

Your Compost Tool Kit



courtesy of

BeGreen
PACKAGING LLC

Be Green...Live the ColorSM



For questions and support, please contact
us at info@begreenpackaging.com

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Healthy soils
= organic & fresh foods
= healthy people.

Be part of the process:
COMPOST!

Overview of Phases

Compost Tool Kit Phases

Be Green Packaging is a leader in the green packaging industry; we are dedicated to three innovative and forward-thinking environmental initiatives:

- 1) **educating ourselves and our customers**
- 2) **reducing our environmental footprint**
- 3) **giving back to the community.**

Each initiative supports the other and contributes to our triple bottom line focus. We operate with a cradle-to-cradle mentality that takes into account the full life cycle of our product, from utilizing wild-grown, annually renewable bulrush to the end of life intention for our packaging- healthy soils.

We have created our compost tool kit to support this intention and empower our customers (and their customers). You may be ready to roll out a compost program or be asking, *“Why implement a compost/food scrap program?”* Methane continues to be one of the leading causes of global warming. It is 20 times more potent than CO2 and results from food scraps, paper products, and yard debris decomposing in landfills. Through the implementation of a compost program, you can effectively reduce your environmental impact, save money and create healthy soils at the same time.

We have designed this tool kit to help simplify the entire process of establishing a compost program. There are THREE PHASES to help guide you; Education, Resources & Implementation.

The first phase: INFORMATION GATHERING

...includes information on the cost and environmental savings of a compost program and a brief questionnaire to determine your food scrap needs. We have also provided a checklist that outlines roles and responsibilities. It also details our overall involvement in assisting you as you and your team implement your compost program.

The second phase: RESOURCES

...provides you the necessary information to get started with a compost program. We have done a large amount of the research for you to help you save time and make the process as easy as possible. We have included a tool to assist you in finding your local compost facilities, approved compostable bags, food scrap Q & A and suggestions on implementing an on-site compost program. We have also designed compost bin signage for your use or content for your design team.

The third and final phase: STAFF EDUCATION & IMPLEMENTATION

...consists of educating your staff. This is one of the most important components of a successful food scrap program. We have created an employee training guide that details the steps to take before, during and after food scrap and compost training. We help you initially train your staff and assist with questions as they arise after the program roll out.

Overview of Roles	Provide Cost & Enviro. Savings Overview	Provide General Resource Guide	Contact Your Local Food Scrap Facility	Compost Bin Signage	Offer Key Contact or Employee Training Guide	Initial Employee Training	Starting Your Food Scrap/ Compost Program	Ongoing Mainten. of Program
Be Green Packaging	X	X		X	X	X		
Customer			X				X	X

Cost Savings For You

Reduced Garbage Fees

Through composting food scraps and reducing or recycling other waste, you may be able to reduce garbage collection and corresponding monthly fees. For example, the City of San Francisco estimates that there is a potential 35% cost savings when food scraps are composted and diverted away from the landfill.

Tax Incentives

Some cities are incorporating tax incentives to participate in their food scrap program. Check with your local municipality to find out about their participation incentives.

Environmental Savings for Your Community

Reduce Global Warming

Methane, the harmful greenhouse gas emitted from food waste in landfills, is a large part of global warming. Diverting your food waste from the landfill will result in the reduction of methane production. For example, a local Santa Barbara restaurant has been diverting 85% to 90% of their total waste stream from their landfill disposal.

Water Conservation

Water is an ever-precious commodity. Compost encourages production of beneficial microorganisms that help the soil retain moisture and reduces the need for water.

Healthier Soils

Compost helps create healthier soils by suppressing plant diseases and pests, reducing or eliminating the need for chemical fertilizers and increasing the overall agricultural crop yield.

Community Awareness about Composting

Businesses have the opportunity to bring greater awareness to the public about the benefits of composting. Through effective signage and communication, your customers will see your commitment to the environment.



Setting Up Your Food Scrap Program

Incorporating a food scrap program at your place of business can be a simple and easy process when the appropriate steps are taken. The first step is determining your food scrap collection needs.

The following questions may be helpful to review prior to contacting your waste management company:

1) Who is your current waste hauling company?

_____ Garbage
_____ Recycling

2) Do you have a designated person at your location that handles your waste hauling?

___ Yes

___ No

_____ Name

_____ Email

3) Where are the food scraps originating?

___ Food Prep Areas

___ Scrapings at bus stations or dishwashing areas

___ Post-Consumer Collection

___ Other, explain:

4) Check the following food and food soiled paper you expect to generate:

___ Meat

___ Shellfish

___ Dairy

___ Fruit & Vegetables

___ Bread & Baked Goods

___ Waxed Cardboard Boxes

___ Pizza Boxes

___ Plate Scrapings

___ Coffee Grounds & Filters

___ Tea Bags

___ Paper Napkins

___ Paper Towels (*kitchen only, not bathroom*)

___ Paper Placements

___ Uncoated food-soiled paper
(*does not have shiny surface*)

___ Floral Clippings

___ Yard Trimmings

The following items are generally NOT allowed:

All Liquids

including milk, beverages, soups & sauces

Grease

Plastic Utensils

(approved compostable cutlery allowed)

Straws

Cups

Plastic/foam plates, cartons

Glass

Aluminum Foil

Styrofoam

Foil-lined bags

Helpful Questions to Ask Your Waste Management Company

Prior to contacting your waste management company, please ensure you know the following information:

- Type and amount of food scraps you generate
- Days when food scrap generation is heaviest
- What percentage of your trash could be diverted to the food scrap bin
- If your company is currently in a contract with a waste hauling company
- What space is available for additional containers in your trash area and in the kitchen

Suggested questions:

- Frequency of pickup
- Available container types and sizes
- Container cleaning service
- Combining the food scrap services with either garbage or recycling to see if they will provide a discount when you bundle services

Here are some specific terms to negotiate and include in the contract:

- Hours during which pickups can occur
- Frequency of pickups to prevent containers from overflowing
- List of items your hauler will provide, including such items as containers, dumpsters and signage for the containers
- Standards for cleanliness for the containers collection areas and container cleaning service (if applicable)
- Point person at the hauling company who will handle any problems that arise with the contract

Food Scrap Collection Q & A

Q: What type of indoor container should I use and where should it be placed?

A: Your food scrap hauling company may provide indoor container options for you. We suggest you use whatever container you feel would work best in your work space. A lid that fits securely always works best if the scraps will not be taken to an outdoor bin on a daily basis. Make sure the hole is big enough for your largest compostable package.

Q: Where should I place the container?

A: We have found that individuals are more likely to properly dispose of food scraps if the container is placed in a location close to where the food is being disposed of (prep station/bussing station etc). You should also try to place the container next to the Trash & Recycle containers to allow easy access for your staff and/or customers.

Q: What type of outside container should I use and how often should it be emptied?

A: There are plastic roll carts with lids in different sizes that are typically provided by your hauling service. The frequency of emptying your container depends upon the quantity of food scraps your business produces. Most hauling companies provide twice-weekly service and offer additional pickups for an extra fee.

Q: What kind of bag should I use in my indoor container?

A: Compostable plastic bags are the only bags that are to be used in food scrap collection containers. Regular plastic bags are prohibited. Bags that have been BPI (Biodegradable Product Institute)-certified are recommended. You can find a list of compostable plastic bag distributors online at www.bpiworld.org. You may also choose to cut costs and not use a bag. However, bins must be regularly washed to avoid pest and odor problems.

Q: Will I have issues with pests or rodents?

A: Leak proof indoor containers, frequent emptying to the outdoor bin and regular pickups by your hauling company should be adequate prevention to pests and rodents. Also, wash the bins with hot water and a small amount of baking soda on a regular basis. Dispose of waste water in sewer drain, not storm drain.

Q: Will fruit flies be an issue?

A: Fruit flies, also known as 'vinegar' flies, can become an issue when over-ripened fruits and vegetable food scraps are collected. If fruit flies do become a problem, you can make a simple but highly effective trap. Just take a soda bottle and remove the lid. Cut the bottle in half, and pour cider vinegar into the bottom half to a depth of about 2 centimeters. Then invert the top half of the bottle into the bottom half, forming a funnel leading into the bottle. Fruit flies will be attracted to the vinegar and will get trapped or drowned in bottle.

Q: How should I educate my staff on the food scrap program?

A: Staff participation is the key component to a successful food scrap collection program (see Food Scrap Training Day Agenda). Determining who should be responsible for monitoring the bins for contamination, moving indoor scraps to the outdoor bin, cleaning the food scrap containers, and ordering bags are all responsibilities that should be designated before starting the program. Staff training is also critical and should take place before implementing the program. Upon request, Be Green Packaging will provide staff training for your employees.

Food Scrap Facilities

Please visit the below website for information on your local commercial composting facilities.

www.findacomposter.com

On-Site Compost Resources

If your city does not yet offer a food scrap recovery program, there are other options to consider. In-Vessel Compost Technologies are commercial systems intended to be used on-site by food generators including hotels, restaurants, hospitals, grocery stores and any other facility that generates food waste.

We have compiled a brief list of in-vessel generators. Please contact the manufacturer for pricing/ specifications and additional information.

For a more detailed list please visit:

www.ciwmb.ca.gov/foodwaste/compost/InVessel.htm

In-Vessel Generators

Environmental Products & Technologies Corporation (EPTC)

2219 East Thousand Oaks Blvd., Suite 373
Thousand Oaks, California 91362

Phone: (805) 492-6865

Fax: (818) 865-2210

<http://www.eptcorp.com/index.html>

Wright Environmental Management Inc.

95 Mural Street, Suite 301

Richmond Hill, Ontario, Canada L4B 3G2

Phone: (905) 881-3950

Fax: (905) 881-2334

Augspurger Engineering

15455 N. Greenway-Hayden Loop, Ste. C14

Scottsdale, AZ 85260-1609

Phone: (480) 483-5966

Fax: (480) 483-0070

engineering@aeinc.com

Biosystem Solutions

7 Ellery Lane

Westport, CT 06880

Phone: (203) 557-0644

Fax: (203) 227-4635

info@biosystemsolutions.com

Bio-Gas Digester

Biogas is a mixture of methane and carbon dioxide that is the result of the decomposition of waste materials, including food waste. The methane can be collected and used as an energy source for heating, cooking and lighting. The production of biogas is done in a special digester to keep the process sanitary and effective.

Converting food waste to biogas is not a new idea. Both China and India are widely known for their use of biogas as an alternative energy source. In the United States, this is a rapidly developing industry and we have provided additional resources for you. Please contact the manufacturer for further information.

Onsite Power Systems, Inc

216 F Street #3

Davis, CA 95616

Phone: (559) 271-2970

onsitepower@comcast.net

www.onsitepowersystems.com

Biogas Energy Inc

Phone: 815 301 3432

info@biogas-energy.com

www.biogas-energy.com

Electrigaz Technologies Inc.

17 Chemin de Maryhill

Harrington (Quebec) J8G 2T3

Canada

Phone: (819) 687-2875

Fax: (819) 687-1378

info@electrigaz.com

www.electrigaz.com

Be Green Packaging does not endorse any of the above products. The information is provided as a helpful resource only and Be Green Packaging assumes no liability for its use.

Compost Bin Signage

Be Green Packaging can design signage to place near or on your compost bins that shows what goes in to the bin and what doesn't. English/Spanish available upon request.

We can also provide the content for your design team if they plan to develop the signage.

YOUR LOGO HERE

COMPOST

YES!
ALL FOOD
Fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bakery items, cheese and eggshells

FOOD-SOILED PAPER
Waxed cardboard, napkins, paper towels, uncoated* paper plates, tea bags, coffee grounds/filters, wooden crates and greasy pizza boxes
* Uncoated food-soiled paper does not have a shiny surface.

PLANTS
Floral trimmings, tree trimmings, leaves, grass, brush and weeds

NO!

- Liquids, grease, cooking oil
- Plastic or Styrofoam
- Glass
- Metal

¡SI!
TODA LA COMIDA
Frutas, verduras, carne, pescado, mariscos, huesos, arroz, frijoles, fideos, pasteles y panes, queso, y cáscara de huevo

PAPEL MANCHADO POR COMIDA
Cartón encerado, servilletas, toallas de papel, platos de papel*, bolsillos de té, posos/filtros para el café, cajas de madera y cajas grasientas de la pizza.
*Papel manchado por comida sin recubrimiento no tiene una superficie brillante.

PLANTAS
Recortes de plantas, podos de árbol, hojas, pasto, maleza y mala hierba

NO!

- Líquidos, grasa, aceite de cocinar
- Plástico o Styrofoam
- Vidrio
- Metales

Photos courtesy of the StopWaste Org and NorCal Waste

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Employee Training Guide

Staff participation is the key component to a successful food scrap collection program. Creating a rewarding, simple process for food scrap disposal will ensure that the program succeeds.

The following steps will help you introduce the food scrap program to your employees. The training can be done in groups or individually and will take approximately 15 minutes to complete. Remember to keep it simple! Food scrap disposal should be just like garbage disposal. Be Green Packaging is available to answer any questions you may have or do an initial training session with you and/or your employees upon request.

Before you begin employee training

IDENTIFY STAFF ROLES:

Decide who will manage the following tasks

- Working with the hauling company
- Monitoring bins for contamination
- Washing bins
- Moving indoor scraps to the outdoor bin
- Replacing and reordering compostable bag refills

CREATE COLLECTION SYSTEM:

Put your collection system in place before you begin training your employees.

- Equipment
- Inside Containers—placed where food is being disposed of
- Service Containers/Outside Bins
- Pick-Up Days: determine frequency of pick-up with your hauler
- Compostable Bags: order BPI-approved bags (see compostable bag resource document)
- What's In/What's Out signage placed near disposal areas/containers

Food Scrap Training Day Agenda

KEEP IT SIMPLE:

Creating a simple process for proper food scrap disposal will help it become automatic and similar to dealing with garbage disposal. The following items are recommended:

- Color-coded or clearly labeled containers
- Signage with what is acceptable/what's not near disposal areas
- English/Spanish training & signage

REVIEW WHAT'S IN/WHAT'S OUT POSTER:

Go over each item and ask if there are any questions. A good rule of thumb is "when in doubt, throw it out!"

DISCUSS COMMON CONCERNS:

- Keeping the lids shut will avoid pest and vector problems
- Notify management if you notice any holes/gaps in the containers and replace promptly
- Regular washing of the containers will help with odors
- Dispose of waste water from washing containers in the sewer drain, not the storm drain
- Review frequency of emptying containers to outdoor bin
- Use compostable bags ONLY
- Remember, food scrap disposal should be a similar process to garbage disposal

After Training

ESTABLISH EMPLOYEE INCENTIVE PROGRAM:

Deciding how you will reward your employees for a successful food scrap program is helpful to determine before the training. Most employees will derive personal satisfaction from doing the right thing but an extra incentive might ensure overall success of the program.

CUSTOMER EDUCATION:

Reach out and communicate your environmental commitment to customers through effective signage and marketing. The food scrap program has the potential to improve overall customer loyalty.

Glossary of Terms

Biodegradable: Able to be broken into simpler chemical compounds by microorganisms. Organic materials are biodegradable

Biogas: Biogas is a mixture of methane and carbon dioxide that is the result of the decomposition of waste materials, including food waste

BPI: The Biodegradable Products Institute is a professional association of key individuals and groups from government, industry and academia, which promotes the use, and recycling of biodegradable polymeric materials via composting

Compost: A mixture of decaying organic matter, as from leaves and manure, used to improve soil structure and provide nutrients

Compostable: Materials based on plant or animal tissues that will decompose in the environment

CO₂: A colorless, odorless, non-toxic gas that is a primary bi-product of fossil fuel combustion. Carbon dioxide is a greenhouse gas that contributes to global warming



Cradle-to-Cradle: A design protocol that supports the elimination of waste by recycling materials or products into new or similar products at the end of its intended life, instead of disposing of it

Digester: A vessel in which substances such as food scraps are softened or decomposed, usually for further processing

Environmental Footprint: A measure of human demand on the Earth's ecosystem

Methane: A colorless, odorless gas formed when organic matter anaerobically decomposes. Methane is about 20 times more harmful than carbon dioxide as a greenhouse gas. Major sources include fermentation in ruminant animals, decay of organic material in rice paddies and landfills

Microorganism: These are microscopic plants and animals. They exist in soil for the purpose of breaking down organic matter into basic mineral elements



We wish your team great success with your composting program.

Please call/email with questions or to share your success stories.

805.456.6088 • info@begreenpackaging.com

How It Works: Composting Diagram

The Cradle to Cradle mentality and commitment requires everyone's participation.



Thank you for composting and encouraging others to do the same.