

2



TRUE

The **TRUE Zero Waste certification system** enables facilities to define, pursue and achieve their zero waste goals, cutting carbon emissions and supporting public health.



TRUE Zero Waste Rating System Overview of Categories & Points

Redesign	4 points	Leadership	6 points
Reduce	7 points	Training	8 points
Reuse	7 points	ZW Analysis	5 points
Compost (Re-earth)	7 points	Upstream Management	4 points
Recycle	3 points	Hazardous Waste Prevention	5 points
ZW Reporting	4 points	Closed Loop System	4 points
Diversion (Minimum 90%)	5 points	Innovation	3 points
ZW Purchasing	9 points	Total Points	81 points

Redesign
 Rethink
 Retrain
 Reduce
Reuse
 Going Beyond
 Recycling

EVOLUTION OF RETURNABLES

Since 2002, Toyota's parts and accessories returnable container program has saved over 220 million pounds of wood and over \$1 billion in packaging costs. These savings equal more resources for the future and lower costs for our parts and accessories.



JAPAN INBOUND

1990's

Parts distribution centers begin using returnables for dealer deliveries

2000

TMC begins using returnable containers to ship parts from Japan to California

2002

North American central parts centers begin using returnable containers to ship service parts to regional parts distribution centers

2005

North American suppliers begin using returnables to ship parts into central parts centers and directly to vehicle distribution centers

2012

Returnables are now used by more than 1,400 dealers, 150 suppliers, 15 parts distribution centers and 2 parts centers

Approximately
11 million parts
 through the program
 per year

OVERALL SAVINGS

220 million lbs of wood,

145 million lbs of cardboard

That's the equivalent of

2.7 billion trees*



\$1 billion
 in packaging costs savings



15
 PARTS
 DISTRIBUTION
 CENTERS

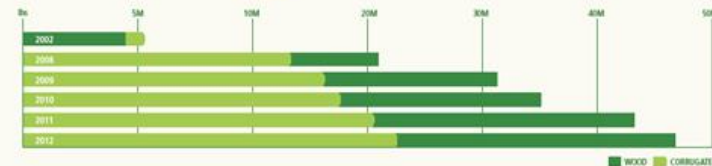


1400+
 DEALERSHIPS

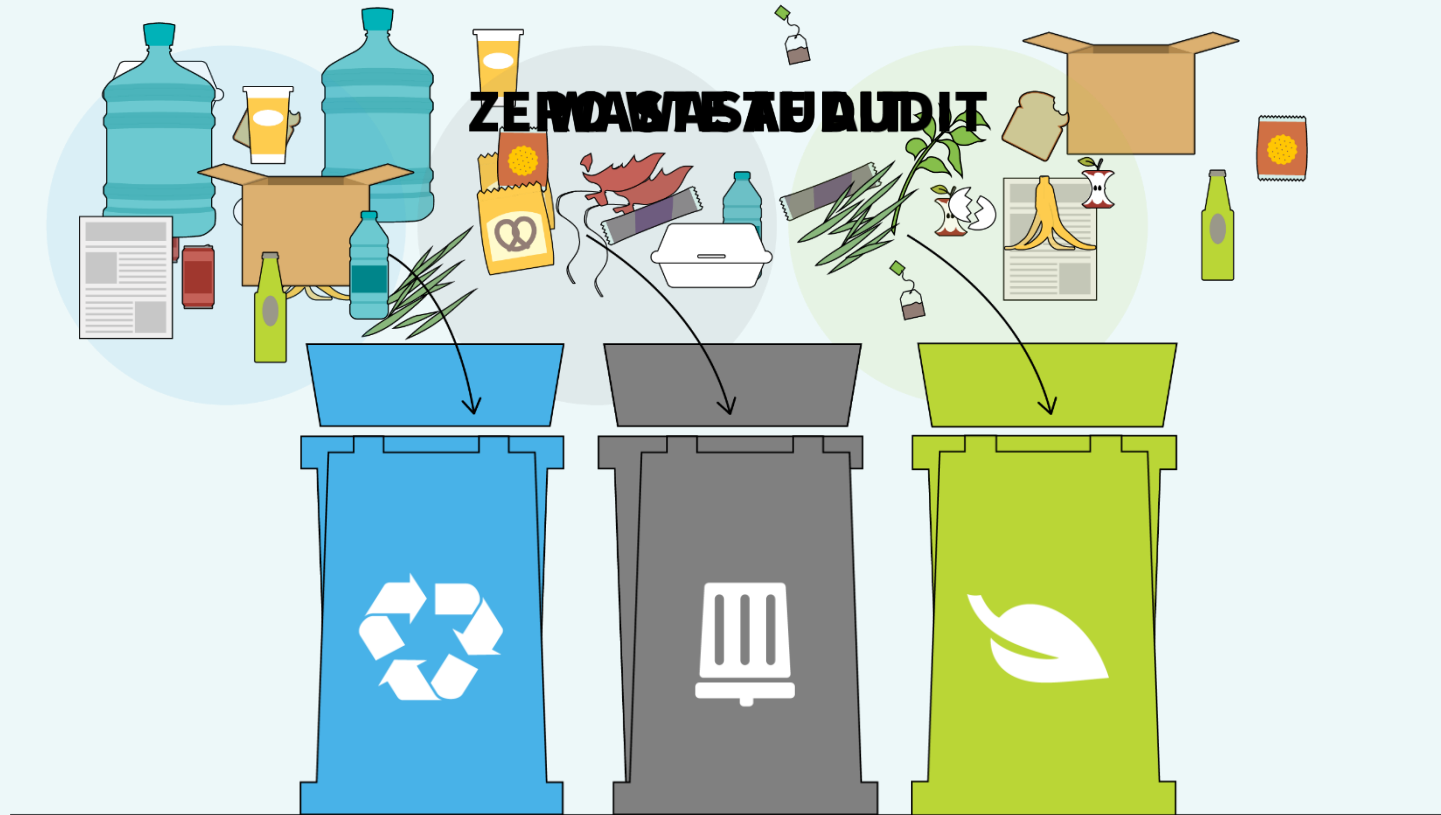


60,000

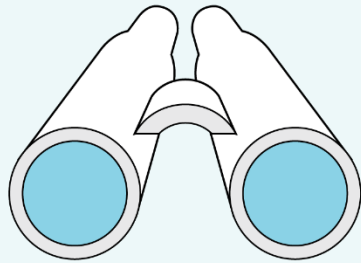
Currently, more than
 reusable shipping
 containers travel through the Toyota parts and accessory network.



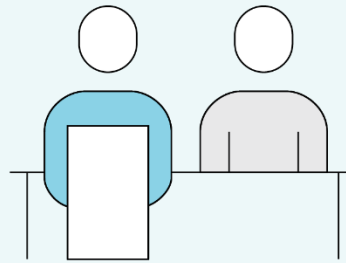
Waste audit vs. zero waste audit



Observe, interview and survey employees



Observe



Interview



Survey

- **Current systems and practices**
- **Bin audits**
- **Daily activities and behaviors**
- **Managers vs Employees**
- **Behaviors and Attitudes**
- **Motivating Factors**
- **Policies vs Practices**

Zero Waste Outreach, Promotions and Total Employee Involvement

- ✓ Give them a reason
- ✓ Training 100%
- ✓ Who's on the Green Team?
- ✓ Internal & External promotion
- ✓ Finding the champions
(surveys & observations)



“Throwaway Society”

RESOURCES:

www.storyofstuff.com

www.refed.com

www.wastenotoc.org

www.true.gbci.org



Photo Credit: Peter Stackpole, Aug 1, 1955 (Getty Images)

The Zero Waste Economy

Designing a Full-Cycle System—Upstream AND Downstream



© Copyright, Eco-Cycle 2005

www.ecocycle.org/zerowaste/zwsystem

Total Participation: The Recipe for a successful Zero Waste program

SAMPLE TRAINING EXERCISE

**GOAL: Develop a simple Zero Waste marketing / education
campaign based on your “R”**

Step 1: Break into small groups of 6 to 8 people

Step 2: Choose a Facilitator, Note taker and Presenter

**Step 3: Assign each member a different job title (accounting,
purchasing, janitorial, chef, server)**

Step 4: Choose your “R”

**Step 5: Brainstorm on ideas based on your “R” to achieve
Zero Waste – think big and small – HAVE FUN!**

Step 6: Share with the larger group in 2 to 3 minutes

Points of generation: know where to start



9 typical points of generation



Warehousing & Distribution



Offices



Food Services



Grounds



Construction



Manufacturing



Vehicular Maintenance



Retail



Housing & Hospitality

What is your R?

Reduce: Eliminate excess packaging or product that is ending in trash, recycling or composting. Saves time and money!

Reuse: Switch to packaging that can be used several times (pallets, shipping containers, service ware).

Recycle: Go beyond single stream to source separation and turn your recycling into a commodity

Re-Train: Empower employees, vendors and customers to practice the Zero Waste principles and provide mechanism for immediate feedback. This should be an ongoing, every day exercise just as with safety and customer service.

Re-Earth: Your compost is more than a bin but new soil to grow the food you serve your clients. A great way to eliminate contamination.

Redesign: This can apply to your Zero Waste system or actual packaging and products. Practice reduce, reuse and must be recyclable.

Repurchased: If you are not purchasing materials with recycled content, the recycles will just end up in the landfill. Supply and demand – its up to you to create it, partner with other and make it affordable. Vendor involvement is critical and can save you both money.

Train and Communicate

Sustainability



WORTH'S HAPPENING

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Sierra Nevada Finishes in 2nd Place in California in the National Bike Challenge

Congratulations to everyone who participated in our first year of the National Bike Challenge. Because of you the brewery landed in second place in California and in thirty-fourth in the nation! Thank you for tracking your miles, sending us your stories and photos, and making a habit of riding your bike instead of driving your car.

Across the nation, Sierra Nevada ranked 34th and came in ahead of companies like Facebook (36th), Union Pacific Railroad (40th), Comcast (51st), IBM (73rd), Hewlett-Packard (127th), REI (150th), UPS (152nd), Target (158th), and that brewery with the bicycle on its label (225th)! The Trek Bicycle Corporation blew everyone away to finish in 1st place in the nation — no surprise there!

More than 100 employees logged miles for the challenge, which began in May and ended September 30. Together we logged 36,421 miles, burned 577,732 calories, saved \$5,899 in gas,

and prevented 18,579 lbs of carbon dioxide from being emitted into the atmosphere. Bicycling is great for you, your pocketbook, our community, and the environment. By saving money, getting more exercise, reducing traffic and road congestion and eliminating CO₂ and other pollutants from being emitted into the air, you and your bicycle are doing more than you think.

The Sustainability Department has a special prize to thank everyone who logged miles during the challenge! Stop by their office to get your saddle bag, Sierra Nevada patch kit, and tire lever to keep with you while you ride.

Don't forget that Sustainability offers incentives and support to help you ride ALL year with the Green Machine program. It's almost too easy to participate and you get useful bike prizes along the way, includ-

ing a Green Machine t-shirt just for signing up! To find out more or sign up email Mandi McKay at mandi@sierranevada.com.

Focusing on Zero Waste

As many of you probably know, your Sustainability Department has a penchant for digging in the trash and the past few weeks have been no exception. During the Oktoberfest and Bine Time festivities, the Sustainability Department was busy collecting and sorting waste from all corners of the tent.

With the help of a team of bussers, the Sustainability Department sorted, weighed and diverted from landfill more than 4,800 pounds of material. Oktoberfest alone saw 6,000 guests over two nights and generated 3,054 pounds of compostables, 738 pounds of recycling, and only 250 pounds of waste that went to the landfill. That's only .04 pounds of waste (not including recycling or compostables) per guest! Bine Time generated only 61 pounds of waste, 955 pounds of compostables, and 76 pounds of recycling. In the end, 93.8% of total solid waste was diverted from landfill from Oktoberfest and 94.4% was diverted from Bine Time. These are impressive numbers and are going to be valuable as the Sustainability Department goes through a third-party verification to become a Certified Zero Waste Business (more on that next month).

Thanks for your support!



It is the mark of an educated mind to be able to entertain a thought without accepting it.

~Aristotle~

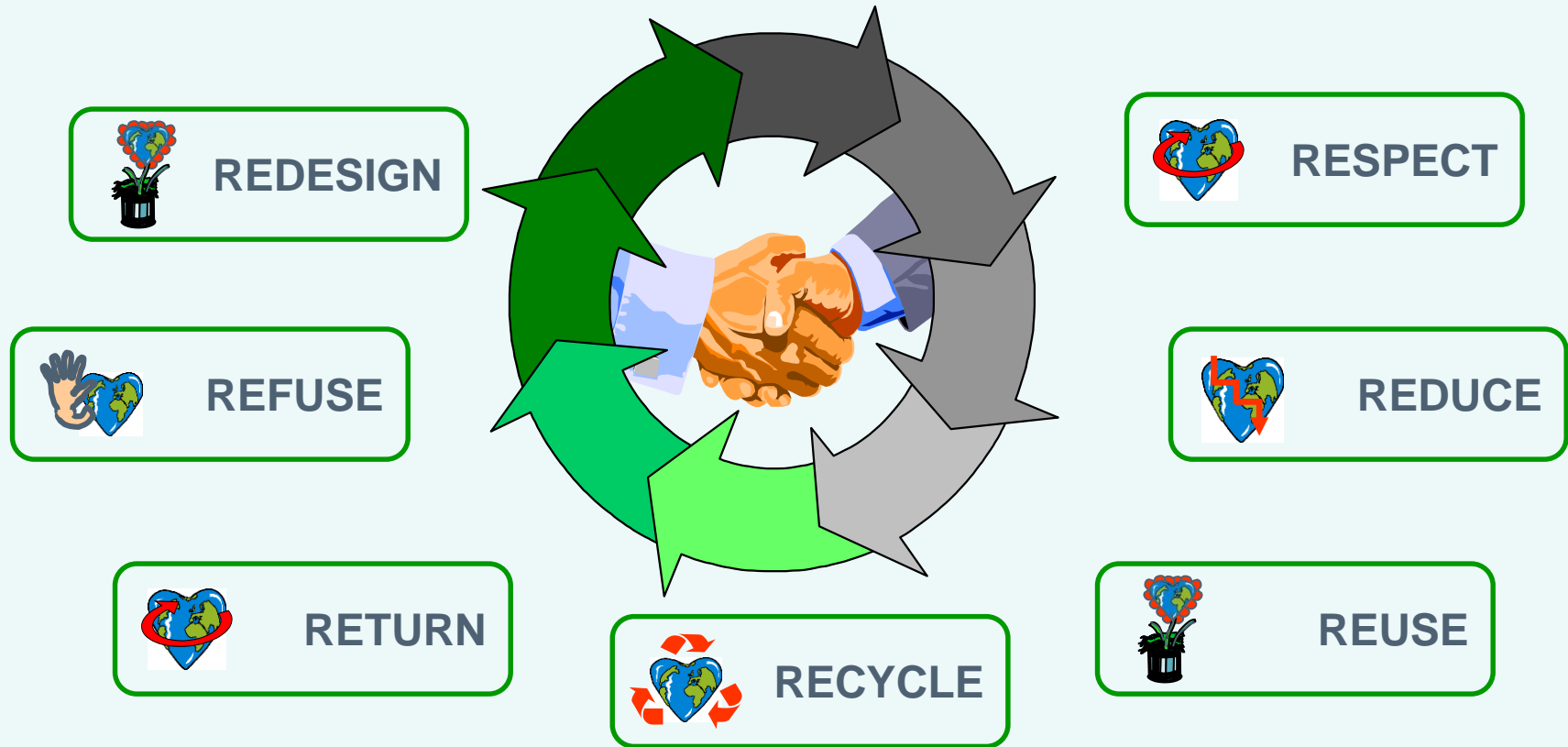


Company diversion KPIs are posted monthly for all employees to see should they choose to view them. They are also discussed in monthly management KPI meetings. The sustainability dept. maintains two bulletin boards that allow for communication on sustainability information - zero waste included- and participates monthly in the company newsletter to provide tips, areas for improvement within the brewery, reminders about reusable coffee mugs/water bottles, etc.



Partnership With Suppliers

Green Procurement



Reduce total cost within Supply Chain

Sierra Nevada Zero Waste Goal

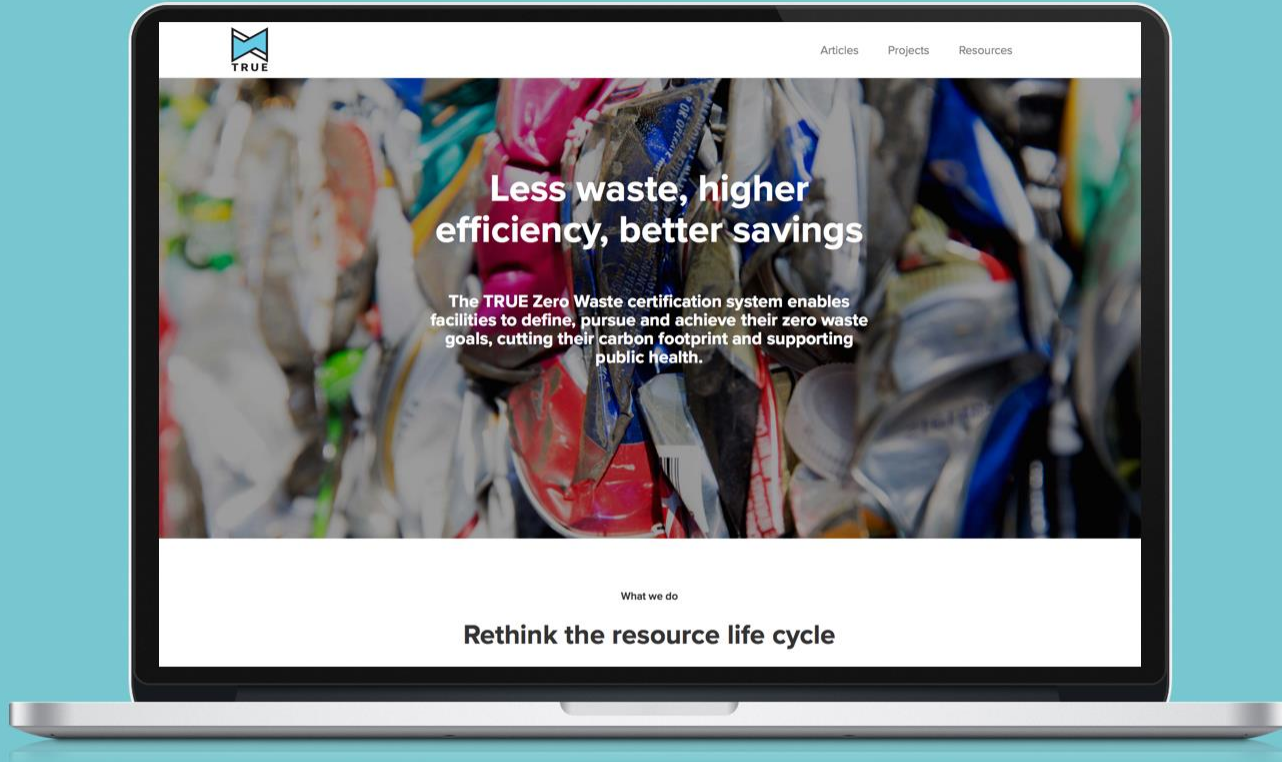
- To **improve environmental health** by reducing landfill contribution, reducing greenhouse gas emissions, sustaining natural resources, and preventing the release of harmful chemicals into water and air systems.
- To **save money** by reducing the cost of utilities and resources (energy, water, solid waste management, packaging materials, raw ingredients, etc.) and to provide a revenue stream by selling recyclable materials (spent grain, cardboard, shrink wrap, glass, etc.).

Potential Wastes

- **Energy**
 - **Compressed Air**
 - **Employee time/productivity**
 - **Miscellaneous solid waste**
 - **Water**
 - **Packaging Materials**
 - **Food**
 - **Parts/Service**
 - **Money**
- **And most importantly... BEER**



**IF YOU'RE NOT
FOR ZERO WASTE,
HOW MUCH WASTE
ARE YOU FOR?**



true.gbci.org

Stephanie Barger: sbarger@usgbc.org