



Solid
Waste
Management
Coordinating
Board

Recycling 101

Prepared for 2009 Community POWER Grantees. Visit RethinkRecycling.com for more information on this and other waste related topics. This information has been approved by county staff and may be reproduced using the credit line below. Be sure to have your county staff contact review any changes made to this document before publishing.

This information has been provided by the Solid Waste Management Coordinating Board through a Community POWER (Partners on Waste Education and Reduction) Grant. Visit RethinkRecycling.com your go-to-guide for waste and recycling in the Twin Cities.

Tool-Kit

The information provided below is an excerpt of information found in the Rethink Recycling Paper toolkit. For additional resources on paper recycling including customizable ads, templates, facts, images, paper recycling charts and fact sheets visit the Rethink Recycling Campaign Toolkit at:

www.swmcb.org/rethink_recycling_toolkit. Items available include:

- Articles on Paper, Cans and Bottles, and Electronics
- Fact Sheets
- Ad Templates
- Images

Introduction

Annually, Minnesota recycles over two million tons of waste, the second best rate in the country. This means we don't have to build five large waste-energy facilities, or put another way, we don't need about ten large landfills because of our recycling efforts. Despite these accomplishments, Minnesotans could recycle much more than we do. Twenty-one percent of our garbage is recyclable paper, and more than half of the people in the state still don't recycle at all.

Contact your city recycling coordinator to learn how to start recycling or recycle even more: RethinkRecycling.com.



Recycling Tips, Myths, and Facts

Here are a few of the common questions and comments we hear from residents. We have provided some suggestions to help you to recycle more!

I recycle my cans, bottles and newspapers, what else is there to recycle?

Recycling programs have changed over the years. Some new items have been added that you may not be aware of, including:

- Mail, office and school papers
- Shredded paper in closed paper bags
- Magazines and catalogs
- Phone books
- Cereal boxes, cracker boxes, pasta boxes and cake mix boxes
- Shoe boxes, gift boxes and electronics boxes
- Boxes from toothpaste, medications and other toiletries
- Glass food and beverage bottles and jars
- Metal food and beverage cans
- Plastic bottles and jugs
 - Water, soda and juice bottles
 - Milk and juice jugs
 - Ketchup and salad dressing bottles
 - Dishwashing bottles and detergent jug
 - Shampoo, soap and lotion bottles

Contact your community-recycling program for information on how to sort these materials for recycling RethinkRecycling.com.

I'd recycle more, but not all my recycling can fit in one bin.

Extra containers or carts are available by calling your community recycling program. You could also use a laundry basket, pail, or box for extra recyclables. Make sure you label the extra container as recycling.

I have trouble carrying the recycling container to the curb.

If you do not have a cart with wheels, try using a wagon, wheelbarrow or luggage cart, or ask a neighbor or family member to help.

I always forget what day is recycling day.

No problem! You can wait until your next recycling day or take your materials



to your nearest recycling drop-off center. Check with your community recycling program, as some offer collection schedules, e-mail reminders or provide stickers to mark your calendar.

I don't have room in my house for collecting more recyclables.

If you don't have room to store your recyclable paper out of sight, consider placing a decorative basket near where you read your mail or pay your bills.

I don't recycle my mail and other papers because I'm concerned about protecting my identity.

Mail and other papers are no safer in the trash. If you shred your paper, you can still recycle it. Place it in a closed paper bag and label it "shredded paper."

Recycling is too much work.

Actually, recycling is easier than it used to be. You don't have to remove labels on cans or bottles. Plus, a lot more material is now recyclable, including envelopes with windows, magazines, and even those glossy inserts that come with the newspaper. Another good tip is to place a recycling container next to your garbage can to make recycling convenient.

There are no markets for recyclables.

Demand for recycled materials has never been greater. In fact, demand exceeds the supply currently provided by the American public. We're using more paper than ever, and paper mills need recycled paper to produce new products. Paper is also a valuable export.

I don't generate enough recycling to make a difference.

You may be surprised, even in a single person household the amount of material that could have been recycled can quickly add up. About one-third of what is thrown away could be recycled.

Recycling doesn't make that big of an environmental difference.

Recycling doesn't just save natural resources; it also saves energy and reduces greenhouse gas emissions. Plus, it's great for our economy. Minnesotans recycle over 2.3 million tons each year. By recycling, Minnesotans:

- **Save Natural Resources** - Recycling 1 ton of paper saves 7,000 gallons of water
- **Reduce Greenhouse Gases** - Recycling in Minnesota reduces emissions equal to taking 2.3 million cars off the road
- **Create Jobs** - Over 19,000 Minnesota jobs are involved with recycling



- **Reduce Our Taxes** - Each year, the recycling industry contributes \$64 million in taxes help pay for public services

Why recycle? It just gets thrown away anyway.

It is against state law for haulers to pick up recyclables and not recycle them. It is also against the law for a landfill or resource recovery facility to accept a load of recyclables. Recyclables are in demand. Cities and haulers receive revenue from the sale of recyclables.

Why can't we recycle everything?

A market must exist that will accept the material and use it to make a new product. The material must be in demand by manufacturers to produce a saleable product. A sufficient, steady supply of good quality material must be provided to meet manufacturers' production needs. A material must meet market specifications. It cannot be contaminated with dirt or grease. For example, light bulbs, mirrors, window glass, ceramic dishes, and crystal cannot be included with clear, green and brown glass food and beverage containers. Each type of glass has different properties and melting temperatures.

Finally, consumers must purchase the products made from recycled materials. This is called "closing the loop."

New technology will produce new markets for more materials in the future. Until then, please prepare recyclable materials according to your city's requirements, which are based on market specifications.

More details about common items that can't be recycled:

Gift-wrap – This type of paper is not recyclable because it is often printed with too much colored or metallic ink. These inks contaminate the batch of new paper pulp and greatly increase the amount of "beaching agent" necessary to whiten the pulp to produce new paper.

Soiled paper – Paper contaminated with foil, grease, paint, or plastics will show up as an "oily" spot on newly formed paper. These spots will not print or glue properly or may cause the paper to be stained. When these non-paper materials contaminate recycled paper, the new paper is considered inferior and is rejected.

Refrigerator/freezer boxes – Packaging for items that typically go in the refrigerator or freezer (such as pop and beer boxes, frozen food boxes, etc.) are not recyclable because they are coated with wet-strength chemicals, waxes, or poly, which do not break down at the same rate as non-coated paper. A quick tip: if the product can be stored in the cupboard it's recyclable. If it goes in the fridge, freezer or microwave it shouldn't be recycled.



Egg cartons – These items have already been made with recyclable paper and have come to the end of their recyclable life. Egg carton fibers are so short that they are not suitable for making new paper products.

Plastic food tubs – Different plastics melt at different temperatures. Small-necked plastic bottles are collected for recycling; wide-mouth plastic tubs do not have a recycling market in the Twin Cities at this time. It is important to include only the specific plastic containers collected by your program.

Metal – Many types of metal may be recycled, however curbside recycling programs generally only accept aluminum food/pop cans and metal food cans. Other kinds of metal can be taken to scrap metal recyclers.

What are my recyclables used to make?

Recyclable	Product made from the recyclable
Aluminum cans	Aluminum cans are shredded, cleaned, melted, and mixed with a pure aluminum base, then recast into new aluminum products.
Aluminum foil/trays	Foil packaging can be made into wrapping foil, semi-rigid packaging such as pie plates and food trays, and flexible packaging such as gum or candy wrappers.
Boxes: cereal, cracker, pasta, cake boxes	These boxes are generally used to make new boxes, puzzles, and things such as egg cartons.
Cardboard	Cardboard can be recycled into new cardboard, cereal, cake, chip and cracker boxes, puzzles, games and items such as tablet backing.
Glass bottles and jars	Old food and beverage containers are crushed into a material called cullet and made into new food and beverage containers. The clear glass is used for clear containers, green glass for green containers and brown glass for brown containers.
Magazines, catalogs and phone books	Magazines are recycled into items such as food or gift boxes (boxboard), tissue paper, game boards, and greeting cards.
Mail, office and school paper	These papers can be used to make new cereal boxes, facial and toilet paper, greeting cards, gift wrap, and writing paper.



Newspapers	Newspaper and its inserts are mixed in with other grades of paper and used to make new newspapers, paperboard, puzzles, wallboard, gift/food boxes, cellulose insulation, and animal bedding
Plastic Containers with a neck #1 and #2	PETE #1 is recycled into carpet, clothing, strapping, tennis balls and other bottles. HPDE#2 is recycled into new containers, drainage pipe, film, pallets and plastic lumber for picnic tables and decks.
Steel food cans	The two by-products, high grade steel pellets and tin ingots, are both remade into tinplate containers. Most steel cans are used to make new cans for food products, paint, aerosol and other materials.

Recycling At Work and Apartment Buildings

Businesses, School, and Organizations

Recycling at work (including schools and non-profit organizations) is typically done on a contract basis. Often, the same company that hauls away garbage can be contracted to collect recycling. Businesses and organizations have to pay for this service, which is why not all employers offer recycling. In addition, employees who collect garbage and recycling (e.g. custodial staff) should be trained to sort the materials correctly. Minnesota Waste Wise is an organization that helps businesses in Minnesota reduce waste.

www.mnwastewise.org

Apartment Buildings

Apartment buildings are considered businesses when it comes to recycling, which is why each multi-family building has to establish its own recycling program. Many waste haulers who collect garbage from apartment buildings offer recycling collection for a fee. Some cities offer these services to apartment buildings too. Eureka Recycling created a useful toolkit of best practices in multi-family recycling, available at: www.eurekarecycling.org

Visit RethinkRecycling.com to find recycling tips for businesses and residents.

Statistics & Facts

Many household items can be recycled, including many forms of glass, metal, plastic, and paper. But does recycling really make a difference? Absolutely!

- **Recycling Saves Natural Resources** - Recycling 1 ton of paper saves 7,000 gallons of water



- **Recycling Reduces Greenhouse Gases** - Recycling in Minnesota reduces emissions equal to taking 2.3 million cars off the road
- **Recycling Creates Jobs** - Over 19,000 Minnesota jobs are involved with recycling
- **Recycling Reduces Our Taxes** - Each year, the recycling industry contributes \$64 million in taxes to help pay for public services
- **A quick tip:** if the product can be stored in the cupboard it's recyclable; if it goes in the fridge, freezer or microwave it shouldn't be recycled.

Recycled materials are often made right back into the product they originally came from – cans turn into new cans, boxes into new boxes, etc. Recycled plastic is made into carpet, clothing, tennis balls, drainage pipe, and plastic lumber for picnic tables and decks. Global demand for cans, bottles, paper, cardboard, and other materials has rarely been higher, with about one-third of the nation's paper and plastic going for export. The nation's number one export by volume is scrap paper.

Resources

RethinkRecycling.com - Residents and businesses can learn how to create less waste, recycle more and properly dispose of hazardous items. RethinkRecycling.com is sponsored by the metro region's Solid Waste Management Coordinating Board (SWMCB), comprised of the six member counties, and the Minnesota Pollution Control Agency.

Recycling Association of Minnesota - www.recycleminnesota.org

Minnesota Waste Wise (for business recycling) - www.mnwastewise.org