



RECYCLING

A Guide for South Carolina Schools

FIVE STEPS for Creating a Successful School Recycling Program



SC DEPARTMENT of
**ENVIRONMENTAL
SERVICES**

Office of
Solid Waste Reduction & Recycling

1-800-768-7348

des.sc.gov/recycle

Why recycle at school?

In South Carolina, there are more than **1,260 schools**. That's about **50,000 teachers** and **760,000 students** generating **significant amounts of waste** – the vast majority of which could be **prevented, recycled or composted**.

Let's consider some of the benefits of school recycling programs. School recycling programs can:

- **Reduce a school or school district's environmental impact.**
 - **Recycling conserves natural resources, reduces litter, saves energy** in the manufacturing of new products **and prevents pollution** caused by the extraction and processing of raw material.
 - **Recycling reduces the need to build landfills.**
 - **Recycling decreases greenhouse gas emissions.**
- **Provide a learning experience for everyone.**
 - **Students, teachers, staff, administration and parents can learn the basics of recycling, sustainability and environmental stewardship.**
 - **Recycling programs offer hands-on, real-life, project-based learning opportunities** in science, technology, engineering and mathematics (STEM).
 - **Recycling at schools allows for service-learning opportunities** that provide students with valuable experience volunteering and learning skills such as communications, team-building, critical thinking and decision making.
 - **Recycling reinforces environmental lessons taught in the classroom.** Throwing away recyclables contradicts that positive message. Students may wonder if recycling is so important, why aren't we doing it?

Did you know?

Recycling is a series of three steps including collection of recyclable material, processing and remanufacturing material into new items, and buying recycled products. Composting is a natural form of recycling by turning food waste and other organics into a rich, soil amendment and then using it in the garden.



- **Make a significant contribution to South Carolina’s recycling efforts while helping the state’s economy.**
 - **Recycling creates jobs, generates income and produces tax revenue** by turning waste into valuable raw material.
 - **Recycling is an essential part of the nation’s and South Carolina’s economy.** The state’s recycling industry, which is comprised of more than 500 companies, is responsible for more than 22,000 jobs and has an annual \$1.3 billion economic impact.

Schools are in a unique position to demonstrate **environmental responsibility** and **leadership** in their community.

Why recycle? **Why not?**

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STEP 1: Build a recycling team.

Organize a team to design, implement and maintain the school's recycling program.

- **Recruit teachers, custodial and cafeteria staff, students and parent-teacher organizations.**
- **The team should include at least one person from administration.** This representative should be familiar with the school's and district's overall operation and help build and/or secure support for this initiative.
- **The person(s) responsible for specific tasks should be identified.**
- **Consider partnerships with community organizations and local businesses.**
- **The team should get advice from the city or county recycling coordinator.** To find your local recycling coordinator, visit des.sc.gov/recycleheresc.

Responsibilities for Team Members

If possible, involve all of the above individuals or groups from the beginning. Each member will have special knowledge that will be important in developing a successful school recycling program. Team members may be given the following assignments:

- **Securing support** from school or school district officials to begin a recycling program;
- **Gathering and analyzing information** relevant to the design and implementation of the program;
- **Working with school or school district officials** to set goals for the program;
- **Overseeing day-to-day operations;**
- **Promoting the program** to staff and students on ways to participate;
- **Monitoring progress;** and
- **Reporting to school or district officials** about program results.

Pick a Leader

This person should have a personal interest in and enthusiasm for recycling as well as good communication and organizational skills. The time required of this person may be considerable at first, but should lessen as the program grows.





Students need to be involved.

A school recycling program is a hands-on, interdisciplinary lesson that educates students about the environment, personal responsibility, community action and solid waste management. It is important for students to recycle and help run the program from the beginning. Students can:

- **Empty the bins and containers;**
- **Monitor recycling bins to reduce contamination;** and
- **Educate other students about the program and encourage participation.** See “STEP 4: Promote the program.”

STEP 2: Know your trash.

Conduct a waste assessment to **determine the amount, type and origin of the waste – and potential recyclables** – the school is producing.

- **Identify recycling opportunities throughout the school.** (Visit classrooms, cafeteria, vending areas, library, gym, athletic fields, offices, restrooms and teachers’ lounges to see the types of trash produced at each location.
- **Identify material that could be recycled.** The most common items recycled at schools are aluminum and steel cans, plastic bottles, paper and cardboard.
- **Provide potential justification for adding recycling or reducing waste collection services.**



Did you know?
 Adding recycling should reduce waste disposal costs. The less waste you throw away, the less garbage pickups you'll need.

Three-Step Waste Assessment

STEP 1: Establish your waste baseline.

1. How many dumpsters for non-recyclables does your school have?
 1-2 3-4 5-6 7+
2. How often are they emptied?
 Daily Twice a week Weekly
3. On average, how full is each dumpster when it is emptied?

DUMPSTER 1	DUMPSTER 2	DUMPSTER 3
<input type="checkbox"/> Half full	<input type="checkbox"/> Half full	<input type="checkbox"/> Half full
<input type="checkbox"/> Almost full	<input type="checkbox"/> Almost full	<input type="checkbox"/> Almost full
<input type="checkbox"/> Full	<input type="checkbox"/> Full	<input type="checkbox"/> Full
<input type="checkbox"/> Overflowing	<input type="checkbox"/> Overflowing	<input type="checkbox"/> Overflowing

4. Who empties the dumpsters?
 Local Government (city, county)
 Private hauler
 Other: _____

5. What does your school pay for trash disposal services?
 Monthly: _____
 Annually: _____
6. If figures are available from billing statements, how much garbage is thrown away by your school (tons or cubic yards)?
 Monthly: _____
 Annually: _____
7. Where is the trash taken or where does it end up? Be specific.

STEP 2: Complete a simple or full waste assessment.

Simple waste assessments can be done visually. Full waste assessments require a scale for actual weights.

RECYCLABLE ITEMS	SIMPLE ESTIMATED VISUAL		OR	FULL ACTUAL WEIGHT	
	VOLUME (gallons)	% VOLUME OF TOTAL		WEIGHT (pounds)	% WEIGHT OF TOTAL
RECYCLABLES					
Mixed Paper, Newspaper and Magazines			OR		
Cardboard					
Aluminum and Steel Cans					
Plastic Bottles					
Compostable Food Waste					
Other					
NON-RECYCLABLES (TRASH)					
Plastic (e.g., baggies, wrappers, straws, sporks)			OR		
Non-Compostable Food Waste					
Other					
OTHER (CHECK WITH YOUR HAULER.)					
Glass Jars and Bottles			OR		
Paper (e.g., napkins, paper towels, contaminated)					
Foil (e.g., aluminum pans, tin foil)					
Milk or Juice Cartons					
Other					
TOTALS					

STEP 3: Calculate the amount of waste and recyclables your school generates.

MATERIALS	WEIGHT OR ESTIMATED VOLUME	DAYS AT SCHOOL PER MONTH	MONTHLY TOTAL PER CLASS		NUMBER OF CLASSROOMS		MONTHLY TOTAL FOR THE SCHOOL
RECYCLABLES		X 20 =		X		=	
NON-RECYCLABLES (TRASH)		X 20 =		X		=	
OTHER		X 20 =		X		=	
TOTAL FOR ALL		X 20 =		X		=	

STEP 3: Develop a plan.

Based on the information collected in the waste assessment, **the team should develop the school recycling plan.**

The plan should address the **material that can be recycled, collection and pickup** of the material, **budget and potential funding, program goals** and **promotion.**

- **What can be recycled?** There has to be a market – a place for the recyclables to go – or the program will not work. Check to see what your hauler accepts or what is recycled in your community.
- **How will material be collected?** The collection process – which includes how the material is moved from collection points to the collector – should answer the following questions.
 - **How many and what type of containers are needed?** See “Choosing Recycling Containers” on page 9.
 - **Where will the containers be placed?** The first rule: Twin the Bin. Recycling containers always should be placed next to trash cans or copy machines. This makes recycling convenient. See “Collection Points” on page 9 for more information.
 - **How will containers be emptied?** This can be done by students, teachers, custodial staff or a combination of the three.
 - **If needed, is indoor space available to store the collected material?** This may not be necessary if the material can be taken to an outside container.
- **How will the collected material be picked up from school?** There are several options to consider.
 - **Ask administration if recycling is in or can be added to the school’s or school district’s waste hauling contract.** The contract may be able to be adjusted. This includes outdoor containers for your hauler to pickup the material.
 - **Check with your county recycling coordinator to determine what services are available to schools.** The recycling coordinator also will be able to provide information on potential commercial recycling haulers and businesses.
 - **Determine if staff or volunteers are willing to drop recyclables at a community recycling center.** This is the least preferred option and must be approved by the city or county.



Choosing Recycling Containers

Containers are required to collect material, move material from collection points to pick-up areas and store material while waiting for final pickup. Different types of containers meet those different needs. Smaller bins or containers (12-to-18 gallon) may be used in classrooms or offices. Larger containers (30-to-60 gallon) will work near copy machines. Roll-off containers with wheels (see below) may be used to collect and move material.

Here are two basic factors to consider.

- **The size of the containers needs to be appropriate.** Consider who is emptying the containers, the space available and time between collections.
- **Some containers should have lids with openings for specific items.**
- **Some containers should be leak proof.**



TIP: Twin the bin.

Always place recycling bins next to trash cans to make recycling convenient.

Collection Points

- Classrooms
- Cafeterias
- Break areas
- Offices
- Copy rooms
- Libraries
- Gyms
- Hallways and other high-traffic areas

TIP: Bins on a Budget

Converted waste baskets or small cardboard boxes with signs can be used as recycling containers. Let students decorate them.

Beyond the Collection System

Here are additional key factors in developing a plan.

- **Develop a budget.** Evaluate the availability of resources at the school or district. Potential start-up costs may include containers, signs and collection services.
- **Look for potential funding.** Consider partnerships with local businesses and organizations to offset costs. Consider holding fundraisers. Look for national, state and local grant funding. The S.C. Department of Environmental Services (SCDES) offers grant funding to schools. Visit des.sc.gov/recycle to learn more. PalmettoPride also offers school grants. Please visit palmettopride.org for details.
- **Set goals.** Make sure the goals can be tracked and measured. Review the goals once a year.
- **Educate everyone.** See "STEP 4: Promote the program."



STEP 4: Promote the program.

The success of the program depends on how well **everyone understands and participates**. Here are some basic recommendations.

- **Make presentations at school assemblies and in individual classrooms.** Tell students, teachers, administrators and custodial staff about the program, what is accepted, collection locations, how the program will work and the benefits of recycling. Advertise on the school's in-house television channel, website and handbook.
- **Hold a school-wide kickoff event.**
- **Make announcements.**
- **Make and hang signs, posters and banners throughout the school.** Write stories for the school newspaper.
- **Share with families.** Speak about it at school orientations and parent/teacher meetings or send home announcements.
- **Have guest speakers visit the school.** Speakers could include your local recycling coordinator or solid waste director.
- **Take advantage of Earth Day and America Recycles Day.** April 22 and November 15 are great times to reinforce the recycling message.



TIP: Make instructions and signs clear.

Use graphics and text to label recycling bins and containers. Each container should be clearly marked indicating what item(s) should be placed inside. You may want to consider bilingual signs.



STEP 5: Begin recycling.

The time is finally here. **Start recycling.** Closely monitor for problems (e.g., right material in the containers, underuse or overuse of containers, messy collection points) during the first few weeks of the program. Once any kinks are worked out, set up a schedule to monitor and evaluate your program. Here are some basic recommendations.

- **Keep records.** From the beginning, track how many pounds of material are recycled to help evaluate the program's performance and measure progress. Records also will help determine any cost savings (from avoided disposal costs) as well as possible revenue generated (from the sale of recyclables).
- **Share the results.** Promoting how much was recycled and the economic benefits may encourage increased participation in the program and continued support from administration.
- **Always look for improvement.** Ask for feedback from students, faculty and staff about the program. What is working? What isn't? Be flexible. Make changes as necessary.
- **Keep it fresh.** Look for new ways to promote the program. Make it fun. Create a recycling website. Create public service announcements. Motivate students with contests, classroom rewards and personal recognition. Consider setting up competition among schools, classrooms or grades. Send press releases to local newspapers or television stations to encourage the community to participate in the local recycling program. Gain recognition. Nominate your school through SCDES' Champions of the Environment or Take Action SC programs.



Resources & Contact Information

SCDES RESOURCES

Office of Solid Waste Reduction and Recycling

Telephone 1-800-768-7348

Website des.sc.gov/recycle

Recycling Education Grant Program

Email swgrants@des.sc.gov

Website des.sc.gov/k12recyclinggrant

Champions of the Environment

Website des.sc.gov/champions

Take Action SC (K-12 curriculum supplement including recycling lessons)

Website takeactionsc.org

Don't Waste Food SC

Website des.sc.gov/dwfsc

OTHER SOUTH CAROLINA RESOURCES

SCDE Office of Health and Nutrition

Website ed.sc.gov/districts-schools/nutrition

Green Steps Schools

Website greenstepsschools.com

NATIONAL RESOURCES

EPA

Website epa.gov/recycle/reduce-reuse-recycle-resources-students-and-educators

PepsiCo Recycle Rally

Website pepsicorecycling.com/RecycleRally

Captain Planet Foundation

Website captainplanetfoundation.org



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