

CRV 101

**A simple guide to
bottle and can recycling.**

CRV 101 TOOLKIT
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Table of Contents:

1. Welcome to CRV 101
 a. A Simple Guide to Bottle and Can Recycling in California.....2

2. What is CRV?
 a. What is CRV?.....3
 b. What’s In and What’s Out.....4

3. How & Where to Recycle
 a. How to Recycle Beverage Containers.....5
 b. Where to Recycle Beverage Containers.....7

4. CRV Facts & Stats
 a. CRV Facts & Stats.....8

5. Resources
 b. CRV Recycling Resource Guide.....12



CRV 101 TOOL KIT

A Simple Guide to Bottle and Can Recycling in California

Welcome to the **CRV 101 Tool Kit – a simple guide to bottle and can recycling in California**. The following pages are intended to provide a one-stop information and resource guide about the California Refund Value (CRV) program and to help increase participation in bottle and can recycling throughout California.

A recent study conducted by the California Department of Conservation (DOC) found that Californians want to recycle – but many are unfamiliar with the CRV program and how it works. The wide-spread lack of knowledge about what, where and how to recycle CRV beverage containers revealed an important opportunity to reintroduce Californians to the experience of recycling, and why it has both monetary and environmental value.

The CRV 101 Tool Kit is designed to assist local recycling coordinators in increasing beverage container recycling in their communities, help members of the media provide accurate information to their readers, listeners and viewers, and give a leg up to individual recycling champions who may want to begin a recycling program where they work or play. It contains the following categories:

- **What is CRV?**
- **How and Where to Recycle CRV Bottles and Cans**
- **CRV Facts and Stats**
- **Resources: Contact Information, Photos, B-Roll, Local Success Stories**

More about the CRV recycling program: The California Refund Value program, a component of the California Beverage Container Recycling and Litter Reduction Act, was created in 1986 to achieve and maintain high recycling rates for the recyclable aluminum, glass and plastic beverage containers Californians use everyday. The Department of Conservation's Division of Recycling administers the program, and provides a number of services to achieve these goals including public education and outreach, technical program assistance to local government and the private-sector recycling industry, and grant funding to promote increased recycling opportunities and awareness.



What Is CRV?

California Refund Value (CRV) is the amount paid by consumers at the checkout stand and paid back to consumers when they recycle eligible aluminum, plastic, glass and bi-metal beverage containers at one of California's more than 2,100 certified recycling centers.

To identify a CRV recyclable beverage container look for the phrase "CA CASH REFUND," "CA CRV" or similar wording on the top of the container or the label of the bottle or can. Aluminum containers are typically marked on the top of the can, while glass and plastic are marked on the label.

How much is each bottle or can worth?

- 5¢ for containers less than 24 ounces
- 10¢ for containers 24 ounces and larger
- *NOTE: CRV is established by law and is subject to change with new legislation.*

As a matter of convenience and efficiency, most recycling centers **pay by the pound** when consumers bring in a large load of recyclable containers. The Department of Conservation establishes the minimum per-pound amounts recycling centers must pay. These amounts differ depending on whether the load contains only CRV materials (the "segregated" refund rate) or includes both CRV and non-CRV containers such as wine bottles (the "commingled" refund rate). Containers must be sorted by material type, e.g. aluminum cans separated from plastic bottles or glass bottles. Consumers may request to be **paid per-container** if they redeem 50 or fewer containers per material type.



What's In and What's Out

By recycling CRV beverage containers, consumers not only receive the refund value of the container, they do their part to help conserve energy and natural resources. The following beverages, if packaged in aluminum cans or glass or plastic bottles, are part of the CRV program:

- **Carbonated Soft Drinks**
- **Wine Coolers**
- **Distilled Spirit Coolers**
- **Beer**
- **Carbonated and Mineral Water**
- **Non-Carbonated Water**
- **Non-Carbonated Soft Drinks**
- **Sports Drinks**
- **Coffee and Tea Drinks**
- **Fruit Drinks**
- **Fruit Juices Packed in Containers Less than 46 Ounces**
- **Vegetable Juice in Containers 16 Ounces or Less**

Every time California consumers buy one of the above beverages in an aluminum, glass or plastic container, they pay CRV. When the bottle or can is recycled, CRV can do one of two things:

1. Go back into the consumer's pocket (containers returned to recycling centers will be redeemed for the CRV cash value).
2. Help pay for recycling (containers placed in a recycling bin at work, the gym, a park or similar location, or put in a curbside bin at home, will be redeemed by whoever collects them).

CRV beverage containers thrown in a trash can typically end up in a landfill.

For a comprehensive list of beverages included in California's beverage container recycling program, visit: http://www.bottlesandcans.com/assets/product_listing.pdf.

Notable products not in the CRV program include:

- **Wine and Distilled Spirits**
- **Milk**
- **Infant Formula**



How to Recycle Beverage Containers

Beverage container recycling is simple. Once the bottle or can is empty of its original refreshment, it is ready to be redeemed for cash and recycled. Here is a quick list of CRV beverage container recycling **“Do’s and Don’ts.”**

DO:

- **Separate CRV beverage containers from non-CRV containers.** (For a list of eligible containers, refer to the “What is CRV?” section of this tool kit). Although this is not required, separating CRV and non-CRV containers will help ensure the cash refund paid by recyclers most closely approximates the amount of CRV consumers paid at the store.
- **Put bottles and cans into recycling bins instead of trash cans.** Many office buildings, parks, gyms and other public places have recycling bins as well as trash cans, so look for the recycling bin. Or take the containers home and put them in the curbside recycling bin, or take them to a recycling center and redeem them for cash.
- **Redeem bottles and cans in loads of 50 or less at a time.** The best way to ensure exact CRV refund is to redeem 50 or fewer beverage containers of each material type per visit and request to be paid by count rather than weight. Consumers have the option of being paid on a per-container basis if they redeem 50 or fewer containers of each material type.
- **Order a Recycling Starter Kit.** Any California business, organization or school can start a recycling program by ordering a Recycling Starter Kit at www.bottlesandcans.com.
- **Only redeem CRV beverage containers purchased in the state of California.** The California Refund Value only applies to beverage containers purchased within California. Bottles and cans purchased outside California are recyclable but not eligible to be redeemed for CRV.
- **Contact the Department of Conservation to learn more about beverage container recycling.** Visit www.bottlesandcans.com or call 1-800-RECYCLE.



DO NOT:

- **Throw bottles and cans in the trash.** Beverage containers thrown in the trash are wasted resources that take up precious California landfill space. These containers could have been recycled to save energy and natural resources.
- **Rinse or clean bottles and cans before recycling them.** In most cases, it is not necessary to rinse or clean beverage containers before they are recycled. The containers are cleaned during the recycling process.
- **Crush your plastic and glass bottles.** It is not necessary or recommended to crush plastic and glass containers before they are recycled. Crushing **plastic** is not necessary and can be rather time consuming, as it often requires the lid be replaced to seal out the air. Crushing **glass** is extremely dangerous and makes it difficult for the recycler to tell if it's CRV material or another type of non-CRV recyclable glass. Consumers may choose to crush **aluminum** cans as a way to save space and recycle more containers at one time.



Where to Recycle Beverage Containers

California residents have several convenient options for recycling and redeeming CRV bottles and cans. The primary places to recycle beverage containers include **certified recycling centers, dropoff and collection programs**, as well as **local curbside recycling programs**. Additionally, many California businesses and organizations have started their own, private beverage container collection programs. Businesses and organizations interested in starting a recycling program can order the Department of Conservation's free **Recycling Starter Kit** at www.bottlesandcans.com.

Certified Recycling Centers. There are approximately 2,100 certified recycling centers throughout the state, conveniently located in most California communities where consumers can redeem their CRV beverage containers.

To find the nearest location to redeem your CRV beverage containers (5 cents for containers under 24 ounces and 10 cents for containers 24 ounces and larger) please visit www.bottlesandcans.com, or call the Department of Conservation toll-free hotline at **1-800-RECYCLE**.

Curbside Recycling. Curbside recycling is a convenient way for California residents to recycle their beverage containers at home. Simply place recyclable glass, plastic and aluminum beverage containers in the curbside recycling bin and put it out to be collected on the appropriate day designated by your community recycling program.

The Recycling Starter Kit. The Recycling Starter Kit program was created by the Department of Conservation to help encourage California businesses, schools and other organizations to start beverage container recycling programs away from home. The kit comes complete with a bottle and can recycling bin, information on how to start a recycling program as well as posters and stickers to encourage participation. To order a Recycling Starter Kit, please visit www.bottlesandcans.com or call **1-800-RECYCLE**.

Out and About. Many Californians live on-the-go lifestyles, so it's important to remember recycling is just as important away from home. Many parks, beaches, shopping areas, sports facilities, campgrounds and other public venues have recycling bins as well as trashcans. So remember to look for the recycling bin for those empty bottles and cans, and if one isn't available, hold onto the containers and recycle them later.



CRV Facts and Stats

When it comes to reducing waste and protecting the environment, each of us can make small contributions that add up to a big difference. In California, citizens will have a hard time finding a reason why NOT to recycle bottles and cans. After all, if bottles and cans are thrown away, it's a waste of natural resources, a waste of energy and a waste of money. Here are some beverage container recycling facts and statistics that will help inspire everyone to do their part to recycle in California.

General CRV Program Facts

- California's beverage container recycling rate reached 61% in 2005.
- Californians recycled an all-time record 12.4 billion aluminum, glass and plastic CRV bottles and cans in 2005, but another 8.1 billion bottles and cans still found their way to landfills.

Source: Department of Conservation, Division of Recycling

What Difference Do I Make?

- On average, each Californian consumed 571 CRV beverage containers in 2005.
- A California family of four, on average, will consume more than 2,000 CRV beverage containers in one year, worth more than \$100 in CRV.
- By recycling their CRV bottles and cans, a family of four not only saves money, but also saves enough energy to power a television for 250 days.
- The average household generated 38 pounds of PET plastic bottles in the year 2002.

Source: Department of Conservation, Division of Recycling; National Association for PET Container Resources

Recycling Starter Kit Facts

- The Recycling Starter Kit is an easy-to-use beverage container recycling kit available free of charge to help California businesses, schools and other organizations establish a sustainable recycling program for empty bottles and cans.



- The free Recycling Starter Kit bin is great for offices, gyms, schools and other locations where aluminum and plastic containers are emptied.
- The Recycling Starter Kit comes complete with a beverage container **recycling bin**, information on **how to start a recycling program** and **posters** to help promote the program once it is in place.
- The Recycling Starter Kit can hold an average of 50-60 beverage containers.
- In the first year of the Recycling Starter Kit program, the Department of Conservation distributed more than 17,000 Recycling Starter Kits to California businesses and organizations.
- As a result of the Recycling Starter Kit program, 939,510 bottles and cans are recycled weekly on average.
- An estimated 48,854,520 additional bottles and cans will be recycled annually as a result of the Recycling Starter Kits distributed thus far.
- Some ideas for what to do with the cash earned by recycling and redeeming CRV beverage containers include purchasing new beverages for the office, hosting quarterly office parties or donating to a local charity or cause.
- The Recycling Starter Kit can be ordered by any California business or organization free of charge by visiting www.bottlesandcans.com or calling toll-free assistance at 1-800-RECYCLE.

Source: Department of Conservation, Division of Recycling

Recycling Saves Energy*

- Recycling one aluminum can saves enough energy to keep a 100-watt bulb burning for almost four hours or to operate your television for nearly three hours.
- Recycling aluminum creates 97% less water pollution than producing new metal from ore.
- The 12.4 billion CRV containers recycled in California in 2005 saved enough energy to power more than 520,000 California households annually.

Source: Department of Conservation, Division of Recycling; Anchorage Recycling Center

**It often takes less energy to create new products from recycled materials than from virgin materials.*



Recycling Facts by Material Type

Aluminum Cans

- Americans throw away enough aluminum every three months to rebuild our entire commercial air fleet.
- Used aluminum cans are recycled and returned to a store shelf as a new can in as few as 60 days.
- Aluminum cans are the most recycled and most recyclable beverage container in the world. It is estimated that 105,784 cans are recycled every minute nationwide.
- With the amount of money Americans receive from recycling aluminum cans, every kid in the U.S. could buy two movie tickets.
- Aluminum never wears out and can be recycled forever.
- Recycling one ton of aluminum saves the equivalent in energy of 2,350 gallons of gasoline. This is equivalent to the amount of electricity used by the typical home over a period of 10 years.
- All aluminum cans recycled since 1972 would stretch from New York to Los Angeles and back 15,939 times.
- It can take up to 500 years for an aluminum can to decompose in a landfill.

Source: Aluminum can recycling facts provided by the California Department of Conservation, Division of Recycling Resources; Purdue Research Foundation, Can Manufacturers Institute, Earth 911, State Environmental Resource Center, Environmental Health & Safety Online, and Anchorage Recycling Center

Glass Bottles

- The energy saved from recycling one glass bottle will operate a 100-watt light bulb for over an hour.
- One million years is how long it takes glass to break down naturally. Glass only breaks down by weathering and physical crushing or pounding.
- Eight to twelve weeks is how long it takes for a glass container to be recycled and returned to the store shelf.



- Each glass container made in California uses approximately 32% post-consumer recycled glass. However, the technology exists to use up to 85%.
- The majority of glass recovered in the United States is used to make new glass containers. A portion is also used in fiberglass and “glasphalt” for highway construction.

Source: Glass bottle recycling facts provided by the Department of Conservation, Division of Recycling Resources, Purdue Research Foundation, and Anchorage Recycling Center

Plastic Bottles

- The PET* bottle (#1 plastic, such as clear plastic water and soda bottles) was patented by Nathaniel Wyeth in 1973.
- The first PET bottle was recycled in 1977.
- Recycled PET can be used to make many new products, such as carpet, fabric for T-shirts, shoes, sweaters and coats, luggage and fiberfill for sleeping bags and jackets.
- It takes 700 years for a plastic bottle to decompose.
- Fourteen 20-ounce PET bottles yield enough fiber for an extra large T-shirt.
- It takes 14 20-ounce PET bottles to make one square foot of carpet.
- It takes 63 20-ounce PET bottles to make a sweater.
- Fourteen 20-ounce PET bottles yield enough fiberfill for a ski jacket.
- It takes 85 20-ounce PET bottles to make enough fiberfill for a sleeping bag.

Source: Plastic recycling facts provided by the National Association for PET Container Resources

**PET is the acronym for polyethylene terephthalate.*



CRV Recycling Resource Guide

There are a number of resources available for general information about California's beverage container recycling program and specific information about what, where and how to recycle California Refund Value beverage containers.

Department of Conservation Contacts and Resources

Media Contacts: Mark Oldfield or Ed Wilson, (916) 323-1886

Toll-free Consumer Helpline, 1-800-RECYCLE

E-mail, Recyclinginfo@conservation.ca.gov

Web Site, www.bottlesandcans.com

CRV Recycling Web Site

California's recycling Web site, www.bottlesandcans.com, is an excellent educational tool that hosts a variety of local and statewide CRV beverage container recycling information. The recycling Web site provides consumers with a recycling center locator that identifies and maps nearby recycling centers by zip code, a Recycling Calculator that helps consumers and businesses get a general idea of how much cash they can receive for their CRV containers, and information on how to start a recycling program. Additionally, the site includes a help section for visitors to post questions and receive responses from recycling specialists at the Department of Conservation.

Local Recycling Success Stories

Individuals and organizations throughout California have established sustainable recycling programs in their communities. The Recycling Success Stories provide a brief summary of each program explaining why the program was started, how it is maintained and the steps taken to make it successful and ongoing. These Recycling Success Stories can be accessed at www.bottlesandcans.com/local_success.php.

B-Roll and Recycling Photos

For news media, the California Department of Conservation has an extensive library of up-to-date B-roll footage and hi-resolution images of recycling options and programs throughout the state. To order B-roll or photographs, please contact the Department of Conservation at (916) 323-1886.

