



Project Option A:  
**Reduce, Reuse, Recycle – Re-think!**  
**Project Guide**  
Chicago Conservation Corps (C3) Student Clubs



**By participating in this project, Club members will:**

1. Brainstorm ways to divert their school's waste through reducing, reusing, and recycling.
2. Implement solutions, considering their brainstormed ideas and findings from their Waste Audit.
3. Involve administration, faculty, staff, and students in their efforts.

### Overview

For this project, your Club will have three main objectives:

1. Learn about the importance of reuse and recycling.
2. Start or improve **one recycling** program at your school.
3. After you have completed the recycling component of your project, start or improve **one reduce/reuse** program at your school.
4. Take as many actions to encourage others to make a difference as you can.

Each of these three objectives is very open-ended. You should consider your school and/or community's needs, your findings from the Waste Audit, and the interests of your Club members in determining which projects you should complete to meet each these objectives. We provide you with a wide variety of options, but feel free to come up with your own project ideas. Just remember that, whatever focus you choose for your project, you should try to have the most positive measurable environmental impact as possible.

Please note that in the spirit of reducing and reusing, the Chicago Department of Environment will not provide any supplies for these projects – all projects can be completed successfully with materials already in your school! Work with your janitorial staff or cafeteria workers to find spare boxes for collecting materials, and perhaps the school's art teacher for leftover supplies you can use to make signs.

*The online report for this audit is due:*

**Friday, January 9<sup>th</sup>**

**To submit your report, log-in at [www.chicagoconservationcorps.org](http://www.chicagoconservationcorps.org) (click on "C3 Teachers")**

*Note: Teacher stipend check is contingent on the timely completion of the report.*

For questions or concerns, contact:

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### Why should we do this project?

The U.S. generates more waste than any other country. Each American throws out an average of **4.5 pounds** of trash a day. By comparison, Germany and Sweden generate only **2 pounds** of waste per day per person. **Minimizing** the amount of waste we generate is very important for several reasons. Most of our waste in Chicago goes into **landfills** that are quickly running out of space and are detrimental to our environment in many ways. Also, a lot of the materials that people throw away can be **recycled** to make something else. This often requires less energy and saves virgin resources from being used to make something brand new. **Reusing** things that would otherwise be thrown away is often a better alternative to recycling; you are not only preventing the manufacture of something brand new, but you also saving the energy that would have been used to recycle that item AND preventing it from entering a landfill. People sometimes don't realize how much of an impact they can have by taking small actions. For example:

- Recycling one aluminum can saves enough energy to keep a 100-watt bulb burning for almost four hours or to run your **TV for 3 hours**.
- Manufacturing bottles made from recycled plastic uses **70% less energy** than manufacturing them from scratch.
- Manufacturing one ton of paper from recycled fibers instead of virgin fibers saves **7,000 gallons** of water, **17-31 trees**, **4,000 KWh** of electricity, and **69 pounds** of air pollutants.

What can you and your school do to reduce the amount of waste that your school sends to landfills?



## Part I: Pre-planning Your Projects (*1 meeting*)

1. Revisit your completed Waste Audit **Worksheets 5 and 6** and consider the opportunities available in your school as you answer the following questions:
  - What recycling or reuse programs already exist in your school?
  - Who do you want to encourage to reduce, reuse and/or recycle? Consider which groups in your school generate the most trash and who would be the most receptive to your message. What is the best way to communicate with each of these groups? See *Tips for Approaching Your School Community* for some ideas (located in your Project Binder and on your CD).
  - Who can help you? For example, if there is a recycling program already set up, who runs it? What other groups might be interested in lending a hand?
  - How much time can you commit to this project? Starting a paper recycling program, for example, can be a long-term commitment; in some recycling programs, students are responsible for collecting the recyclables and taking them out to the parking lot every day or two. Another project focus might take far less time; for example, if you were to work on boosting your school's participation in the CPS battery recycling program.

## Part II: Plan and Implement Your Projects (*at least 3 meetings*)

After pre-planning for your project, you should have a good idea of which project focus to tackle (see options below). Choose a **recycling** project focus first. Then, with the remaining time for this project, choose at least one **reduce/reuse** project focus. If you still have more time after that, we encourage you to work on additional projects (see the **Supplemental Projects** guide on pages 6-7).

Remember that it is expected for your Club to have regular, weekly meetings, and there is plenty that can be done to use your new-found knowledge regarding land and waste issues! Let students and staff know what they can do individually to reduce waste and have a more positive impact on the environment. You can do this by hosting mini-workshops, putting up signs, or having people sign pledges.

Make sure that for any of these projects that you choose to complete, it is important to determine clear, **measurable goals**. For instance, if you choose to implement a battery recycling program, set a goal of how many pounds you want to have collected by the end of the project. Next, keep track along the way so you can measure the difference you're making. We will ask you to report these impacts at the end of the unit, so make sure you are recording that information.

## Step One: Recycling Project Focus Options

If your school does not recycle certain materials, start a recycling program! Or, if your existing school recycling program is underutilized, find a way to increase recycling. In order to receive credit for your project, choose a project focus from the list below that best fits your school's needs/resources, or create a project and have it approved by the C3 Staff.

1. **Improve the paper, plastic and/or aluminum recycling program in your school.** If your Club noticed that large amounts of **paper, plastic and/or aluminum** are being thrown out instead of recycled because there are not enough bins in your school, CPS teachers can email [recycling@cps.k12.il.us](mailto:recycling@cps.k12.il.us) with a request for more bins. The CPS Department of Operations will answer your email and work with you to install more bins in appropriate locations. *Note: It can take up to a month for recycling bins to arrive at the school from the time that they are ordered.* Be sure



to check with your janitorial staff first, as you may already have bins that aren't being put to use. Note: If you are a contract or charter school, some restrictions may apply. Talk to your administration, as well as the CPS Department of Operations (see e-mail above) for more information. If this is the case, one option you have is to encourage your school to contact Allied Waste to purchase classroom recycling bins. You can also line used boxes (try local grocery stores and retailers) with blue bags as a less expensive alternative.

After the bins are in place, your Club will need to ensure that they are being used properly. Make sure that the bins are emptied into the proper recycling dumpster. Club members can either work with custodians to ensure that recycling is disposed of properly, or set up a schedule for Club members to empty the bins themselves. Set a goal for how much recycling your school will achieve, and track how many bins are received and how regularly they are filled and emptied.

**Did you know?**  
Paper accounts for 40% of the average landfill's contents.

*Suggested materials: bins from the Department of Operations and posters to promote recycling*

- 2. Ensure that the battery recycling program at your school is fully utilized.** Under a CPS program that started in 2007, CPS schools can collect batteries and ship them via the internal mail delivery system. Increase participation in the program by setting up bins or boxes in appropriate locations and publicizing the program. Work with school office staff to ensure that the batteries are collected regularly by the mailperson. Set a goal for how many more batteries your school will recycle as a result of your efforts, and track battery collection.

*Suggested materials: posters and bins (e.g., decorated cardboard boxes)*

- 3. Set up a cell phone recycling program for your school.** Fundraise for your school by helping recycle some of the 130 million cell phones that go out of use every year. Eco-cell is a cell phone recycling program that will pay you up to \$15 per phone. Register at [www.eco-cell.org](http://www.eco-cell.org) and work with the program to set up collection bins, publicize your campaign, and monitor the results. Set a goal for how many cell phones you will recycle, and track the number of cell phones you collect and the amount of money you raise.

**Did you know?**  
Those 130 million cell phones discarded each year result in more than 65,000 tons of hazardous waste.

*Suggested materials: bins (e.g., decorated cardboard boxes) and posters (from Eco-cell or design yourself)*

- 4. Start a CD-ROM recycling program in your school.** Install a few collection bins in prominent locations around the school, and create posters to publicize your collection campaign. Monitor the bins and periodically send the CDs to Plastics Recycling, Inc., a firm located in Indianapolis that grinds CDs down and reuses the plastics for automotive and other machine parts. Call Allen Shaw (317-780-6100) at Plastics Recycling, Inc. for more information on mailing in the CDs. Set a goal for how many CDs you will recycle, and track the number of CDs you collect.

*Suggested materials: bins (e.g., decorated cardboard boxes) and posters*



## Step Two: Reduce/Reuse Project Focus Options

Recycling is a crucial strategy for minimizing waste, but reducing and reusing save even more energy and landfill space. After you have completed the recycling component of your project, select at least one **reduce/reuse** component from the list below to implement at your school. Choose the one that best fits your school's needs/resources, or brainstorm your own reduce/reuse component and have it approved by C3 Staff.

1. **Conduct a junk-mail campaign.** Help your school office collect the junk mail it receives. Tear off the mailing labels and send them back to the mailer along with a note saying, "Please take us off your list." Before you begin, set a goal for reducing the amount of junk mail your school receives. Check back with your school office in a few months to see if your efforts were successful!
2. **Set up a school community exchange day** to enable teachers, students, parents, and others to swap used materials. For example, teachers can swap old posters, decorations, or furniture. Students and parents can swap old school supplies, clothing, jewelry, sports equipment and other useful items. Set a goal for how many people will participate, and keep track of how much stuff is exchanged instead of thrown away.
3. **Donate leftover food!** Excess edible food that is still packaged or has not been served may be able to be donated. Talk with your school cafeteria staff about connecting to a local organization that serves food to the needy and brainstorm ways of safely transporting the food. Keep track of how much food goes to a good cause instead of ending up in the trash.
4. **Watch what you eat!** Talk with the cafeteria managers about evaluating the lunchroom purchasing process. Consider whether reusable or recyclable products can be purchased instead of disposable ones, whether there are products available with less packaging, and whether the cafeteria can purchase products made from recycled materials.
5. **Reduce office packaging!** Talk with the school office staff about assessing the office purchasing process. Consider whether the office can purchase supplies in bulk to reduce packaging (and cost!). Ask the office to purchase recycled paper and other supplies made of recycled goods. Reusable products, such as refillable pens, are another possibility.
6. **Plan a Zero Waste day for your school.** Arrange a reward for students who throw nothing away that day. If you think your school is up to the challenge, try a *Zero Waste week* and raffle off a prize for everyone who made it the full week without generating any non-recyclable or compostable waste.
7. **Conduct a water bottle campaign.** Have students and staff sign pledges to bring their own water bottles to school instead of using cups and vending machines. You could even sell reusable water bottles as a fundraiser for your Club!
8. **Encourage students to pack zero-waste lunches.** Have students sign pledges to pack only as much food as they will eat, use reusable containers and bags, cloth napkins, and durable forks, knives, and spoons.
9. **Teach students some great ways to go paperless!** You can save paper that has only been used on one side for note-taking, or to feed into printers for draft documents. Another strategy is to bind one side of a stack of single-sided paper together to use as a scratch pad. Setup boxes in the copy room and near printers to collect re-printable paper.



### **Part III: Analysis** (*half a meeting*)

Revisit your project goals as defined at the beginning of your project. As your project wraps up, discuss your successes and challenges. Have a group note-taker keep track of your conversation so you can share a short summary of the conversation with DOE as part of your online report.

1. How far did we get in achieving our goal?
  - What were our specific achievements?
  - How does that compare to the goal that we set? Are we pleased with our progress?
  - What were our measurable positive environmental impacts?
2. What were some of our challenges? How might we resolve these in future projects?
3. What might we do differently if we were doing this project again?
4. What did we learn from implementing this project?
5. What could we do in the future to continue enhancing our school's efforts to limit their waste?
6. Fill out the online report for this audit, due on **Friday, January 9<sup>th</sup>** (see page 1 for instructions).

*NOTE: We recommend typing up the answers in Microsoft Word and then pasting them into the online report, so that you can save a copy for your records.*





## Supplemental Project List Land & Waste Topics



### Chicago Conservation Corps (C3) Student Clubs

*If your Club has additional time while you wait for various components of your project to fall into place (or if you finish early!), your members will need ways to stay active during your weekly meetings. In this situation, Clubs are encouraged to select items from this supplemental project list, or to come up with additional projects on their own!*

- **Give presentations to classrooms about worm composting and the importance of waste reduction.** These presentations could be PowerPoint presentations, short skits, or even “trainings” where you invite people to learn more about how they can create similar composting systems at home.
- **Take a field trip!** Chicago’s going green – there are plenty of places to visit where you can learn more about land and waste management issues! Try the Chicago Center for Green Technology (CCGT), Lincoln Park Zoo, the Shedd Aquarium, Peggy Notebaert Nature Museum, Garfield Park Conservatory, and many others!
- **Participate in a blog about worm composting,** or start your own! What do YOU think people should know? What might have helped you when you were just getting started? What might persuade people to give it a try? Now YOU can share your knowledge and experience.
- **Ask students to carry reusable school supplies** like refillable pens and pencils, a durable backpack, and a lunchbox and water bottle.
- **Paper or plastic?** A decision most consumers have had to make at one time or another is whether to use paper or plastic bags to carry home groceries. Now cities like San Francisco are banning plastic bags and some stores are no longer offering them. Have students investigate the environmental impact of paper and plastic bags including the energy used and pollution released to make and recycle each type of bag; the amount of space they take up in landfills; and how reusable each bag is. Create posters or presentations about student findings and give away or sell reusable cloth bags as a good solution to the problem.
- **Investigate the “lifecycle” of some commonly used items.** The “lifecycle” of a product begins when the materials to make it are harvested or extracted, and it ends with the disposal of the product after it has been used. At each step along the way there are impacts on the environment. Have student explore the “lifecycles” of some items they use every day such as paper, pencils, and pens. Then have them create posters to educate the rest of the school community about the impacts of these products.



- **Learn to think about waste before you buy a product.** Investigate the amount and type of packaging used for some of the products students use every day. Is the amount of packaging reasonable for the size of the product or is there a lot of empty space or extra coverings? Is the packaging made out of recycled materials? Is the packaging recyclable? Once you have led your own investigation, educate the rest of the school community about how to choose products with less packaging in order to reduce waste.
- **Hold a household hazardous waste awareness campaign.** Many household items that make their way into the trash are actually considered household hazardous waste, and should be disposed of properly to prevent harm to sanitation workers and the environment. These items include: paint, some oils, cleaning chemicals, nail polish, pesticides, and batteries (<http://earth911.org/household-items/how-to-monitor-hazardous-products/> for more details). Create an awareness campaign to let everyone know not to throw these items away, and where the nearest household hazardous waste recycling and disposal facility is located.
- **Help the school's community find places to recycle different kinds of materials in the neighborhood.** Assemble a directory of recycling and reuse centers and experts to distribute to students, teachers, and administrators by checking the internet (search by zip code at [www.earth911.org](http://www.earth911.org), and check the National Recycling Coalition and the Illinois Recycling Association), the phone book (look under recycling and recycling coordinators), and by asking city officials.
- **Organize a waste reduction fundraiser!** Some communities charge residents according to the amount they throw away (called Pay-As-You-Throw programs). Organize a fundraiser by asking for pledges from neighborhood businesses for competing classrooms. The businesses can pledge a certain amount for every pound of trash your classroom reduces, reuses, recycles, or composts over a week or a month. Compete with other classrooms to see which one can keep the most trash out of landfills!
- **Encourage teachers, administrators, staff, and students to use double-sided printing** to reduce paper consumption.
- **Ask the administration to circulate memos via routing slips or email instead of sending out paper copies.**
- **Ask administrators and teachers to reduce paper usage during meetings by using overheads, marker boards, blackboards, or PowerPoints.**
- **Encourage teachers and the school office to reuse cardboard boxes, file folders, and envelopes for internal mailings.**

