

Zero waste implementation guide



WASTE AUDIT

AND SUPPLIERS

OUR TEAM

PROMOTE YOUR PROGRAM

Support a cleaner planet



24%

pounds of municipal solid waste is generated per person per day Source: EPA.gov of municipal solid waste landfilled is comprised of food scraps Source: <u>EPA.gov</u> more food scrap is captured in the compost bin when an operation switches to compostable foodserviceware

78%

Source: <u>BioCycle.net</u>

Zero waste is achieved when an organization diverts 90% or more of its waste away from incineration and the landfill. This goes beyond just recycling and composting. Achieving zero waste is a circular solution that helps ensure a sustainable future economically, environmentally and socially.

In this guide you will find everything you need to know to begin your journey to zero waste.

- 1 Build a plan and cultivate a team
- 2 Perform a waste audit
- 3 Assess waste service providers and suppliers
- 4 Install a new bin system
- 5 Educate your team
- 6 Promote your program

Included are tools to help you navigate this guide more efficiently and effectively.

You can start at the beginning of the guide and work your way through all of the information, examples and tools. Alternatively you can move directly to each section simply by clicking on the green section header tab located on the right side of the page. The color of the tab will change to blue when you are in that section.

Interactive check boxes and written text space located throughout the guide allows you to fill in notes, check off steps as they are completed and supplies as they are gathered.

Links are also available to download available tools, and take you to other websites for more information.

We hope you enjoy this guide and look forward to helping you achieve zero waste!

WASTE AUDIT

Step 1: Build a plan and cultivate a team

Start a dialogue

How does your organization's leadership feel about sustainability, whether it's the products you use or how you operate your facility? Is it part of your culture already, or is it a brand new concept? Begin to start an internal dialogue around zero waste and build foundational relationships for program success. Buy-in from leadership is critical in achieving success.

Create program goals

Setting goals helps trigger new behaviors, guide your focus and sustain momentum. Goals communicate program expectations and provide a framework to measure progress.

Collaborate cross-functionally across your organization

Identify people within your company who could become collaborators and allies for zero waste. Creating cross-functional collaboration may take time to build – persistence is key.

Build a Green Team

Begin to build a diverse Green Team. The Green Team is where the magic happens. The Green Team is a group of engaged individuals that are rooting for a zero waste program and willing to spend time and energy to ensure program success. Involve individuals that have a direct role in influencing leadership decisions, bringing materials in, handling of materials and sending materials out. Examples of functional roles to include may be: operations/ materials, purchasing, janitorial, front of house and back of house staff.

Step 2: Perform a waste audit

A waste audit is the collection of baseline data used to make informed decisions regarding your waste management system. During a waste audit, you measure the effectiveness of current waste management systems, quantify and categorize the composition of waste generated and identify opportunities to improve landfill diversion strategies.







AN AND A TEAM

Waste audit checklist

Determine scope of audit

Planning is key to a successful audit. We recommend asking yourself the following questions to ensure you have the necessary information and resources to perform a successful waste audit.

- 1. What is the estimated volume of waste material you plan to audit?
- 2. How many days will the audit take?
- 3. How many people are needed for the waste audit team? _____
- 4. What is the current flow of waste material at your operation?
- 5. Who are your waste haulers and when is each hauler's scheduled pick-up day/time?
 - a. Recycling:
 - b. Composting:
 - c. Landfill: _____

Recruit and organize audit team

A waste audit is a good opportunity to educate people on what material goes where, build morale around sustainability activities and goals and engage people with the changes your organization is going through. Consider how communication takes place within your organization. How will you engage employees to participate? The following page has a template to help you get started in recruiting an audit team.

The more audit team members, the faster the audit will be completed. We recommend a minimum of five audit team members.

Audit team sign-up sheet

Audit team sign-up sheet

Purpose: To identify and quantify waste material and current condition. This data will support data-driven decisions on landfill diversion and implementing a zero waste program.

*Each shift will be approximately 1-2 hours. *Please arrive 10 minutes prior to your shift to help with setup.

Please put your name below on the date/shift that you'd like to work.

DAY 1	Setup Shift	
Day-of Setup Set up all stations per the "Setup / Teardown Checklist" and stage material that will be sorted	1	3
	2	4
DAY 1	Shift 1	Shift 2
Sort Station Manage incoming materials, tear into bags, spread waste, and sort accordingly	1	1
	2	2
	3	3
Weigh Station	1	1
Weigh sorted bags, record data, manage outgoing materials	2	2
DAY 2	Shift 1	Shift 2
Sort Station Manage incoming materials, tear into bags, spread waste, and sort accordingly	1	1
	2	2
	3	3
Weigh Station Weigh sorted bags, record data, manage outgoing materials	1	1
	2	2

Click here to view and download the audit team sign-up sheet

Gather audit supplies

You can't execute a waste audit without proper personal protective equipment (PPE) and supplies. The waste audit supplies checklist includes all the materials to support a successful waste audit.

Waste audit supplies checklist

Audit team table

8' folding table or two 6' tables

Camera or phone for photos

Speaker for music

Personal protective equipment (PPE):

Safety glasses

Nitrile gloves

Cotton gloves

Tyvek suits

Shoe covers

Face masks

Recommended:

Closed toe shoes

Clothing you don't mind getting dirty

A second pair of shoes

Audit team goodies:

Hydrating drinks

Snacks

Swag items

Weigh station Hanging scale

Data collection sheet(s)

11"x17" clipboard

Pen(s)

Sharpies

Sort station

16'x 20' tarp (minimum size)

Weights for tarp corners (typically this can be found on site)

Two 6' folding tables

Таре

Boxes

Clear bin liners

Waste category signage

Squeegees

Shovel

Other helpful items

Rolling carts

5-gallon bucket

EDUCATE

PROMOTE YOUR PROGRAM

Execute waste audit

It is time to execute! This includes setup / teardown, audit team training, data collection, and calculating total waste per waste category. When training the audit team, be sure to explain how this audit supports your organization's greater goal to achieve zero waste, waste audit goals and what each person's role entails. Below are three tools to assist you in executing a waste audit.

Setup/teardown checklist

Pre-audit setup

Establish staging area and ensure no waste goes to dumpster Final gather of supplies If space allows, build boxes

Day-of setup

Lay base tarp and weigh down the corners

Set up stations

Setup volunteer table

Table

Personal protective equipment (safety glasses, latex gloves, cotton gloves, Tyvek disposable coverall suits, face masks)

Audit team goodies

Establish incoming / outgoing staging areas

Set up sort station

Erect tables in the center of the tarp

Build boxes

Insert clear bin liners in boxes

Tape waste category signage to each box in the order listed on the data collection sheet

Set up weigh station

Establish spot for scale

Clipboard with data collection sheet

Pen(s)

Sharpies for potential new signage

Once everything is set in place we can begin the sort!

Daily clean-up

Clean up all stations. If this is a multi-day waste audit, move items to a temporary storage space Sweep up left over material with squeegee and spray down tarp Empty any remaining outgoing waste to appropriate dumpsters Weigh down tarp with old pallets (or whatever is available) Return bins to waste staging area

UILD A PLAN AND ULTIVATE A TEAM

PERFORM A WASTE AUDIT

AND SUPPLIERS

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Waste category signage examples



Click here to view and download the waste category signage examples

Waste audit data collection sheet

Waste audit data collection sheet

Waste Material Type	Bag 1	Bag 2	Weig Bag 3	ght (lbs.) Bag 4	Bag 5	Bag 6	NOTES
Copy Paper							
Cardboard/ Paperboard							
Contaminated Paper							
Paper Cups, Plates, Bowls, Takeout Containers							
Food & Beverage Cartons							
PLASTIC	1			1		1	1
#1 - #6 Cups & Containers							
#7 PLA							
#7 Other/ Unknown							
Banding							
Film							
Plastic Bottles							
Plastic Utensils							
METAL							
Aluminum Cans							
Aluminum Foil							
Aerosol Cans							
Other Metals (Aluminum, Steel, Copper, Brass, etc.)							
GLASS	1					1	1
All Glass (Clear, Brown, Green, Blue)							
ORGANICS							
Compostable Cups, Plates, Bowls, Takeout Containers, Utensils							
Food Waste (Pre & Post-consumer)							
Other							
WOOD	r			-	-	1	1
All Wood							
MISCELLANEOUS ITEMS	1	1		1	1	1	
Batteries Chip Bags/ Candy		_	-	_	-		
Wrappers				+			4
Cigarette Butts			_		_		4
Electronics	L	_			_		4
Light Bulbs		_					4
Rubber Gloves		_			_		4
Soiled Fabrics	L	_		1			4
Tape							-
Toner/ Inkjet Cartridges							-

Click here to view and download the waste audit data collection sheet

Analyze audit data and report findings

You have the data, and now it's time for analysis. What are you doing well? How much of your waste could be diverted from the landfill stream? Are there potential cost savings? Present your findings to the management team, audit team, and the overall organization.

ASSESS PROVIDERS

PROMOTE YOUR PROGRAM

Step 3: Assess waste service providers and suppliers

Review current waste service contracts

Below are questions to consider when reviewing current waste hauler service contracts:

- 1. Who do you currently work with for trash, recycling, and composting hauling services?
- 2. How much does each provider cost and how are costs assessed?
- 3. What is accepted for recycling and/or composting in your area?
- 4. Does the trash hauler offer composting and/or recycling services?
- 5. Are there areas for improvement?
- 6. Do you have contracts with each waste service provider? Is so, when are your contracts up for review?

Haulers are highly competitive. Even if your current hauler offers recycling/composting services, be sure to request quotes from other haulers to compare costs and services.

Review current flow of waste

Review and map out the current flow of waste material in your organization. Look for opportunities to reduce, repurpose, recycle, or compost waste. Knowing all the touch points of the waste material and who is responsible for each step will help you understand who needs to be involved in any changes. Below are questions to consider when mapping out the flow of your waste:

- 1. Who touches what waste material? Do you have a janitorial team?
- 2. Where and when is the waste material handled?
- 3. Who is responsible for managing the janitorial team?

PROMOTE YOUR PROGRAM

Review supplier contracts

Below are questions to consider when reviewing current supplier contracts:

- 1. What foodserviceware is currently used in your operation?
- 2. Does the current foodserviceware used in your operation align with your zero waste goals? Is it compostable, recyclable, or reusable?
- 3. What about other items currently used in your operation, such as pre-packaged items? Are they compostable, recyclable, or reusable?
- 4. Who are your current foodserviceware suppliers?
- 5. Do you have contracts with each supplier? If so, when do the contracts expire?
- 6. Do your current suppliers offer products and/or services that support your zero waste goals?

Identify opportunity gaps and recommend proposed changes

It is important to understand all the areas where waste is generated in your operation. Places such as kitchens, restrooms, food stations, fan seating for example are all areas where waste can be created. Identify gaps where positive change can be made and propose those changes to all stakeholders.

Make changes to current system

Once approved, make the proposed changes to improve material flow in your organization. If implementing composting, this may include modifying contracts so your organization only uses compostable foodserviceware certified by a third party (Biodegradable Products Institute or Compost Manufacturing Alliance).

OUR TEAM

🔁 Step 4: Evaluate bin systems

Map out current bins and identify areas of improvement

Where are waste bins located throughout your organization? Create a map of where all waste collection bins are located in your organization and count the total number of bins. This includes centralized dumpsters all the way down to waste bins in individual offices. Below are questions to consider when mapping out your current bin system and looking for areas of improvement:

- 1. Is clear signage for sorting and disposal available?
- 2. Where is the most waste being created?
- 3. Are there locations where people tend to litter?
- 4. How does waste material currently flow throughout your operation? Is the current bin system efficient and ergonomical for janitorial pickup?
- 5. How many landfill bins exist compared to recycle and/or compost bins?
- 6. Do you offer alternative waste collection bins (i.e. battery recycling, hazardous material)?

Determine new bin map and total count of bins needed

One of the most important parts of zero waste is determining how to efficiently and effectively collect "clean," uncontaminated waste streams. Bin location plays a huge role in how humans dispose of their waste. Bins may be placed in a centralized location and/ or at exit points in your operation. Recycling and composting should be just as easy and convenient as throwing an item in the trash. Below are questions to consider when designing a new bin system:

- 1. How many total trash, recycling, and composting bins are needed?
- 2. Do you need bins for alternative waste collection in specific areas? For example, hazardous material/sharps bins in bathrooms.
- 3. Are the appropriate bins mapped out for specific areas? For example, you may have compost bins in common areas, but not in offices.
- 4. It is best practice to "twin the bin" and have trash, recycling and/or composting bins located together. Where will you have these bin systems located?

consider when choosing the physical design of a new bin system:

- 1. What type of bin makes the most sense for what you are trying to achieve?
- 2. A three-bin system is one unit with three separate bins. Typically a three-bin system holds three different types of waste. These are common in spaces that collect trash, recycling and compost. Where might a three-bin system make sense?
- 3. A two-bin system is one unit with two separate bins, holding two different types of waste. These are common in spaces that collect trash and a special recycling item. Where might a two-bin system make sense?
- 4. Are the bins compatible with signage display?

Determine physical design of new bin system

- 5. Can janitorial services easily change out bags?
- 6. How easily can you clean the bin system?
- 7. Are there special colors you'd like to use (i.e. company or team colors)?
- 8. How much waste, on average, is produced in a day at your operation?
- 9. How frequently are the bins serviced?
- 10. Are the new bins designed to hold that so there will not be overflow?

OUR TEAM

Develop and implement new bins and signage

Bin needs vary from operation to operation. When choosing the right bin(s) for your operation it is important to think about physical design, location, usage and serviceability.

It's crucial that your bins have proper signage with clear, specific instructions to help people understand how to properly sort and dispose of their waste. The goal here is to reduce confusion of what goes into the bin and prevent contamination. Good signage has catchy, easy-to-understand graphics and is often posted at eye level near the opening of the bin. Images are preferred over the use of words due to different languages around the world. Where possible, graphics on your signage should match the products used within your operation.

Don't forget to consider what to do with your old bins. You may be able to recycle, donate or repurpose them.

Standard 3-bin system signage Standard 2-bin system signage Sort it out! Before you throw it out. Sort it out! Before you throw it out. Let's achieve zero waste together. Let's achieve zero waste together. LANDFILL PAPER & RDBOARD RECYCLE COMPOST LANDFILL Ó Ξ 3 -Í 1 <u>N</u> ۲

Special waste recycling bin signage examples



In-use examples



Step 5: Educate your team

Schedule staff training sessions

Your bins and new signage are set up and looking great! Now it's time to educate everyone (janitorial, staff) involved on how the program will work. This could be in the form of a large group training, email communication, individual team meetings, etc. This is an incredibly important step to avoid contamination. Make it fun and make people want to dispose of their waste properly. The more you can be positive about zero waste and show how easy sustainability can be when everyone participates, the higher likelihood of success you will have.

Assign Sustainability Champions

Assign Sustainability Champions on each shift to engage and educate staff and consumers.

Seek feedback on the new program

Seek input from staff and let them help you build support for the program. Additionally, request feedback from staff regarding contamination or improper handling of materials.

Recognize and reinforce good behavior

Encourage positive behavior with positive reinforcement. Offer rewards and recognition to employees and consumers who correctly dispose waste materials.

Provide regular updates

Regular communication is key for program success and ongoing team engagement. Provide regular updates through team meetings, memos or posted announcements.

Step 6: Promote your program

Engage your marketing team

If you haven't already, engage your marketing team and work together to promote your new zero waste program. This is a big deal. Share your goals! Share your success! Tell your customers why this is important to you!

Share your succes

Update your website, create posters for your operation, develop social media content, share your goals and milestones. As noted above, regular communication keeps everyone engaged and educated. Promoting your program internally and externally raises awareness around zero waste.

Create incentives

Offer rewards to folks that sort properly. This could be in the form of gift cards to participating vendors, team swag, free food. Get creative with it!

PROMOTE YOUR PROGRAM

Promoting your program raises awareness around zero waste while educating and engaging consumers. Below are examples of how an organization might promote a zero waste program on digital channels, media outlets and printed materials. We can collaborate together to share your successes through digital media (social media, website, video, e-blast, testimonials and so much more).

Social media

First, make sure to follow Pactiv Evergreen and Greenware® USA on social media!

Pactiv Evergreen

Greenware USA Instagram

<u>Facebook</u> <u>LinkedIn</u> YouTube

Second, tag us in your social media posts: @PactivEvergreen and @GreenwareUSA.

Lastly, share the news with your social network. Below are examples of social media posts and suggested hashtags:

Example #1: Zero waste focus

Sort it out! Before you throw it out. We are committed to operating an efficient campus that is continually working towards eliminating waste. Let's achieve zero waste together.

Example #2: Greenware Cups

Proper disposal of @GreenwareUSA products is important. We're using Greenware[®] Cups that clearly state that they are @BPIcertified to be commercially compostable on-site. Composting Greenware[®] products help divert food scraps from landfills and reduce greenhouse gas emissions.

Example #3: Greenware Containers and Cups

This year we have transitioned away from using disposable plastics and instead are using commercially compostable containers and cups – @GreenwareUSA, drink cups and containers are made entirely from annually renewable plants – not petroleum. Learn more about Greenware: GreenwareUSA.com

Example #4: EarthChoice® Packaging

Recycling is a great way to build a sustainable future. We're excited to be using EarthChoice Packaging that is made from post-consumer recycled materials. Learn more about EarthChoice: EarthChoicePackaging.com

Example #5: Recycleware® Containers

#DidYouKnow that we use Recycleware[®] Containers and they are made with a minimum of 20-50% post-consumer recycled PET bottles. Using post-consumer recycled PET in place of virgin PET reduces energy demand by 75% and greenhouse emissions by 60%. Learn more about Recycleware Containers: RecyclewareUSA.com

Suggested hashtags

Hashtags specific for Greenware and EarthChoice - products that are commercially compostable:

#madefromplants #compost #composting #compostablecups #compostablepackaging
#gogreen #GreenwareUSA #EarthChoice #madeinUSA #PTVE #PactivEvergreen

Hashtags specific hashtags for Recycleware and EarthChoice - products that are recyclable:

#plasticrecycling #recycle #environment #reduceresuserecycle
#recycledplasticbottles #RecyclewareUSA #EarthChoice #madeinUSA #PTVE
#PactivEvergreen

Sustainability and diverting food waste hashtags:

#sustainable #sustainablematerials #sustainability #sustainableliving #sustainabletips
#sustainablelivingtips #sustainablepackaging #foodscraps #foodwaste
#reducefoodwaste #zerowaste #zerowastejourney #divertingfoodwaste

Make sure to use the hashtag #zerowaste to join the conversation and celebration around diverting waste from the landfill!

Posters



Window clings and stickers







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