

Restaurants and Bars

**A Best Practices Guide to Waste Reduction and Recycling
with an introduction to Zero Waste principles**



NEBRASKA RECYCLING
COUNCIL

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Introduction

The Nebraska Recycling Council produced "Restaurants and Bars: A Best Practices Guide for Waste Reduction and Recycling" to provide a simple process for owners and managers to go from zero recycling to Zero Waste. Moving toward Zero Waste is the goal, but first we'll help you analyze then design a program that begins with basic waste diversion and employee training.

Growing numbers of restaurants and bars have already begun diverting their waste streams. According to a 2014 National Restaurant Association survey:

- Two-thirds of restaurants recycle their cardboard or paper. More than a third of restaurants recycle their plastics, cans or glass.
- More than 60 percent of restaurants purchase products made from recycled materials.
- Nearly one in five restaurants compost their food scraps, and 40 percent of restaurants buy compostable products.



Restaurants and bars can reduce the costs of waste management by making better purchasing decisions, cooperating with neighbors to share hauling costs, and recycling and organics diversion. It is easiest to start by recycling basic materials and expand from there. Wherever you begin, there are two essential components to include from the start: measuring and tracking of materials and employee training.

The state of recycling in Nebraska

The State of Nebraska released a *Waste Characterization Study* in 2009 that measured categories of wastes in eight landfills across the state. The main objective of this study was to determine the characteristics of Nebraska's solid waste stream and establish a baseline of waste characterization data for the state. The three largest portions of Nebraska's waste stream were paper fibers at 41.15%, plastics at 19.13%, and food at 16.64%. Combined, these three materials comprised almost 77% of Nebraska's total waste stream.

More than 50% of the paper fibers were easily recyclable and approximately 27% of the plastics were easily recyclable. Food waste composting options have become more available since the study, although commercial composting services are mostly limited to larger metropolitan areas of the state. Metals, comprising 3.64% of Nebraska's municipal waste stream, were easily recyclable more than 75% of the time.

A *Nebraska Recycling Study* was conducted in 2015 to inform policy decisions and establish a baseline to measure progress in the future. The major findings were: "1) Nebraska lags in recycling compared to other states; 2) there are significant gaps in availability and accessibility to recycling in the State; 3) there is not currently a comprehensive plan or strategy to improve recycling in Nebraska; and 4) there are best practices demonstrated to be effective in other locations and in Nebraska communities that could be implemented across Nebraska, leading to reductions in waste and increases in recycling."

[http://www.lonm.org/attachments/Bulletins/2015/Statewide Recycling Study Final Report.pdf](http://www.lonm.org/attachments/Bulletins/2015/Statewide_Recycling_Study_Final_Report.pdf)

A few words on Zero Waste

Zero Waste principles are logical and specific, yet taken altogether, they are demanding. The road to Zero Waste is a process that requires commitment, not perfection. Documentation (measurement and tracking) is key to navigating the path to Zero Waste, and it is also good due-diligence for any waste diversion program. Below are the fifteen areas in which a business seeking Zero Waste Certification must earn credits.

1. **Redesign** – right size containers and frequency; restructure waste collection agreements; review nine points of waste generation to eliminate wasting and pursue the highest and best use; review purchasing records and supply chain agreements.
2. **Reduce** – document materials reduced by commodity; have tracking program for materials flows; reduce size/amount of product packaging; go paperless for at least one major office function; duplex printing on all printers; grass-cycle; use native landscaping and xeriscaping.
3. **Reuse** – develop reuse systems; document reused pallets and shipping containers; implement reusable transportation options; reuse office supplies or other materials; reusable/durable service ware; donate food for human consumption; donate food for animal feed.
4. **Compost (Re-earth)** – collect compostables separate from trash; yard trimmings composted; on- and off- site composting of food scraps and soiled paper; utilize/reuse compost or mulch on-site; implement other technologies (e.g. digestion); growing food on-site for company use.
5. **Recycle** – 80% of 12 market categories, follow Highest and Best Use; document markets/uses for recyclables and use locally as much as possible.
6. **Zero Waste Reporting** – document 90% diversion by commodities; track economics (including avoided costs & material sales revenues); use US EPA WARM Model for Climate Reports; US EPA Waste Wise Program Member.
7. **Diversion from landfill, incineration, and environment** – showing diversion rates above 90%.
8. **Zero Waste Purchasing** – Environmentally Preferred Purchasing policy; durable goods preferred over disposables; prefer sustainably produced paper and wood products; EPP highlighted in purchasing catalogs; purchase as priority used, refurbished, and/or remanufactured goods.
9. **Leadership** – Zero Waste goal adopted by upper management; upper management reviews monthly diversion activities; staff incentives encourage Zero Waste; take responsibility for all products and packaging for all company brands; require suppliers take responsibility for all products and packaging; upper management promotes Zero Waste in the community.
10. **Training** – Zero Waste policy provided to all employees; Zero Waste in orientation; communicate at least quarterly with staff about Zero Waste; clearly label receptacles for recyclables, compostables, and

Zero Waste

Zero Waste is a goal that is ethical, economical, efficient and visionary to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

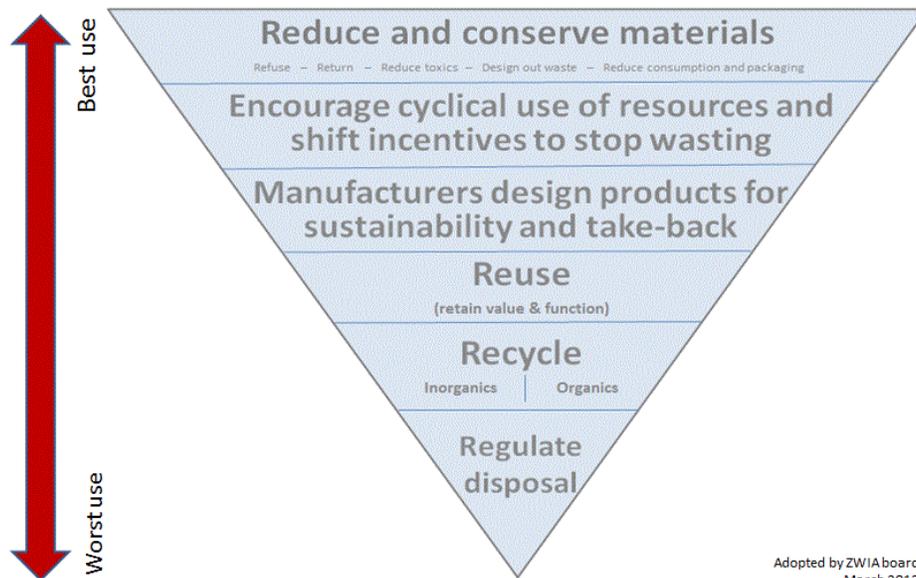
Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.

landfill material; training for purchasing agents on EPP preference; Zero Waste responsibility in job description; Zero Waste training on internal website.

11. **Zero Waste Analysis** – physical waste analysis done annually; complete recommendations from waste analysis; complete annual audit of recyclables to ID contamination; rejected recyclables documented as waste; staff engaged in waste analysis.
12. **Upstream Management** – work with suppliers to eliminate non-recyclable packaging; request vendors to be Zero Waste; 100% recyclable packaging policy; work with suppliers to redesign products for reusability/recyclability.
13. **Hazardous Waste Prevention** – hazardous materials properly labeled and stored; hazardous waste manifests saved for at least 3 years; reuse or recycle universal wastes; replace hazardous materials with non-toxics; reuse or recycle universal wastes from employees and/or community.
14. **Closed Loop** – 30% recycled office paper; 20% recycled janitorial paper products; purchase compost from facility that composts your material or from local sources; use local markets as much as possible.
15. **Innovation** – upcycle non-traditional recyclable materials; commit to continuous improvement.

Zero Waste Hierarchy



Zero Waste Facility Certification

Zero Waste Certification is awarded to facilities that meet the Zero Waste Principles of the Zero Waste International Alliance. For more information, visit <https://uszwbc.org/certification/facilities/certification-program/>.

Ready, Set, Go!

Step 1: Gather information

According to the National Restaurant Association, 25% of a restaurant's waste is from one material - CARDBOARD! If you choose to begin your recycling program with only one material, this would be a good choice. But, before settling, consider this: a few extra steps could save on your solid waste management costs, demonstrate your organization's commitment to community well-being, conserve resources and reduce greenhouse gas emissions. Here's how:

"Focusing on recycling your cardboard will help you get big bang for your buck by reducing the size of your waste stream and the need for a big dumpster to hold your trash," says Jeff Clark, the National Restaurant Association's [Conserve](#) program director.

1. Find out what's in your trash.

- a. Visit all areas of your building where waste is generated. List all the recyclables, organics (including soiled paper) and landfill items generated in each area. Include restrooms, storage/supply rooms, office, break rooms, shipping and receiving, kitchen and front of house areas.
- b. Assess food waste in three separate categories: spoilage, prep waste and plate waste. There are different strategies for reducing each. US EPA has an excellent guide for reducing food waste. https://www.epa.gov/sites/production/files/2015-08/documents/reducing_wasted_food_pkg_tool.pdf
- c. If you already have recycling containers indoors, look at how much material is being thrown away and how well people are recycling. Is trash contaminating your recycling bin, or are recyclable materials in your trash bin?
- d. Consider a waste audit.
The Foodservice Packaging Institute has guides, forms, and a video to help. [Waste audit worksheet \(Microsoft® Excel®\)](#), <https://www.youtube.com/watch?v=6VEm4SqLOxc>
The Nebraska Recycling Council also performs fee-based waste audits for organizations. A waste audit will:
 1. Determine the quantity and type of waste generated.
 2. Provide a baseline from which you can measure progress and set goals.
 3. Identify opportunities for waste reduction, recycling and reusing materials.
 4. Validate the costs and the savings for implementing a waste management plan.

2. Evaluate the potential for waste reduction.

Eliminating waste before it occurs is the top strategy for reducing costs.

- a. Make sure you're buying only what you need. This is especially important with perishable items.
- b. Are there durable, reusable substitutes for some of your materials? Think dinnerware and napkins.
- c. Review this food waste video by LeanPath for ideas: "[5 Food Waste Myths to Debunk](#)"

- d. Review data from your waste review or audit for ideas. Involve employees in the audit and ask for ideas on how to improve.

3. Assess your current hauling service. **

- a. Look at your outdoor trash dumpsters.
- b. How many of each size do you have?
- c. How often are they picked up?
- d. How full are they when they are picked up?
- e. Are any of the containers used for recycling?
- f. Are containers shared with other businesses?
- g. Do you contract directly, or is this part of your lease?

4. Compare hauling services and pricing.

Ask your hauler and two other service providers (if available) these additional questions:

- a. What are the different sizes of dumpsters offered and what are the associated costs?
- b. How much is charged each time the dumpster is pulled?
- c. Can they help right-size your dumpsters?
- d. Are there other businesses on this block that use their services?
- e. What materials do they accept for recycling?
- f. Can they provide a separate dumpster for cardboard free of charge?
- g. Do they offer organics recycling?
- h. Will their dumpsters be well-labeled according to material?
- i. Are their containers lockable to prevent scavenging, and will they be compatible with your available space?
- j. What is the collection schedule, and are there options to minimize frequency of pickups and transportation costs to haul your waste away?
- k. Can you downsize your garbage service to cover the costs of recycling and composting?
- l. Do they offer on-site waste audits, educational materials and/or training?

5. Evaluate your indoor containers.

- a. Inventory your current container count by volume (size), color and location.
- b. Evaluate their usefulness. Are there enough containers? Too many? Could they be placed in locations that are more convenient for users, e.g. high-traffic areas?
- c. To encourage better recycling behaviors, consider the following principles:
 - 1. Color-code recycling, trash and organics containers. The color standards are: Blue for Recycling, Black or Gray for Landfill, and Green for Organics.
 - 2. Better signage. Color-coding is essential here too, and signage works best when there is a combination of photographic images and words. (See image on the following page.)
 - 3. Create multi-use stations. Always pair a recycling bin immediately next to every landfill bin. Users need conveniently located, color-coded and well-labeled bins to make the right

Leaseholders**

Contact your property owner or manager to find out what additional hauling services are available. Talk to other tenants in the property to find out if they are also interested in recycling.

Cooperative hauling

If you are concerned that a new recycling dumpster will not fit in your central collection area for waste, contact adjacent businesses to find out if they would consider sharing landfill and recycling containers. It might take some trial and error, but it could reduce the number of dumpsters and save money.

choices, or contamination will occur. If organics are being collected, those containers will need to be placed next to the others too.

6. Survey employees.

Have your employees complete a survey to help you develop better recycling tools and training programs.

- a. Ask detailed questions about every step of the recycling/composting process from receiving goods to taking materials to the central collection area outdoors to understand which ones are perceived as the greatest barriers.
- b. Ask specific questions about their views on the benefits of recycling.

Step 2: Develop an action plan

1. Determine the scope of your program.

- a. Decide whether you want to recycle cardboard only, or include other materials in your program.
- b. Decide whether to include organics.
- c. Decide whether to limit waste diversion to back-of-house or include front-of-house materials.

2. Review quotes from haulers and select one that best fits your needs.

Ask if they are willing to work with you during a trial period.

3. Count and size containers to be purchased and reused.

Look at your container inventory. Now that you know the color-coding standards, start counting how many containers you will need, subtracting the number of containers you already have that can be reused.

4. Purchase recycling containers and labels.

Nebraska Recycling Council offers recycling equipment grants for containers and labels. Also, check with your local municipality about grants and incentives related to recycling containers. For a list of good container companies, visit www.nrcne.org and click on the Buy, Sell, Trade tab.

5. Advocate for support.

- a. Report your findings to the manager or building owner and bring them on board. Help them understand that recycling demonstrates your commitment to the environment and the community, has the potential to save money, and is attractive to customers.
- b. Inform employees about your program goals, and ask for their ideas and support. Identify recycling champions amongst your staff.
- c. Review the employee survey results. Which barriers to recycling stand out? How can you make the barriers easier to overcome? What can you do to discourage undesirable behavior and reward the behaviors you want to encourage?
- d. Add recycling/composting tasks and behaviors to job descriptions, employee orientation, employee manual and performance reviews.

Better Signage

Recycle Across America is a nonprofit organization that advocates for easy to understand, consistent labels on recycling containers. They sell high-quality, weather-resistant labels in many configurations which can be customized.

www.recycleacrossamerica.org



6. Design for Food Waste Diversion.

Once you have reduced surplus food in your operation, the next step is food recovery: food-to-people, food-to-animals, and finally, composting.

1. Food to people. You may donate any fresh or prepared food that is still fit for human consumption to a food rescue agency or an agency that provides meals to homeless or needy people. The Good Samaritan Law protects your business from liability. Unserved menu items and buffet foods, unused food from catered events, and day-old baked goods are suitable.
1. Food-to-animal. Contact a local farmer to have your food waste hauled and fed to animals. This could be food prep waste, plate waste, and unpackaged foods.
2. Organics composting. Commercial composting facilities can process a wide range of organics materials. Check with your local service provider to learn what is acceptable at their facility. Generally, it may include produce, meat, bones, grains, baked goods, cheese, coffee grounds, and food-soiled paper, such as uncoated paper plates, trays and cups, paper towels and napkins, parchment paper, egg cartons, soiled pizza boxes and waxed cardboard boxes.



Step 3: Set up your program

1. **Set up measurement tools.** Prepare to document amounts of materials you will be diverting from the waste stream and associated costs. If you conducted a waste audit initially, you will have a baseline from which to compare progress. This information will be useful when making future decisions about waste management. This will also be a way to share the results of your new program with staff, providing tangible evidence of the benefits of their efforts. Try the [US EPA's WARM tool](#) for entering data.

2. **Set up indoor recycling containers.**
 - a. Set up sorting stations where waste is generated and in other high-traffic areas.
 - b. Place recycling, landfill and organics containers immediately next to one-another.
 - c. Use color-coded bins (or color-coded liners if color-coded bins are not in the initial budget).
 - d. Use color-coded labels with images.
 - e. Place labels on bins and at eye-level where possible.

3. **Set up a compostable food collection system.**
 - a. Work with your composting company to devise a workable system of food collection.
 - b. Collect food in dedicated, leak-proof containers that are covered when not in use.
 - c. In the kitchen, make sure your food waste containers are sized so they can hold enough food to be practical, but won't get too heavy.

Consider using a 5-gallon reusable food bucket. Empty its contents into a larger toter (on wheels) at the end of each day and have staff run buckets through the dishwasher at the end of their shift to control the risk of fruit flies and odor.

- d. On the serving floor, be sure to have wait staff remove non-organic items from food waste such as straws, creamer packets, etc. before scraping plate waste into a 5-gallon reusable food bucket. Once full, it can be emptied into the toter in the kitchen and cleaned at the end of the shift.
- e. Food waste should be removed from the kitchen at the same frequency as landfill waste. If odor becomes a problem, consider temporarily storing food waste containers in a walk-in cooler before taking outdoors.

4. **Set up the outdoor central collection area.**
 - a. Place all dumpsters or carts together- landfill, recycling and compost. Contamination occurs when one bin is in a different or more convenient location than others.
 - b. Label all carts and dumpsters with color-coded labels to help workers quickly identify where each type of waste belongs.
 - c. Include the central collection area in the training of all employees and contractors that handle wastes.

Celebrate Zero

Finish Steps 1 - 3, and you will have already begun these steps:

- Redesign
- Reduce
- Reuse
- Recycle
- Compost
- Zero Waste Reporting
- Zero Waste Purchasing
- Zero Waste Analysis



Step 4: Kick it off!

Train your entire staff to be sure that everyone understands the purpose and goals of the program. A kick-off event (for each shift, where appropriate) is an opportunity to demonstrate what can and cannot be recycled, how to sort, collect and store materials properly, assign responsibilities and share any changes that will be made in personnel policies.

1. Employees.

- a. Share the goals of your program.
- b. Show staff how to recycle and what materials to compost or landfill with actual items from the back-of-house and front-of-house, and include how to process certain items before recycling (e.g. making sure containers are clean and empty). Give employees an opportunity to try it out.
- c. Share the importance of keeping materials free of contamination - i.e., only recyclables in the recycling bin and only compostables in the composting bin.
- d. Train staff to safely cut up boxes and lay them flat in the cardboard bin. This will reduce empty space between loosely packed boxes so you can fit more in for each pick up and save money.
- e. Include the central outdoor collection area in your training so employees learn where the correct containers are.

2. If contractors do cleaning in your establishment, be sure they are instructed as well.

3. **Assign a manager or other champion** with the task of monitoring and helping employees and customers separate their waste correctly. Provide gloves or grabbers for this person to physically move materials from one bin to another when mistakes are made. Once contamination occurs, people tend to follow the example.

Step 5: Promote your program

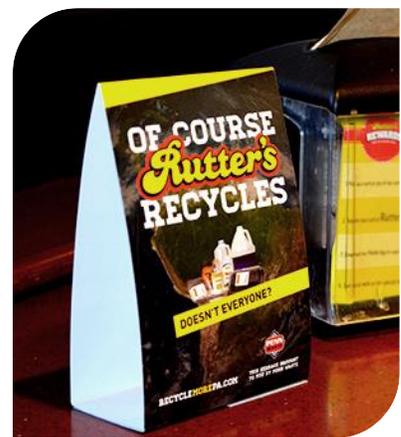
Employees and customers are more likely to embrace your waste diversion program if you promote it on a regular basis and make it a part of your company's culture. People love success, so it is worth the effort to celebrate your achievements.

1. **Take advantage of national days to promote your program.** Use Earth Day (April 22) and America Recycles Day (November 15) to celebrate your success.
2. **Highlight the program** on your website and social media, and include recycling/composting information on menus, posters, table tents, door hangers and flyers.
3. **Partner with your hauler** to help monitor diversion rates and promote your progress.
4. **Appoint champions** on each shift to help employees and customers recycle correctly, and keep everyone informed about the progress you have made.

Celebrate Zero

By now, you have accomplished

- *Diversion from landfill*
- *Leadership*
- *Training*
- *Innovation*
- *Hazardous Waste Prevention*



5. **Inform vendors.** Share your goals, recycling efforts, and progress with vendors.
6. **Share your knowledge** with other local restaurateurs and foodservice establishments.
7. **Alert local recycling officials** about your efforts. Share milestones as you continue toward zero waste.
8. **Post results.** Let employees know how much waste is being diverted by posting monthly or annual results.
9. **Recognize employees** or groups of employees for their efforts in recycling.

Step 6: Keep it going

Once the program is launched, be sure to:

1. **Continue staff training.**
 - a. Use staff training meetings to add more information about recycling and provide regular updates on progress.
 - b. Request feedback from staff regarding contamination or improper handling of materials.
 - c. Recognize and reinforce proper recycling and composting efforts by staff.
 - d. Train all new employees.
2. **Conduct an annual waste sort** to monitor and identify improvements that can be made.
3. **Gradually reduce more items from your waste stream.**
4. **Adopt an “Offer First Policy” for straws and other non-essential items.**
5. **Review waste hauling and disposal records and contracts.** Examine 12 months of records to identify fluctuations in the amount of waste produced and any opportunities to reduce that waste and service fees.
6. **Continue down the road to Zero Waste.** Chances are you have already begun to tackle Upstream Management, Hazardous Waste Prevention and Closed Loop to some degree. Bravo! Perhaps Zero Waste Facility Certification is within reach!

Celebrate Zero

Bravo! Chances are that by now, you have already begun to tackle **Upstream Management** and **Closed Loop**, the final frontiers on the road to Zero Waste. Perhaps [Zero Waste Facility Certification](#) is within reach!



www.nrcne.org

Acknowledgements

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