

Commercial Recycling Toolkit

Office



Recycling Waste Makes Good Business \$ense

Yes, recycling can save money! Recycling is often less expensive than trash disposal. Whether you are just starting or are trying to improve an existing program, it always helps to have a plan. Designing an effective waste reduction program will insure that you comply with the Universal Recycling Law, will help reduce your waste stream, will save natural resources and energy, and has the potential for significant waste disposal savings. This toolkit will provide assistance in setting up a new recycling program or help you evaluate your current program.

Elements of waste reduction include ways you reduce and reuse the waste you generate. The first and most effective component of the waste hierarchy is to reduce the waste created. Generators of waste are encouraged to reduce their waste by purchasing in bulk, buying items with less packaging and switching to reusable instead of single-use items. In addition to benefiting the environment, these efforts often offer the financial incentive of lower expenses in purchases. Despite efforts to reduce the amount of waste generated, consumers and businesses still create a substantial amount of waste. The U.S. Environmental Protection Agency estimates that each American generated 4.3 pounds of waste daily. Much of this waste can be reduced, reused, or recycled to minimize the strain on the environment and municipal waste management. One simple way to remind people of the waste hierarchy is to provide recycle bins larger than trash bins, or to provide a greater number of recycling bins than trash bins.

Recycling Plan

Step 1: Identify your recycling program coordinator

The facility manager or their designee should plan and oversee the recycling program. This individual should be motivated, have a good rapport with staff, and takes an interest in waste reduction, reuse, and recycling. Announce the program and the new recycling coordinator to all staff to encourage cooperation and compliance. The recycling coordinator should:

- Establish recycling policy and procedures.
- Interface with staff and with recycling service providers.
- Determine the start date of the program.
- Facilitate education & promotion of recycling by explaining how recycling works and why it is important.
- Track the progress and success of the recycling program.
- Assemble a green team to help plan, implement, evaluate and manage the program. The team should include employees from each area of operation where waste is generated.



Step 2: Characterize your waste stream

A waste characterization is the process used to quantify the types of wastes and recyclables being generated. You literally inspect, identify, and sometimes weigh the types of materials discarded. A waste characterization will help you identify recycling and waste prevention opportunities, potential savings from reduced disposal costs, potential revenue from the sale of recyclables, and help you establish baseline data for measuring the future effectiveness of the program. To conduct a waste characterization:

- Utilize knowledgeable staff (*For guidance see: Additional Resources - Northeast Recycling Council*) or, contact your waste hauler, recycling service provider, or a waste/recycling consultant.
- Small businesses may request a free characterization of their waste stream by contacting DSWA at 800-404-7080 or DNREC at 302-739-9403. Requests for a free waste characterization will be addressed on a first come, first serve basis as resources allow.

Step 3: Identify the materials to be collected

Work with your waste hauler, recycling service provider, or waste/recycling consultant to analyze the information collected during your waste characterization. Once you see what you're discarding, identify opportunities for waste reduction, reuse, and recycling. Discuss recycling collection options with your waste hauler or recycling contractor. Identify opportunities for waste reduction. Request that your vendors use reusable shipping crates and totes instead of cardboard boxes, or install air dryers in the restrooms. Finally, identify recyclable items. For single-stream recycling programs, all of the following materials can be commingled:

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| <input type="checkbox"/> Mixed paper (office, junk mail) | <input type="checkbox"/> Plastic bottles, jugs, containers | <input type="checkbox"/> Aluminum and steel cans |
| <input type="checkbox"/> Newspapers | <input type="checkbox"/> Corrugated cardboard | <input type="checkbox"/> Boxboard containers |
| <input type="checkbox"/> Magazines and catalogs | <input type="checkbox"/> Glass containers | <input type="checkbox"/> Telephone books |

Large quantities of certain materials may be sorted for cost-effective recycling. Here are some examples of material streams commonly found in office settings which may be beneficial to recycle separately:

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| <input type="checkbox"/> Office paper | <input type="checkbox"/> Batteries | <input type="checkbox"/> Food waste |
| <input type="checkbox"/> Electronics | <input type="checkbox"/> Packing peanuts (EPS loose fill) | <input type="checkbox"/> Landscaping waste |
| <input type="checkbox"/> Corrugated cardboard | <input type="checkbox"/> Carpet | <input type="checkbox"/> Plastic film / shrink wrap |
| <input type="checkbox"/> Ink and toner cartridges (many suppliers provide take-back programs) | | |
| <input type="checkbox"/> Fluorescent lamps and bulbs (consider using high efficiency fluorescent ballasts and lamps (T-5 & T-8)) | | |

For more information see: www.recycling.delaware.gov or www.dswa.com/programs.asp.

Step 4: Determine collection program logistics

Making recycling easy and convenient will boost levels of staff and customer participation. Recycling should be as easy as throwing something in the trash, so recycling containers should be placed wherever you currently have trash containers (individual offices, cubicles, lobby, break room, file/copy room, etc.) Take the following criteria into consideration when choosing containers:

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| <ul style="list-style-type: none">• Placement• Location• Capacity• Durability• Ease of handling | <ul style="list-style-type: none">• Cost• Appearance• Opening type• % recycled content |
|---|---|



The recycling containers should look different from trash cans, be easily identified, and be clearly labeled. Labels can be self-made or purchased. Lids should have restricted openings. Consider choosing blue bins for recycling, black for trash, and green for food waste. Use clear liners so staff can easily identify recyclables from trash once bins are emptied. Other considerations include:

- Is your recyclable storage area of adequate size for your hauler to pick up?
- Do your recyclable materials need to be crushed, baled, banded or compacted?
- Is a recycling service needed for a specific material stream?



Step 5: Select a recycling service provider

A recycling service provider can be one or more vendors that will pick up your recyclables for processing. While many waste haulers offer recycling services, some companies specialize in providing strictly recycling services.

Discuss collection schedules and options with a variety of service providers and request a billing structure that will reduce your waste disposal costs. Some paper recyclers may pick up high quality office paper at a reduced charge, or even pay you for sufficient quantities. Specialty recyclers can be found in the phone book or online. Services might include baling, shredding, crushing, or compacting as well as transporting and marketing the recyclable materials. Monitor how full collection dumpsters are and make arrangements to adjust the collection schedule based on volume. If you choose not to use a collection service you can also self-haul your recyclables directly to a recycling processor.

Step 6: Outreach and Education

Before you launch the program, spend time promoting your recycling effort and educating staff about recycling procedures. Implementation will require an ability to motivate staff to participate. Once the program has begun, you should reinforce good habits and keep staff interested in the program.

Choose a launch date to officially start the program. Alert staff well in advance and prepare simple information explaining the benefits and procedures to promote the program. Organize training sessions for staff that may have new duties. Prepare a press release to publicly announce and promote the program – and your business! Plan an event to launch the program and to generate enthusiasm. Involve local business and government leaders with a “ribbon-cutting” ceremony.



For an effective recycling program, you must educate staff. This can be done in a variety of ways, including (but not limited to):

- Download and distribute the ‘How to Recycle’ guide in both English and Spanish at: www.recycling.delaware.gov.
- Meet with staff to discuss the recycling procedures and program goals.
- Inform vendors about the program.
- Place recycling information in obvious and readily available locations.
- Stress the importance that recyclables be kept free of trash and contamination.
- Place labeling and signage with recycling information on trash and recycling containers and dumpsters.
- Display recycling goals and/or promote the amount that has been recycled on signs and displays.
- Request feedback from staff regarding contamination or improper handling of recyclables.
- Send out press releases to publicize your recycling program and announcing milestones.
- Encourage participation and publicize program successes through newsletters, e-mails, posters, and new employee orientation.

Step 7: Sustaining the program

Monitor and evaluate the recycling program on a regular basis. Request a monthly disposal report stating the amounts of recyclables by material type and disposal data in tonnage or cubic yard measurements.

- Post results and accomplishments listing the quantity of recyclables collected, total waste diverted, and revenue from the commodities.
- Percentage of waste diverted by your recycling program – compare the tonnage of recyclables collected to the tonnage of waste generated.
- Maintain records for charges for hauling waste and recyclables. Calculate savings from reduced disposal costs.
- Request contamination reports from recycling hauler or perform routine inspections of recyclables.
- Monitor progress and make the diversion rates mean something – translate the data into terms the average person can understand.
- Consult DNREC or a private consultant for assistance.

Additional strategies for waste reduction

The following waste reduction strategies can reduce costs associated with unnecessary material use and waste.

Reduce – Purchase, consume, and throw away less. Use upstream control of the volume and types of wastes generated by your office through purchasing decisions. Source reduction actually prevents the generation of waste in the first place, making it the preferred method of waste management. Methods may include:

- Implement an electronic records system
- Implement double-sided copying as the default setting on all printers and copiers
- Install a water cooler and coffee station, encourage staff to bring in reusable water bottles and mugs
- Provide alternatives to single-use cream, sugar, and stir sticks for coffee
- Install air dryers in the restrooms
- Adjust your heating and cooling systems when the office is not in use
- Use long-lasting, energy efficient light bulbs and fixtures
- Ask suppliers to reduce packaging in purchases and shipping
- Use renewable, refillable, or returnable shipping containers

Reuse – Reusing items by repairing, donating, or selling them. Reuse is even better than recycling because items do not have to be reprocessed before they can be used again.

- Put new labels on old file folders
- Reuse laser and printer cartridges by participating in take-back programs
- Set-up a 'Reuse Area' in the workplace for office supplies you no longer need
- Use reusable mugs, plates, and cutlery in the lunch room, and for office parties and events
- Establish a compost pile or have food waste collected by a local composting facility

Buy Recycled – If you are not buying recycled content products you are not recycling! Purchase products that are re-manufactured or made from post-consumer waste (PCW) recycled content such as:

- Office paper
- Paper towels, napkins, and toilet tissue
- Recycling and trash containers
- Toner and printer cartridges
- Carpeting
- Office furniture and decorations
- Packaging



Additional Resources:

Delaware's Universal Recycling Grant and Low Interest Loan Program:

www.dnrec.delaware.gov/services/Pages/Loans.aspx

Delaware Recycles: www.recycling.delaware.gov and www.facebook.com/DelawareRecycles

(Download 'How to Recycle' guide, Commercial Recycling toolkits)

DNREC, Division of Waste and Hazardous Substances: www.dnrec.delaware.gov/whs/awm or call (302) 739-9403

Delaware Solid Waste Authority (DSWA): www.dswa.com or call 1-800-404-7080.

Electronic waste: For guidance in disposing of electronic waste and take-back programs

DSWA: www.dswa.com/programs_EGRbusiness.asp

EPA: www.epa.gov/epawaste/conservematerials/recycling/index.htm

EPA Environmentally-Preferable Purchasing Program: www.epa.gov/epp (Costs and benefits of purchasing choices)

EPA Food Recovery Challenge: www.epa.gov/foodrecoverychallenge (Food waste reduction)

Food Bank of Delaware: <http://www.fbd.org/> (Food donations)

Green Business: www.greenbiz.com

Habitat for Humanity: www.habitat.org/restores/directory/de

Northeast Recycling Council: www.nerc.org/documents/town_business/recycling_makes_sense_guide.pdf

(See Appendix C)

Product Stewardship: www.productstewardship.us/index.cfm

Special Wastes: www.dnrec.delaware.gov/whs/awm/Recycling/Pages/Recycling.aspx or www.dswa.com/programs.asp

(Some material streams including: batteries, fluorescent lamps and bulbs, ink and toner cartridges, paint, prescription medication, scrap tires, used motor oil, and white goods may require special handling)

Sustainable Business: www.sustainablebusiness.com

The Emerson Good Samaritan Food Donation Act: www.gpo.gov/fdsys/pkg/PLAW-104publ210/pdf/PLAW-104publ210.pdf Encourages food donation to nonprofits by minimizing liability

US Green Building Council: www.usgbc.org

More recycling information: www.earth911.com