



WASTE REDUCTION AND DIVERSION

Waste-related GHG emissions result from the type of products we consume within our daily lives and how we dispose of them as well as from pre-consumer commercial and industrial processes. In Citrus Heights, nearly 4.4% of GHG emissions are associated with solid waste generation and disposal in landfills. Waste disposal creates emissions when organic waste (e.g., food scraps, yard clippings, paper, and wood) is buried in landfills and anaerobic digestion takes place, emitting methane, a potent GHG, as a by-product of the digestive process. Additionally, extracting and processing raw materials for consumer products, distributing them to consumers and disposing of them creates a large portion of global GHG emissions.

The City currently contracts with Allied Waste Systems to provide residential waste collection and recycling. For commercial waste-related services, the City uses private commercial haulers. The City recognizes that, due to limited remaining landfill space in Northern California, disposing solid waste will become more expensive as communities oppose the expansion and creation of new landfills adjacent to populated areas. Presently, most waste reduction practices focus on diverting waste products from landfills through recycling strategies. However, it is also important to consider programs that reduce overall waste generation, and to first consider reuse options.

As consumers of goods and services, we all generate waste and related GHG emissions. Our choices regarding products, packaging and consumption determine our personal contributions to community waste generation. Lowering our consumption and buying climate-friendly, durable products with minimal packaging can substantially reduce our personal GHG emissions, and in the process can reduce community waste generation.

WASTE REDUCTION: SOURCE REDUCTION



Measure 6-1.A: Establish a 2020 waste reduction target of 75% below 2005 levels and work with the County, neighboring cities and other organizations to create a low-waste plan and provide public education regarding low-waste strategies and implementation.

The 1989 California Integrated Waste Management Act (AB 939) required cities to reduce their waste stream to landfills by 50% by the year 2000. Senate Bill (SB) 1016 (2010) requires the City to adopt a per capita annual disposal rate. The City will increase its reduction and diversion target for 2020 to 75% relative to 2005 waste generation levels.

Prior to SB 1016, the City's target had been to achieve at least 1.6% of the 50% diversion required by AB 939 through waste source reduction programs. With the new SB 1016 method for quantifying waste diversion, the City will need to increase its current source reduction efforts. The actions below identify areas where the City has maximum opportunity to effect waste reduction programs.

GHG Reduction Potential:

18,880 MT CO₂e/ year

Community Co-Benefits:

Improved air quality

Cost to City

Medium

**Cost to resident/
business owner**

NA

**Savings to resident/
business owner**

NA



Reducing waste disposed at landfills can reduce emissions of methane, a potent greenhouse gas.

**Did you know?
COOL FACT**

After AB 939 was enacted in 1989, one major office building in Los Angeles managed a 75% recycling of waste paper saving 2,000 tons of waste paper. The effort also saved 32,760 trees, 69 million gallons of water and 4,450 barrels of oil. Los Angeles also gained 3,800 cubic yards of precious landfill space.
- Los Angeles Business Journal, 1991

Actions	Implementation Target	Responsible Party
A. Create a comprehensive source reduction plan for the community to assist residents, businesses and schools to decrease per capita waste generation.	Before December 31, 2013	General Services
B. Develop a junk-mail prevention outreach program that helps residents to voluntarily opt out of receiving junk mail.	Before December 31, 2012	General Services
C. Provide incentives (such as continue tiered rates and award programs) for increased participation in homeowner and business owner recycling programs.	Before December 31, 2012	General Services
D. Conduct waste-reduction consultations with major waste generators (businesses and multi-family) and recommend strategies to reduce waste and increase recycling while reducing business cost.	Before December 31, 2013	General Services
E. Consider the feasibility of a ban on use of plastic water bottles.	Before December 31, 2013	General Services
F. Create a comprehensive yard waste-to-mulch program and require commercial tree companies to use all tree waste as mulch.	Before December 31, 2013	General Services

Notes and References

The City currently contracts with private companies for solid waste collection and recycling services. The City will partner with the private waste service company and commercial haulers to create a comprehensive communitywide waste reduction strategy.

Related General Plan policies: Policy 51.1, Policy 51.3, Policy 63.1, Policy 63.2, Policy 63.1, Policy 63.4



Measure 6-1.B: Increase recycling and composting programs to divert waste from landfills.

Citrus Heights provides recycling services through private residential and commercial waste collectors. Based on the AB 939 50% diversion requirement, Citrus Heights' goal has been to achieve at least 27% of the total diversion through recycling. However, pursuant to SB 1016, the City will need to identify new diversion programs to successfully meet the lower per capita waste disposal rate.

One of the City's target areas will be to identify ways to manage construction waste. Although the real estate market has been slow, the City has ongoing construction projects associated with street and landscaping improvements, and can anticipate future development. Therefore, a key step is to adopt a construction and demolition program to guide how the community should salvage, recycle and divert construction waste from landfills.

Another target area is to explore composting options. The Sacramento County Waste Management and Recycling Division (SCWMRD) has been operating a Backyard Compost program for residences since 1991. The City can create more visibility and acceptance for this program through public outreach and education. Citrus Heights also has a large number of restaurants. Exploring food-to-composting programs within local restaurants can also help increase diversion of organic waste from landfills.

GHG Reduction Potential:

(Included in Waste Reduction Measure 6-1.A)

Community Co-Benefits:

Alternative energy source

Cost to City

Very Low – Low

**Cost to resident/
business owner**

NA

**Savings to resident/
business owner**

NA



Compost bin for organic waste including food scraps and yard waste.

**Did you know?
COOL FACT**

The EPA estimates that 75% of what Americans throw in the trash could actually be recycled.

Recycling one aluminum can saves enough energy to run a TV for three hours — or the equivalent of a half gallon of gasoline.

Actions	Implementation Target	Responsible Party
A. Continue to aggressively pursue community recycling efforts by developing public awareness/outreach campaigns, promoting e-waste collection events, bulk and community clean-up projects, and distribution of recycling containers at bus stops.	Ongoing	General Services
B. Develop a communitywide hazardous waste collection and recycling program to address recycling of batteries, compact-fluorescent light (CFL) bulbs, and similar household hazardous waste.	Before December 31, 2013	General Services
C. Conduct a feasibility study to create a food-to-compost program for local businesses and residents.	Before December 31, 2013	General Services
D. Implement a construction and demolition program to require all designated recyclable materials be recycled or reused.	Before December 31, 2011	General Services

Notes and References

Some commercial haulers provide fluorescent lighting recycling services, but the City should actively seek ways to improve the efficiency of commercial fluorescent light recycling and expand such services for residential areas. Since one of the key GHG reduction measures within the energy sector is to replace incandescent bulbs with CFLs, the City will aggressively pursue recycling services for them. One of the community concerns for CFL use is disposal of the limited amount of mercury contained in the bulbs. However, a dedicated recycling service for CFLs will encourage increased participation in the light bulb replacement program.

Related General Plan policies: Policy 63.2, Policy 63.3, Policy 63.4, Policy 63.5, Policy 63.6, Policy 63.7



Measure 6-2.A: Implement a paperless office program for all feasible municipal operations.

Municipal activities generally require extensive record-keeping which consumes paper for copying and printing. However, the City can actively choose to go paperless and reduce its carbon footprint related to manufacture and use of paper for some activities and operations.

Some feasible municipal operations where the City can avoid using paper include billing and payment records, plan reviews, and maintaining digital copies of codes, rules and ordinances. One of the key concerns for municipal functions is to make City documents easily accessible to the community. Maximizing use of City's website can reduce paper waste generation.

The City will conduct an inventory of all municipal operations requiring paper use and adopt a policy to go paperless whenever feasible. This measure will help the City to lead by example by reducing municipal waste generation and contribute toward an effective communitywide waste source reduction. This will also help reduce municipal operations and maintenance costs.

GHG Reduction Potential:

Supporting measure

Community Co-Benefits:

Reduced municipal operating costs

Cost to City

Very Low

**Cost to resident/
business owner**

NA

**Savings to resident/
business owner**

NA



Stacks of paper used for office record keeping.

**Did you know?
COOL FACT**

The EPA estimates that a typical business office generates about 1.5 pounds of waste paper per employee per day!

Actions	Implementation Target	Responsible Party
A. Work with utilities and public service providers to encourage paperless billing and payment options and other City functions.	Before December 31, 2012	City Clerk

Related General Plan policies: Policy 55.2