

# Chula Vista Zero Waste Academy

## Course Syllabus and Expectations

The City of Chula Vista's Office of Sustainability is offering a 7-session Zero Waste Academy course to educate Chula Vista residents on the concepts and practices of Zero Waste and to promote understanding of the City's Waste Reduction Strategic Plan (Zero Waste Plan) and the City's goal of achieving 90% waste diversion by 2035. Also, many "wastes" are actually "resources" that can be used again until their useful life is no more. Students will be provided with opportunities to gain knowledge and will be highly encouraged to become participants so they can implement Zero Waste actions into their lives. Various issues, including Zero Waste for Chula Vista, detailed in the City's Zero Waste Plan, will be covered in the course to promote an overall understanding of Zero Waste thinking and practices with the intention of benefitting our community and the region. In-person tours of the Otay Landfill, EDCO's Materials Recovery Facility (MRF) and a Construction and Debris (C&D) facility are also planned. Conducting this course fulfills part of the Zero Waste Plan (Action 3.8) of developing and implementing a Zero Waste education and recognition program that encourages applying Zero Waste principles and engaging and collaborating in such activities. Those that complete the course will be recognized as "Chula Vista Zero Waste Champions."

Note: The course will be limited to 20 in-person participants. Online participation using Microsoft Teams is also available. Classes will be held at the Chula Vista Civic Center Branch Library conference room. In-person participation lends itself to better interaction. The Academy course schedule is available via link on the Zero Waste website – Attend Chula Vista's Zero Waste Academy.

The course will consist of:

- Talks/presentations from knowledge experts
- Informational readings and online videos
- Conducting a waste audit at your home
- Participating in a sustainability project (document and report on it at the final class) \*
- In-class two-way discussions include tips and tricks to build and practice Zero Waste actions.
- In-person tour of the Otay Landfill is included to provide participants with a firsthand look at what happens with waste collected.
- In-person tour of a materials recovery facility (MRF) and a Construction and Debris (C&D) facility. This will provide an eye-opening opportunity to see how recyclable materials are handled and an understanding of the business of recycling.

Academy enrollees are automatically signed up for the tours when they enroll for the Zero Waste Academy.

If a class participant misses a class, they can make up the class by writing and submitting a brief 1-2-page essay covering related topics in the class they missed. Submit essays via email to [environmentalservices@chulavistaca.gov](mailto:environmentalservices@chulavistaca.gov). Please include "Zero Waste Academy" in the subject line. Utilizing the reading list and/or on-line videos for the missed class will provide educational information for writing the essay.

\*Participating in a sustainability project (present your results in Class 7), some suggested examples include: 1) reusing or repurposing an existing product or 2) changes made in your own lifestyle.

Briefly present results of your home waste characterization (covered in Class 1, presentations in Class 7).

Participants who complete the class requirements (listed above) will be awarded a certificate of completion as a "Chula Vista Zero Waste Champion."

The key expectation is for Zero Waste Champions to take the lessons learned and become advocates for implementing Zero Waste practices. As a Chula Vista Zero Waste Champion, this includes adopting a leadership role as one in the community which informs others about Zero Waste and its environmental benefits. As such, it is highly advised that Champions share this information on social media and via email to those in their networks or any groups, organizations, clubs or special interest groups a Champion belongs to or associates with. One suggestion would be to have a "video party" to share videos presented as part of the course. One of the key purposes of Chula Vista's Zero Waste Plan is to "change the mindset" of residents and businesses – it takes a community effort and participation of all sectors to make changes needed to reduce and eliminate waste and implement these practices. As part of this course, Zero Waste Academy participants will be encouraged to create a Zero Waste project of their own design or to participate/volunteer with existing organizations to help them implement programs or assist as volunteers with implementing Actions in the City's Zero Waste Plan. Additionally, the City of Chula Vista is interested in building a core group of volunteers from its Zero Waste Champions to assist from time to time in sustainability and Zero Waste outreach efforts and events.

Note: Online participants will receive meeting invites to participate via Microsoft Teams. Login 5 minutes prior to start of class.

## Syllabus/Lesson Plan:

### **1. First Class: What is Zero Waste? - Introduction and Overview (2 hours)**

This class will provide an overview of Zero Waste and key issues. It will also touch on Chula Vista's Waste Reduction Strategic Plan (Zero Waste Plan).

**Pre-class Required Reading:** Chula Vista Waste Reduction Strategic Plan (Zero Waste Plan), visit [www.chulavistaca.gov/zerowaste](http://www.chulavistaca.gov/zerowaste)

**Pre-class Activity:** It is highly recommended that course participants review the selected video and website under **First-Class suggested videos and readings** as part of your introduction to the course (see below).

- **Academy Overview**
- **Defining Zero Waste**
  - What is a Zero Waste System?
  - Zero Waste Hierarchy
  - "Resources" Not Wastes
  - Circular Economy
  - Benefits of Zero Waste
  - Triple Bottom Line
  - Extended Producer Responsibility
    - What you should know - Explanation and breakdown
    - Legislation

- Examples in US
  - Pharmaceutical Takeback
    - What Chula Vista Does
  - What you can do
- Product Stewardship
  - What you should know - Explanation and breakdown
  - Legislation
  - California Product Stewardship Council (CPS)
  - Carpet America Recovery Effort (CARE), Mattress Recycling Council, PaintCare®
  - What you can do
- **Introduction and Overview of Chula Vista Zero Waste Plan**
  - Goal and Purpose – 90% Diversion Goal
  - Core Principles
  - Zero Waste Planning
  - Intro to Chula Vista's Waste Stream
  - Waste – pounds per day per capita
  - California Waste Reduction Legislation
  - Six Key Tasks of the Zero Waste Plan and Actions
    - Tasks Descriptions and Summary of Actions
    - Waste Diversion and Reductions of Green House Gases - Projections
    - Actions Planned - Blend of Current and New Activities
- **Conducting Your Own Waste Characterization**
  - Household Assessment - Find out what you discard – throw away, recycle, sell, or donate
  - Keep track/document using guidelines provided to Academy participants
  - Based on your tracking, determine ways to avoid and reduce waste creation
  - Submit via email to [environmentalservices@chulavistaca.gov](mailto:environmentalservices@chulavistaca.gov) by Friday, March 10
- **Discussion and Zero Waste Tips and Tricks**

Discuss today's class topic. Provide simple ways to reduce waste and reuse products, and avoid creating waste. (Content from CLEAN Newsletter reuse articles, websites, news articles, and other sources.)
- **Information on Participating in Tours: 1) Second Class, the Otay Landfill and 2) Fourth class, a local Materials Recovery Facility (MRF) and Construction and Debris (C&D) Facility**

Academy enrollees are automatically signed up for the tours when they enroll for the Zero Waste Academy.

Tours are an important part of the course. Logistics for attending the tours will be presented. Course participants may need to arrange carpools.

**First-Class suggested videos and readings: Ideally, you should view or read before the first class.**

- Video: The Story of Stuff (expanded) - <https://www.youtube.com/watch?v=9GorqroigqM>

- Article and website: [Honestly Modern – Sustainable Living for Modern Families](#) (This site serves as primer for Zero Waste as an aspirational endeavor covering numerous activities. Explore, learn more.)

## **2. Second Class: Tour of the Otoy Landfill (required) (Approximately 2 hours, not including travel time. Course participants may need to arrange carpools.)**

This class session is a tour of the Otoy Landfill organized by City staff and conducted by Republic Services, owner/operator of the Otoy Landfill.

- Participants will witness and learn how trash and organic waste generated by Chula Vista residents and businesses are handled. The tour will provide a firsthand understanding of what happens to what you throw away and the magnitude of the waste stream.
- The tour is mandatory course participants should make every effort to attend. Note: It is best to attend the scheduled tour as make up tours may be difficult to schedule.
- Academy enrollees are automatically signed up for the tours when they enroll for the Zero Waste Academy. A reminder email about the tour will be sent to Academy Participants.

### **Second Class suggested videos and readings:**

- Landfill Videos: <https://www.youtube.com/watch?v=ThpxqEvoVzg> (highly recommended)
- Modern Landfill: How Landfills are Built: <https://www.youtube.com/watch?v=Rf4BqB5IGb4>
- How Does a Modern Landfill Work: <https://www.youtube.com/watch?v=lsyg472MQp8>

## **3. Third Class: Recycling Business and Markets (2 hours)**

- **Pre-class Required Video:** MRF videos: <https://www.youtube.com/watch?v=M5nmNKVNCBw>

This provides an understanding of how MRFs operate and the recycling business. This class will provide an overview of the waste stream, categories of discarded materials, and recycling systems.

- **Understanding the Waste Stream**
  - Upstream, Midstream, and Downstream
    - Descriptions
    - Wastes Generated
    - How these apply to Chula Vista
  - Chula Vista's Trash - Downstream
    - Residential
    - Multi-family and Commercial
    - Role of Republic Services – City of Chula Vista's Franchise Hauler
      - Trash, Recycling, Food, and Yard Waste Recycling
      - Bulky Pickup for residential and multi-family
  - Twelve Market Categories of Discarded Materials – Revisit the Circular Economy
    - Compostable, recyclable, potentially recoverable, non-recoverable
    - Content and percentages of discarded materials
    - How materials can be reused

- **Recycling Markets for "Resources" (Discarded Materials)**
  - Role of MRFs
  - Market issues – CRV (beverage containers), glass, paper, plastics, construction debris, food, and yard wastes - key statistics
  - Recoverability and management of discarded materials
  - How materials can be reused
- **Recycle Right in Chula Vista**
  - Residential Service
  - Multi-family and Commercial Service
  - Education campaigns, CLEAN website
- Recycling Service (Blue cart/white dumpster)
  - What can be recycled and what cannot?
  - Wish-cycling
  - What do I do with this item? Options for recycling certain items - metals, bubble wrap, packing peanuts, mattresses, carpet, textiles, and more
  - Recycling Businesses in Chula Vista
- Food and Yard Waste Recycling (Green cart/Green dumpster)
  - Fighting Climate Change
  - What can be recycled and what cannot?
    - Food Waste
    - Yard Waste
  - What happens with collected food and yard waste?
    - Composting process – creates chemical-free, nutrient-rich soil amendment
    - Compost production at the Otay Composting Facility
    - Availability of compost - for residents (3 free giveaways), schools, City parks and facilities, golf courses, agricultural and landscape industries
  - Best Uses and Benefits of Compost
  - Backyard Composting - Create Your Own
    - Master Composter Classes and Living Coast Discovery Center Classes

- **Discussion and Zero Waste Tips and Tricks**

Discuss today's class topic. Provide simple ways to reduce waste and reuse products, and avoid creating waste. Content from CLEAN Newsletter reuses articles, websites, news articles, and other sources.

**Third Class suggested videos and readings:**

- Video: Inside Germany's Largest Recycling Center  
<https://www.youtube.com/watch?v=BYe7maozgBM>
- Household Hazardous Waste Collection Facility tour:  
<https://www.youtube.com/watch?v=8jkbFslVrGg>

#### **4. Fourth Class: Tour of a Local Materials Recovery Facility (MRF) and Construction and Debris (C&D) Facility (Approximately 2 hours, not including travel time. Course participants may need to arrange carpools.)**

This class session is a tour of a MRF and C&D facility organized by City staff and conducted by EDCO, owner/operator of these facilities located in Lemon Grove.

- Course participants will see firsthand how recyclable materials are handled and prepared to become raw materials for producing new beverage containers and manufacturing other products from recycled content.
- The tour is mandatory so course participants should make every effort to participate. Note: It is best to attend the scheduled tour as make up tours may be difficult to schedule.
- Academy enrollees are automatically signed up for the tours when they enroll for the Zero Waste Academy. A reminder email about the tour will be sent to Academy Participants.

**Pre-class Required Reading:** Article: [What Is a Materials Recovery Facility?](#)

#### **5. Fifth Class:**

##### **1) Dealing with Household Hazardous Waste**

##### **2) Understanding Plastic Issues and Eco-friendly Business Practices (2 hours)**

This class will cover two distinct subject areas: 1) household hazardous wastes; and 2) the issues of plastics and packaging and will also cover eco-friendly business practices, including greenwashing versus green marketing.

**Pre-class Required Video:** Plastic Wars Episode 38-15 Frontline  
<https://www.pbs.org/wgbh/frontline/film/plastic-wars/>

**Pre-class Required Reading:** Greenwashing vs. Green Marketing – What is your Company doing? - Oct. 14, 2020, <https://www.protectusa.net/greenwashing/>

- **Hazardous Wastes and Household Hazardous Wastes (HHW)**
  - Use of Hazardous Wastes in Industry
    - End of Life – What happens to these chemicals?
  - Description of HHW - household hazardous and toxic materials/products: cleaners, fuels, oil, miscellaneous chemicals, paints, batteries, electronics, sharps, fluorescent bulbs, and several other applicable items.
    - Proper HHW disposal for Residents – What do you do?
      - Disposal at City's Household Hazardous Waste Facility – Key Statistics
      - Reuse Program Store at the HHW
      - PaintCare™ locations
    - Proper HHW Disposal for Businesses – Small Quantity Generators
      - What should businesses do?
  - **Prescription Drugs**
    - Description

- Where to properly dispose – collection kiosks
- Take-back events
  
- **Plastics Reduction and Better Options**
  - Environmental Pollution on Land, Waterways, and the Oceans
  - California Plastic Bag Law
  - California Single-Use Plastics Ordinance
  - City of Chula Vista's Single-Use Plastics Ordinance
  
- **Eco-friendly Business**
  - What is Greenwashing?
  - Examples and companies that do greenwashing
  - Greenwashing vs. Green marketing
  - Examples of companies with sustainable practices
  - Corporate Social Responsibility (CSR)
  - Sustainable Packaging
  
- **What You Can Do**
  - Civics Responsibility and Action

- **Discussion and Zero Waste Tips and Tricks**

Discuss today's class topic. Provide simple ways to reduce waste and reuse products, and avoid creating waste. Content from CLEAN Newsletter reuses articles, websites, news articles, and other sources.

**Fifth Class suggested videos and readings:**

- Website, provides insight into the plastics industry: [www.beyondplastics.org](http://www.beyondplastics.org)
- Greenwashing - A short documentary: <https://www.youtube.com/watch?v=INtguE3J09c>
- Everything you need to know about Greenwashing: [Everything You Need to Know About Greenwashing - YouTube](#)

**6. Sixth Class: Changing Behavior - Keys to "think and practice" Zero Waste (2 hours)**

**Pre-class Required Activity:** Visit a Chula Vista thrift store to see firsthand the plethora of donated items that were kept out of the landfill. Note: Visiting a thrift store can be done anytime prior to the Sixth Class.

- **Review of Zero Waste Hierarchy – Keep it out of the Landfill**
  
- **Reduce – Avoid and reduce waste creation**
  - Expand on the how and the why
  - Avoid the use of household toxic cleaners and yard/garden chemicals – "Do I really need this?"
  - Use nontoxic products

- Make your own products – cleaners, toxic-free pest control, salad dressings and more
- Limit use of paper products, other products
- Buy what you need
- Food shopping
- Benefits of reduce
- **Reuse or Repurpose – In same way, find similar or new uses for materials**
  - Expand on the how and the why
  - Household items – the list is long, provide examples – jars, textiles, bags and more
  - Benefits of reuse and repurpose
- **Repair - Can it be fixed? Can I get parts?**
  - Expand on the how and the why
  - Keep it out of the Landfill
  - Determine value of repair vs. buying new
  - Benefits of repair
  - Donating materials
  - Fix-it clinics
- **Materials Recovery – Other Uses**
  - Divert materials from the Landfill
  - Feed stock for raw materials for manufacturing
  - Donate – textiles, clothes, household goods, and more
  - Benefits of materials recovery
- **Discussion and Zero Waste Tips and Tricks**

Discuss today's topic. Provide simple ways to reduce waste and reuse products and avoid creating waste. (Content from CLEAN Newsletter reuse articles, web sites, news articles, other sources.
- Academy Participants Waste Characterizations, 1-2 pages. Submit via email to [environmentalservices@chulavistaca.gov](mailto:environmentalservices@chulavistaca.gov) by close of business, Friday, March 10. Academy coordinators will compile and share with course participants.

**Sixth Class suggested readings and videos:**

- 12 Cheap and easy tips for reducing your Waste- Sustainability Zero Waste Hacks <https://www.youtube.com/watch?v=K9ojpJBSTw8> (highly recommended)
- [https://www.youtube.com/watch?v=B5ijPk5\\_8pM](https://www.youtube.com/watch?v=B5ijPk5_8pM) Tips for a Zero Waste Living
- <https://www.youtube.com/watch?v=Xqau-sCWE-Q> Assignment Asia: Japan zero waste town 56 minutes

**7. Seventh Class: Course Review – Questions/Discussions/Show and Tell (2 hours)**

Be prepared to discuss Zero Waste practices you have begun doing and/or plan to implement. Feel free to bring examples of materials you have reduced, reused, repaired, or plan to donate. – Do Your Own Waste Characterization.

- **Brief Overview of Covered Materials**
  - Q/A
- **Zero Waste Partners/Participation in Chula Vista**



- **Zero Waste Practices – What are you doing now?**
  - Go Around the Room Participation – Show and Tell – **Zero Waste Tips and Tricks** (simple ways to reduce waste and reuse products and avoid creating wastes)
    - Results of your waste audit
    - What Zero Waste practices have you implemented?
    - Show examples of materials you have reduced, reused, repaired or plan to donate
    - Show items you have created from reused or recycled materials
- **Review Expectations of Zero Waste Champions**
- **Present Certificates of Completion to Zero Waste Champions**
- Acknowledgement of Zero Waste Champions will occur at a City Council meeting. (Photos will be shot during the classes and tours as part of presentation to the City.)

Note: A brief Academy evaluation will be emailed to Academy participants prior to and made available at the seventh class. Academy coordinators appreciate your feedback, Thank you!

## **Expand Your Zero Waste Knowledge - More Suggested Readings:**

### **Zero Waste Articles, Video Links and Organization Websites**

This first section contains information regarding Chula Vista as well as information from the State of California and other organizations.

- City of Chula Vista Zero Waste webpage: [Zero Waste | City of Chula Vista](#)
- Video: <http://www.storyofstuff.com>
- California Product Stewardship Organization website: [Product Stewardship and Extended Producer Responsibility \(EPR\)](#)
- Chula Vista City Environmental Services/Sustainability website: [Chula Vista, CA Trash & Recycling | Republic Services](#)
- SWANA Organization website: [Solid Waste Association of North America \(SWANA\)](#)
- California Organization Website, RDMZ source page: [Recycling Market Development Zone \(RMDZ\) Program](#)
- Organization website: [California's Short-Lived Climate Pollutant Reduction Strategy - CalRecycle Home Page](#)
- Organization website: [Zero Waste and Economic Recovery - GAIA](#)
- Organization website, Keep America Beautiful: [Keep America Beautiful](#)
- Video: [Recycling Solar panels -City of Santa Monica](#)  
[https://www.youtube.com/watch?v=uodHTg\\_vi1s](https://www.youtube.com/watch?v=uodHTg_vi1s)
- Resource webpage: [Sustainable Materials Management US EPA](#)

### **Extended Producer Responsibility**

Extended Producer Responsibility (EPR) is a strategy to place the shared responsibility for end-of-life product management on producers/manufacturers and other entities involved in the product chain, instead of putting the burden on local governments. Product redesign is encouraged to minimize negative impacts on human health and the environment at every stage of a product's lifecycle.

- Article: [EPR in the US can't directly follow the European model; it must avoid a producer monopoly | Waste Dive](#)
- Article Surveying the corporate-controlled EPR: [https://www.wastedive.com/news/opinion-seldman-epr-landscape-colorado-oregon-maine-grassroots/625617/?utm\\_source=Sailthru&utm\\_medium=email&utm\\_campaign=Issue:%202022-06-22%20Waste%20Dive:%20Recycling%20%5Bissue:42600%5D&utm\\_term=Waste%20Dive:%20Recycling](https://www.wastedive.com/news/opinion-seldman-epr-landscape-colorado-oregon-maine-grassroots/625617/?utm_source=Sailthru&utm_medium=email&utm_campaign=Issue:%202022-06-22%20Waste%20Dive:%20Recycling%20%5Bissue:42600%5D&utm_term=Waste%20Dive:%20Recycling)

### **Sustainability and Reuse Articles and Videos**

These articles provide numerous ways to reuse and recycle products. Information on microplastics and textiles is included.

- Article: [100 Ways to Repurpose and Reuse Broken Household Items - DIY & Crafts](#)
- Article: [10 Ways to Reuse Common Household Items](#)
- Article: [9 reasons you shouldn't throw away clothes and 4 things you can do instead.](#)
- Article: [21 Brilliant Ways To Reuse Glass Jars](#)
- Article: [Honestly Modern – Sustainable Living for Modern Families](#)
- Article: [How to Recycle Plastic Bags - Earth911](#)
- Article: [The Ultimate Guide to Recycling, Reusing, and Repurposing Plastic Items - Plastics Make It Possible](#)
- Article: [10 Clever Hacks for Reusing Plastic Bottles in the Garden](#)
- Article: [What You Need To Know About Microplastics and Textile - Fiber shed](#)
- Article: [Surveying the corporate-controlled EPR landscape in 2022 | Waste Dive](#)
- Article on recycling: [Why Recycle I Want to be Recycled](#)
- Article: [Zero waste systems can create thousands of jobs across the world: Study](#)
- Zero waste Video Ted Talk: [Zero Waste Challenge TED talk: https://www.youtube.com/watch?v=Bzvnc1ZZqyw](#)
- Website, provides insight into the plastics industry: [www.beyondplastics.org](http://www.beyondplastics.org)

### **Climate Change Calculator**

An easy-to-use climate calculator from U.S. EPA is provided so people can determine usage of products and their impact on creating greenhouse gases.

- [Greenhouse Gas Equivalencies Calculator | Energy and the Environment | US EPA](#)

### **Materials Recovery Facility (MRF) Articles:**

These articles give insight to what happens to the recyclable materials we put into our recycling bins. The complex system of sorting and packaging materials for remanufacturing is presented.

- Article: [What Is a Materials Recovery Facility?](#)
- Article: [What Is a Materials Recovery Facility \(MRF\)? | Rubicon](#)

## **Zero Waste Video Links**

Examples of Zero Waste lifestyles and examples of finding alternatives for reuse

- Assignment Asia: Japan zero waste town 56 min: <https://www.youtube.com/watch?v=Xqau-sCWE-Q>
- Recycling revolutionary Veena Sahajwalla turning plastics into reusable materials <https://www.youtube.com/watch?v=4fkbQynfSyY>

## **Corporate and Business Sustainability**

These articles show how business have incorporated sustainability into their corporate culture that is beneficial to their operations, their customers and society.

- Article: 8 Corporate Sustainability Examples from Companies that are doing It Right, May 28, 2019, <https://www.perillon.com/blog/8-corporate-sustainability-examples>
- Article: 12 Examples of Corporate Sustainability Initiatives to Inspire Your Goals - <https://www.edgepointlearning.com/blog/examples-of-corporate-sustainability-initiatives/>
- Article: 5 Examples of Successful Sustainability Initiatives, <https://online.hbs.edu/blog/post/sustainability-initiatives>

## **Greenwashing vs. Green Marketing**

Unlike greenwashing, **green marketing is when companies sell products or services based on legitimate environmental positives**. Green marketing is generally practical, honest, and transparent, and it means that a product or service meets the following criteria: Manufactured in a sustainable fashion. Teaching Note: Greenwashing is a marketing ploy that brands use to deceive consumers that their products, aims, and policies are environment friendly. What these brands do is use misleading information to make them appeal more to the eco-conscious market.

- Article: Greenwashing vs. Green Marketing – What is your Company doing? - Oct. 14, 2020, <https://www.protectusa.net/greenwashing/>

More greenwashing videos:

- Greenwashing -A short documentary: <https://www.youtube.com/watch?v=INtguE3J09c>
- Greenwashing: A Fiji Water story [Greenwashing: A Fiji Water Story - YouTube](#)
- Everything you need to know about Greenwashing: [Everything You Need to Know About Greenwashing - YouTube](#)

## **Pesticides**

Alternative Zero Waste options to commercial pesticides: good for the earth, safe for you and your family. The following links are for articles.

- [Natural and Biological Pesticides](#)
- [Alternatives to pesticides Californians for Pesticide Reform](#)
- [10 Nontoxic Ways to Control Weeds Small Footprint Family](#)
- [5 Nontoxic Pesticides and Herbicides You Can Make Yourself](#)
- [6 homemade herbicides Kill the weeds without killing the Earth TreeHugger](#)
- [Nontoxic Herbicides Home Guides SF Gate](#)
- [Weed Control Nontoxic Alternatives to Roundup Apartment Therapy](#)
- [Natural Herbicides Are they effective - UC Weed Science - ANR Blogs](#)