# Chapter 5 Commercial waste reduction and recycling



Businesses are responsible for just over half of the waste generated in Hennepin County. And nearly two-thirds of the waste created at businesses and nonprofits is recyclable.

This chapter will address how to implement commercial waste reduction and recycling programs and options for diverting organic waste in commercial settings. Implementing waste reduction and recycling at multifamily properties, including apartment buildings, condos, and townhouses, is also covered here because most residential buildings with five or more units are serviced like commercial accounts.

# Included in this chapter

- Waste collection in a business setting
- Participation in commercial recycling
- Developing a recycling program at work
- Environmentally preferable purchasing
- Recycling at multifamily complexes

# Waste collection in a business setting

In Hennepin County, the hauling of commercial waste is an open system, which means businesses can select any licensed hauler to collect their waste or they can self-haul to a recycler or drop-off facility.

Recycling is mandated by state law (Minnesota Statute 155A.151) for businesses that generate over four cubic yards of trash per week.

Hennepin County revised its recycling ordinance (Ordinance 13, Solid Waste Source Separation) in 2018 to include new recycling requirements for businesses. This update incorporated the state law and added specific guidelines about how to collect recyclables. Most businesses in Hennepin County must:

- Have hauling service, either using single-sort service or separate hauling for at least three types of materials such as cardboard, cans, and plastics.
- Place a recycling bin wherever there is a trash bin.
- Label bins with color-coded labels for each waste type (blue for recycling and red, gray or black for trash) and include images of acceptable items.

In addition to separating recyclables from the trash, some businesses that generate large quantities of food waste must divert food scraps. This rule became effective January 1, 2020. Businesses that must separate their food scraps meet both of these two factors:

- Generates one ton or more of trash per week or contracts for eight cubic yards or more of trash service per week
- One of the following sectors: restaurants, grocery stores, food wholesalers, distributors and manufacturers, hotels, hospitals, sports venues, event centers, caterers, nursing and residential care facilities, office buildings with dining services, farmers markets, food shelves and food banks, colleges and universities with dining services, shopping centers, airports, golf clubs and country clubs, or rental kitchens and shareduse commercial kitchens.

These covered businesses must meet the following requirements to be considered in compliance with the ordinance:

- Have food waste recycling service in place, which could be food-to-animals or organics recycling for composting
- Provide labeled food waste collection containers in their back-of-house areas
- Separate food scraps from trash and recycling in backof-house operations
- Provide education and train employees annually

# Participation in commercial recycling

For some businesses, recycling provides significant financial savings and is essential to their daily operations.

For example, a big box retailer that generates large quantities of cardboard from product shipments and has the ability to store and transfer the cardboard to a paper recycler may get paid for the material rather than paying to have it collected with their garbage or recycling service.



Another example is a major food distributor that generates primarily unprocessed food waste and is able to send it to a compost facility at a lower cost than disposing of that material as trash.

Under these circumstances, there are large volumes of consistent materials making it viable to sell the material directly to a processor.

Businesses save on money by avoiding disposal or recycling collection costs, getting revenue for the material and avoiding solid waste fees. Counties charge fees for solid waste disposal; materials that are recycled are exempt from the fees.

Small business with minimal waste may find it challenging to participate in recycling programs because recycling collection service may be an additional cost. If the amount of materials generated is minimal, avoiding waste disposal fees may not provide much incentive for waste diversion. Additionally, a business in a multi-tenant building may want the service and be willing to pay for it but is limited by a building owner or management company that is unwilling to provide the service.

Additional barriers may include:

- Building or exterior space limitations for storing containers, especially with multi-sort systems.
- Local health and building code requirements for container siting and servicing.
- Additional time required for custodial staff to get materials set out for collection.
- Coordination between multiple tenants, custodial staff, and building owners.
- Limited service options.

Although these commonly referenced barriers may prevent some businesses from participating in recycling programs, they can be overcome.

# Developing and maintaining a waste reduction and recycling program at work

Take the following five steps to establish and maintain a successful business waste reduction and recycling program.

# Step 1: Gain Management Support and Assign a Coordinator

It is critical to gain management support for your program.

Programs succeed best when management:

- Implements company-wide waste reduction and recycling policies.
- Allocates resources (personnel and money).
- Leads by example by reducing waste, recycling, and buying recycled products.
- Stays committed and involved.
- Supports incentives to reward staff involvement.
- Communicates often and in a variety of ways.

Assign someone to coordinate the program. Choose someone who is enthusiastic, organized, and communicates well with co-workers and management.

The coordinator will:

- Work with others to evaluate which materials can be reduced, recycled, and composted.
- Teach co-workers and management how to reduce, reuse, and recycle waste.
- Coordinate activities with service providers and other company departments.
- Keep everyone in the company informed about the program goals and successes.



If a business has several departments, it may be necessary to create a waste reduction and recycling team to work with the coordinator. The

team should include someone from multiple departments, including management, maintenance, production, purchasing, personnel and food service.

## Step 2: Look in the bin

A waste assessment will help you become aware of what waste your business creates and how it is managed. Staff can then target opportunities for reduction, recycling and composting.

Deciding where to begin with an assessment depends on the type and amount of waste the company generates.

A waste assessment should address:

- How much waste the business generates.
- Where, how, and why waste is generated.
- What types of materials are being thrown away.
- Where the waste is going and how it is managed.
- The cost of collection and disposal services.
- How much of the waste can be reduced, recycled, or composted.

#### Step 3: Reduce waste

Waste reduction can lower costs in every area of a business – not only in offices, break rooms, shipping, and manufacturing, but also building, equipment, and vehicle maintenance.

The following are effective waste-reduction strategies. Use these ideas to kick off brainstorming conversations about what would work at your office.

- Set printer defaults to print double-sided, and encourage employees to print less.
- Replace plastic cups, plates and utensils with reusable counterparts.
- Provide reusable dishes in break rooms and kitchens, and encourage employees to bring lunches in reusable containers.
- Adopt green purchasing policies, such as selecting products that are less toxic, conserve energy or water, or use recycled-content materials.
- Reduce packaging waste by buying supplies in bulk and using reusable shipping containers.
- Donate unwanted supplies and other items to organizations or exchange with other businesses.
  Reuse Minnesota (reusemn.org) and the Minnesota Materials Exchange (mnexchange.org) are good places to start.
- Host green meetings. Limit printing of materials. Offer call in options. Provide information about transit, walking and biking to the meeting. If food is being served, offer organics recycling and make sure food service items are reusable, recyclable, or compostable

- Choose non-hazardous or less-hazardous cleaning products and use reusable towels and rags.
- Evaluate your company's processes to identify ways to use raw materials more efficiently and use less hazardous alternatives.

## Step 4: Start recycling

All business can recycle the basics like paper, cardboard, cartons, plastic, metal, and glass. Businesses that produce a lot of food waste should consider adding organics recycling to their waste diversion efforts.

#### Choosing a recycling service provider

Find out how much you're paying for waste service by looking at your current waste bill. If a third party handles the billing for your waste, ask them for the trash and recycling information. Check the terms and duration of your waste contract.

Then get quotes from your current waste hauler for adding services such as recycling or organics recycling, and request quotes from at least two other haulers to compare prices. Comparison shopping will help you find the most complete, reliable and cost-effective option.

Ask the following questions of potential recycling and organics recycling service providers:

- What materials do you collect?
- Is there a minimum amount required for collection?
- Do you provide collection containers (desk paper trays, bins, barrels, dumpsters, outside storage containers, etc.)?
- How is the pickup service scheduled (weekly, on-call, etc.)?
- Do you provide educational materials and recycling and/or organics recycling training?
- What are your payment terms?
- Do you require a contract for service and if so, what are the terms of the service contract?

#### Set up your program

Remember the following to set up effective recycling containers:

- Make recycling convenient
  - Create sorting areas by placing recycling, trash and organics containers next to one another. Set up sorting stations where waste is generated and where there is heavy traffic.
  - If employees do not have recycling bins at their desks, consider setting up an intermediate

recycling area for approximately every 20 employees. Make sure the recycling area is conveniently located in a high-traffic area, such as by the break room or restroom.

- Put a recycling bin by the mailboxes and copy machine so it's convenient for people when sorting their mail and making copies.
- When starting an organics recycling program, it may help to start in the kitchen or lunchroom and expand to other areas over time.



- Make recycling easy
  - Use consistent, color-coded containers and signs with images of items to help users figure out what goes where. The idea is to distinguish between the waste streams as much as possible so users are aware that not all waste is trash and to help them easily sort their waste. We recommend blue for recycling, green for organics, and red, black or gray for trash.
  - In addition to color-coding, using different shapes of containers and lids, and signs, labels or posters can draw attention to the different containers.
  - Place labels and signs on or near containers so users can refer to them to determine how to sort their waste. Consider using multiple signs and labels to reinforce the materials that go in each container.





- Set up your central collection area
  - Place all of your dumpsters/carts together.
  - If your hauler has not done so, clearly label all of your dumpsters/carts to help workers identify quickly and accurately which waste goes where.
  - Include the dumpster area in the training of your cleaning and other staff.



Design with flexibility in mind. Be ready to change initial practices as information is gathered and new handling methods are learned. If the business generates large quantities of materials, consider establishing a pilot

program to work out potential problems before expanding the program company-wide.

# Step 5: Spread the word

Employee participation is critical to success. Gain the support and active participation of upper management immediately. Employees who see their boss reducing, reusing, and recycling are more likely to participate. Make participation easy by educating everyone about the program.

#### Announce and promote the program

Launch the program with a special event or staff party. Then promote the program both internally and, if applicable, throughout the community.

Consider all of your communication channels. Make announcements at staff meetings, post messages on company bulletin boards, send email messages, and post signs and flyers announcing the start of the new or improved program. Include the commitment to reduce waste, recycle, and compost, and clearly explain the new program procedures and how to sort materials. Introduce the program coordinator and provide his or her phone number and/or email address.



Plan a short monitoring period in which someone stands by the waste station(s) to help employees and/or customers separate their

waste correctly into recycling, organics and trash bins. This is particularly important with organics recycling, which is a new concept for many people.



Having someone available to help with sorting and to answer questions reduces contamination and makes for a smoother transition as people learn new habits.

#### Hold training sessions

Training is vital. Everyone who handles waste, including employees, custodial staff, and outside contractors, should understand how the program works.

Staff meetings are ideally suited for training sessions. Both the coordinator and management should be involved in answering questions, providing encouragement, and discussing the program's needs and successes. Provide employees with a list of materials currently accepted (or specifically rejected) by the recycling program, along with brief instructions on topics such as collection locations and material handling methods.

Plan for staff turnover to ensure continuing success of your program. Include components of the recycling and/ or organics program when training new staff or hiring new contractors.



#### Keep employees informed and involved

Once underway, track successes to share with employees and management. Providing regular program updates and positive communication are critical for long-term success.

Here are some suggestions for keeping staff and management informed and involved:

- Send articles about program successes and staff involvement through emails or a company newsletter or internal website.
- Post flyers reminding employees of program goals and progress towards meeting them.
- Create a competition between floors, departments, etc. to see who can improve recycling the most.
- Form a green team or appoint recycling champions to help educate employees and customers, keep everyone informed of the business' progress, and lead additional environmental efforts.
- Give awards to employees or departments that

have demonstrated innovative strategies for waste reduction and recycling.

- Encourage employees to share innovative ideas and solutions.
- Work closely with your waste hauler to monitor progress, or conduct periodic waste assessments to see how you're doing.

#### Get recognized for your efforts

Make sure to let customers know about your program! Businesses are evaluated on many aspects of their performance, including their environmental stewardship.

Waste reduction and recycling programs show customers and vendors that your business cares about the community and environment. So, share your recycling efforts, goals and results with your customers. Some ideas:

- Send news releases about the program's accomplishments to community papers as well as environmental and business trade publications.
- Post signs and banners in public areas that inform visitors about the program.
- Motivate other businesses to establish their own programs. Speak at business meetings, workshops and seminars.
- Sponsor a local cleanup day or take part in community recycling activities and events. Let the community know the business cares.



# Assistance available from the county

Many resources are available to help make waste reduction, recycling and organics programs successful. Access these resources at **hennepin.us/businessrecycling**.

#### Grants

The county has grants for small businesses and non-profit organization to start or improve recycling and organics recycling programs.

#### Professional staff assistance

County staff also offer the following free services:

- On-site assessments to determine best options and necessary start-up steps.
- Evaluation of potential costs and savings.
- Assistance with internal collection setup.
- Promotional and education materials.
- Follow-up and ongoing assistance.

#### **Container labels**

Hennepin County has a variety of signs and labels available for free to all businesses and organizations in the county.





# Environmentally preferable purchasing

Purchasing decisions can greatly support waste reduction and recycling efforts. Environmentally preferable purchasing involves choosing products and services that have a lower impact on the environment and human health.

Taking the following steps can help ensure that purchases support waste reduction and recycling efforts:

- Make a company-wide commitment to purchase environmentally preferable products and services.
- Identify purchasing opportunities.
- Revise purchasing policies, ordering practices and product specifications.
- Set realistic, attainable purchasing goals.

Ask the following questions before purchasing any product:

- Is the product necessary? Is there a similar product that is a better choice for the environment?
- Is the product non-hazardous or less hazardous than other choices? Good resources include Green Seal (greenseal.org) and U.S. EPA Safer Choice (epa.gov/ saferchoice), both of which assess product for human health and environmental concerns.
- Is the product reusable, durable or easily repaired?
- Can the product be found used? Reuse Minnesota (reusemn.org) and the Minnesota Materials Exchange (mnexchange.org) are good resources.
- Is the product made from recycled or compostable materials or renewable resources (such as plant-based raw materials)?
- Will a recycled-content product work in place of one made with virgin materials?
- Does the product conserve energy or water?
- Is the product refillable or available in bulk quantity to reduce packaging?
- Is product leasing an option?
- What happens to the product at the end of its life? Can it be recycled or composted? Does it need special disposal? Will the manufacturer take it back?

# **Buy recycled**

Recycling is more than collecting, processing and turning materials into new products. Success only comes when the recycling loop is closed by purchasing products made from recycled materials.

Businesses can look for opportunities throughout their operations to substitute recycled-content products for those made from virgin materials. In most cases, the quality of recycled content products is comparable or superior. Look for recycled content in everything from office products and packaging to building materials and raw materials for manufacturing.

# Examples of environmentally preferable purchasing

## Equipment

- Develop maintenance contracts and purchasing specifications for laser printers and copy machines that support the use of recycled-content paper and remanufactured toner cartridges.
- Purchase used equipment.
- Purchase or lease copiers and laser printers that automatically copy or print on both sides (duplex printing).

#### **Supplies**

- Specify chlorine-free, recycled-content paper and soyor agri-based ink when placing printing orders.
- Purchase laser, copy, and letterhead paper with 30 to 100 percent post-consumer recycled paper content.
- Contract with a custodial service that uses less-hazardous (less-toxic) or non-hazardous cleaners.

## Products

- Tell your vendor to use waste reduction techniques, such as minimal packaging or returnable shipping containers and pallets.
- Manufacture products and packaging that can be reused, recycled, or composted.
- Evaluate all purchases considering "cradle to grave" costs such as liability, environmental impacts and employee safety during the manufacture, use, and disposal of a product.

# Recycling at multifamily complexes

Nearly one-third of Hennepin County residents live in buildings with five or more units. Most of these properties contract as a business for waste and recycling services and are not included in a city's curbside program.

Cities are required to have and enforce ordinances requiring property owners to provide service to tenants. Hennepin County's Ordinance 13 added additional requirements for multifamily housing:

- Educational materials must be distributed to new tenants and at least once per year to all tenants.
- There must be a recycling bin wherever there is a trash bin in common areas such as laundry rooms, mail rooms and community rooms.
- Bins must have color-coded labels stating the waste type.
- Collection containers for recycling and organics must not be overflowing and must be accessible to tenants any time they have access to trash.

There are currently no requirements for multifamily complexes to provide organics recycling service to residents, however there may be local drop-off opportunities.



# Uncovering the challenges and opportunities for multifamily recycling

In 2017, Hennepin County conducted a waste study to assess how well apartment and condo buildings were recycling. The study looked at the recycling diversion rate, contamination levels in the recycling, and the composition of what was being discarded as trash. The study had three main conclusions.

- 1. Apartment buildings have low recycling rates and high contamination rates: The study found that only 13 percent of everything being discarded by apartment and condo residents is being diverted for recycling. This is significantly lower than the countywide recycling rate of 41 percent. There is also a lot of contamination in the recycling. About 24 percent of what was put in the recycling was actually trash.
- 2. There are significant opportunities to divert more materials from the trash: Analysis of the trash found that only 30 percent was truly trash. The remaining 71 percent was materials that likely could be diverted. This included organics (33 percent), recycling (23 percent), bulky/reusable household goods (8 percent), textiles (7 percent) and hazardous waste or electronics (2 percent).
- 3. Service levels are not adequate: The study also found that typical service levels may not be adequate to collect the amount of recycling generated at apartment and condo buildings. On average, properties provided half the amount of service capacity for recycling as they did for trash.

Find the full report from the multifamily waste sort study at **hennepin.us/solidwasteplanning**, under Multifamily waste study in the Waste studies tab.

# Improving recycling at multifamily buildings

Developing and maintaining a successful multifamily waste reduction and recycling program requires an onsite champion of the program, conveniently located and well-labeled containers, and ongoing education. Some buildings may need recycling materials in multiple languages for non-English-speaking tenants.

There are many opportunities for CRAs to help improve recycling at multifamily buildings. Some ways to help include:

• Directly educating tenants through door knocking that includes distributing educational materials and answering questions.

- Assisting complexes with new or revamped recycling or organics program set-up.
- Giving presentations that provide information about the building's recycling system to tenants and answer recycling questions.
- Connecting property owners to outlets for bulky-waste diversion, such as unwanted furniture and mattresses.
- Establishing onsite community gardens and composting bins for tenants.

Prior approval from the property management and/or owner needs to be obtained before activities are initiated. Hennepin County has a variety of materials available including container labels, posters, and educational materials in different languages. See the resources available at **hennepin.us/apartmentsrecycle**.



# Resources

- hennepin.us/businessrecycling: Information about recycling grants, professional staff assistance, free container labels, and more resources available to help businesses and organizations start or improve recycling programs.
- hennepin.us/apartmentsrecycle: Information and free resources for property owners or residents interested in establishing or improving recycling programs at multifamily properties.
- mnexchange.org: The Minnesota Materials Exchange is a free service for businesses that connects organizations that have good quality, reusable goods they no longer need to those that can use them. Businesses can find low-cost or free materials and find new markets for surplus materials.
- mnchamber.com/wastewise: Private, non-profit, member-supported organization affiliated with the Minnesota Chamber of Commerce that helps businesses reduce waste and save money.
- **mnimize.org**: MNimize is a campaign to recognize and support businesses as they take action to reduce plastics.
- Print resources for businesses: order print copies at hennepin.us/businessrecycling
  - Business recycling best practices guide
  - Recycling at work guide
  - Organics recycling at work guide
- Print resources for multifamily complexes: order print copies at **hennepin.us/apartmentsrecycle** 
  - Recycling at your building brochure
  - Recycling advocate recruitment flyer
  - Apartment recycling poster
  - Recycling door hanger
  - Recycling request business card