# Starting a School Recycling Program



Prepared by THE GREEN TEAM www.thegreenteam.org

Massachusetts Department of Environmental Protection (MassDEP)
One Winter Street
Boston, MA 02108

http://www.mass.gov/eea/agencies/massdep/

# "Starting a School Recycling Program"

### Introduction

If you are interested in starting a recycling program at your school and you have this toolkit in your hands, you are in luck! This guide will provide you with the basic framework for starting a successful recycling program at your school, from planning, identifying, and implementing a program that fits your needs, to monitoring and promoting your hard work. For additional information, see the Manual for Implementing School Recycling Programs.

There are many benefits associated with establishing a recycling program at your school. Recycling is a great educational opportunity, engaging students in a sustainable behavior that they can take with them outside of the classroom. Recycling saves natural resources and energy by reducing the need to use raw materials to make new products. Recycling extends the life of landfills by sending material to different processing facilities. And recycling is usually less expensive than disposal and can sometimes even bring revenue to your school.

To Start a Recycling Program at Your School:

- 1. Build support for the recycling program
- 2. Evaluate current waste operations and options for the recycling program
- 3. Plan the recycling program
- 4. Implement the recycling program
- 5. Analyze and maintain the recycling program
- 6. Promote the recycling program

# 1. Build Support for the Recycling Program

Identify a Recycling Coordinator for the School Program

To make your school recycling program most successful, a "Recycling Coordinator" should be identified. This person will oversee and facilitate the recycling program, from planning and implementation to monitoring and promotion. It is important to note that this person does not have to be the one to carry out all of the actions outlined in this guide, but should serve as the point of contact and organizer in charge of arranging that all action steps are taken. The Recycling Coordinator will be the driver of the recycling initiative, championing its benefits and ensuring the program is developed effectively. Suggestions for a Recycling Coordinator include: a school administrator; a school staff member, like a teacher, facilities/custodial staff or librarian; an active PTA member; or a local municipal recycling coordinator. It is worth mentioning that successful programs have been implemented where a student took on the role of the Recycling Coordinator. If a student is identified as the Recycling Coordinator for your school's recycling program, then it is essential to take appropriate steps to ensure the program remains sustainable after the student has moved on from your school.

### Build Administrative and Staff Support

Before a recycling program can be developed and implemented at your school, buy-in must occur at the top level of administrators and staff. Depending on who the person is at your school that is driving the effort to establish a recycling program, it may be the responsibility of the Recycling Coordinator to obtain approval and support from stakeholders. At this point, it is a good idea to know if the recycling program will be implemented district-wide, or just at your school. This decision will likely depend on the resources available for your recycling program, but some advantages to implementing the recycling program district-wide include:

- Recycling program will be the same at every school, making it easier for student transition
  - o Collection bins, materials collected, "How-To's" of participation
- Implementing the program district-wide makes it difficult for a single school to choose not to participate
- Your recycling hauler may offer a better service fee if the program is implemented at every school in the district, especially if your trash hauler is also your recycling hauler

Stakeholders that should be in support of the recycling program include: School administrators (when implementing the program district wide, this may include the Superintendent or representatives of the School Board; when implementing the program at one school, this may just be the School Principal); the manager of the custodial or facilities staff; and representatives of the teaching staff (See "Tip for Building Administrative and Staff Support", *Supplemental Information*).

Massachusetts Department of Environmental Protection (MassDEP) offers a <u>technical</u> <u>assistance grant</u> to help school districts with their recycling programs. The deadline for application is in mid-June.

It is important to mention that for your school to be eligible for grant assistance from the MassDEP to implement school recycling, your school district MUST adopt a district-wide school recyclable materials policy that explicitly states your school district's plans to recycle paper, cardboard, bottles and cans. If you plan on applying for grant assistance, your recyclable materials policy should be drafted, agreed upon, and adopted during the process of seeking approval for your recycling program (See "Example Recyclable Materials Policy", *Supplemental Information*).

### Form a Recycling Team

Once a Recycling Coordinator has been identified and the recycling program has received support from necessary stakeholders, the next step is to form a Recycling Team. Suggested stakeholders for the team include: a representative from school administration; a representative from the custodial/facilities department; school faculty member (preferably a teacher); cafeteria monitor, a representative from your school's

GREEN TEAM; and an active PTA member. In addition, it is a good idea to include a student representative(s) on the Recycling Team. It is important to be inclusive when forming the Recycling Team both to prevent conflict, and build ownership through shared responsibility. The responsibility of forming the Recycling Team will likely fall to the Recycling Coordinator. That being said, by forming a comprehensive Recycling Team at the beginning of the process, the Recycling Coordinator will be reducing the amount of work that falls on them further down the line.

## 2. Evaluate Current Waste Operations and Options for the Recycling Program

### Assess Current Waste Operations

It is essential to understand your school's existing waste operations and the quantity and type of waste your school generates in order to implement a recycling program. The custodial/facilities manager and members of their staff can provide key information of how waste moves through your school, and what materials make up that waste. Another source of this information is your school's existing waste hauler. It is important to identify if the hauler is contracted through the municipality, school district, or individual school and work with the contract manager to determine some information before calling.

- Does the school's current trash hauler charge a volume-based fee for service, a
  per ton fee, or a service frequency charge? Cost savings can be seen by
  reducing tonnage, volume, and service frequency.
- What is the current amount of trash that is collected on a weekly basis from your school?
- Ask for authorization to contact the hauler and then the waste hauler account representative's contact information.

When talking with your school's hauler about establishing a recycling program, be sure to ask the following questions:

- Does the hauler have an estimate for how much of the trash is recyclable?
- If not, does the hauler offer a service to conduct onsite waste audits to identify quantity and type of waste generated at your school?
- Does the hauler offer collection of recyclable material? If so, inquire:
  - What materials does the hauler collect? (NOTE: MassDEP <u>Waste Ban</u> <u>Regulations</u> restrict certain readily recyclable or toxic items from being disposed of as trash including: cardboard, recyclable paper, bottles and cans.)
  - Is the recycling service a single stream or a dual stream collection? (See "Single Stream vs. Dual Stream", Supplemental Information)
  - o How must materials be prepared for collection?
  - What is the process for adding recycling service to your school's existing waste hauling contract?

- Tip: This is an opportunity for the contract manager to talk with your hauler about a favorable contract renegotiation
- If the hauler does not offer collection of recyclables, is the hauler aware of any services in your region that do offer collection of recyclables? (NOTE: RecyclingWorks in Massachusetts provides a searchable database to find local recycling haulers and processors in your area: Call 1-888-254-5525 or visit www.recyclingworksma.com/find-a-recycler)

The Recycling Coordinator will likely be the point person in charge of reaching out to your school's existing waste hauler. Depending on how successful that correspondence is, the Recycling Coordinator can work with the Recycling Team to ensure the following tasks get accomplished:

- A waste audit is conducted to identify quantity and type of recyclable material generated at your school
  - For information on how to conduct a waste audit, see the "Trash Can Scan" activity on page 45 of the MassDEP's <u>Solid Waste Management</u> <u>Resource Guide for Massachusetts Schools</u>
- A list of recyclables that can be locally and reliably processed in your school's region is created
- A recycling service provider is identified that accepts recyclables that can be locally and reliably processed in your school's region
- The type of collection system (i.e. single stream or dual stream) available in your region is identified

Based on the results of this process, the Recycling Coordinator and Recycling Team should identify what materials the school's recycling program will target, whether the school's program will be single stream or dual stream, and who the school's recycling service provider will be. At this point, the Recycling Coordinator and Recycling Team should assess and take care of any needs associated with hauling arrangements and contracts.

It is important to note that some recycling service providers also provide collection equipment as part of the service. When speaking with your recycling service provider, ask if they provide collection equipment. This information will help when determining the type of collection points inside and outside of the school, as well as identifying what additional equipment your school will need to acquire for its recycling program.

# 3. Plan the Recycling Program

### Design Program Operations

Now that you have decided on the basics for your recycling program, it is time to determine how your program will operate. A major factor that needs to be determined is where recyclable material will be stored prior to collection by your service provider. The Recycling Coordinator should work with the Recycling Team to conduct school site

visits, and identify location(s) that have adequate storage space for recyclables. Because these areas may accumulate large amounts of combustible material like paper, it is necessary to contact your local Fire Chief and Board of Health to approve of the areas where recyclables are to be stored.

After appropriate storage areas have been identified, the Recycling Coordinator should meet with the Recycling Team to determine collection logistics for your recycling program. Decisions that must be made during this meeting include:

- Determine collection points inside and outside of schools
  - For maximum diversion and minimal contamination, place recycling containers right next to existing trash containers.
  - Consider the cafeteria, kitchen, student gathering areas, teacher's lounge, copy room, concession areas, the gymnasium and auditorium.
- Plan what materials your program will collect.
  - Cardboard
  - Paper-copy paper, newspaper, magazines
  - o Bottles, aluminum cans and milk cartons
  - Steel cans and plastic jugs
- Choose collection containers (type and quantity) that are appropriate for program being established (single stream or dual stream)
  - o Containers include: Classroom bins, Rolling carts, Outside dumpsters
- Plan how materials must be prepared for collection
  - This will likely be determined by recycling service provider
  - o Will you provide a pour-off station for cafeteria liquids?
- Decide HOW recyclable material will be transported from one collection point to another
- Decide WHO will be transporting recyclable material from one collection point to another
- Decide FREQUENCY for how often recyclable material will be transported from one collection point to another
- Establish any goals for recycling program to be evaluated post-implementation

# Develop Program Budget and Identify Potential Funding Sources

There are three main costs associated with school recycling programs: collection equipment; collection services; and training/educational resources, including signage and stickers. The Recycling Coordinator and Recycling Team can use information obtained through the waste audit, as well as factors such as the collection points inside and outside determined in the previous step, to identify how many collection containers your school's recycling program will need. <a href="GREEN TEAM">GREEN TEAM</a> member schools may apply for <a href="free recycling equipment">free recycling equipment</a>. To request equipment, <a href="register">register</a> with THE GREEN TEAM, complete the equipment request form, have it signed by the principal, and submit it. You will be contacted to coordinate picking up the equipment.

It is a good idea for the Recycling Coordinator and the Recycling Team to discuss and research other potential grant opportunities to cover costs of recycling programs, such as municipal, state or federal grants.

Obtain Collection Equipment and Educational/Training Materials

After all program operations have been determined and agreed upon, and any outside funding sources have been identified and secured, the Recycling Coordinator and Recycling Team should arrange the purchase and distribution of collection equipment. At this point, all hauling arrangements and contracts organized in Step 2 should be finalized. In addition, all educational and training outreach materials on the recycling program and proper source separation should also be obtained or created. Educational material should be specific to your school's program and the recyclable materials the program will target, and identify whether your program is single stream or dual stream. This is a great opportunity to involve students in the process, especially classrooms that are participating in MassDEP's <u>GREEN TEAM</u> program. Educational materials (posters) should be posted at the collection areas, but also can be posted around the school as a reminder to recycle.

### 4. Implement the Recycling Program

Train Faculty, Staff, and Students

Now comes the exciting part of training everyone how to effectively participate in the program that you have established! It is essential to first train all staff, faculty and students that will be responsible in collecting and transporting recyclables from indoor collection sites to outdoor collection sites. These responsibilities do not necessarily have to fall to maintenance staff, although some schools may find it efficient to have maintenance staff service recycling containers if they are already servicing trash containers. If this is the case, some important suggestions when training maintenance staff include:

- Emphasize that the recycling program is not generating any new waste, simply handling recyclable items from that waste in a different container.
- Assuming you were successful at obtaining buy-in from the managers of maintenance staff, have this stakeholder present at the training to exhibit the fact these directions are new operating policies
- Allow ingenuity, suggesting that as long as staff adhere to the system the Recycling Coordinator and Recycling Team have set up, whatever they view as most efficient for them is fine
- Empower staff by emphasizing the environmental and community good they are helping to achieve

Next comes time to train faculty, staff and students on effective participation in the recycling program at your school. The Recycling Coordinator should work with the Recycling Team to identify the best strategy for educating each group, depending on

the size of your school. At a minimum, everyone must be shown exactly how to separate waste so that only acceptable recyclable materials end up in the recycling collection containers. For faculty and staff, a training strategy might be a presentation during weekly or monthly meetings. For students, training might occur at a school-wide presentation, classroom presentation, student made videos, morning announcements or use of the school digital message boards. (See "GREEN TEAM Lesson Plans", Supplemental Information). Important tips for educating everyone on proper separation include:

- Identify and work with "lead" classrooms that can help with outreach and education on the recycling program
  - Classrooms participating in MassDEP's <u>GREEN TEAM</u> program are great candidates!
- Educate everyone as close to the time of program implementation as possible, especially younger students, so this information is fresh in their minds when they actually start participating

### Implement Recycling Program

When all collection equipment and educational signage is in place, and faculty, staff and students have been trained on program operations and source separation, the recycling program should be implemented. Even after the program is implemented, the Recycling Coordinator and Recycling Team should plan for multiple, consistent educational campaigns on the new program.

# 5. Analyze and Maintain the Recycling Program

### Program Monitoring and Maintenance

Congratulations! You have successfully started a recycling program at your school. But the process is not complete. To ensure that the recycling program remains sustainable, the Recycling Coordinator and Recycling Team should develop a system for consistent monitoring of the program for the duration of the school year post implementation. The program should be monitored for efficiency and contamination. Monitoring should also be reinstated for the first 2-3 months of school in subsequent years. Strategies for monitoring the recycling program include:

- Outreach to faculty, staff and/or students responsible for collecting and transporting recyclables within school
- Outreach to the school's contracted recycling service provider
- Outreach to the recycling processing facility accepting the school's recyclables

If contamination in the recycling stream is evident, consider campaigns to re-educate faculty, staff and students. Also, consider creating a recycling competition, where classrooms are challenged to eliminate contamination in their recycling bins. Involving students in these campaigns is a great idea!

Track Volume of Recyclables Collected for "Impact" Assessments

To encourage continuous buy-in to the recycling program, as well as effective participation, the Recycling Coordinator should work with the Recycling Team and the recycling service provider to track the volume of recyclables diverted from the school. This information is essential for promoting the program both within the school and to the community through local media outreach.

Because recyclables are now being diverted out of the trash, the school should be able to reduce the frequency of trash service or dumpster volume. Work with your hauler to optimize service levels.

Identify Responsibility for Making the Program Sustainable

It is unlikely that the Recycling Coordinator and Recycling Team that did such an excellent job at getting your recycling program started will assume those responsibilities year after year. But before they pass on the reins, it is important to develop a plan for ensuring the program is implemented in following years. This plan should include:

- Strategies for identifying roles and responsibilities associated with program
- Strategies for re-education of students, teachers and staff year after year
- Written instructions that include lessons learned and helpful resources (like this guide!) for the team that takes over recycling program responsibility

# 6. Promote the Recycling Program

You have done such an amazing job, now it is time to promote your hard work! The Recycling Coordinator should work with the Recycling Team to conduct outreach to local media outlets focused on letting the community know about the recycling program at your school. Use data collected for the "Impact" assessments to identify the impact the program has had on diverting recyclable material from the waste stream. This positive media will reinforce enthusiasm regarding the program and encourage participation and buy-in from all stakeholders. Suggestions for promoting your program include:

- Promote through the MassDEP <u>GREEN TEAM</u> program
- Promote through the school/district newsletters and website
- Present program results at School Board meeting
- Contact local politicians and inform them about program success

Within the school community, consider celebrations or awards ceremonies to build and maintain enthusiasm for the recycling program.

GOOD WORK! If you have further questions about starting a school recycling program, contact The Green Team at recycle@thegreenteam.org.

# Supplemental Information

## A. Tip for Building Administrative and Staff Support

When meeting with stakeholders, it is a good idea to tailor the conversation to the individual stakeholder. For example, when meeting with administrators, stress the cost savings that can occur from diverting recyclables and reducing the volume of trash the school generates, equating to potential savings in trash hauling from less frequent trash pick-ups. When meeting with custodial staff, emphasize that diverting recyclables has a range of environmental benefits, including saving natural resources.

## B. Example "Recyclable Materials Policy"

The [INSERT SCHOOL COMMITTEE] believe it is our responsibility to make our students and staff aware of the importance of recycling materials whenever possible to conserve the world's limited resources and conserve energy while exercising sound financial practices. To this end, all [INSERT SCHOOL DISTRICT] will recycle materials that would otherwise become waste, including papers, cardboard, bottles and cans, from throughout the school buildings and grounds in support of the Massachusetts Department of Environmental Protection waste ban (310 CMR 19.017), which prohibits disposal of recyclable paper, cardboard, and paperboard; glass and metal containers; and single-resin, narrow-necked plastics.

The implementation of this policy is the responsibility of the School Committee, staff and students. Success in reducing waste through recycling is based on the cooperation of all the individuals in the school community.

To ensure success in the district's recycling efforts, the following areas will be adopted:

- 1. All district personnel are expected to support recycling efforts throughout the schools;
- 2. A system to document recycling amounts will be created and implemented;
- 3. Teachers are encouraged to include educational lessons on recycling in the curriculum where appropriate.

The [INSERT SCHOOL COMMITTEE] directs the Superintendent and his/her agent to implement a materials recycling program in the [INSERT SCHOOL DISTRICT].

Adopted: [INSERT DATE]

## C. Single Stream vs. Dual Stream

Single stream recycling arrived in Massachusetts in 2006. Single stream recycling allows for all recyclables (paper and containers) to be placed into one bin. Mixed materials are sent to a single stream MRF where sophisticated sorting technology separates the paper from the containers.

*Dual stream* recycling requires schools to sort materials into two separate categories or streams: paper and comingled containers. "Paper" includes office paper, note paper,

cardboard, mail, catalogues, magazines and newspaper. "Comingled Containers" include plastic, glass, and metal food, beverage and household product containers.

Depending on your location and municipality, your school may or may not have access to single stream recycling. Your hauler will be aware of this information, so it is essential that you find out this information before moving forward with the planning of your school's recycling program. Single stream recycling requires fewer bins and less emphasis on source separation, so if your school is eligible, it may be more effective and efficient to pursue a single stream program.

### D. GREEN TEAM Lesson Plans

The GREEN TEAM website has resources and lesson plans for educating students on actions that help protect the environment. The GREEN TEAM's Slash Trash Lesson aims to raise awareness about problems associated with waste disposal and help students discover how to reduce, reuse and recycle instead. Students track their waste reduction at home for a month, then calculate their diversion individually and collectively as a class. The activity shows students how their actions make a difference, individually and together. For additional GREEN TEAM lesson plans, visit the <a href="https://green.org/green.or