



Working With Local Businesses to Increase Recycling

While residential recycling has become mainstream, the bigger challenge ahead for local governments is to increase recycling by retail, service, office and industrial businesses.

Each year in California, more than 42 million tons of waste -- enough to fill garbage trucks placed bumper to bumper stretching 1.25 times around the earth -- is hauled to landfills. Nearly 60 percent of this paper, cardboard, plastic, food and construction waste is generated by commercial, industrial and institutional sources, according to the California Integrated Waste Management Board.

Some cities and counties throughout the state are already taking aggressive action to curb waste generated from commercial sources and increase the amount of refuse diverted to recycling plants. Offices, retail stores, restaurants, shopping centers, hospitals and manufacturing firms can significantly reduce disposed waste if they are given guidance and incentives to follow the state's policy on diverting waste: Reduce or reuse waste, and then recycle what would otherwise go to landfills.

While many cities and counties have achieved a 50 percent solid waste diversion rate (the statewide diversion rate currently stands at 54 percent), recycling programs typically focus on residential customers. Local governments, waste haulers and individual businesses all have a key role to play in ensuring that business-generated waste is recycled rather than sent to landfills.

Landfills Can Release Methane, A Greenhouse Gas

In addition to the pollutants generated from transporting waste to disposal sites, improperly managed landfills release methane, a greenhouse gas (GHG) 20 times more potent than carbon dioxide (CO₂). In fact, the largest human-generated source of methane GHG is from landfills.

Ironically, many of the materials that *should* biodegrade -- paper, cardboard, green waste, food waste -- typically do not due to the lack of oxygen in large, dense landfills. If not properly managed, these landfills release large quantities of methane, a vigorous contributor to the accumulation of GHGs that leads to global warming and climate change.

Local agencies have broad authority for waste disposal and recycling. As a result, the regulatory structure at the local level for these services varies widely from city to city and county to county. Each local agency has the opportunity to encourage greater recycling in the commercial sector in a manner that works best for its jurisdiction. Each city or county also has opportunities to work with local haulers within the context of their contract or regulatory relationship to encourage recycling.

Business Waste by the Numbers

Overall Business Waste Disposal*

of all waste disposal

Most Disposal by Business Type**

** California Integrated Waste Management Board, based on 2004 statewide estimates

The Institute for Local Government's (ILG) California Climate Action Network has developed 10 climate leadership opportunity areas and a series of best practice options to follow within each area geared specifically for city and county efforts to reduce GHG emissions (for details, visit www.ca-ilg.org/climatepractices). Waste reduction and recycling is a key area where measurable decreases in locally generated GHG emissions can be achieved. This article explores some of the best practices related to commercial recycling.

Require or Encourage Recycling In the Commercial Sector

Many cities and counties with active commercial recycling programs report that businesses are more likely to recycle when required to do so by ordinance or a mandatory program. For example, until recently, Fresno, a city that provides its own refuse collection, offered recycling services on a voluntary basis for several years. Many businesses, especially those that owned apartment complexes, did not take advantage of the service.

After Fresno passed an ordinance in 2005 requiring its 6,000 businesses and multifamily complexes to recycle at each location, recycling practices changed dramatically. By instituting a two-tiered pricing structure, these businesses now have a strong financial incentive to deposit more waste in their recycling bin rather than the trash: A four cubic-yard container costs \$1,258 a month for weekly trash pick-up, but just \$344 for the same size recycling container.

In the few short years since Fresno adopted its ordinance, the city's overall diversion rate has nearly doubled from 32 to 62 percent. Because the city's residential recycling stood at near-full compliance, an additional 500,000 tons of material diverted for recycling in 2007 is largely attributable to the increase in commercial recycling.

"Most businesses want to do the right thing but need help," said Patti Toews, Fresno's recycling coordinator at the time the improved recycling program was created. Toews credits the city's "pay as you throw" tiered waste-disposal fees with the impressive turnaround in local business participation in recycling.

Local Governments Turn Business Waste Into Recycling

The City of Agoura Hills originally mandated commercial recycling in 1995, but found a high level of noncompliance. In 2006, the city updated its commercial recycling resolution to require that haulers prove a 50 percent diversion rate or risk not having their contracts renewed (www.ci.agoura-hills.ca.us).

The Sacramento Regional Solid Waste Authority (SWA), a joint powers authority comprising the City of Sacramento and Sacramento County, adopted a business recycling ordinance in 2007 that requires franchised haulers to provide — and businesses to subscribe to — recycling services. The SWA provides extensive educational materials, including sample signs, a handbook for businesses, brochures and more, to help businesses establish an effective recycling program on their premises (www.sacramentoswa.com).

The City of San Diego found in 2006 that 65 percent of trash generated in the city could be recycled, enough to fill PETCO Park baseball stadium five times per year. Last year, the city adopted a recycling ordinance requiring commercial property owners and managers to obtain recycling services and to educate tenants about recycling. Haulers must report volume of trash and recycling by customer (www.sandiego.gov).

The South Bayside Waste Management Authority, which includes 10 cities in San Mateo County and the county unincorporated area, has 200 restaurants and cafeterias participating in its Business Composting Collection Program. Within the first year, by separately disposing fruit and vegetable trimmings, meat, bones, shells, dairy products, waxed cardboard, food contaminated paper, floral trimmings and garden waste for recycling, participating businesses reduced their overall waste going to the landfill by 75 percent (www.rethinkwaste.org).

The City of Stockton sought to increase its commercial recycling rates and, in 2004, negotiated a new hauler contract for residential and commercial customers to use a three-bin system (trash, recyclables and green/food waste). Haulers must now promote recycling to businesses and demonstrate that at least 50 percent of all waste is diverted. The citywide diversion rate is now up from 47 to 56 percent (www.stocktongov.com).

Ventura County passed an ordinance in 2004 requiring haulers to provide — and generators to pay for — separate recycling bins for specified materials. Commercial customers have the freedom to choose their waste and recycling haulers, but the county requires that collection of recyclables be provided at a lower cost than refuse collection (www.wasteless.org).

Approach Business Recycling From Several Angles

The County of Santa Barbara (www.lessismore.org) had an experience similar to that of Fresno. While the county's 69 percent diversion rate was already considerably higher than the state-mandated 50 percent, it sought to divert even more materials from a near-capacity landfill. Commercial and industrial customers were generating 55 percent of the county's total waste, but only 30 percent of that was recycled.

In 2003, the county met with various businesses and asked how to encourage more recycling. Business groups urged compulsory recycling as a way to jump-start participation. That year, the county adopted a resolution and implemented protocols to establish mandatory commercial recycling in its unincorporated areas where approximately 1,500 commercial customers are located.

The County of Santa Barbara has three exclusive contracts with haulers for solid waste, recyclables and organic collections. These haulers, as part of their contract, must also provide recycling services. In turn, businesses must subscribe to a recycling service through a franchise waste hauler or self-haul their recyclables. If a business does neither, it is subject to a surcharge equal to 20 percent of the business's trash collection rate. The haulers are also required as part of their contract to help customers develop a recycling plan and check recycling bins periodically to determine that they contain no more than 25 percent trash. If the threshold exceeds 25 percent, the hauler will work with the business to achieve compliance. Two years after establishing the mandatory commercial recycling program, the county's diversion rate is increasing at approximately 2 percent a year.

Audit Business Waste to Boost Recycling

Each year, the City of Napa determines its 25 largest commercial trash generators and automatically audits their waste composition in an effort to reduce trash and increase recycling. These businesses receive an in-depth analysis of what should be recycled and how to set up a system to capture all recyclables on-site. In addition, the remaining smaller trash generators from the business sector each receive a mini-audit to help reduce their trash bill. Every year, the business that does the best job of recycling receives a \$1,000 prize.

Why should Napa businesses pay attention to waste audit findings and take advantage of recycling services? It's because recycling services are free and trash service is not. For example, the City of Napa has a 10-year contract with Napa Recycling & Waste Services to encourage diversion by offering more opportunities for recycling. The City of Napa provides its customers with both interior and exterior recycling bins ranging in size from three-gallon to 32-gallon containers. It's not surprising that many of the city's 1,200 businesses request a waste audit to help reduce their trash bill.

Promote Increased Recycling By Educating Businesses And Employees

Failing to educate employees adequately about on-site recycling is the most significant barrier to successful commercial recycling, according to many cities and counties that have launched commercial recycling programs. Adequate signage inside and outside the business to convey what can be recycled and visible containers for recyclables are key to maximizing employee participation in recycling.

The Alameda County Waste Management Authority (www.stopwaste.org), a joint powers authority comprising 14 cities, two sanitary districts and the county, offers waste audits designed to help businesses save money and learn more about recycling. Though each of the cities has its own franchise agreements, the countywide group (in conjunction with the Alameda County Source Reduction and Recycling Board) offers a wealth of information and services to encourage businesses to recycle more and reduce overall waste.

Businesses that opt for a voluntary audit receive a report with focused recommendations on which materials can be recycled, how to streamline collection of recyclables and how to educate employees about using recycling containers.

"We start with the recommendations that are most financially advantageous. That's why we have such good participation," said Rory Bakke, a senior program manager who heads up the commercial waste audits for the Alameda joint powers authority. Over the past 10 years, the group has worked with 600-plus businesses and diverted more than 240,000 tons from area landfills.

"No matter what the company," emphasized Bakke, "there are always ways to recover materials that aren't already being recovered. There are always ways for us to help businesses save money through waste reduction and recycling."

Require Recycling Plans for New Businesses and Commercial Buildings

Realistically, the best time to work with a business is before it opens. In some areas, prospective developers and business owners must have a plan for handling recycling on their premises. Their site plans must also include adequate space on the building exterior to accommodate recycling bins and access by collection vehicles.

In 2003, the City of Redlands adopted an ordinance requiring all new development (except single-family residential) to submit plans for locating recycling bins as part of a site plan. In addition, new businesses must show plans for educating employees about recycling and show signage plan details for clearly marking interior and exterior recycling containers.

Implement Programs to Capture Organic Waste Material

Because California's waste stream from businesses contains nearly 30 percent organic material, food and green waste are the next frontiers in recycling. San Francisco is one of several local agencies that have launched a green waste and food waste recycling program. SF Environment (www.sfenvironment.org), the San Francisco city-county department that oversees recycling in the area, has one of the most ambitious waste reduction goals in the nation -- 75 percent diversion by 2010. San Francisco's diversion rate currently stands at 69 percent, and diverting food waste is a key strategy in reaching its goal.

San Francisco is diverting ever-larger amounts of organic material by collecting compostable food scraps from residents and 2,000 participating businesses, most of which are restaurants. Collectively these waste generators send more than 300 tons of organic material daily to Norcal's Jepson-Prairie composting facility near Vacaville, which in turn converts the organic waste into rich soil for use in area farms.

San Francisco's program is neither mandatory nor ordinance-based. Instead, two years ago San Francisco abandoned its long-standing program of free recycling bins for non-organic materials and converted to a paid system offering up to a 75 percent reduction on waste disposal bills corresponding with the amount of material placed in recycling bins. The new pricing structure has resulted in far more recycling, especially of food waste. The city's biggest recycling gains in the year ending April 2007 came from the commercial sector and compostable food scraps and yard trimmings collected in separate green waste containers.

Much Waste Can Still Be Recycled Or Composted

California cities and counties have made great strides in diverting waste from landfills over the past two decades, but there is still room for improvement. Of the waste that's going to landfills, nearly 60 percent could either be recycled, composted or reused, according to estimates provided to the state Integrated Waste Management Board, thereby reducing greenhouse gases by the equivalent of that produced by 15.7 million passenger vehicles annually.

Programs that focus on greater involvement by businesses in reducing waste, reusing packaging and materials, and recycling can help put a big dent in minimizing the amount of disposed waste contributing to GHG emissions. For ideas on how to encourage greater focus on commercial waste reduction and recycling in your community, visit www.ca-ilg.org/climatechange.

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