



Sustainability

The Value of Can and Bottle Recycling

April 2019

NACS[®]

Maximizing the Value of Can and Bottle Recycling

About This Toolkit

With more than half of all convenience store customers (54%) saying they'd like to see more recycling at their local c-store, there is an opportunity for the industry to enhance current practices.¹ And although in-store recycling is more commonplace, recycling at the pump is where 70% of American drivers say they dispose of trash from their vehicle while refueling.²

This guide is specifically focused on the recycling of beverage cans and plastic bottles as they are priority materials for recycling and account for one-third of the items littered outside of a convenience store.³ While this toolkit provides guidance for retailers that sell motor fuels—of the 153,000-plus c-stores in the United States, about 122,000 locations sell fuel—much of the suggestions and messaging is relevant to the entire industry, as well as retailers that already implement a recycling program.



BEVERAGE CANS AND PLASTIC BOTTLES ACCOUNT FOR ONE-THIRD OF THE ITEMS LITTERED OUTSIDE OF A CONVENIENCE STORE.

In this toolkit:

1. Benefits of a Recycling Program

2. Steps to Improve Recycling of Cans and Bottles

3. Tools & Resources

¹ NACS, *Convenience Store Industry's Take on Litter*, August 2018

² NACS & Keep America Beautiful, *Being a Good Neighbor: A Guide to Reducing Litter, Managing Trash and Encouraging Recycling*, 2017

³ NACS, *Convenience Store Industry's Take on Litter*, August 2018

This toolkit was developed jointly by:



NACS advances the role of convenience stores as positive economic, social and philanthropic contributors to the communities they serve.



Can Manufacturers Institute (CMI) is the national trade association of the metal can manufacturing industry and its suppliers in the United States. The can industry accounts for the annual domestic production of approximately 119 billion food, beverage and general line cans; which employs more than 28,000 people with plants in 33 states, Puerto Rico and American Samoa; and generates about \$17.8 billion in direct economic activity.

Key Insights:



Aluminum
beverage cans are
100%
recyclable over
and over again—
forever



41%
of retailers say trash at
the pump comes from
customers cleaning
out their cars



53%
of consumers toss
their trash into an
outside receptacle
at the pump



It takes
60 days
for full can-to-can
recycling



Benefits of a Recycling Program

Developing a clearly designed, easy-to-use collection system for recycling cans and bottles helps retailers:

- **Enhance the Brand.** Supporting a clean neighborhood and showing environmental stewardship builds positive community relations. People prefer to find recycling bins wherever they travel.⁴ This can also lead to better employee recruitment, as well as increased employee retention and engagement.
- **Improve Customer Service.** Offering recycling is another way to better serve customers. Customers are asking retailers to provide recycling at stores (54%)⁵ and more than half (53%) are tossing their trash into an outside receptacle at the fuel pump.⁶ Messaging about recycling also provides an opportunity for retailers to interact with customers at the fuel pumps.



53%
OF CUSTOMERS ARE
ASKING RETAILERS
TO PROVIDE RECYCLING
AT STORES.

⁴ Wisconsin Recycling Guide for Convenience Stores

^{5,6} NACS, *Convenience Store Industry's Take on Litter*, August 2018

Steps to Improve Recycling of Cans and Bottles

Here are several steps convenience retailers can adopt to improve the likelihood that customers will recycle cans and bottles appropriately:

1. Make it easy.

Retailers should clearly differentiate can and bottle recycling bins from trash bins by color, signage and specialized openings. Customers don't think much when disposing of something they don't want and therefore need visual cues to guide their actions. These cues can take various forms. Ideally, retailers will coordinate with the local jurisdiction to pick a consistent color scheme, and label message to reduce the need for customers to think about what belongs in which bin.

Here are some suggestions:

- + Use a **different color** for the recycling bin (or at least the lid) than for the trash bin so customers can tell them apart at a casual glance. Blue is the standard color for recycling bins and black is used to designate items for the trash.
- + Use a **round container-sized bin opening** (or bins shaped like beverage containers) to reinforce what can be recycled and provide a visual cue to customers. These bins can take various forms. The key is giving customers convenient access to the opening. Bins may be available through beverage suppliers, from local recycling offices, or can be retrofitted (e.g., to create lids with round openings on the top or the side).
- + **Match the location of the openings** for both trash and recycling bins. If, for example, the trash bin has an opening on the top and sides, and the recycling bin only has an opening on the front, the likelihood is lower that customers will recycle their cans and bottles if they approach the bins from behind.
- + **Twin the Bins. Place both recycling and trash bins next to each other at the fuel pump.** Most customers clean out their vehicle while refueling; therefore, recycling bins should in close proximity. Customers are less likely to carry their trash across the parking lot or to another fueling position.
 - Keep America Beautiful research suggests that the location of recycling bins makes a difference, and that the rate of littering drops significantly when people are within 10 feet of a trash receptacle.
 - Walt Disney Company research at entertainment parks and shopping areas found that trash receptacles must be placed at intervals of about 30 steps to ensure proper disposal.⁷ Disney also found that "open front/side (no flap)" or "front/side (push flap)" receptacles can help prevent litter from blowing out of containers.



CUSTOMERS NEED VISUAL CUES: THOUGHTFUL BIN PLACEMENT, COLOR AND OPENINGS CAN HELP MAKE RECYCLING EASY.

⁷ NACS & Keep America Beautiful, *Being a Good Neighbor: A Guide to Reducing Litter, Managing Trash and Encouraging Recycling*, 2017

Samples of bin placement, color and openings at convenience stores:



- To reduce the burden on staff, retailers should **select bins that are easy to service** and won't blow over in the wind. Ideally retailers should use bins with enough capacity to avoid increasing the existing service schedule for trash. Branded operators should also check with their supplier or corporate headquarters to understand any relevant guidelines or requirements related to bin selection.



TWIN THE BINS:
PLACE TRASH AND
RECYCLING BINS NEXT
TO EACH OTHER TO
MAKE THE CHOICE
CONVENIENT.



2. Tell your customers what should be recycled.

Understandable pictures and words on the bins and nearby make it easy for them to know what can and cannot be placed in recycling bins.

The most effective messages convey to customers: *what* to recycle, to *remember* to do so and the *value* of doing so. Local recycling offices and haulers often have material and standardized recycling messages available for retailers to use. Standardized labels for recycling bins have proven to increase waste diversion/recycling rates by 50-100%. Clear and consistent messaging makes it easy to recycle right. [Recycle Across America](#) (nonprofit 501c3) has created standardized labels with a mission of a society-wide label for all recycle bins. In addition, beverage product manufacturers are increasingly using a standardized labeling system on products, such as [How2Recycle](#), to communicate recycling instructions to consumers.

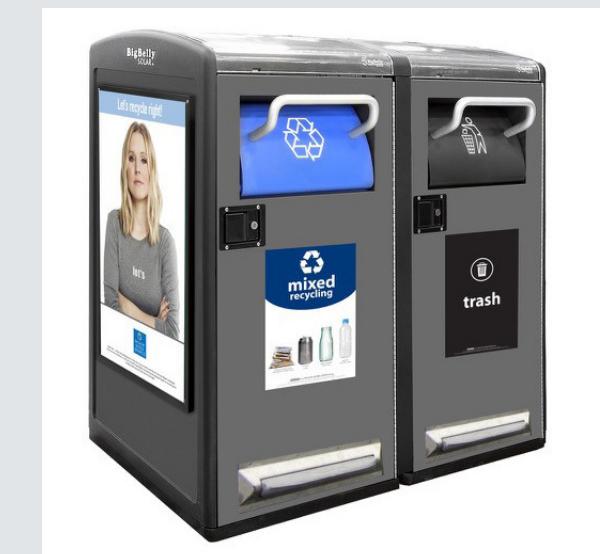
The following are some suggestions:

- Place **labels directly on or next to recycling bins**. These should be at eye level or immediately next to the opening (i.e., on the top if the opening is on the top). Ideally customers will see the signage as they approach from multiple directions.
- Use **simple pictures** (i.e., of cans or bottles) or a **few key words** that communicate what can be put in the recycling bin. If possible, test different messages before committing to a standard label across all store locations.
 - Sample messages that alert customers when using the bin include: “Recycle Cans and Bottles Here” and “Cans and Bottles Only.”
 - Sample messages on how to recycle could also include: “Keep the Tabs and Caps On,” “Don’t Crush Cans or Bottles” and “Empty Before Recycling.” Retailers should refer to their local recycling program about these details. For example, recyclers prefer that the cap is on the bottle to prevent loose caps from falling out during sorting.



THE MOST EFFECTIVE MESSAGES CONVEY TO CUSTOMERS: **WHAT** TO RECYCLE, TO **REMEMBER** TO DO SO AND THE **VALUE** OF DOING SO.

Sample bin labels:



Source: www.recycleacrossamerica.org

Sample messaging:



Sources: www.yourbottlemmeansjobs.com; www.recyclingpartnership.org

- + **Reinforce with targeted messaging elsewhere** (i.e., on pump toppers, digital signage, cooler decals, in-store displays). Messaging examples from the Can Manufacturers Institute include:

- “Cans can be recycled over & over again, forever”⁸
- “Recycling a single aluminum can saves enough energy to run a TV for three hours”⁹



RECYCLERS PREFER THAT THE CAP IS ON THE BOTTLE TO PREVENT LOOSE CAPS FROM FALLING OUT DURING SORTING.

^{8,9} Can Manufacturers Institute, www.cancentral.com/recycling-sustainability/facts

Understanding Your Waste Stream

When making improvements to a recycling program, it's useful to know what materials are currently being discarded.

Retailers can do a waste audit (also referred to as a waste characterization, or waste sort) to survey the types of items customers and staff throw away. The insights can help inform what messages to use as well as the size of bins.

To help identify the types of materials discarded, retailers can conduct a simple visual survey or undertake a more robust audit. Guidance, funding and assistance for an audit may be available through governmental or non-profit groups (e.g., the multi-state Northeast Recycling Council), local haulers, recycling service providers or consultants. You can assess your waste stream by using a quick, online waste audit tool at recyclingcalculator.com/cstore.

3. Confirm that your staff understands the program.

Providing store staff with clear guidance on how to minimize contamination in recycling bins will help ensure that hauler requirements are met. The guidance will also help customers recognize that their local convenience store is proactively supporting a clean neighborhood and environment.

Staff is busy with many priorities, so providing easy-to-understand guidance can help them implement a successful recycling program. Some suggestions are to:

+ Integrate recycling program training into store procedures.

- Create a simple guidance document to help each store easily implement the program. This includes proper bin placement and emptying of the recycling bin.
- Place labels/decals with recycling information on dumpsters and replace worn labels/decals.
- Incorporate recycling procedures into employee responsibilities and new employee orientation.



PROVIDING STAFF WITH GUIDANCE ON HOW TO MINIMIZE CONTAMINATION IN RECYCLING BINS WILL HELP ENSURE HAULER REQUIREMENTS ARE MET.



+ Communicate broadly with staff to encourage participation.

- Request feedback and involve employees in enhancements, maintenance and evaluation of the program.
- Display the company's recycling goals and/or promote the amount that has been recycled, sometimes referred to as the diversion rate, to motivate staff. Diversion rate is the amount of material that was recycled as a percentage of total materials collected. Communicating the success of the program to the community and local media can help motivate staff to be ambassadors of the company's recycling efforts.

+ Understand requirements of haulers and local jurisdictions.

- Be clear on what items haulers will and will not recycle.
- Understand specific requirements of haulers for preparing recycling to avoid contamination of the recycling stream. For example, most haulers do not accept recyclables that are placed in plastic liners. If bags are needed, however, best practices are to use light blue or clear bags to line recycling bins. When placing recyclables in an outdoor dumpster, staff should be told to empty the loose recyclables into the dumpster and throw the plastic liner in the trash.



About Contamination:

Recycling contamination is when anything other than the items being collected for recycling are put into the recycling bin. Whether a material is a contaminant or not is determined by the agreement retailers have with their recycling service provider. For example, even though paper is recyclable, if a retailer is not collecting it for recycling, it could be considered a contaminant. Contamination may also occur when the right items are prepared the wrong way (e.g., excessive liquid remaining in bottles, recyclables in plastic bags).

Each hauler will accept different levels of contamination in recycling, which can vary from 0-15%. Since there is no industry standard, retailers need to check their contract to determine what level of contamination will be acceptable to their hauler.

Retailers can reduce their contamination rate by having a clearly established, easy-to-use collection system. Maintaining a high quality of recyclables entering the commodity markets is important as contamination significantly increases the cost to process recyclables, and the material may lose its ability to be recycled (i.e., it becomes trash).¹⁰



CONTAMINATION AGREEMENTS VARY.
SOME RECYCLABLE ITEMS LIKE PAPER MAY BE CONSIDERED CONTAMINATES. BE SURE TO CHECK YOUR RECYCLING AGREEMENT.

¹⁰ Keep America Beautiful, *Planning for Success: Ten Tips for Designing Public Space Recycling Programs*

Checklist for Recycling at the Fuel Pump

The following checklist, adapted from the NACS and KAB “Being a Good Neighbor” online resource, can help retailers ask the right questions about their can and bottle recycling program. Retailers who answer “yes” to most of the questions are likely to have less contamination of recycling bins and more successful programs.



Receptacles

- Are recycling bins located at fuel islands?
- Are recycling bins the most effective container in terms of color, opening and shape?
- Are recycling bins placed next to the trash bins at the fuel pump?
- Do recycling bins have specialized tops or lids to increase the likelihood of proper disposal?



Signage and procedures

- Is there enough signage or other messaging to encourage customers to correctly recycle cans and bottles at the fuel island (and elsewhere)?
- Is there communication with haulers to understand expectations about contamination rates?
- Do you have procedures for staff to follow to minimize contamination of recycling and meet hauler's specific requirements?
- Is there ongoing employee training to reinforce hauler requirements?
- Are you converting the materials collected and equating the energy/fuel saved; greenhouse gas emissions reduced?



Also, consider the following:

- How much of each material (e.g., aluminum cans, plastic bottles) is being collected?
- What is the current contamination rate in recycling bins? What are the most common contaminants? How can that be reduced?
- What is the current diversion rate (i.e., the “weight of recycling” divided by the “weight of recycling plus the weight of trash” times 100)? How does this compare to other stores within the company or with industry peers? What diversion rate is possible based on those benchmarks?
- What is the level of interest in recycling among customers?
- Do observations of customer behavior indicate confusion about which bins to use?

Tools & Resources

The following tools and resources can help convenience store operators build and maintain a successful recycling program:

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[“Being a Good Neighbor: A Guide to Reducing Litter, Managing Trash and Encourage Recycling”](#) (produced in partnership with Keep America Beautiful)

[“Convenience Store Industry’s Take on Trash”](#): consumer perceptions and retailer observations on trash, litter and recycling at convenience stores

Can Manufacturers Institute

Consumer-friendly messages about the [benefits of recycling cans](#).

Keep America Beautiful

[Tips on how to recycle](#): recycling public service announcements (radio, print and video) for retailers to use in media such as gas pumps and in-store video monitors. KAB can also offer technical support as well as access to its volume-based pricing on recycling containers. Messaging can also be developed and incorporated to promote recycling on the go.

Recycle Across America

[Standardized labeling system](#) for recycling bins available for order.

The Recycling Partnership

[Community-focused messaging](#) to help consumers navigate the recycling system and to encourage greater participation.

Association for the Advancement of Sustainability in Higher Education (AASHE)

[“Six Lessons from A Gas Station”](#): Kum & Go’s three-year recycling journey by Adam Hammes, former manager of sustainability at Kum & Go and founder of the Iowa Sustainable Business Forum

Some states offer recycling guidance and downloadable materials for state-level recycling programs:

Recycle More North Carolina’s [NC Convenience Store Recycling Program](#)

[Minnesota Pollution Control Agency’s Media Toolkit](#)

[Wisconsin Department of Natural Resources](#): “Recycling and Waste Reduction at Convenience Stores and Gas Stations” (PDF)

[Delaware Division of Waste & Hazardous Substances](#): guidance for businesses starting a recycling program.



About NACS

NACS (www.convenience.org) advances the role of convenience stores as positive economic, social and philanthropic contributors to the communities they serve. The U.S. convenience store industry, with more than 153,000 stores nationwide selling fuel, food and merchandise, serves 165 million customers daily—half of the U.S. population—and has sales that are 11% of total U.S. retail and foodservice sales. NACS has 1,900 retailer and 1,800 supplier members from more than 50 countries.

**FOR MORE
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