

## **Why we should divert food waste from the waste stream through composting**

"One of the simplest things each one of us can do every day to combat climate change is keeping our food scraps and soiled paper out of the landfill," explains Deanna Simon, a zero waste specialist for the San Francisco Department of the Environment. An effective way to do this is by composting, whether at home or through a municipal program.

Food and yard waste, and other biodegradable materials like paper, make up more than half of the nation's municipal solid waste. (Food waste and yard waste each constitute about 12.5 percent of the total garbage. Recycling paper is a higher use than composting it, since recycling paper eliminates the need to cut down as many trees.)

When these organic materials decompose under anaerobic conditions (without oxygen), as in a landfill, they release methane. Landfills have become the number one source of man-made methane, which molecule for molecule is a 72 times more potent greenhouse gas than carbon dioxide!

There's a nation-wide campaign to get all compostable organics out of landfills by 2012. It's called COOL 2012 and was launched by the GrassRoots Recyclers Network and BioCycle magazine.

In the composting process, beneficial microbes convert once living matter (like plant and animal wastes) in the presence of sufficient oxygen and moisture into a nutrient-rich soil amendment. Rather than being released as the climate-changing pollutant carbon dioxide, the carbon contained in the organic wastes is stabilized in finished compost.

Keeping all compostable organics out of landfills would cut greenhouse gas emissions as much as shutting down one fifth of U.S. coal-fired power plants. Composting these organics also replenishes soil carbon and makes agriculture more sustainable and productive. It's a solution that turns a climate problem into a soil solution.

## **What's needed to begin composting food waste beyond the home in Washington County**

- 1. A compost site:** We need a local compost operator who is interested and able to accept food waste on a regular basis. Farmers can start small compost operations which can become a substantial income stream over time.
- 2. Sources of other materials to incorporate in the compost windrows.** Food waste should probably be composted with carbon rich materials (like hay, straw, wood chips, etc.) that also absorb moisture.
- 3. Trucking to compost site.** The food waste should not get contaminated in any way and should not leak onto road in transit.
- 4. Quality control.** To make good compost that people will want to use on the gardens and farms, there should be zero tolerance for plastics and other contaminants. Also insect, vermin, and odors must be prevented where the food waste is stored before pickup.

**5. Training of and communication with food waste generators.** Signage, information handouts, and simple training for staff are key to success in separating out food waste. (The Central Vermont Solid Waste Management District has developed excellent materials for this.)

**6. Commitment of the people involved.** Buy-in of people in charge, such as owners/managers of stores, restaurants, and cafeterias and special event planners, is essential.

**7. Oversight and coordination.** Someone needs to be responsible for the project and there must be a feedback loop, so problems can quickly be corrected and improvements made.

### **Food waste composting from businesses and institutions**

It's often easiest to start food waste composting with food residues from supermarkets, cafeterias, restaurants, and other concentrated generators. It is this material that programs in Vermont and Massachusetts, for example, are capturing.

The Central Vermont Solid Waste Management District in Montpelier, VT, provides training to stores and food service, as well as totes for the food waste, troubleshooting, quality control, and trucking. The program has no tolerance for plastic and other contaminants.

Three farm-based compost operations do the composting. The largest is Vermont Compost, a producer of a very high quality product for organic and other growers. It receives deliveries of food waste twice a week. When two of us visited in 2008, there was no smell and no mess. Vermont Compost keeps 1200 laying hens and roosters and sells eggs. These birds forage for their nourishment on the compost piles and receive no other feed.

The Massachusetts Department of Environmental Protection has been facilitating the composting of supermarket waste for close to two decades. It has funded technical assistance, such as through the Center for Environmental Technology, a not-for-profit environmental organization, to help supermarkets and farm composters establish effective programs. Three hundred of the 400 supermarkets have their food waste collected for composting, and there are even hauler routes dedicated to food waste collection from restaurants, retailers, and institutions.

At Stanford University, students pressing for sustainable food borrowed from the British "Love Food, Hate Waste" campaign. In 2007, the school diverted 1.2 million pounds of food waste from campus dining halls and cafes that would have gone to a landfill. Instead it was composted at a local facility and half of the compost was returned to the school for use on its gardens and grounds.

According to a Sept. 15, 2009 email, in Milwaukee, Growing Power's urban farm made 500 yards of compost in 4 months this year using the fruit and vegetable waste from one supermarket and wood chips provided by Asplund Tree Trimmers and another source. This effort has only taken one person 2 hours a day, using the supermarket company's machinery and the farm project's small pickup truck. The supermarket "has been incredibly competent in inspiring its workers to sort out unwanted material from the barrels" for daily pick up.

## **Composting food waste collected at the curbside is not rocket science!**

Though many people already compost vegetable food scraps in their backyards, a far greater proportion of the population doesn't. Relatively few communities teach residents how to compost, and millions of households don't have any place to do it. The potential for attracting vermin also acts as a deterrent.

A few pioneering cities began piloting food waste composting in the 1990s. Since 2004, San Francisco has provided weekly curbside food waste collection to all residents, including apartment dwellers. The program trucks 300 tons of food waste a day to a nearby compost facility. Its certified organic compost fertilizes produce farms and vineyards that feed the city forming a sort of closed loop system.

The city of Seattle motivates residents of its 150,000 single-family homes to separate out food and yard waste with the tagline: "Why waste a good thing when you can turn it into compost and help our local parks and gardens grow?"

These programs provide residents with a large green, tight-lidded container for all food residuals (including meat and fish), food-soiled paper like napkins and pizza boxes, and yard trimmings. San Francisco also gives out 2-gallon pails for the kitchen.

As these successful models have become better known, momentum for composting has been growing. Climate change is one reason. And setting up a food waste composting facility costs less than building a new landfill – and compost can be sold profitably. Promoters say it's like the early days of curbside recycling and they expect new programs to take some time to get close to full participation.

While some states have banned disposal of yard waste in landfills, none exclude food waste yet. Some cities, like Portland, Oregon, have been stymied by an inability to site a local facility, though residents are pressing the city to compost food waste.

### **A small Midwestern city sets an example**

In America's heartland, Hutchison, Minnesota, population 14,000, began weekly curbside collection of food and yard waste in 2001. (Recyclables and garbage are also collected.) In 2008, Hutchinson's composting operation, which also accepts yard waste from other towns in the rural county, sold 1.2 million bags (40 lb. each) of compost and soil products. And it made a profit!

The weekly food waste collection program has become so successful in diverting organics that some households now opt for just one 30-gallon garbage can and biweekly garbage pickup! The compost manager said the city has reduced its solid waste by 75 percent through its recycling and composting initiatives.

In the program's first year, the city had to work hard overcome residents' skepticism. The

compost manager told me, "People said, 'Did you guys fall off your rockers and hit your heads?'" Armed with a can-do attitude, the city administrator and the compost manager reached out to educate the community. Partnering with youth sports associations is one of the ways the city keeps awareness high.

It is a brilliant strategy on the part of the city. Every month, a different sports club goes door to door and delivers 8 biodegradable kitchen waste bags to every household. The sports clubs use it as part of their fundraising, since the city pays them for the service. Having these youngsters for ambassadors has positioned the composting program as an all-American initiative that's integral to the community.

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(I have his contact info, but didn't want to encourage multiple people locally to contact him.)