programs Long Beach easily exceeded the state goal, diverting 69% of its waste in 2006. Among large cities, that diversion rate is the second highest in the nation. This is achieved through various programs like residential curbside recycling, household hazardous waste roundups, consistent public outreach, elementary school recycling education, and even classes for at-home composting.



SOUTHEAST RESOURCE RECOVERY FACILITY

In 1988, the City of Long Beach opened SERRF in conjunction with the County Sanitation Districts of Los Angeles. SERRF converts municipal trash into energy, and generates enough electricity to power 35,000 homes annually. Another benefit of this conversion process is the reduction of solid waste volume by an astounding 80% with the resulting ash being used as road base at the Puente Hills Landfill.



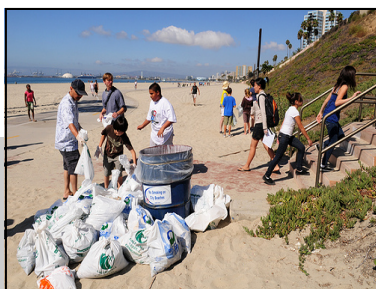
CONSTRUCTION & DEMOLITION RECYCLING PROGRAM

In 2007, the City implemented a Construction and Demolition Debris Recycling Program. This program is helping to reduce solid waste going to landfills by requiring the largest development projects across the city to ensure that at least 60% of the waste materials generated during a building demolition or major construction activity reused or recycled.



RECYCLING MARKET DEVELOPMENT ZONE (RMDZ)

In 1992, Long Beach created the first of 40 RMDZs across the state. RMDZs were created to assist sustainable companies that use recyclables as feedstock in manufacturing. The Long Beach RMDZ is combined with the City's Enterprise Zone and the economic benefits that both programs offer can greatly assist in corporate development and expansion. To date, 8 companies have taken advantage of the technical and fiscal benefits offered, including a company that retreads used tires, one that processes used oil filters into recyclable components, one that manufactures wood pallets from scrap wood, a company that grinds scrap asphalt and concrete into road base, and another corporation that manufactures consumer items from recycled plastic pellets.



LITTER ABATEMENT

The Litter-free Long Beach Campaign is designed to expand awareness of the impacts of litter—how it detracts from the safety of our neighborhoods and negatively impacts property values, the economic vibrancy of business corridors and the health of our environment. Campaign strategies focus on engaging residents and neighborhood associations, partnering with LBUSD schools to reach students, parents and teachers, sponsoring neighborhood litter clean-up events, providing access to programs that allow local businesses to get involved and conducting outreach throughout the City to encourage support and sustain participation.

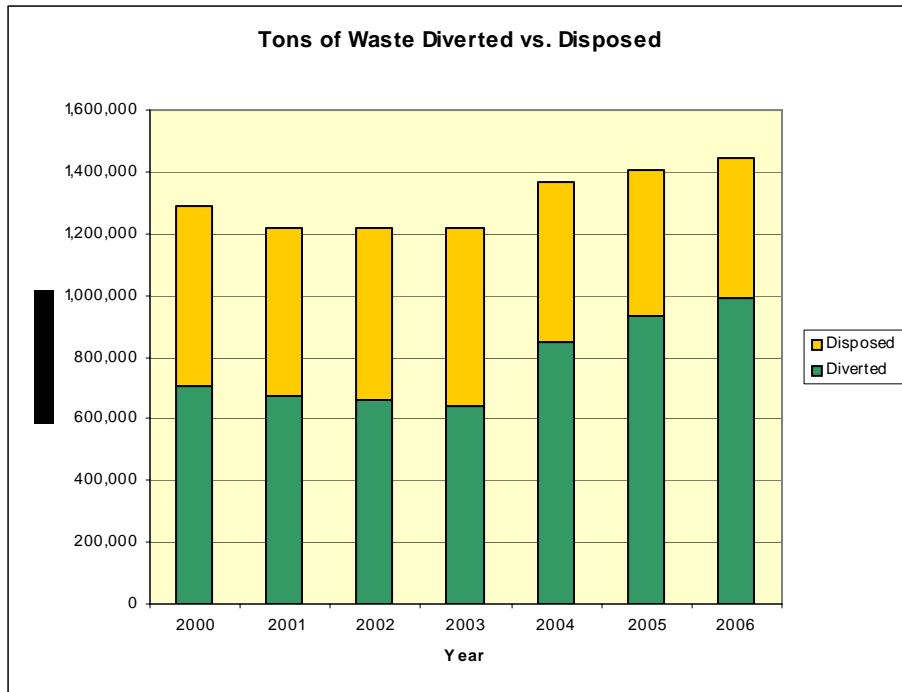


Waste Reduction Initiative 1:

Increase diversion by reducing waste and increasing recycling and reuse

SUSTAINABILITY GOALS

Annual reduction in average pounds of solid waste generated per person per day



STATISTICS

- Long Beach has the 2nd highest diversion rate of any large US city at 69%.
- Since 2003, over 9,500 gallons of used oil has been recycled through ESB's programs.
- SERRF reduces waste volume by 90%, has generated over 4 billion kilowatts to date and recycles an average of 825 tons of ferrous metals each month.
- Statewide, 60% of discarded waste is generated by the commercial sector.
- All Long Beach residential recycling and trash carts are made of 25% post-consumer plastics.
- All refuse accounts serviced by Long Beach offer recycling pickup for no extra fee.
- 26 tons of e-waste was collected from the City's roundups in 2008.

ACTIONS

1. Implement the Multifamily Recycling Ordinance which requires private haulers to offer recycling to all residential building complexes with over ten dwelling units and continue to structure waste hauler contracts to offer economic incentives for recycling, and charging additional fees for haulers who dispose of larger amounts
2. Establish commercial recycling guidelines intended to increase the recycling rate of the commercial sector, keeping waste out of the waste stream
3. Establish an Environmental Depot facility that will recycle electronic waste and properly dispose of various household hazardous wastes for residents
4. Establish a publicly accessible compost/mulch facility in the city and create beneficial uses for city greenwaste within city limits (grasscycling, mulching, etc.)
5. Develop commercial sector food-waste recovery programs and expand edible food redistribution programs
6. Create comprehensive publicly-accessible recycling infrastructure at all city facilities and locations and require businesses to have recycling pick-up and public recycling on site
7. Encourage residential composting and further expand the City's residential composting program
8. Aggressively implement measures to decrease beach debris and expand beach recycling programs
9. Investigate emerging conversion technologies as part of long-term waste management



Waste Reduction Initiative 2:

Increase awareness and promote the concepts of reduce, reuse, and recycle

SUSTAINABILITY GOALS

Increase the number of students participating in Traveling Recycling Education Center to 2,000 per year by 2016.



STATISTICS

- In 2007, 157 different elementary school clean-up events were completed with supplies provided by ESB.
- In 2008, Long Beach's TREC program has made 42 school visits and educated 1,440 4th graders on the reduce, reuse, recycle concept.
- 1,938 "Litter Free" banners were rotated among 938 light poles throughout Long Beach in 2008.
- 6,170 litter bags were distributed to residents in 2008, which often included literature and giveaways on recycling and littering.
- 5,320 elementary school students participated in the Lunch with a Lizard program which teaches K-3 students about littering and recycling.

ACTIONS

1. Create a public education campaign to reduce litter and waste by promoting the use of all types of reusable products instead of disposable products (reusable grocery bags, water bottles, etc.) and refusal of single-use items.
2. Continue public education efforts through continued to support Litter Free Long Beach and other educational programs that promote reduction of waste and litter
3. Continue educating school children to recycle and reduce litter by continuing Traveling Recycling Education Center (TREC) and Lunch with a Lizard programs
4. Develop an environmental recycling awareness program to be implemented in targeted industries (hospitality, medical, restaurants, etc.)
5. Publicize and encourage free-cycling programs
6. Promote sustainable landscaping practices and composting
7. Promote and support community beach clean-ups and increase the frequency of beach clean-ups events
8. Promote the use of post-consumer content products thereby reducing demand for virgin materials
9. Promote take-back programs that allow customers to return packaging or used products to manufacturer for proper disposal
10. Promote the proper disposal of special wastes such as Household Hazardous Wastes and electronic waste



Waste Reduction Initiative 3:

Utilize recyclable materials as a raw materials source for industrial development to enhance the recycled-materials market in Long Beach

SUSTAINABILITY GOALS

Attract and retain of total of 20 RMDZ manufacturing companies by 2020

STATISTICS

- In 2007 there were 8 RMDZ companies in Long Beach that employed approximately 170 people.
- In 2007, one RMDZ company recycled approximately 4,750 tons of milk jugs, juice bottles, and water containers into plastic pellets that were used by area manufacturers for injection molding.
- In 2007, another RMDZ company processed approximately 220 tons of used oil filters in recyclable components.
- Statewide, recycling and reuse generates \$4 billion in salaries and wages and produces \$10 worth of goods and services annually.

ZERO WASTE SYSTEM



© 2005 Eco-Cycle, Inc. All rights reserved.

ACTIONS

1. Continue existing operations of the Long Beach Recycling Market Development Zone to foster economic development and job opportunities
2. Expand RMDZ boundaries
3. Promote RMDZ products in the local marketplace.
4. Offer incentives such as free press for businesses that participate in the "Litter Free Zone" program.
5. Encourage location of RMDZ businesses to Long Beach by fast tracking permits and licenses
6. Promote community-based programs that provide jobs for disadvantaged individuals in RMDZ businesses
7. Participate in e-waste recycling program and support private e-waste programs and events
8. Require city operations and encourage businesses and residents to buy recycled products to support the recycled products market
9. Aggressively apply for grants and partner with others agencies to leverage funding to implement used oil and tire recycling programs and other litter programs.