

Project Guide

Campus Curbside Recycling

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 at School

California school districts dispose large amounts of waste. This waste represents a significant loss of natural resources and school district funds, as well as a potential threat to student/staff health and the environment. The cafeteria is one of the largest areas on campus where waste is produced. Food, trays, cups, cans and straws are just a few of the items that are wasted. Classrooms and offices use a lot of paper products each year. These materials are expensive and costly. In planning a campus waste reduction program, it is important to create goals that are realistic and progressive. It is vital to establish a good working relationship among students, staff, facilities managers and waste haulers to ensure opportunities for program expansion through purchasing power, new ideas and information.

Campus Curbside Recycling Project Guide

This guide will direct students to answer specific questions and make decisions that build a campus curbside recycling plan to share with key stakeholders, including those who provide final permission for the project. Once approved, they can begin to execute their plan.

The Steps

1. Create a Plan

Students work through a variety of questions to create a draft plan for a campus curbside program. This includes what to know to share with stakeholders.

2. Get Permission

Using the information gathered, students update the draft plan for consideration. Permission may be from the school principal or another entity responsible for the site.

3. Make it Happen

Using the plan as a guide, students create a task list to accomplish the steps needed to get started including the creation of a timeline.

Tasks include gathering supplies, placing bins, creating a collection schedule and conducting an awareness campaign.

4. Evaluation

Complete the project by answering questions that serve to evaluate the process and offer next steps for potentially taking on additional waste reducing projects.

5. Resources

Resources are provided including grants, partners and signage.

MAKE A PLAN & GET PERMISSION

Students answer specific questions and make decisions that build a plan to share with key stakeholders, including those who provide final permission for the project.

Procedure

1. Answer the questions to help build a plan.
2. If conducted, plan how to use the waste audit quantities, site maps and interview results to support the plan. (See Helpful Hints.)
3. Once students have the steps thought out and created a plan, have them create a presentation for all the key stakeholders including the Principal, Plant Manager, teachers, parents and any other important stakeholders.
4. Conduct the presentation and get the permission needed to get started.

Helpful Hints

Conduct a site assessment and waste audit of the campus.

- Follow the guidelines provided in the [Waste Reduction and Recycling Toolkit](#).
- Utilize the information to indicate where there are specific waste collection elements on campus and identify the different types of waste found.
- Use this information to support the plan.

Practice the presentation.

- Be prepared to answer questions
- Know what the roles are of all stakeholders



Questions

How will a campus recycling program help the school?

Start by determining the campus's current cost per cubic yard for disposing of waste in the landfill and the projected costs or revenue from your project. Be sure to highlight how your program can:

- Cut the school's garbage costs.
- Generate additional revenues for the school.
- Provide opportunities for school recognition and awards.
- Reduce campus litter and the amount of space taken up by garbage cans.

What is the scope of the project?

Determine which of the following is included as part of the proposed program:

- Indoor
 - Classroom recycling
 - Multi-classroom recycling
 - Office recycling
- Outdoor/campus-wide
 - Cafeteria recycling
 - Entire campus/facility
 - Other
- Provide opportunities for school recognition and awards.
- Reduce campus litter and the amount of space taken up by garbage cans.

Cost Per Cubic Yard

To determine the current cost per cubic yard for disposing waste, obtain a copy of the monthly service fee bill from the principal.

Multiply the number of garbage containers by the size of the container in cubic yards collected during the billing cycle. Repeat for recycling containers.

Divide the total disposal cost during the billing cycle by the total number of cubic yards of material collected during the billing cycle.

Plant a Seed - Let it Grow

Sometimes if the recycling program doesn't have the necessary support it needs from key stakeholders to be sustainable in the long run, it's best to start small and let it grow.



What materials are to be collected for recycling?

Determine the type of materials that will be collected and recycled. Some things to consider:

- The easiest and most effective campus-wide waste reduction program collects all the different types of materials your waste hauler can recycle.
- While collecting only bottles and cans earn money for the school/club, it misses the opportunity to divert important items like paper, cardboard, or beverage cartons from the landfill, as well as the opportunity to raise awareness.

What bins will be used?

Whether they are used for, indoor or outdoor use will help determine what type of bins can be used.

- Outside
 - Must be a weather resistant container.
 - Recycle bins should have lids, so they must be opened to use. This ensures they don't collect unnecessary trash.
 - A size that fits assigned locations to avoid overflow.
- Inside
 - Cardboard boxes, milk carton crates or reuse containers if bins cannot be donated or purchased.
 - Try to keep bins uniform across campus, either by color, size and shape, or same type of item used (i.e. ALL are made from decorated cardboard boxes, or ALL are made from baskets, etc.)

Where will the bins be located?

Depending on the scope of the program, indicate on the map where proposed bins will be located. Consider:

- A garbage can against a wall or in a corner where there is room for a recycling bin to be placed next to it.
- Convenient areas where there is a lot of foot traffic
- Within the cafeteria, or other eating area as a “cafeteria recycling station.” See page 9 for more information.
- Areas that can be seen and identified easily as you approach, such as near the teacher's desk.
 - Avoid placing bins right next to a door where signs may be ignored or people are distracted while throwing things away.

What bags are needed to line the bins?

You may need to use clear plastic bags called liners for the recycling bins. Liners come in different thickness and sizes. Ask your Generation Earth Coordinator to help you decide which liner is right for your project.

- Purchase liners that do not rip easily. We recommend 1.5 mils or more.
- Clear bags that are long enough to wrap around the lid, extend to the bottom when full and wide enough to wrap around the whole edge of the opening.
- Coordinate with your on-site Maintenance/Plant Manager and Principal for purchasing, storing and using these bags.

How much will it cost?

It will depend on the school district or situation, what you can get at no cost or what will require funding. Consider the following supplies that may be needed:

- Classroom bins
- Curbside/outside bins
- Waste bags
- Signage (paper, markers, lamination)

District Resources

LAUSD

To begin a recycling program at your school, have your Principal reach out to OEHS and request services from the contracted waste hauler, including free bins, dumpsters and assistance with all elements of setting up a successful waste reduction plan.

wastemanagement@lausd-oehs.org
(213) 241-3199.

Other School Districts

To begin a recycling program at your school, have your Principal contact your School District Administration for policy and resources available.



What is the collection plan?

Create a collection schedule and procedures for a weekly and/or monthly collection.

- **Collection Schedule**
If your student recycling team members are responsible for the collection of recyclable materials, create a schedule including:
 - Time and location of pickup.
 - Location of where the items will be stored and delivered or picked up.
- **Collection Procedures**
Create procedures for the recycled items to include:
 - Bag replacement and area cleanup.
 - How items will be collected and transported.
 - Tracking progress for the quantity of items recycled.
 - Determine if some of the recycled items must be delivered to an off-campus location and if so, who will deliver them and when.
- **Collection Plan Ideas**
 - Transport classroom recyclables to bins or dumpsters at the same time after school each week.
 - Ask teachers to leave their recycling bins outside of the classroom on designated days to be picked up after school. Bins can be returned to classrooms by janitors.
 - Have an Eco-Club dedicate one meeting per month to recycling.

- Check with the Plant Manager to see if the campus maintenance crew can assist in the recycling plan. If yes, make sure all maintenance staff members understand the procedure for replacing bags, keeping the bins in the correct location and transferring the recyclables to the right dumpster or storage area.
- Create a dedicated recycling team to collect recyclables and/or compost during lunch break every day. Recruit volunteers to assist weekly and offer services or credit hours for volunteering.

How will the recycling program be promoted?

Determine how the program will be promoted to ensure everyone who is involved with using the bins will be informed of the changes and how to properly recycle, including which items to recycle:

- **Signs**
Use signage to keep contamination of recycling bins down and help serve as a reminder to the audience. When using signs, consider the following:
 - Create a visual cue at each of the recycling bins to attract attention.
 - Ensure they are easy to read – large, clear and concise.
 - Color coded: blue for recycling, green for compost and black for landfill.
 - Utilize pictures of the items that go in the container along with text.
 - Use multiple languages.
 - Make them fun.

- Other Media to consider:
 - Announcements
 - School newspaper
 - Awareness posters
 - Social media
 - Classroom guest speakers
 - Assemblies
 - YouTube videos
 - Contests, relay races, recycling olympics
 - Volunteer monitors at the cafeteria recycling station

Who will help?

For outside partners to help with the project, consider the following:

- Local non-profits that facilitate educational assemblies.
- Local businesses that can sponsor signs, bins, or bags.
- Contests that will reward your school or club for exemplary waste reduction results.
- Grants for resources.
- Parents who can help with collection and more.
- Ask your Generation Earth Teacher Facilitator for guidance.

Promotion

Contact your Teacher Facilitator for help with setting up a cafeteria waste monitor system.

Plan to be part of a back-to-school assembly to share the recycling plan and guidelines each new school year.

What is the sustainability plan?

To keep the program going next year and beyond, consider:

- Talk with the Plant Manager or others in decision-making positions.
- Create a plan to ensure the future of the program when students, teachers, plant managers, or the principal leave the school.
- Write a toolkit with instructions for new students and staff, to create a recruitment plan for future students to continue the recycling team. Include ideas for program growth.
- Utilize strong multi-level partnerships with all stakeholders involved. Hold meetings throughout the planning process.

Get Started

Use the plan created and the following steps to get started.

Procedure

1. Using the plan as a guide, work with the students to create a task list to accomplish the steps listed below.
2. Ask students to organize the tasks, grouping similar tasks together.
3. Create a timeline and calendar for students to put tasks in order by completion date.
4. Ask students to assign themselves tasks to complete following deadlines.

Steps

Gather Supplies

- Bins
- Promotional posters and signs
- Clear plastic garbage can liners
- Gloves

Place Bins

- Place bins in strategic locations.
 - Use bin liners.
- Display the recycling signage.
 - Signs should be easy to see from ten feet away, placed over the bin or close to the lid.

Materials

- Recycling Plan
- Calendar
- Paper
- Pencil/pen
- Other supplies, depending on the plan



Cafeteria Recycling Station

- Create one or more main stations for sorting lunch waste. The easier it is for participants to sort and recycle their waste, the higher the participation rate. Stations should include:
 - Monitors to assist at the stations every day for at least one month.
 - Table for setting down trays while separating items and as a place to stack trays.
 - Bucket for pouring leftover milk and beverages.
 - Recycling bin with a liner and lid.
 - Small container for food scraps.
 - Cooler or table for food donation collection.
 - Garbage can and any other containers for alternative recycling projects (See Resources section on page 12).
- Display the recycling signage.
 - Signs should be easy to see from ten feet away and placed over the bin.



Sample cafeteria recycling station: liquids bucket, recycling, landfill, compost and food donations.

Follow Collection Schedule and Plan

- Make the collection process easy.
 - Adjust the schedule/plan as necessary.
- Rinse out bins to eliminate odor.
 - Wash the bins lightly with water and eco-safe cleaner.
 - Place the bins outside to air dry with the lid open.

Conduct an Awareness Campaign

- Spread the word and get everyone on board.
- Promote the recycling program in the same week that the bins and signs are placed.
- Conduct classroom visits or an assembly sharing the program.
 - Create a game by challenging students to determine which items are trash and which are recyclable. Provide prizes.
- Conduct a poster contest.
 - Challenge students to create posters that teach which items are trash and which are recyclable, why recycling is important and the importance of conserving resources.
 - Hang posters near the recycling bins and vending machines.
- Keep reinforcing the message for a few weeks at the beginning of the launch.
- Redo the campaign at the beginning of each school year.

Track Progress

- Keep a log of your progress!
 - How many bags of recycling and compost were created?
 - How many fewer garbage dumpsters or bags were created?
 - Track the weight (ask the Generation Earth Teacher Facilitator for help calculating the weight using number of bags or bins full).
- Create a chart to track your results.
 - Display the results where everyone can see.
- Keep track of areas/bins that are not working.
 - Contaminated bins with trash or trash cans that have a lot of recyclables.
 - Make adjustments to location and/or signage.

Reward and Recognize

- Organize a school-wide recycling contest.
- Promote the contest timeline, reward, rules and reason.
- Ask local businesses for prize donations.
- Check with your Generation Earth Coordinator about the possibility of presenting your project at the youth summit.
- Submit a story about your project to the local newspaper. Submit your results weekly/monthly to Generation Earth and your school principal.
- Invite school district, city, or state public officials to attend a recognition ceremony.
- Tell the Generation Earth staff about your completed projects! Take pictures and tell us your project's story.

EVALUATION

Once students have their recycling program running, have them 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:

- E-Waste Collection Event
- Composting
- Community Swap
- Textile Recycling Event
- Food Rescue



RESOURCES

Recycling Information

- California State: calrecycle.ca.gov
- Los Angeles County: cleanla.com

Grants/Funding

- U.S. Environmental Protection Agency (EPA): epa.gov/education/grants

Partners

- U.S. Environmental Protection Agency (EPA): epa.gov/education
- California Regional Environmental Education Community (CREEC) Network: creec.org
- Los Angeles Conservation Corps assists schools and teachers with implementing programs on their campuses: lacorps.org

Signage

- museprintables.com/download/sign/please-recycle/

Alternative Project Options

- Terracycle: Collect normally unrecyclable packaging and other items such as markers, chip bags and granola bar wrappers to be recycled or upcycled into new products.
— Set up an account and follow the steps at terracycle.com
- Planet Green Ink Cartridge, Batteries and Portable E-waste Recycling: www.planetgreenrecycle.com/pages/start-fundraising
— Raise funds by collecting and mailing in e-waste and used ink cartridges.
- Re-Book It: Used book donation through The Last Bookstore.
— Raises funds through the sale of each book for libraries, charities, hospitals and schools.
877-877-4080 or rebookit.org/about



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