

Closing THE LOOP

With Organics Recycling

A practical guide for restaurant and food service operators





Introduction

This guide offers kitchen-tested ideas and solutions developed by the Green Table Network to help you design, implement and maintain an organics recycling program. The Green Table Network is a Vancouver not-for-profit organization that offers sustainability solutions to the restaurant and food service industry.

The ideas and recommendations in this guide were reviewed and tested by the Green Table Network. Tools and resources are also included to help customize your organics recycling program.

Keeping food and food waste out of the garbage will be mandatory for all Metro Vancouver residents, businesses and institutions in 2015.

Food and food waste are often referred to as organics or green waste, and include fruit, vegetables, meat, fish, dairy items and eggs, as well as baked goods and prepared, processed and frozen foods. Full-service and quick-service restaurant organics may also include paper napkins and bags, uncoated paper cups and plates, coffee filters and tea bags, wooden utensils, chopsticks, stir sticks and toothpicks.

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Waste By The Numbers

Every year, Metro Vancouver businesses and residents send approximately 188,000 tonnes of food waste – the equivalent of 26,000 truckloads – to regional landfills. It's an impressively large number, but one that, for several very good reasons, can be much less.

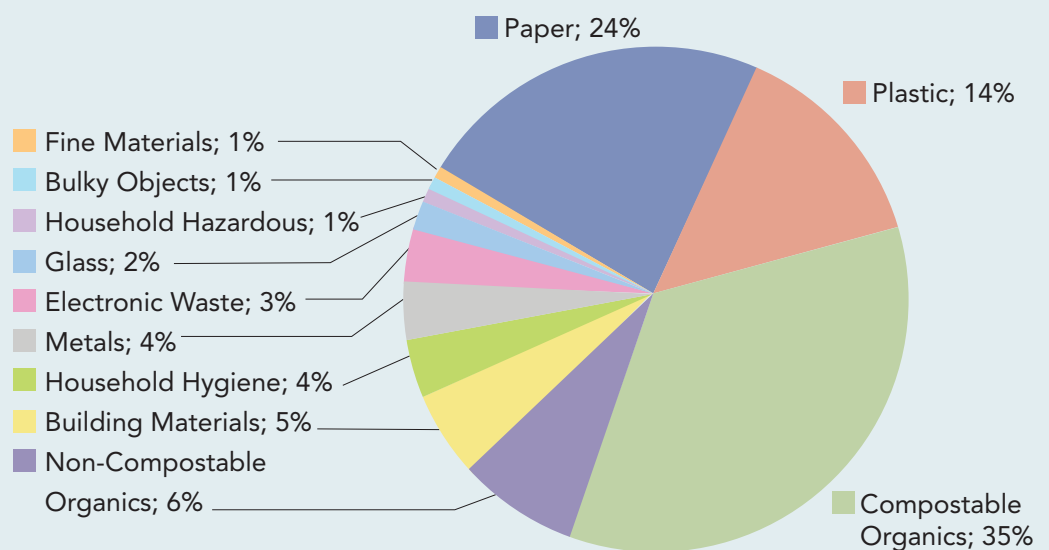
For example, if only half of all that food waste were to undergo the natural process of decomposition into the rich soil amendment we know as compost, the resulting 30,000 tonnes of 'soil booster' could easily enrich 1,600 hectares of farmland per year. That would be enough to help nurture the entire 9,000 tonne BC blueberry crop!

Hardly seems like 'waste' anymore, does it? That's because converting food waste to compost 'closes the loop', recovering the natural nutrients, energy and value in organic materials to return them to the soil. This process is also a key component of a more sustainable, regional farm-to-fork food system – one that our restaurant industry

will increasingly need to rely on in the face of mounting environmental and economic cost of food imports.

In supporting a regional composting solution, we can all be in the very sustainable business of producing delicious food...not food waste.

Waste Composition in Metro Vancouver



Benefit Your Business

Here are some smart, and strategic, reasons to add organics recycling to your operation's waste management program:

Protect the environment

- After energy consumption, waste is the food service industry's largest environmental impact. Since typically 60% of food service waste is organic, redirection of this 'wet waste' from the landfill offers environmental and waste management benefits.

Cost savings

- Substantially reduce the amount of garbage in your dumpster. You may be able to achieve cost savings over time by working with your hauler to adjust your waste removal contract to reflect reduced volumes of garbage.

Brand enhancement

- Green actions build customer loyalty. Starting an organics program is a commitment and clear message for a greener future.

Employee retention & recruitment

- More job seekers now choose a workplace that values environmental initiatives. Shared values lead to easier employee recruitment, higher retention rates and lower HR costs.

Every local food service operation can contribute to this system by simply doing something they are already expert at: optimizing the value of food.

Benefit Your Community

Being proactive on organics recycling contributes to the health and well-being of your community.

Reduce greenhouse gas (GHG) emissions

- Food disposed in a landfill generates methane, a powerful greenhouse gas that contributes to global warming. If this waste is recycled, it can be processed into compost or bioenergy.

Returns nutrients to the soil

- Food waste converted to compost can help rebuild and maintain regional gardens, parks and new urban agriculture projects. Applying compost to soils improves soil health and reduces the need for chemical fertilizers.

Conserve our waterways

- Compost boosts soil's ability to retain water and decreases runoff, which can pollute water systems by carrying soil, fertilizers and pesticides to nearby streams.



Waste Not

Food service operators do their best to manage inventory and limit overproduction. Food surplus or spoilage is often unavoidable. Composting this food is an excellent choice. Donating your delicious food and ingredients to feed people in need is the first, best option.

There are a number of social service agencies involved in the rescue and redistribution of food to thousands of hungry people every day. Develop a relationship with a local charity or community food bank. Most will pick-up, or have drop-off hours, and will happily receive your usable leftover produce, pantry staples, packaged goods and, especially, prepared foods.

Each agency has their guidelines on acceptable food donations. Develop an in-house protocol for food donation and communicate it with your staff. Post the critical information as a reminder to your staff.

BC adopted a Good Samaritan ‘Food Donor Encouragement Act’ which protects donors from liability when they act in good faith to donate surplus perishable food, while ensuring recipients’ rights are protected.

The best rule of thumb for donation is safety first: Here are some general guidelines for food donation.

Ingredients:

- Start with canned and dry packaged foods such as soups or sauce bases.
- Rice and pasta are always welcome as is fresh produce that is no longer restaurant quality or that will spoil before it can be used.
- Expired frozen items that have never been thawed can be safe to donate, but fresh meats, dairy products and other refrigerated products past their expiry dates may not be fully safe (though some programs may accept them).
- Check condition and expiry dates. Reject anything that could be unsafe to eat.
- Keep items in their original packaging and do not open.
- Mark thawed items so they will not be refrozen.
- Package food separately to prevent cross contamination.

Prepared dishes:

Often the most-desired items are leftover dishes that are prepared, kept hot and can be easily chilled or frozen for reheating. Be sure to manage temperature, handling and storage times for these items as you would for your own customers.

- Offer donated dishes in shallow, one-use recyclable aluminum pans or clear plastic food-grade bags.
- Package bulk donations, such as soups or stews, in containers that allow for temperature control.
- Label and date all containers so that contents can be readily identified.

Five Smart Steps

Like any addition to or change in operations, your new organics recycling program will require a degree of planning and preparation. These five steps are essential elements to any successful program.



- 1 Smart contracts** – Select a hauler that provides flexibility in the services you need and a pick-up schedule that fits.
- 2 Smart design** – Go with your work flow. Select the appropriately sized collection containers and place them strategically within your operations.
- 3 Smart staff** – Train your staff on the materials that go into the organics bin and the items to keep out. Assign responsibilities. Encourage and reward your ‘champions’.
- 4 Smart customers** – Make it easy for your patrons to participate with prompts such as colour-coded bins and clear and concise signs.
- 5 Smart business** – Track your waste reduction performance and estimate your cost savings. Share the good news with your staff and customers.

It can be this simple.

Experienced food service operators will tell you that spending time to tailor a program to fit your business’s style and culture will be the most successful in the longrun.

The Details

Front to back. And more.

While they review their monthly waste management bills, most restaurateurs rarely take a close look at the contents of their dumpsters and recycling bins. In designing an effective organics recycling program, it's well worth getting a fresh snapshot of the amount and variety of materials that regularly travel through your operation.

1. Get to know your waste

This can be as simple as routinely viewing the amount and variety of materials ending up in your garbage. Identify problem areas of waste generation related to spoilage, menu prep and customer plate waste. Look for opportunities for reducing the amount of waste diversion.

Remember the most effective way to manage waste is to not produce it in the first place.

A comprehensive waste audit will provide a profile of your waste and a baseline to measure your performance. Understanding the quantity and nature of the waste you're generating will also help you reflect on how your existing management policies and operating practices influence how waste is generated.

A proper waste audit can be a messy business, involving handling, sorting and weighing your garbage. Consider your options: conduct a waste sort as a team-building exercise for management and staff or leave it to one of the many qualified specialists. Check first with your waste hauler as they may offer waste audits to their customers.

2. Watch what you buy

In addition to evaluating the composition of your waste, consider your supply-side for reduction opportunities. Advise your suppliers that waste reduction is a priority. Review each of the products on your regular order sheets to identify whether it, and its packaging, is either compostable, or recyclable.

If you have questions about any item, consult your supplier or your hauler.

With this snapshot, you will not only know where each product should go, but also be able to review and substitute compostable options. Tell your suppliers that you want to reduce the non-recyclable materials you use and discuss options.



Once you've got a handle on your waste stream, expect to find organics in every corner of your operation from prep trim in the kitchen to fruit rinds at the bar and paper hand towels in the restrooms. The next step is to determine what you'll need to efficiently collect it all for removal by your hauler.

The good news is you probably already have most of what you need.

Allow your team members to choose a (1) metal or plastic tub, pan or bowl for their station – one that best suits their set-up and volume of work. For collecting organics in kitchen/prep areas, reuse (2) 35L plastic pails which are easy to clean and locate. If they are green in colour all the better as most jurisdictions choose green as the standard colour for organics recycling bins.

Midsize (3) 50L stand-up bins are well suited to high-volume operations, such as banquet and catering prep areas, but also work well as a 'big green target' on the cooking line during service to catch any misfires and mistakes.

Your hauler can provide information about the bins that will best suit your needs: (4) Large 240L or 360L wheeled bins

For collecting table scraps returned to the bussing/dish area by serving staff use a large bin appropriate to your regular service volume.

It's a good idea to set up the organics collection bin beside the garbage bin. Place the garbage container in front of the designated organics bin, so servers can easily remove the non-compostables first then clear the scraps into the organics bin. This allows for maximum efficiency and minimizes the chance of contamination. The rule of thumb here is "when in doubt, throw it out".

The facilities in our region make high-quality compost, which is diminished when plastics (including those labelled compostable or similar) are added.

There are some exceptions for commercial waste which is normally high volume and handled separately from residential waste. Businesses can talk to their hauler or landlord to understand their options.

The Issue of Bags

To help keep organics collection bins clean and reduce the "ick" factor many operators like to use liners or bags. Check with your hauler on sourcing certified compostable liners or bags that will be acceptable at the processing facility.



What's In. What's Out.

So what does compostable mean? In Metro Vancouver, it refers to materials that are accepted for processing by regional organics recycling facilities.

That said, the mandatory organics waste ban that will come into effect in 2015 in our region will focus on removing

food from the garbage. The easiest and best place for restaurants to tackle this process is back-of-house where pre-consumer (prep trim, spoilage) and post-consumer (plate scrapings, uneaten breads, tea bags) food waste can be collected and directed to dedicated green bins.



What's In

- White or kraft paper napkins
- Plain, unlined paper plates and boxes
- Plain, uncoated plant fibre-based (bagasse) plates, bowls and clamshells
- Wax-coated bags and wrap paper
- Plain and food-grade wax-coated wooden cutlery and chopsticks

What's Out

- Plastic and foil condiment packages
- Plastic wrap and trays
- Polystyrene #6 plastic cutlery
- Polystyrene #6 (Styrofoam) plates and clamshells
- 100% PLA cold cups, clamshells, cutlery and straws
- PLA-coated or lined paper hot cups, plates, wrappers and take-out boxes
- Biodegradable corn or potato starch plastic containers
- Oxo-degradable plastic bags

Always check with your hauler or supplier to confirm whether your chosen product is accepted as compostable in either municipal or specialized commercial facilities.



Take-Out. Delivery.

There is an ever-increasing variety of next-generation take-out packaging and disposable serving ware for food service.

In order for restaurant customers to recycle the compostable clamshells and plates they take home, you should choose products that are accepted by residential green bin programs around Metro Vancouver and not only acceptable for commercial purposes.

This category includes:

- uncoated paper plates, bowls and napkins made of 100% paper, preferably high in pcf (post-consumer fibre) recycled content.
- fibrewares (bagasse, sugar cane, bamboo, palm leaf) – that are plants or plant by-products pressed into sturdy moisture-resistant containers and plates. An effective substitute for polystyrene or plastic-coated paper.
- folding cardboard containers that are increasingly made with 100% recycled paper content. Only uncoated and unlined products are accepted by organics recyclers.
- wooden cutlery and serving accessories like forks, knives, spoons and chopsticks. These are acceptable as long as any coating is plant-based.
- Wax coatings may be acceptable. Check with your hauler or organics recycler to see if it's accepted.

Is a compostable product always the best choice?

From an environmental point-of-view, the answer is most often 'yes.' From the operational side, however, the answer is 'it depends'. To avoid confusing your staff and customers, it's always best not to mix compostables and non-compostables within a product category such as cups, straws, napkins or in common combinations such as a cup, lid and straw.

The following materials were once accepted in specialized commercial facilities, however, they are generally no longer accepted for composting at local commercial facilities.

- Corn or plant-based polylactic acid (PLA) plastics that replaced non-recyclable (#6) plastics. PLA can replace plastic as a moisture-resistant lining in paper hot cups, folding boxes and as a coating on paper sandwich or burger wrappers. There are also 100% PLA cold cups, clamshells, cutlery and straws.
- Plant starch-based packaging and cutlery. This is a plastic substitute made from potato or other vegetable starches. Some brands, however, still add conventional plastics which means they are only biodegradable.
- Oxo-degradable plastic bags.

Always check with your hauler or supplier to confirm whether your chosen product is accepted as compostable in either municipal or specialized commercial facilities.



***Go re-usable!
Where viable,
a re-usable
foodware program
is always the
better choice.***

Staff Awareness

Being in the food service business, there's no need to remind you that, as with every other in-house program, your organics recycling initiative will only be truly 'sustainable' if your management and staff support it.

As part of a 'snapshot' review of your current waste system, it's a very good idea to consult with your entire team to confirm the following procedures and policies:

- How is waste currently moved from the kitchen to loading bay or lane (per day/per week)?
- How is it done (with bags or a cart, etc.) and how often (per day/per week)?
- Whose job is it to manage the removal of waste and recyclable materials?
- Which factors (workload, absence, turnover) affect regular procedures?

For the organics program, experienced food service operators state that the best approach is to spread the tasks and responsibilities amongst all staff members.

That said, all staff will need ongoing and clear, consistent direction regarding:

- acceptable and unacceptable materials.
- key roles and assigned responsibilities.
- providing feedback on barriers and opportunities.

Of course, you'll want to integrate orientation on organics recycling into your staff training program. Make waste reduction and recycling a standing item at your weekly meetings. This can be an excellent forum for discussing problems and to brainstorm solutions especially related to contamination.

Remember to talk about the program's success (X-number of tonnes saved from going into the garbage always impresses and invite comments on problems with recommended solutions.

Dialogue like this will also encourage your team to talk up your 'growing green' organics program with customers because they'll also need to know how do their part.





“Everybody wants this to work, but at first, you need to repeat and repeat, give all staff pre-shift reminders of what goes in the organics bin, and more importantly, what doesn’t.”

We found that the best signs are ones with pictures of the ‘No’ items posted by the bin. That’s easiest to remember.

Around here, the front-of-house and back-of-house work together, but also hold each other accountable. That’s important, for a lot of reasons.”

Toby, Prep cook
Cactus Club
– Park Royal



“At the start of every shift, when a prep cook sets up their station, they head to the warewashing area to grab their cutting board and their green organics pail.

We’ve found that it’s best to put responsibility for organics recycling in each cook’s hands. It keeps the process in the forefront and helps focus attention on minimizing contamination. When it’s fully integrated like that, it just works.”

Aryn Ferguson
Facilities Manager
UBC Food Services

Contamination

Contamination is a serious problem for all organics haulers and recyclers, and a frequent source of frustration for food service operators. Glass is the most dangerous contaminant and plastic the most common.

Contamination can lead to three undesirable outcomes:

- your hauler can refuse to pick up your organics bins.
- entire truckloads of organics are refused at the composting facility, and sent to landfill instead.
- haulers and organics facilities are forced to add more screening processes, adding costs to your service.

Each of these scenarios will add costs and human resources to your operations. The solutions are simple if not always easy. Food service operations can reduce contamination with regular orientation for all staff, clear messaging to customers, and working 'upstream' to eliminate or replace products that cause contamination.

Here are some strategies to consider:

- offer regular reminders to all staff about organics practices and policies. Ensure signs and prompts are current and accurate. A good practice is to post images of the top 5 potential contaminants at your operation.
- create an atmosphere where staff can help each other to make the system work. Encourage friendly competition (between shifts or stores) to keep your program fresh and interesting.

Odours

Odours from organic bins are not, or shouldn't be, any more noticeable than those from a regular garbage bin. There are, however, some common practices you should apply to your program:

- 1. Keep organics bins clean** – talk to your hauler about this. They may exchange dirty bins for clean ones or wash them onsite. Some may expect your staff to rinse and clean them.
 - use small kitchen bins that can run through the dishwasher regularly.
 - clean and rinse customer-area bins regularly.
 - refresh bins with organic odour control such as a dash of vinegar or sprinkle of baking soda.
 - line bin bottoms with compostable cardboard, egg cartons, newspaper, paper towels or napkins to soak up liquids.
- 2. Practice smart storage** – if any odour issues arise, they're usually due to extended storage or storage conditions.
 - use leak-proof containers with closed lids.
 - keep outdoor bins out of the direct sun on warm days.
 - schedule routine clearing of past-date freezer and walk-in items with organics pick-up schedule.



No Pests

The majority of food service operators with established organics programs report no increase in the amount of pests. However, if you have particular concerns, here are some simple preventative actions you can take:

Flies

- keep bins, particularly those containing meat and protein scraps, closed as much as possible.
- herb spray, such as pennyroyal, eucalyptus, mint or bayleaf, will repel flies as will a splash of vinegar.
- make layers: cover fruit/vegetable scraps with shredded paper, napkins or other paper.

Rodents and other pests

- lock your bins and store outdoors as much as possible
- store bins away from fences, trees, picnic tables, as animals might use them to access the bins.



Health & Safety

Organics collection bins can get very heavy, very quickly. Topped up with a typical waste mix, a 120L bin can weigh up to 150 kg, double that for a 240L bin.

- To avoid strains or injuries caused by moving large bins, have staff dump small kitchen bins into larger bins located in the loading bay or storage area where only your hauler has to move them.

Staff may be tempted to remove obvious contaminants from bins.

- Ensure they use tongs and wear protective gloves to avoid risk of injury from broken glass or other sharps.

Customers Awareness

If you design a front-of-house system

that clearly and easily shows your customers what to do, evidence suggests most will take the time to sort their waste.

At the point-of-sale, staff have the best opportunity to highlight and ‘coach’ customers on the in-house system and field any related questions. Prepare and distribute a consistent, clear (and friendly) customer message for all staff to deliver. Ensure the message is updated to reflect any product changes.

Label the sorting station. This isn’t the place for generic messages. Use signs with clear, simple images of the actual items and products served or offered at your operation. Colour coding and ‘right-sizing’ openings for the materials will also help customers choose the correct bin.

Switching to condiments in bulk rather than individual-sized packets will also help to remove waste.

Again, the default policy should be “when in doubt, throw it out”. Every hauler will tell you it’s better to add garbage than to risk contaminating the organics.

The most-effective systems allow the customer to ‘deconstruct’ their plate or tray in a convenient location with clear visual prompts that support their effort.



The Hauler You Need

Though it's not necessarily standard procedure with other waste or recycling streams, collaborating with your hauler is essential to the success your organics program.

Effective and timely dialogue will help manage contamination issues, keep costs low and maximize waste diversion.

Some key factors to discuss include:

- service start-up – unlike standard dumpster service, a new organics program often needs a 'settling-in' period to determine the optimum number of bins and pick-ups, and to deal with common implementation issues like contamination. Confirm your hauler's availability during this critical period.
- flexibility of service – again, unlike dumpster service, organics recycling typically requires adjustment to the number of bins in-use and frequency of pick-ups. If your operation has seasonal variations or promotional periods that boost customer flow and waste output, you'll likely need to adjust your organics service. Ensure your hauler can accommodate these changes without cost penalties.
- clean and green – whether liners are specified or not, organics bins need to be cleaned regularly to help control odours. Ask whether the hauler has a bin cleaning and replacement program or policy.
- supplementary services - including signage, waste reduction assessments and audits as well as regular reports on your diversion amounts.
- service consolidation and cost offsets – whenever possible, consolidate all your waste/recycling programs with one hauling service to help keep administration time and costs low.

A listing of commercial hauling services is included in the Reference section together with a sample Hauler Communication Form.



"Handling the multiple bins made for some extra work at first, but it also made our recycling program tidier."

"Because of the clear pictures and large signs, staff received very few customer questions regarding the sorting station. Given the opportunity, our customers simply made it work."

Lisa
Store Manager
Terra Breads
Kitsilano

Tools and Resources

Organics Recycling Service Providers – Metro Vancouver

Company	Contact info	
BFI Canada	604-525-2072	bficanada.com
Bottle Guys Enterprises Inc.	778-321-0111	bottleguys.ca
Ecoaction Recycling Ltd.	604-876-3330	ecoactionrecycling.com
Emterra Environmental	604-635-0999	emterra.ca
Garbiz Removal and Recycling Ltd.	604-4-GARBIZ or 604-442-4279	garbiz.ca
Growing City	1-855-932-6676	www.growingcity.com
Maple Leaf Disposal Ltd.	604-533-4993	mapleleafdisposal.com
NorthWest Waste Solutions Inc.	604-539-1900	northwestwaste.com
NSD Disposal Ltd.	604-520-5669	nsddisposal.com
Recycle-Now!	1-888-887-1840	recycle-now.net
Recycling Alternative	604-874-7283	recyclingalternative.com
Segal Disposal	604-583-2467	segaldisposal.com
Smithrite Disposal Ltd.	604-529-4030	smithrite.com
Super Save Disposal Inc.	604-533-4423	supersave.ca
Urban Impact Recycling Ltd	604-273-0089	urbanimpact.com
Waste Management of Canada	604-520-7888	wmcanada.com or thinkgreen.com

For the status of other programs, check directly with haulers listed at www.metrovancouver.org
Search “Hauling Services”.

Sample – Hauler Communication Form

Have your hauler use this document (or equivalent) to provide regular feedback on sources of contamination, particularly in the first few months of service.

Date: _____ Time: _____

Restaurant: _____ Location: _____

Estimated Contamination Levels: _____

Contamination Report

Plastic:

- ☐ Cling Film
- ☐ Recyclable Containers
- ☐ Disposable Cups / Lids / Straws

Other: _____

Glass:

- ☐ Recyclable Containers Glassware
- ☐ Refundable Beverage Containers
- ☐ Broken Glass

Other: _____

Metal:

- ☐ Foil
- ☐ Recyclable Metal Cans
- ☐ Refund Beverage Containers
- ☐ Cutlery

Other: _____

Composites:

- ☐ Milk/Juice Cartons/Tetra Packs
- ☐ Plastic/Foil Packaging
- ☐ Non-Paper Coffee Cups

Other: _____

Other:

- ☐ China plates, cups, etc.

Other: _____

