



**Colorado Association for Recycling**  
**PO Box 11130**  
**Denver, CO 80211-0130**  
*Turning today's waste into tomorrow's resources.*

## **Office Recycling – Step-By-Step Guide**

### **Why Should You Develop An Office Recycling Program?**

Recycling is an important part of an integrated solid waste management plan. The Environmental Protection Agency estimates that 90 percent of all office waste by weight is paper. If your business or agency generates waste paper, then you can set up a successful office recycling program.

Up to 77 percent of the solid waste generated in a commercial building can be recycled. This portion is made up of reams of discarded computer printouts, white and colored stationery, scratch paper, copier paper, outdated information, memos, flyers and reports. Markets exist to absorb recyclable paper.

An office paper program can reduce disposal costs and add to a company's bottom line. Companies with fifty or more employees can expect to generate enough volume of paper to make a collection program run efficiently. Office paper adds up quickly given that the average office worker throws away at least a half-pound of high-grade recyclable paper each day.

Small companies can still recycle office wastes. In many cases, businesses can combine efforts with other businesses located in the same building. Companies can also deliver paper and other recyclable materials to the recycling center.

This guide explains the process for establishing a cost efficient and environmentally responsible recycling program. Included are sample questionnaires, worksheets, waste audit forms and promotional materials. It is designed to provide the basis for a successful collection program. Collection programs should be tailored to meet the individual needs of a business or agency, but all programs require similar approaches for start-up.

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Federal ID # 84-1179373      State ID# 98-15928-0000

## Facing the Facts!

### **Recycling reduces disposal costs:**

Recycling can reduce the amount of waste your company sends to the landfill, thereby reducing the amount you pay to have the waste picked up by your trash hauler.

### **Recycling conserves resources and the environment:**

Less energy is needed to manufacture paper from recycled fiber than from virgin wood. Recycling also reduces waste deposited in landfills, thus prolonging the life of our overburdened landfills.

### **Recycling benefits your business:**

Today, business' commitment to community responsibility means being a good citizen, both locally and globally. That includes protection of the environment through resource management, taxes and licenses, awareness and education programs, conservation, and recycling.

### **Collection is not the whole story of recycling:**

If you're not also buying recycled products you're not really recycling. It isn't enough to have businesses or governments collect recyclables. The materials must have a market to have a value. All collection programs should work simultaneously with a procurement program that establishes a policy to buy products made with recycled materials.

Planning and developing your recycling program can be hard work...but it's work that pays off. At the moment, recycling is the most popular method of reducing office waste.

### **Support! Support! Support!**

Be sure to check with your top management or senior company officer to get the go-ahead to start a recycling program. Their support is crucial to your success. If you lease space in multi-tenant building ask your building management office if a recycling program exists or is being planned.

### **Let the Recycling Begin...With a Waste Audit!**

Before you call your current waste hauler or a recycling company to install recycling bins and have office wastes picked up, start by obtaining as much information as possible about the type and volume of paper your office generates on a monthly or weekly basis.

The questions in the Waste Audit will give you an overview of your company's disposal needs. You can refer back to your answers when you are ready to start designing your program. The audit will also help you give information to a hauler who will pick up your recyclables. It's a good idea to research the current custodial contracts that operate in your building, as custodians can be a very important link in your program.

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## WASTE AUDIT WORKSHEET

Recyclable Paper Generation:			
_____ x Number of employees	.51 lbs = (Avg. lbs. recyclable paper, per day, per employee)	_____ (a) Recyclable paper, per day	
_____ (a) x Recyclable paper per day	240 days / 12 months Working days per year	/ 2,000 lbs. = pounds per year	_____ (b) Tons per month recyclable paper
Potential Paper Recovery Rates:			
_____ (b) x Tons per month recyclable paper	65%* = Participation rate	_____ Tons per month of paper recyclable paper recovered	
* While all program coordinators will aim for 100% participation with collection programs, 65% has been determined to be a more accurate level.			

### Surveying Your Recyclable Wastes

#### Visual Survey:

Look through a random sample of existing garbage cans on each floor of your building: list the most common types of paper found. Be sure to check different areas to compare the types of waste generated at a clerical or computer area versus a manager's office.

#### Type of Waste:

The visual survey will reveal the different types of paper and recyclable materials that you will recycle. When determining the types of waste, also consider the disposal of confidential materials. Destruction of paper often yields large quantities of recyclable paper and a few recycling companies have separate certified services for dealing with confidential shredding and recycling of such waste paper.

Depending on the recycling collector, you can consider extending collection to other types of waste including: corrugated cardboard, aluminum beverage cans, glass bottles and jars, and plastic narrow-necked bottles #1 and #2.

### "Special Concerns"

When looking for a recycling company to pick up your materials, you should have a good idea about the type of program you would like. It's important to have an idea of the frequency of pick-ups your office will require. It's also important to note if your office does annual or monthly purges of files and records, since this could dramatically change the volume collected.

#### Confidential Document Destruction:

If your company is currently having its confidential materials destroyed, try to integrate these services with your office paper recycling program. Destruction companies should provide legal certification that your document has been accurately shredded.

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Many companies choose to recycle materials that are semi-confidential as a safer alternative to throwing them into the trash since the materials are destroyed in the recycling process. The semi-confidential materials can be safely kept in your office or building until the recycling company picks them up.

## **All Collection Programs Require Maintenance By A Program Coordinator**

To run an effective office recycling program, you will need a program coordinator, and depending on the size of your company, a few monitors. The coordinator should have a commitment to recycling, organizational experience, and good communication skills. Program monitors should have a good rapport with the staff and a thorough understanding of how the program works. Also, a little enthusiasm on the part of the coordinator and the monitors goes a long way!

Depending on the size of your office or company, the coordinator will spend anywhere from a day or two to a couple of weeks getting a recycling program off the ground. After the program has started, the coordinator will need no more than a few hours each month to monitor the program.

The coordinator is responsible for selecting a waste dealer, developing the collection system, getting the employees involved, and tracking the progress of the program. Don't try to do it all yourself. Try to involve as many employees as possible in the planning stage. A memo soliciting ideas for recycling from employees helps garner support and interest. Although the job has many responsibilities, almost all coordinators find that the rewards of organizing a recycling program far outweigh the work involved.

Monitors are responsible for making sure the containers are relatively free of non-recyclable trash, notifying the coordinator if a container overflows, and encouraging employees to participate in the program. One monitor for each division or floor, or for every 25-50 employees, is optimal.

## **Keeping the Recyclable Paper Out Of The Trash**

A successful office recycling program begins at each employee's desk.

To be effective, an office paper recycling program must intercept waste paper before it becomes part of the trash. The coordinator should give every employee a small, sturdy desk-top or under-the-desk container for storing recyclable paper at his or her desk. Specially-designed units are available from corrugated container companies or office supply companies. However, a box top, spare drawer, or corrugated box will also do the trick. When the employee's container is full, he or she simply empties it into a larger container that is located centrally on the floor.

With any new program, you will be asking people to change their behavior somewhat. The success of your program depends on whether you make it as easy for employees to recycle as possible.

Program success can be enhanced and contamination decreased if desk-side and floor containers display program identification stickers that list what is acceptable and unacceptable material for the recycling program.

Stationing one floor container for every fifteen to twenty employees throughout your office is optimal. Clearly labeling the containers, "For Mixed Office Paper Only", "For Computer Paper Only", "For Commingled Aluminum Cans, Glass Bottles, and Plastic Bottles Only", and "For Newspaper Only", will help to prevent employees and visitors from using the floor containers as trash cans.

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Placing regular trash cans near the recycling containers will also help to minimize unwanted trash. But, recycling containers should look different than your trash cans to avoid confusion. Most waste haulers and recycling companies will supply floor containers; however, you may want to purchase your own containers to match your office decor.

Common work areas, such as copiers, mail rooms or printer locations provide the best central area to place floor containers for office waste paper. Beverage collection containers can be placed near high-traffic areas such as elevators, or in employee cafeterias and breakrooms.

## Consolidating Your Office Waste Paper and Beverage Containers

Floor containers need to be emptied into one main storage area for the waste hauler, waste paper dealer, or recycling company to pick up the materials. A storage area most often contains five to six large bins. An important program decision involves appointing the responsibility for emptying the floor containers into the main storage area.

Regardless of who transports the recyclable material to the main storage area, consolidation from the floor containers into the main storage area can substantially add to the success of your program.

### **The benefits of consolidation are:**

Depending on the type of company you select to collect your recyclable materials, you may receive a better price for your paper because you will be able to accumulate larger loads;

You will avoid overflowing of central containers that may occur if the hauler, recycling company, or waste paper dealer can't immediately respond to your call for a pickup; and,

You will not need to have the waste hauler, waste paper dealer, or recycling company go through your office to remove the paper and/or recyclables during working hours.

The main storage area should be organized to minimize accidental mixing of trash with recyclable paper and it must meet local fire requirements. The waste hauler, recycling company, or waste paper dealer can help you determine what size storage space is necessary; typically, you will need a space that is at least 4 feet by 2 feet. Ask your building manager and/or waste hauler/recycling company to help you select your main storage site.

Most companies keep their main storage bin(s) in the basement or loading dock area of the building. Keep in mind the following points when selecting your site:

Is the site large enough?

Can the site be locked?

Is the site protected with sprinklers?

Is there easy access to the loading dock from the site?

You still have other options even if there is no area large enough to accommodate the main storage bins. Have your consolidation staff station the paper in a temporary storage area where it can be picked up the same or next day. Or, have the waste hauler/recycling company collect the paper directly from the floor containers located throughout the building. Some vendors also have locking dumpsters, which permits storage in an outside area.

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## Program Operation

Most office paper recycling programs work best when integrated with existing custodial operations -- custodians simply collect the paper from the floor containers and transfer it to the main storage bin. Some companies use an alternating collection system in which the custodians collect the recycling paper one night and the trash the next. In any case, existing custodial contracts may determine some program decisions.

If you have the ability to involve custodians with your program, promotion and education should focus on custodians as well as office staff. When introducing custodians to the new recycling program, explain that they are simply emptying the regular trash and the recyclable paper into separate bins. Many companies add the responsibility of picking up the recyclable paper into the custodian's contract when it is up for renewal.

Other personnel such as mailroom staff, equipment porters, or other under-utilized staff can also consolidate the recyclable paper. Or, you may want to hire part-time personnel and pay them with the proceeds from the paper sales, or from savings due to reduced waste removal costs. Student, physically challenged, or other special employment agencies are excellent resources for hiring this type of personnel.

It's important that custodians be recognized for their contributions to the program. Also, custodians should not be expected to sort contaminants, only to monitor and report sources of contamination to the program coordinator.

If the custodians are not involved in the collection of the recyclable paper, make sure that they are informed about the program so that they don't accidentally mix the paper with the regular trash and throw it away. It is also advisable to ask custodians not to empty the desk-side (desk-top) unit, as that responsibility should reside with the individual employee.

Consider these points when deciding who can best consolidate your paper from the central containers to the main storage area:

How many custodians service your building?

Are the custodians in-house, contract, or union?

Are there day and evening shift responsibilities? If so, which crew could best handle the consolidation duties?

Are there porters, main room staff, or other personnel who could handle the consolidation duties?

Is your office staff willing to rotate consolidation duties?

Commercial Office Recycling Guidelines

## Participation – The Key to Success

Promotion and education are the keys to all successful recycling programs. Employees will participate if they are well-informed about the program and its benefits. Three separate steps for your promotion campaign are recommended -- kick-off memo, educational sessions, and follow-up publicity.

In addition, you may want to send out a short survey to your staff before you start your program to gauge the level of interest in recycling. Most people will agree that recycling is a good idea, and once they have done so, are more likely to participate. You may also be able to recruit program monitors by conducting a survey.

### **Kick-off Memo:**

A memorandum signed by your CEO and directed to all employees, highlighting the benefits of recycling, describing the program, and explaining the separation and collection procedures is a good way to start your program. Also, include information about where the revenue from the program (if any) will go.

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When announcing your program, be sure to provide written instructions, and recognize employee ideas that you've incorporated into your program.

### **Educational Sessions:**

It is important that each program monitor attend a brief informational session about the new program. The sessions can be incorporated into a regular staff meeting and the "do's and don'ts," as well as the benefits of the program, can be explained and questions answered. Be sure to inform any new employees about the recycling program.

### **Follow-up Publicity:**

Reinforcing the new recycling habit is very important. Quantities recycled, revenue earned (if any) and where the proceeds are going, disposal cost savings, and any problems such as putting trash into the floor containers or low participation rates can all be highlighted in follow-up memos or employee newsletters. Continual reminders will help maintain a successful program. Employees won't participate if they don't know how the program works.

Compute the energy and environmental savings from your company's recycling program:

# tons recycled x 10,401 KWH = # KWH saved

# tons recycled x 3 barrels of oil = # barrels of oil saved

# tons recycled x 3.3 = # cubic yards of landfill space saved

# tons recycled x 17 trees = # trees that don't need to be cut down

## **Precycle! Stop Waste Before It Happens**

Most everyone knows how to recycle, but reducing and reusing are less recognized. Notice that reduce and reuse come before recycle, because the more you can reduce your consumption and reuse products, the less you'll need to recycle. Though vastly preferable to using virgin materials, recycling uses more energy and natural resources (and creates more pollution) than reducing or reusing, since recycling means remanufacturing products. Reducing your consumption will reduce your costs and improve your efficiency. Think about how you can avoid buying or disposing of products. Here are some pointers:

### **For writing/printing paper:**

- Make double-sided copies.
- Buy recycled paper.
- Purge mailing lists and keep them updated by requesting address corrections on your mailings. Current lists also are more cost effective.
- Circulate memos, documents, periodicals and reports (with a space for each employee to check off after they've read it), rather than distributing or buying multiple copies for all office personnel.
- Use outdated letterhead for in-house memos.
- Ask yourself, "Do I really need to print this?"
- Send a postcard and save an envelope.
- Print summaries of reports and let people know where they can get the whole document if they need to see it.
- When designing and printing materials on recycled paper, attempt to design them so the paper or roll it will be printed on is optimized, creating less waste.

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- Use smaller typeface, smaller margins, single spacing and rigorous editing to keep documents small.
- Make the exact number of copies needed.
- Edit documents on-screen before printing copies.
- Save documents on disks or CDs instead of making hard copies.
- Reduce the amount of junk mail you receive by writing the Mail Preference Service, Direct Marketing Association, P.O. Box 3861, New York, NY 10163-3861.

#### **For packaging:**

- Ask suppliers not to over-package orders.
- Request that deliveries be shipped in returnable containers.
- Reuse foam "peanuts" and cardboard boxes, or find someone who will.
- Set up a system for returning cardboard boxes and foam "peanuts" to distributors for reuse.
- Return, reuse and repair wooden pallets.
- Replace cardboard boxes with durable boxes for shipping to branch offices, stores and warehouses.
- Request minimal packaging when ordering supplies and materials (including food); choose products packaged with less waste. Let suppliers know your preference for creating less waste.
- For equipment:
- Use remanufactured office equipment.
- Use rechargeable batteries.
- Recharge fax and printer cartridges.
- Invest in equipment that facilitates waste reduction, such as:
  - - high quality, durable, repairable equipment.
  - - copiers that make two-sided copies.
  - - dishwashing equipment and durable dinnerware.
- Install reusable furnace and air conditioner filters.

#### **For landscaping/organics:**

- Choose a landscape design that requires low maintenance and little water.
- Compost grass clippings and leaves, or make sure your landscape contractor composts.
- Purchase compost for use as a topsoil amendment, or request that your landscape contractor does.
- Use a worm bin to convert non-fatty food wastes into high-quality potting soil (vermicompost).
- For over-stocked, exchangeable items:
- Donate clothing and other items to charitable organizations.
- Donate surplus produce and past-pull-date perishables to food banks.
- Advertise surplus and reusable waste items through a commercial waste exchange.
- Set up a give-and-take area in your business for employees to use.
- Set up a swap board for customers to use.

#### **For consumer choices:**

- Teach your customers about the importance of reducing waste.
- Effective tools for getting the message across include: promotional campaigns, publications (remember to use recycled paper), banners, newspaper advertisements, product displays, store signs and labels.
- Encourage reuse of shopping bags by asking customers if they have their own bag, complimenting customers who reuse bags, providing a financial incentive for reuse, and implementing a promotional campaign.
- Offer customers waste-reducing choices alongside their waste-producing counterparts. Examples include:
  - - bulk items
  - - durable cloth products, such as diapers, coffee filters, towels and napkins

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- - solar-powered items, such as watches, calculators and flash lights
- - rechargeable batteries
- - products packaged in recycled and recyclable materials
- - razors with replacement blades
- - durable picnic dinnerware
- - high-quality merchandise
- - repairable merchandise.
- Encourage your customers to purchase products packaged in recycled and recyclable materials.
- Reward your customers with a rebate when they return grocery bags, containers for bulk items, coffee mugs or pop cups for refilling.

**For food and personal service:**

- Use cloth towels, tablecloths and napkins instead of paper.
- Invest in a dishwasher. Avoid serving food on disposable dishes; use durable dishes, flatware, cups and glasses.
- Use cloth roll towels in the restrooms.
- Encourage employees to use durable cups and dinnerware.

**Other:**

- Use electronic mail.
- Use Voice Mail to record telephone messages.
- Use sticky fax notes rather than full or half-page cover sheets. Use fax machines that use plain paper that can be recycled.
- Buy products that can be recycled in your office collection program.
- Use centralized files for hard copies.
- Ask your customers if they want to be removed from mailing lists.
- Provide reusable tableware or encourage employees to bring their own. Buy bulk-packaged condiments instead of individually wrapped ones.
- Reuse office products whenever possible. Like precycling (or waste reduction), reusing products in the office often saves money, as well as resources.
- Refilling laser printer and personal copier toner cartridges, for example, costs as much as 50 percent less than buying new cartridges. Most major cartridge manufacturers accept refilled cartridges without any effect on the company's warranty.
- Packing materials used in shipping and in mailrooms also can be reused. Your shipping department employees can set up bins to collect styrofoam pellets from incoming packages that can be used again for packing outgoing shipments. Shredded office waste paper can also be used as packing material.

**Here are some simple reuse ideas:**

- Use both sides of each sheet of paper; make discarded paper into scratch pads.
- Convert manila envelopes mailed to you into interoffice pouches by attaching a routing sheet, or reuse them for your mail.
- Urge clients and readers to recycle your publications and products.
- Use two-way shipping containers.
- Reuse foam packaging peanuts and bubble wrap.
- Refill laser printer cartridges rather than buying new ones.
- Initiate an employee suggestion program; reward good suggestions on how to reduce or reuse waste. Develop an organization-wide waste reduction awareness.
- Encourage employees to use reusable food containers.
- Install a compost bin for cafeteria wastes.
- Conduct contest with companies or agencies to see who can manage waste the best.

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## Some Questions You Will Want to Ask Prospective Recyclers, Waste Paper Dealers, and Haulers

Choose a waste hauler, recycling company, or waste paper dealer who will provide your company with high quality service; price should be secondary to service when selecting a collection company. A current list of Fort Collins waste haulers, recycling companies, and Colorado waste paper dealers is included with this guide.

Don't expect to make tons of money. Even though you reasonably can expect payment for waste that is sorted properly, much of your "savings" will come from avoiding disposal costs. The best way for your office to save money is to combine source reduction, reuse, and recycling.

The following questions will help you select a recycling company:

1. What recyclable materials are collected? Do they charge for this service? If so, how much?
2. What grades of paper are to be collected and what is the minimum amount required for a pick-up?
3. Will the dealer pay you for your paper and beverage containers?
4. Will the dealer help you organize and promote your program?
5. Is the dealer willing to sign at least a one-year contract?
6. What is the allowable level of contamination?
7. Will the dealer collect the paper from each floor container in your office, or does the paper need to be consolidated into one main storage area?
8. Will the dealer supply recycling containers to use throughout the office: desk containers, floor containers and large bins for the main storage area?
9. Will the dealer provide "scheduled" or "on-call" pickups? When checking companies' references, it is helpful to ask how responsible the haulers have been with their pick-ups, i.e. Do trucks usually arrive within 24 hours of a phone call if pick-up is arranged on an on-call basis? If pick-ups are pre-scheduled, has the hauler been arriving on schedule?
10. Does the dealer offer destruction services for confidential materials? Do these services meet your legal requirements for destruction?
11. What reporting method does the dealer provide for tonnage collected and percentage of contamination?

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