

## Project Guide

# E-Waste Collection

Waste Reduction & Recycling





## Generation Earth Program

Generation Earth is a Los Angeles County Public Works environmental education program. Our goal is to educate and encourage youth in Los Angeles County to be an active part of the solution to environmental concerns in their community. We offer do-it-yourself environmental projects that help youth make a positive difference in their schools, at home and in the world. Our programs are built to support the needs of teachers, students and schools.

## Waste in Los Angeles

Waste is a vital issue in Los Angeles County. Each person generates an average of five pounds of waste per day. This may not sound like much, but when multiplied over a period of a year, the amount of waste each person creates is staggering.<sup>1</sup> Waste is generally transported to one of ten solid waste landfills around Los Angeles County. It costs money to dispose of it and valuable open space is used to create landfills to store waste.

## Electronic Waste

Electronic waste (E-Waste) consists of electronic devices such as televisions, computers, cell phones and microwaves that have come to the end of their life, are broken or are simply discarded. E-Waste is highly toxic to humans, plants, animals and has been known to contaminate water, air and soil. Proper disposal of E-Waste includes keeping it out of landfills and responsible E-Waste recycling. Schools can play a major part in creating awareness of proper disposal by hosting E-Waste collection events.

## E-Waste Collection Project Guide

To help promote the proper disposal of E-Waste and in the process, keep it out of landfills, this guide provides the guidelines for students on how to run an E-Waste collection event. It includes a timeline, checklists, suggested management roles and more to ensure a successful event.

## The Steps

### 1. Did You Know

The topic sheet provides useful information that can be used as an introduction to the topic to share with others and poses thoughtful questions for discussion.

### 2. E-Waste Collection Preparation Checklist

Using the E-Waste Collection Checklist students take steps needed to plan and run an E-Waste event.

### 3. E-Waste Collection Timeline

It takes one to two months to plan and produce an E-Waste collection event. Students follow the timeline to make the event happen.

### 4. Promotion Plan

Students create a promotion plan for reaching the largest audience possible. Guidelines are provided.

### 5. Evaluation

Complete the project by answering questions that serve to evaluate the process and offer next steps for potentially taking on an additional trash related project.

### 6. Resources

Resources are provided for curriculum and E-Waste collectors.





# DID YOU KNOW?

**Toxic materials are used to make electronics and their components. They could pose risks to human health and the environment if handled improperly.**

*What materials might be toxic?*

Some examples include, compact fluorescent light bulbs (CFLs) which contain mercury. The glass used in old computer monitors contains a cathode ray tube (CRT) which is a type of hazardous waste. It is hazardous because it may contain materials such as lead and mercury.<sup>2</sup>

**The estimated E-Waste recycling rate in the United States in 2022 was 52%.<sup>3</sup>**

*What are the laws in California related to E-Waste?*

In California, it is illegal to throw many types of E-waste into the garbage. The Electronic Waste Recycling Act was signed into law on September 24, 2003 and amended in 2004. It established a new program for consumers to return, recycle and ensure the safe disposal of video display devices, such as televisions and computer monitors. As a result, consumers pay a fee that is included in the cost of new devices and used to pay qualified E-Waste collectors and recyclers to manage E-Waste.<sup>4</sup>

*How is E-Waste managed?*

Unfortunately, much of the E-Waste ends up in landfills. This is an issue because toxic chemicals found in E-Waste often leach into the ground or may be released into the air, impacting the environment and local communities. In some cases, old electronics are reused, whether they are re-certified and resold or sent to developing countries for reuse.

**Most of the materials used to manufacture a cell phone can be recovered to make new products. Metals, plastics and rechargeable batteries from recycled cell phones are turned into new materials and products.**

*What are ways that different parts of a cell phone can be used?*

The metals in cell phones – gold, silver, platinum, palladium, copper, tin and zinc – can be recycled and used by different industries such as jewelry, plating, electronics and automotive. The plastics can be recycled into plastic components for new electronic devices or other plastic products such as garden furniture, license plate frames and replacement automotive parts. The battery can be recycled into other rechargeable battery products.<sup>5</sup>

**Other solutions exist to reduce the amount of E-Waste that poses risks to human health and the environment.**

*What are other ways to help reduce E-Waste and its improper disposal?*

Support companies that make eco-friendly products and those that take responsibility for the full life cycle of their electronics by taking back their products for reuse. Host an E-Waste collection event to educate and invite the community to participate in proper disposal.

# MAKE A PLAN & GET STARTED

A student organized E-Waste collection event is an opportunity for students to promote the proper disposal of E-Waste. There are steps to ensure a well run event. Use the resources provided to get organized, set a date and complete the necessary tasks.

## Preparation Checklist

- Have students use the E-Waste Collection Checklist to plan and complete the first steps.
- Work as a team to assign tasks.

## Timeline

- It takes one to two months to plan and produce an E-Waste collection event.
- Once a date is set, use the E-Waste Collection Timeline on page 6 to complete the necessary tasks needed to ensure a successful event.

## How an E-Waste Collection Works

- A school team arranges a collection date and location with a licensed E-Waste collector at least 30 days before the event.
- The local community is invited to bring their electronic waste on the day of the collection event.
- Items can include computers, laptops, printers, tablets, cell phones, stereos, scanners, video game consoles, televisions and more.
- Volunteers receive the E-Waste before it is loaded onto pallets and trucks provided by the E-Waste collector.
- At the end of the event, the E-Waste collector takes away the waste for responsible recycling.
- If enough materials were brought, the E-Waste collector pays the school according to a predetermined payscale.

## Helpful Hint

Review the E-Waste Collection Checklist and Timeline (pages 4-7) ahead of time to understand what will be required.

# E-Waste Collection Checklist

## ☐ Choose a Location

- Identify a large area where cars can drive in and easily drop off items in a drive-through style.
- Vacant school parking lots or student pick-up/drop-off curbs are perfect.

## ☐ Choose a Date and Time

- Typical collection events take place on Saturdays from 9 a.m. - 3 p.m.
- Any month during the school year will work, but keep in mind weather conditions such as rainy or extreme heat days.
- If held on campus, check with school administrator to ensure the date is available.
- Avoid holidays or religious observances.
- Note that E-Waste disposal increases after the holidays in January and February and most E-Waste collection organizations are booked for April and May events.

## ☐ Get Permission

- Choose a team to compile the information about the event and present to the Principal and other stakeholders.
- If held on campus, make sure permission is granted from the Principal. Clarify whether or not E-Waste from your school site can be included in the drop off (any electronic waste on campus is the property of the school district and most schools have signed contracts with waste haulers).
- If held off campus, ensure location point-person can help promote the event and gives permission to use the parking lot, restrooms, garbage, recycling bins and dumpsters.

## ☐ Identify an E-Waste Collector

- Ask Generation Earth for a list of reliable E-Waste collectors.
- Only partner with E-Waste collectors that are currently accredited through the State of California.
- Verify with the E-Waste collector that 100% of your event's E-Waste gets recycled rather than shipped to landfills.
- Confirm the selected E-Waste collector has the date available for the event.
- Ask if E-Waste collector provides a crew to carry and handle all of the E-Waste to haul it away. **Students are not allowed to lift any E-Waste or transfer it from cars to palettes.**
- Ask for the price matrix of donations and payment. Once the E-Waste is dropped off, it becomes the property of the E-Waste collector. Pay rates vary by year, the E-Waste collector you choose and the type of E-Waste collected. Some E-Waste collectors require a minimum E-Waste weight before payment is available.
- Find out if your E-Waste collector will give you money for cell phones. If not, pull the cell phones at the event and recycle them with [smartphonerecycling.com/](http://smartphonerecycling.com/)
- Make sure the E-Waste collector chosen can provide a certificate of liability insurance in case your school district requires one for the day of the event.
- Ask the E-Waste collector if they can assist in outreach efforts by providing banners, helping post ads and social media posts.

## **Secure Materials**

- Create posters, banners and flyers to promote the event.
- Make signs to direct people to the E-Waste drop-off area location when they are nearby and on the campus.
- Bring sunscreen, drinks and snacks for volunteers on the collection day.
- Have at least one table or several clipboards and pens for information sheets.

## **Get Volunteers**

- At least ten to fifteen students or volunteers are needed.
- Plan for more volunteers to ensure coverage if someone drops out or can't attend.

## **SUPPLIES**

- One or more tables
- Chairs
- Shade canopy
- Sign-in sheet
- Wires, clips, pins, or tape to hang signs
- Blank or printed paper to make directional signs
- Colored markers to make directional signs
- Sunscreen
- Pens
- First aid kit





# E-Waste Collection Timeline

It takes one to two months to plan and produce an E-Waste collection event. Once the date is set, assign tasks and due dates.

## One to Two Months Before the Event

- ☐ Identify and secure a location for the E-Waste Collection Event.
  - Evaluate the desired site and ensure it is suitable.
- ☐ Find an E-Waste collector to pick up waste.
- ☐ Prepare an E-Waste collection plan for the event day including time (event setup through take down), location and desired participants.
  - Use the details determined in the E-Waste Collection Checklist.
- ☐ Present the E-Waste collection event plan to key stakeholders to obtain permission.
  - Investigate the need for volunteer safety and photo release waivers.
- ☐ Create a Promotion Plan (see page 8).
  - Assign tasks to promotional team members.
- ☐ Create social media plan. Consider what websites or event pages to post.
- ☐ Create signs and secure banners.
- ☐ Create paper flyers for distribution.
- ☐ Write an advertisement or press release and get permission to send out.
- ☐ Launch promotion plan.

## One Month Before the Event

- ☐ Recruit volunteers for the event.
- ☐ Solicit other student groups or local community organizations to have an outreach booth at the event.
- ☐ Display signs and banners.
- ☐ Create a map of the site and plan your set up to create optimal flow of traffic.
- ☐ Distribute and collect any necessary volunteer waivers.

## One Week Before the Event

- ☐ Coordinate with the location staff about entry time, getting keys for use of the restrooms, etc.
- ☐ Secure all supplies (see below).
- ☐ Create signs to direct cars.
- ☐ Continue promotion of event.
- ☐ Ensure all necessary volunteer forms are received.
- ☐ Assign shifts and responsibilities to volunteers.
  - Consider creating two hour shifts from 9 a.m. - 11 a.m., 11 a.m. - 1 p.m. and 1 p.m. - 3 p.m. with at least three students and one or two adults per shift.

## Event Day

- ☐ Place directional signs.
- ☐ Keep count of how many participants come to the E-Waste collection. Use a sign-in sheet or assign a greeter volunteer to count the number of attendees when arriving.
- ☐ Take photos and/or videos of the event.
- ☐ Assist in getting information sheets that need to be completed by each individual who drops off E-Waste.
- ☐ Thank people for participating.
- ☐ Have fun and be safe.

## After the Event

- ☐ Take down any signs, banners and flyers after your event. Return banners to your partnering E-Waste collector.
- ☐ Take any leftover snacks or drinks home or donate to a local food shelter.
- ☐ Collect all items that were brought such as pens, tape and signs.
- ☐ Send thank you notes to E-Waste collector and location staff.
- ☐ Thank all organizations and stakeholders involved.
- ☐ Within two to four weeks, the E-Waste collector should provide a report that lists the items collected in pounds and check for items collected. Make sure to tell the E-Waste collector who the check should be addressed to. Fund Account access varies from school to school, please check with your Principal for more information.

## Create a Larger Event

An E-Waste collection event is a great opportunity to share the work of others. It also increases community participation.

Invite the following to have an outreach table:

- Local nonprofits and community organizations
- Neighboring schools
- Youth clubs or organizations
- Campus clubs

- ☐ Hold an informal event debriefing. Ask what went well and what you would change for next time. See page 11 for evaluation.
- ☐ Report diversion numbers to the school and selected community leaders. Promote the results and photos.
- ☐ Plan to celebrate your success with a party or fun activity!





# PROMOTION PLAN

Create a promotion plan for reaching the largest audience possible. **The success of the event is tied to how much advertising and outreach is done.** Expect a 10% participation rate for all outreach efforts.

Consider:

## Who do you want to reach in the community?

- Who is your audience?
- Will some materials need to be in another language?

## What do you want to communicate?

- The reasons for the E-Waste collection.
- Date, time and location.
- Free for all participants.
- Details for involvement.
- Items accepted.
- Any additional activities happening or organizations attending.
- Phone number or email for more information.

### Posters and Flyers

- Create posters and flyers that are appealing to your audience.
- Present information in a way that it is easily understandable.
- Include important information such as: who, what, when, where and why.
- Make sure the title and subheadings can be noticed from a distance and are eye-catching.
- Include appropriate graphics and photos.

## How do you want to communicate?

- Create and send ads
  - School PTA newsletter
  - Local newspapers
  - Radio stations
  - Neighborhood/City Councils
  - Churches/Places of Worship
  - Partners with the school or event space
  - Ask the local utility company to send a flyer in the monthly bills to residents.
  - Connect with your community television channel to advertise the event.
  - See sample press release on page 10
- Create and distribute flyers
  - Place flyers in and around the school community at libraries, chamber of commerce, recreation centers, senior centers, privately owned markets, the mall or any local business.
  - Ask student volunteers to take home flyers to give to neighbors. Offer incentives such as extra credit or prizes.
  - See sample flyer on page 9.
- Social media
  - Online blogs
  - Facebook Event
  - Neighborhood websites
  - Instagram
- Word of Mouth
  - Door Knocking
  - Classroom Announcements

# E-Waste Collection Event



DISPOSE OF YOUR OLD ELECTRONICS IN A SOCIALLY AND ECOLOGICALLY RESPONSIBLE WAY:

## El Camino Real Charter High School

5440 Valley Circle Blvd., Woodland Hills

Saturday, May 13th | 9AM to 12PM

### WE WANT ALL ELECTRONICS

(EXCEPT BATTERIES, REFRIGERATORS, LIGHT BULBS, THERMOSTATS & AIR CONDITIONERS)

WANT MORE INFO? VISIT: [WWW.HOMEBOYRECYCLING.COM](http://WWW.HOMEBOYRECYCLING.COM)

Your e-waste will be handled in a way that protects the planet, keeps your data safe, and creates jobs for people in Los Angeles facing serious barriers to work. Homeboy Recycling is a certified electronics recycler offering recycling, data destruction, asset recovery and repair services.

Note: It's always a good idea to clear your data, but not to worry, no matter what, all hard drives and data storage devices will be wiped according to Department of Defense standards.

### QUESTIONS?

[info@homeboyrecycling.com](mailto:info@homeboyrecycling.com) - (323) 222-3322



ELECTRONICS RECYCLING WITH A SOCIAL MISSION

## Sample Press Release

FOR IMMEDIATE RELEASE

Contact: Karla Ramos, LA Conservation Corps  
(XXX) XXX-XXXX  
lacorps.org/

Contact: James Wise, Advisor, Imagine Green Eco Club  
(XXX) XXX-XXXX  
imaginegreenecoclub.com

### **Imagine Green for the Community of Burbank**

Electronic Waste can be properly disposed of in the eyes of 7th graders at Luther Burbank Middle School. Luther Burbank Middle School's Imagine Green Eco Club and eWaste Center team up to do their part.

On Saturday, January 30, 2023, Luther Burbank Middle School's Imagine Green Eco Club and eWaste Center Inc. will be holding an E-waste collection and recycling event at Luther Burbank Middle School, (address here) from 9 a.m. to 3 p.m. Consumers can help prevent toxic chemicals and hazardous materials from entering our landfills by bringing in their old televisions and outdated computers to be properly disposed of.

The refuse from discarded electronic products, also known as E-waste, often ends up in landfills or incinerators. This means toxic chemicals like lead, cadmium and mercury that are commonly used in these products can contaminate the land, air and water. Luther Burbank Middle School's Imagine Green Eco Club and eWaste Center is dedicated to disposing of these products in a safe and ethical manner.

Imagine Green Eco Club is made of Luther Burbank Middle School students who volunteer their time to green their campus and surrounding community.

LA Conservation Corps provide at-risk young adults and school-aged youth with opportunities for success through job skills training, education and work experience with an emphasis on conservation and service projects that benefit the community.

For more information regarding this event, please contact Karla Ramos at LA Conservation Corps at (XXX) XXX-XXXX or Imagine Green Eco Club advisor James Wise at (XXX) XXX-XXXX.

###



# EVALUATION

Once the E-Waste collection event is complete, have students answer the following questions to evaluate their project and introduce some possible next steps.

## Questions

1. What was the most successful part of the project?
2. What was the least successful?
3. What would you do differently next time?

## What's Next?

Are you interested in another project?

Consider using another Project Guide:

- Community Swap Event
- Composting
- Campus Curbside Recycling
- Textile Recycling Event
- Food Rescue



# RESOURCES

## Curriculum Ideas

- Invite a representative from Generation Earth or your partner E-Waste company to speak to your group and/or faculty.
  - Make sure everyone knows what E-Waste is and how to dispose of it properly.
- The secret life of smart phone: [www.epa.gov/recycle/secret-life-smart-phone](http://www.epa.gov/recycle/secret-life-smart-phone)

## E-Waste Collectors

- Local facilities that accept electronic waste for recycling: [www2.calrecycle.ca.gov/Electronics/eRecycle/](http://www2.calrecycle.ca.gov/Electronics/eRecycle/)
- Planet Green Recycle, for ink cartridges: [planetgreenrecycle.com](http://planetgreenrecycle.com) (800) 377-1093
- CFL Bulb Recycling and more information: [dpw.lacounty.gov/epd/hhw/default](http://dpw.lacounty.gov/epd/hhw/default)
- Smartphone Recycling: [smartphonerecycling.com/](http://smartphonerecycling.com/)

## References

1. [dpw.lacounty.gov/epd/rethinkla/recycle/recycle-what-is.aspx](http://dpw.lacounty.gov/epd/rethinkla/recycle/recycle-what-is.aspx)
2. [dtsc.ca.gov/electronic-hazardous-waste/](http://dtsc.ca.gov/electronic-hazardous-waste/)
3. [dtsc.ca.gov/electronic-hazardous-waste/](http://dtsc.ca.gov/electronic-hazardous-waste/)
4. [dtsc.ca.gov/e-waste-more-information/](http://dtsc.ca.gov/e-waste-more-information/)
5. [www.cjdecycling.com/rechargeable-battery-recycling/#:~:text=Recharged%20battery%20Recycling%20materials%20can,solar%20cells%20and%20electroplating%20baths.](http://www.cjdecycling.com/rechargeable-battery-recycling/#:~:text=Recharged%20battery%20Recycling%20materials%20can,solar%20cells%20and%20electroplating%20baths.)





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