# Steps for Organizing a

# Recycling

# Program

A guide to help you begin or improve recycling at your school





This Guide Provided by: Alabama Recycling Coalition alrecyclingcoalition.org

# **Benefits of Recycling:**

Recycling is an easy and important way for individuals, households, businesses, and schools to conserve natural resources, save energy, reduce pollution, conserve landfill space – and save money. Recyclables are used to valuable raw materials, which benefit your local and Alabama's statewide recycling industry. Recycling creates 4 jobs for every one job created in the waste and disposal industries and strengthens the economy in Alabama.

Did you know: The Alabama Recycling Industry employs nearly 11,000 people?

Recycling 10% more would create over 1,400 jobs - \$66 million in personal income and over \$3 million in annual tax revenue!

# Importance of School Recycling

Up to 60% of materials in Alabama's landfills are recyclable, and 40% of that material is paper. Paper is one of the largest segments of most school's waste, followed by cardboard and food. Implementing a school-wide recycling program diverts valuable materials, like paper and cardboard, as well as other recyclable materials out of the dumpster, and into the recycling stream.

The Result: The schools save money by reducing their dumpster haul (disposal) fees, while effectively reducing the amount of total waste going to the local landfill.



A school recycling program communicates the value of recycling and environmental stewardship among students, teachers, staff, administration, and parents. Students gain practical, hands-on learning experiences and waste reduction and gain a sense of leadership and pride for their school and environment.



# Waste Generation / Assessment Calculator

Waste Container Loc	Waste Container Location(s):					
Size of Waste Container(s):						
Number of Waste Container(s):						
Total container volume (volume size x number of containers):						
Frequency of Waste	Collection (per container):					
Dumpster # 1:						
1x per week		4x per week				
2x per week		Daily				
3x per week		Other				
Dumpster # 2:						
1x per week		4x per week				
2x per week		Daily				
3x per week		Other				
<u>Dumpster # 3:</u>						
1x per week		4x per week				
2x per week		Daily				
3x per week		Other				

Collection Frequency (services/week) = \_\_\_\_\_



<b>Percent</b>	Full	when	<b>Emptied</b>
----------------	------	------	----------------

Dumpster #1: \_\_\_\_\_

Dumpster #2: \_\_\_\_\_

Dumpster #3: \_\_\_\_\_

Avg. % full when emptied: (quarter, half, three-quarters, full)

# CALCULATE YOUR SCHOOL'S MONTHLY WASTE GENERATION

Determine (A), (B), and (C):

### Calculation:

Total yards of waste (A) x Collection frequency (B) x Percentage (%) full when emptied (C)  $\times$  4.33 = Estimated monthly waste generation

# Example:

4 cubic yard dumpster x 2 containers = 8 cubic yards x 2 pickups per week x .90 full x 4.33 = 62 cubic yards of waste generated per month





# **Questions:**

1. Are the waste containers emptied on a regularly scheduled time or on call?

Scheduled\_\_\_\_ On Call \_\_\_\_

2. How is the school charged for garbage collection? (Weight, number of containers, frequency of collections, etc.

3. Where does the hauler take the garbage?

**Answer: the landfill** 









# **Local Recycling Programs**

Does your city have a curbside or drop off recycling collection program? Not sure? Contact the Alabama Recycling Coalition and we can help you find out.

Many Alabama cities offer specific recycling containers for schools – making it easier than ever to start and maintain a successful recycling program.

Being familiar with the weekly and monthly waste generation at your school will help our crew determine your specific needs.











# Steps for Starting a School Recycling Program

#### 1. Identify all Materials School is Currently Disposing

a. Identify the Recyclable Materials (office paper, newspaper/magazines, cardboard, plastics #1, plastics #2, aluminum cans, steel tin "soup" cans, and electronics)

#### 2. Determine Baseline (school disposal frequency, fees) – see more on pg

- a. Meet with school administrators to determine the weekly/monthly disposal fees from your school.
- b. How many waste containers (dumpsters) does your school have?
- c. How often are the dumpsters serviced (emptied)?
- d. How full are the dumpsters when they are serviced, and what are they full of? (Mostly food, mostly cardboard/recyclables, etc.)

#### 3. Assemble a Team

- a. This team will serve as your school's "green team" or "environmental ambassadors" to the rest of the faculty, staff and student body.
- b. This team will be responsible for collecting and sorting recyclable items once the program is in place.
- c. This team will continue to monitor the garbage dumpsters to measure differences (reduction) in overall waste output. Successful recycling programs see marked reduction in waste output.

#### 4. Meet with the local hauler

- Organize the recycling program (sorting and collection) of recyclable materials
- b. Determine what items will be recycled at your school most haulers recommend the following: office paper, newspaper/magazines, cardboard, plastics #1, plastics #2, aluminum cans, and steel tin "soup" cans
- c. Determine how many classroom bins are needed for you school. Typically one 18-gallon bin per classroom and 2 per large office space is sufficient. The local hauler recycling crew can help you determine exact numbers.
- d. Larger containers for hallway and large assembly rooms may be purchased by the school by outside vendors at the school's expense. (See educational resources for more information.)



#### 5. Communicate and Educate

- a. Market this program to all students, faculty and staff
- b. Educate the entire housekeeping staff on the new recycling program to ensure they know to recycle all office paper, newspaper/magazines, cardboard, plastics #1, plastics #2, aluminum cans, and steel tin "soup" cans
- c. Educate the cafeteria manager and cafeteria staff about the new recycling to ensure they know to recycle. Typical recyclable items found in the cafeteria kitchen include: cardboard boxes, plastics #1 and #2 (drink containers and milk jugs), aluminum cans, and steel tin "soup" cans.

#### 6. Keep Records – Evaluate and Expand

- a. Your local hauler can help you estimate how many pounds (or tons) of materials is recycled at the school. These records can help you and your students devise a cost savings chart – which tracks the overall decrease in waste output over time.
- b. Use your baseline information to compare and evaluate your program over time.
- c. Review the recycling program and goals at least once a year, but once a semester is ideal. Provide a survey to faculty, staff and students to help evaluate the success of the program and solicit ideas for improvement.
- d. Once you determine the recycling program is operating effectively, investigate additional ways to reduce school waste, reuse instead of buying new, and expand the recycling program as needed (drop-off electronics for recycling, glass drop-off recycling program, compost organic waste, etc.)

#### 7. Incentivize and Reward

- a. Everyone wins when a school recycles, but be sure to recognize certain grades and classrooms that excel.
- b. Celebrate with events like field trips (local recycling plant, landfill, science museum), school parties, t-shirts, and other promotional items.
- c. Adopt-a-School Partners are always willing to help where they can.



REGYCLING TIPS
EDUCATE ALL FACULTY, STAFF, AND STUDENTS



# **Recycling Facts**

# **Paper**

Paper can account for as much as 60% of school waste.

Manufacturing one ton of office paper with recycled paper stock can save between 3,000 and 4,000 kilowatt hours over the save ton made with virgin wood products.

Preventing one ton of paper waste saves between 15 and 17 mature trees.



Recycling one ton of paper saves enough energy to heat an average home for six months.

The greenhouse gas emission reductions from recycling 10 tons of mixed paper are comparable to preventing the use of 94 barrels of crude oil.

Recycled paper supplies 37% of the raw materials used to make newspaper products in the U.S. Without recycling, this material would come from trees.

Americans use more than 67 million tons of paper per year, or about 580 pounds per person.

#### Cardboard

Every year, more than 900 million trees are cut down to provide raw materials for American paper and pulp mills.

Recycling 1 ton of cardboard saves 9 cubic yards of landfill space and 46 gallons of oil

Cardboard and paper make up 41% of the municipal solid waste stream.



Recycling cardboard creates less sulfur dioxide emissions into the atmosphere than the processing of pulp from trees.



#### **Aluminum and Plastics**

It takes 95% less energy to recycle aluminum than it does to make it from raw materials.

Recycling one aluminum beverage can saves enough energy to run a 100-watt bulb for 20 hours, a computer for 3 hours, or a TV for 2 hours.



Recycling 10 tons of aluminum prevents the same amount of greenhouse gas emissions as preserving more than 101 acres of forest from deforestation.



Producing new plastic from recycled material uses only twothirds as much energy as manufacturing it from raw materials.

Five 2-liter recycled PET bottles produce enough fiberfill to make a ski jacket.

Recycling 10 tons of PET plastic prevents the same amount of greenhouse gas emissions as removing more than 3 cars from the road for a year.

### Steel

Recycling steel and tin cans saves 60-75% of the energy used to the produce them from raw materials.

According to the Steel Recycling Institute, steel recycling in the United States saves the amount of energy required to power about one-fifth of the American households for one year.

One ton of recycled steel saves the energy equivalent of 3.6 barrels of oil and 1.5 tons of iron ore over the production of new steel.

Recycling 10 tons of steel prevents the same amount of greenhouse gas emissions as growing 470 tree seedlings for 10 years.



# **Educational Resources**

www.aeconline.org - Alabama Environmental Council

www.keepalabamabeautiful.org - Keep Alabama Beautiful

www.epa.gov/education - activities, games and information for kids

www.epa.gov/students - student and teacher resources on environmental topics

www.recycleguys.org – resource for teachers and kids

www.earth911.com - games, activities and resources about the environment

www.myschoolrecycles.com - Office Depot collects ink toner and small electronics and rewards schools

www.plt.org - Project learning tree - environmental education program for teachers

www.greenschools.net - information on how to green your school

www.wastefreelunches.org – waste free lunch program

www.wm.com - Waste Management School Recycling checklists and activities

# Other Recycling Bin Containers for Schools

For specific questions about what bins to purchase (outside of what the City provides), contact your local hauler or City government to learn more about recycling in your area.

www.recyclingbin.com www.rehrigpacific.com www.buschsystems.com www.officedepot.com www.clearstreamrecycling.com

These lists is not exclusive.

Other educational resources and vendors are available





"Uniting and Promoting the Recycling Industry in Alabama" www.alrecyclingcoalition.org