Los Angeles County Campus Waste Reduction and Recycling Toolkit

The State of California is committed to waste reduction and recycling. Los Angeles County prides itself in being an environmental leader within the state by promoting responsible management of resources rather than disposal. Your campus is invited to help the County and State meet or exceed waste reduction and recycling goals, ensure compliance with important legislation, all while creating a strong campus community.

Landfill disposal is expensive...not just for your school or the school district, but for the environment. Landfills are a leading contributor of greenhouse gas emissions. By increasing recycling of paper, plastics, metals and organic materials, we can remove these items from the landfill and decrease the amount of new materials that need to be mined, manufactured, and transported.

The youth of today are interested in taking actions to create more sustainable campus communities and are seeking careers in sustainability at exponentially growing rates. There has never been a more rewarding time to create a sustainable school campus, help meet state and local regulations, and prepare your student body for a growing job market. This Five-Step Process provides resources for you to improve the waste reduction and recycling programs on your campus.

FIVE STEPS TO WASTE REDUCTION AND RECYCLING ON YOUR CAMPUS

Step One: Understand State and Local Waste Policies

The State of California has adopted many policies and mandates that require municipalities, businesses, institutions, and residents to reduce the amount of waste sent to landfill and incineration. Here's a brief overview of the state laws¹ that impact disposal on your campus...

- Assembly Bill (AB) 341: <u>Mandatory Commercial Recycling Law</u>
 Schools that generate four (4) cubic yards or more of trash (solid waste) per week must arrange for recycling services.
- Senate Bill (SB) 1383: <u>Short-Lived Climate Pollutant Reduction Strategy</u> Schools must arrange for organic waste recycling services, recover, and donate surplus edible food that would otherwise be disposed of.
- Assembly Bill (AB) 827: <u>Solid Waste, Commercial and Organic Waste, and Recycling Bins</u>
 Schools must provide recycling and organic waste recycling containers in areas where recyclables and/or organic waste is generated. Containers must be:
 - Visible
 - Easily accessible
 - Adjacent to each trash bin
 - Clearly marked with signage
- Assembly Bill (AB) 1276: <u>Reduction of Waste from Single-Use Articles and Expanded</u> Polystyrene Products

School cafeterias located in County unincorporated areas may not provide single-use disposable food service ware (such as trays, plates, cups, "clamshells" and other food containers) with ready-to-eat food, unless the single-use items are either compostable or recyclable after use. Single-use food accessories (such as cutlery, napkins, straws, and condiments) should never

¹More Information on These State Laws

be bundled or packaged together, and condiments may only be provided in reusable containers, bulk and/or self-serve dispensers, or non-plastic packaging.

In addition to the state laws, Los Angeles County has the following policies and ordinances:

• Ordinance 2021-0059: Mandatory Organic Waste Disposal Reduction Ordinance:

- All businesses and residents in the County unincorporated communities must subscribe to organic waste collection services.
- Self-hauling is allowed under certain circumstances.

• Purchase of Environmentally Preferable Products (Green Purchasing):

- Institute practices that reduce waste by increasing product efficiency and effectiveness.
- Purchase products that minimize environmental impacts, toxics, pollution, and hazards to worker and community safely to the greatest extent practicable.
- Purchase products that include recycled content, are durable and long-lasting, conserve energy and water, use agricultural fibers and residues, reduce greenhouse gas emissions, use unbleached or chlorine free manufacturing processes, and use wood from sustainable harvested forests.

Ordinance 2010-0059: Carryout Bags:

- No store shall provide to any customer a plastic carryout bag.
- All stores shall provide or make available to a customer only recyclable paper carryout bags or reusable bags for the purpose of carrying away goods.
- Any store that provides a recyclable paper carryout bag to a customer must charge the customer 10 cents (\$0.10) for each bag provided.
- All stores must provide reusable bags to customers, either for sale or at no charge.

Step Two: Identify Your Team

Campus compliance takes commitment to care about the planet and your community. Schools that undergo waste reduction and recycling programs by focusing on both environmental benefits and community building find that the program benefits far exceed compliance with legislative requirements. Career and college bound students enjoy the creative problem-solving process and being a part of a sustainable community. Many students gain skills and experience that support college planning and future careers. Building a strong team has ripple effects throughout the school and the local community.

Your Waste Reduction and Recycling Team will include:

- Project Leader
- Faculty/Administration Contact
- Facilities/Custodial Leader
- Foodservice Leader
- Outreach and Education Specialist
- Student Body Leader
- Implementation Team of students and staff to rollout and support new programs

Project Leader: Project leaders will coordinate team activities and communicate the project purpose, resources needed, and provide regular updates across different departments. Your project leader should be someone who can stay involved with the project for at least one year, will build strong relationships, and has excellent organization and communication skills.

Faculty/Administration Contact: The person who is responsible for facilities management, coordinating custodial contacts, and data collection for state compliance for your school should definitely be on your team. This person does not need to attend every meeting, but their involvement will be essential throughout the project. Note: You will need approval from administration for the formation of the team and project.

Facilities/Custodial Leader: Custodians are both the implementers and watchdogs for waste management programs. Be sure to listen to their concerns and collaborate on ensuring that the program is "doable".

Foodservice Leader: The separation of organic waste (including food waste) from the existing waste stream is a significant change for most campuses. Foodservice staff will need to modify workflow to collect back-of-house food waste (vegetable cuttings, bones, fruit stems and seeds) as well as coordinate with dining areas to collect post-consumer food waste. Food service staff will also be involved in watching inventory to avoid food spoilage and participate in any programs to donate excess edible food.

Outreach and Education Specialist: This may be your project or student body leader or a separate individual. The Outreach and Education Specialist will be responsible for signage, communications, and training. They should be well-versed in best practices from programs on similar campuses.

Student Body Leader: Students will provide valuable information on what is working and what's not as well as how the program is perceived. They will be key players assisting with implementation, distributing new bins and signs, providing training programs and helping students and staff learn new sorting rules.

Step Three: Assess Your Current Waste Stream and Collection Program

In California, schools dispose of over 500,000 tons of waste each year. Much of this waste *could* be reduced, reused, or recycled...but very little of it actually is.

This chart shows the type of waste generally disposed of in schools and their percent of the waste stream.²

Material Type	Percent (%) of Waste Stream
Electronics	0.1%
Glass	0.5%
Household Hazardous Waste	0.1%
Inerts and Other	2.8%
Metal	1.4%
Mixed Residue	0.2%
Organics	50.8%
Paper	31.4%
Plastic	12.7%

To assess your current waste stream and collection program, conduct a waste audit, collaborate with campus stakeholders, and contact your school's waste hauler.

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² https://calrecycle.ca.gov/recycle/schools/composition/

A) Conduct a Campus Waste Audit

1. Identify Generation Points for Waste

A campus site map and building floor plan are instrumental in recording current and proposed generation and collection points. If you cannot obtain an official plan, sketch one out as you go.

Typical waste by area includes:

- Classroom: paper, school supplies, snack wrappers, water bottles
- Foodservice area: food waste, bottles and cans, compostable food soiled paper, wrappers and other items to be landfilled, edible food
- Entryway and school grounds: bottles, cans, coffee cups, foodservice containers
- Dorms: furniture, electronics, batteries, e-waste, textiles, plus all the above

2. Review Collection Systems

- Do the collection systems meet the Custodial and Kitchen Training Overview³ quidelines?
 - Collection system is near generation point.
 - Provide collection for three waste types (organic waste, recycling, landfill) near each other. If a bin is missing, there is likely to be contamination.
 - Bins should be color coded with gray/black for trash, blue for recycling, and green for organic waste
 - Check with your service provider if container liners should be used and if so, the type for each bin.
 - Signage should be at eye-level and visual. Graphics are better than words. The person discarding materials should know which bin to use within a few seconds and as they approach the bin they are not required to stop and read signage once at the bin.
 - Proper storage is necessary for food donation. Follow guidelines and ensure tracking is completed.
- Is there contamination?
 - Contamination includes any item that ends up in the wrong bin. Whether it's recyclable items in the landfill bin or food soiled paper in the recycling bin, you'll want to note its occurrence and identify causes and ways to resolve in the future.
- Are there opportunities to save costs? Are the bins full or partially empty at pickup?
 Are cardboard boxes being broken down or are you paying to pick up air? There may
 be opportunities to decrease service and save costs or a need to increase service.
 Obtain invoices for current services. You will want to note the size of the bins.
- Throughout the audit, ask yourself "Why is this item in the waste bin?" Could it be replaced with a reusable option? Is there a compostable or recyclable alternative? Could someone else use this item instead of throwing it away?

B) Collaborate with Stakeholders

Touring the school with department heads, students who use the area, teachers, staff, and/or custodians will provide critical information. You'll learn why some bins are full, others are often

³ Custodial and Kitchen Training Overview can be found in the YES Toolkit website under the Higher Education tab.

contaminated, what challenges your community is experiencing and what's really needed to improve the system as a whole.

C) Contact Your Waste Hauler

Once you have an estimate of how much trash, recyclables, and organic waste are generated by your school, you can work with your waste hauler to set up or revise contracted services. Ask your hauler to explain what services and benefits are provided as part of the collection agreement. Oftentimes, the hauler provides complimentary audits, signage, collection containers, and training.

Step Four: Implementation

Implementation generally will include identifying program needs, educating the community, distributing bins, and monitoring the system.

A) Identifying Program Needs

During Step 3, you will have identified shortcomings in the current system. You may find that the community does not understand how to sort materials or that the custodial staff does not have the time to collect additional materials. You'll likely determine new collection bins are needed in some locations and identify where signage is insufficient. You may even find areas where reusables can replace disposables and other ways to eliminate an item from the waste entirely. Work with your team to identify how to solve problems and develop your implementation timeline and budget.

B) Educating the Community

All programs require ongoing education. You'll need to ensure the entire community understands how to manage the waste generated. Education generally falls into two distinct categories:

- Program Objectives Education: Help build understanding and motivation to actively
 participate by explaining the importance of reduction and recycling through assemblies,
 newsletters, onboarding training, staff meetings, posters, videos, social media and other
 communication channels. Be sure to include details on the program in any contracts with
 outside vendors who provide foodservice at school events.
- **Just-in-time Education:** Help the community make the right decisions at the time of disposal through:
 - Bin Location
 - Bin Design
 - Proper signage
 - Possibly "helpers" at waste stations to assist individuals in building proper disposal habits

C) Distributing Bins

You have likely identified new waste types (organic waste, batteries, e-waste, etc.) and a need for new containers or container locations. When you are distributing new bins, be sure to include signage and information for those using the bins if there have been changes, such as the need to separate food waste from other waste.

D) Monitoring the System

The most successful programs maintain leadership and oversight on an on-going basis. After the initial rollout of new programs, continue to monitor and address new issues that come up and celebrate the success of the program. Use the Bin Monitoring Form⁴ to continue monitoring bins. Use data collected to update training, outreach, signage, or system design.

Step Five: Continually Improve and Celebrate

There are many factors to consider in measuring success: waste diverted from landfill, source reduction by switching to reusables, cost savings from rightsizing, and improvements in contamination. Many schools also find success when students who participated in the program are able to use their skills and experience in other volunteer and professional positions. Sharing these stories can help motivate future student teams and connect on-campus project work to future careers.

Other ways to ensure the program continues to improve:

- Maintain the quarterly team meetings.
- Establish a process for updating education. Replace signs as they become damaged or as the program changes.
- Follow up on information received from your waste hauler on contamination and recycling reports.
- Meet with administration annually to reset goals and establish priorities with each new school year.
- Continue to monitor and track progress. Let the community know of successes like reduced contamination, lower bills, greenhouse gas emission reductions, and creative solutions to waste problems.

RESOURCES

School Teams for Waste Reduction and Recycling

- Tips for Starting a Green Team at your School: http://www.greenschools.net/article.php-id=361.html (Tips for Starting Your Green Team, n.d.)
- <u>Sample agendas</u> to get your Green Team focused on waste reduction, recycling and organic waste collection at your school.

Assess Your Waste Stream:

- Detailed guide on conducting a full campus waste audit.
- Sample Waste Audit Report Template
- CalRecycle Waste Assessment and Audit Resources

Implement Successful Programs

- Recorded webinars, templates for education and signage, activities and lots more resources.
- Waste less in the cafeteria.

County Programs

Generation Earth Program (Grades 6-12)

Arlette Morales (626) 458-3562 armorales@dpw.lacounty.gov

⁴ Bin Monitoring Template can be found in the YES Toolkit website under the Higher Education tab.

School Garden Program

Beverly Jones (626) 458-3516 SchoolGarden@pw.lacounty.gov

Fight Food Waste LA

FightFoodWasteLA@pw.lacounty.gov

Food Donation & Recovery Outreach Program (Food DROP)

Priscilla Deng (626) 458-2518 FoodDROPLA@pw.lacounty.gov

Los Angeles County Food Redistribution Initiative (LACFRI)

County of Los Angeles Department of Public Health – Environmental Health (888) 700-9995

For more information about these programs, visit: https://dpw.lacounty.gov/epd/sbr/schools-county-programs.aspx or to request assistance with implementing your school recycling program, contact the Los Angeles County Public Works, Environmental Programs Division at (888) CLEAN LA.

Model School Programs

There are a variety of model programs for you to learn from that may be something your institution can implement. See how other institutions are recycling by visiting https://dpw.lacounty.gov/epd/sbr/schools-model-programs.aspx.

Clean LA

Clean LA offers a variety of information on ways to reduce, reuse, and recycle, as well as information on household hazardous and electronic waste collection events. For more information, visit www.888cleanla.com.

The California Education and the Environment Initiative (EEI) Curriculum

The K-12 EEI Curriculum uses the environment as a context to help students learn science and history-social science. The curriculum is a model for educators to demonstrate how to integrate environmental literacy into classroom instruction. For more information, visit https://www.californiaeei.org/Curriculum/