

Module: Recycle

Introduction

Recycle is the fourth "R" in the Region's Waste Management Hierarchy, after Rethink, Reduce and Reuse. Recycle is an important step in the waste hierarchy but should be considered only after applying other alternatives. It is the last attempt to keep items out of the garbage bag and should be done after the other Rs have been used. Recycling diverts material away from the garbage bag to be reprocessed into something new. By separating your recyclables, you can significantly reduce the amount of garbage your household generates. In this module, students will learn about the Region's Blue Box recycling program and how they can participate for a cleaner, greener future.

Learning Objectives

- 1. Identify and define the fourth "R" Recycle
- 2. Identify acceptable and nonacceptable materials for recycling
- 3. Explain some of the benefits of Recycling
- 4. Identify and describe key elements of the recycling processes
- 5. Explain how residents can reduce waste

Resource Materials (located in the resource folder)

Videos:

- Durham Region's five "Rs"
- Food Waste Prevention Playlist
- Benefits of Recycling
- Prevent litter by preparing your recycling in these quick steps
- Durham Region's Materials Recovery Facility
- Circular Economy

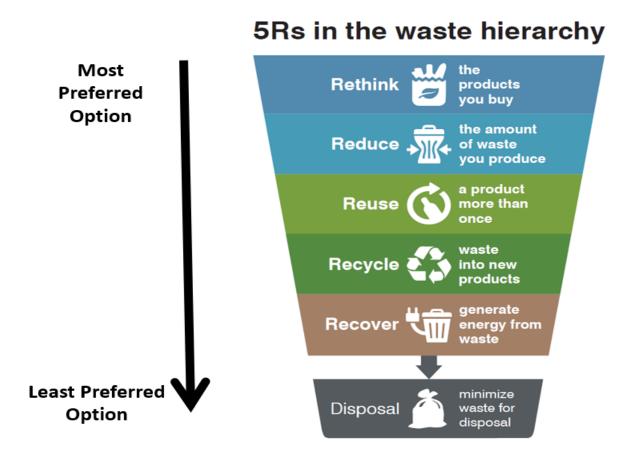
Infographics:

- 5Rs in the Waste Hierarchy
- What is a circular economy?

What is Recycling?

Recycling is part of the circular economy, a closed looped system that aims to retain and recover as much value as possible from resources by rethinking, reducing, reusing, and recycling products and materials. Recycling is collecting and processing materials that would otherwise be disposed of as waste and turning them into new products. Recycling helps to retain value associated with the material for a longer period, reduces the amount of new natural resources required to make new materials, and supports a circular economy. Recycling also includes composting in the Region's waste hierarchy as it involves converting organic matter into something new.

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What are the benefits of Recycling?

There are many benefits to recycling which makes Blue Box recycling a valuable program for our community and the environment.

Some of these benefits include:

- Reducing the amount of garbage households generate by diverting material away disposal options such as incineration and landfill
- Reducing pollution and greenhouse gas emissions in Durham Region
- Prolonging the life of a material
- Reducing the need for new raw materials and saves energy
- Prolonging the need to expand waste management infrastructure for waste disposal such as increased energy from waste and landfill capacity

Durham's Blue Box program

Durham Region's recycling program is successful because it uses two blue boxes for recycling (called two-stream recycling). Two-stream recycling keeps our materials cleaner. When recycled material is dirty, it creates more waste and lowers its value. In today's increasingly challenging recycling markets, it is more important than ever to keep recyclables as clean as possible.

The Region provides households with two blue boxes for residents to participate in the Region's curbside Blue Box program. Residents are required to separate recyclables by using a dedicated blue

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box for containers and one for fibers such as papers and cardboard. This material can then be placed into the Blue Box for weekly collection at the curb.

Acceptable blue box materials

Examples of acceptable blue box materials are provided below.

Containers blue box	Fibers blue box
 Aluminum drink cans Aluminum foil and trays Empty paint and aerosol cans (lids removed) Glass bottles and jars Juice boxes (no straws) Milk cartons Plastic bakery and cookie trays Plastic bottles Plastic egg cartons Plastic fruit and vegetable containers Plastic takeout food containers Single-serve yogurt and pudding cups Spiral containers Steel food and drink cans Toiletry bottles 	 Boxboard (fold boxes flat) Cardboard (fold boxes flat, then tie and bundle the same size as your blue box. Place next to or on top of your blue box) Catalogues, magazines, and phonebooks Junk mail and envelopes Newspaper Office and computer paper Shredded paper (place inside a smaller box, such as a cereal box) Soft-covered books (such as paperbacks)

Note that 95 per cent of the Region's recyclable materials are moved to sustainable end markets within North America, including Canada and the United States. Even with this remarkably high rate of materials making it to end markets, we strive to do better. The remaining five per cent are non-recyclable materials that residents mistakenly put in their blue boxes.

Unacceptable blue box materials

Examples of unacceptable blue box materials are provided below.

Unacceptable blue box materials

- Coffee cups
- Coffee pods
- Food or beverage pouches
- Hangers
- Motor oil containers
- Plastic bags
- Plastic straws or cutlery
- · Propane or helium cylinders
- Tupperware-type containers
- Styrofoam

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Recycling practices in Durham Region

To participate in the Region's Blue Box program:

- Use two blue boxes to separate containers and fiber products.
- Place your blue boxes at the curb every week on your collection day.
- Blue boxes must be at the curb before 7 a.m. on your collection day.
- Blue boxes cannot weigh more than 20 kilograms (44 pounds).
- All recyclables must be loose inside the blue box. Recyclables in plastic bags will not be collected.
- Empty and rinse all containers before putting them in the blue box.
- On windy days, put your recycling out for collection in the morning instead of the night before.
- Don't overfill your blue boxes. Keep material below the rim.
- Bundle cardboard separately. These bundles can act as a "lid" for your blue box
- In the winter, place blue boxes on cleared parts of your driveway. Do not put them on top of snowbanks or icy patches.
- Write your address on your blue boxes in permanent marker. They will be easier to find if they blow away.
- There is no limit to the number of blue boxes you can set out for collection.

The video Prevent litter by preparing your recycling in these quick steps provides additional tips on sorting and preparing your recyclables.

What happens to Durham's blue box materials after collection?

Blue box materials collected from the curb are collected by waste collection trucks and brought to our Material Recovery Facility located in the Town of Whitby. The facility sorts more than 47,000 tonnes of recyclables every year. The sorted materials are then sold to recycling markets to be made into new products. The flow chart below provides a brief overview of the process. For a more detailed overview, watch the video Durham Region's Material Recycling Facility to see the process in action.











Recycling means making something new from things that have been used before



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Closing the recycling loop

Purchasing new products that have been made using recycled materials is a great way to help support a circular economy and to help close the recycling loop. When purchasing items, look for products that contain recycled content and products that can easily be recycled rather than disposable options that will end up in the garbage.

Upcoming changes to the Blue Box program

On August 15, 2019, Minister of the Environment, Conservation and Parks announced that the Blue Box program will transition to full Extended Producer Responsibility (EPR).

The objective of EPR is to shift the responsibility of designated recyclable materials (this includes financial, operational and regularity responsibilities) from the municipalities to producers (the companies that make the products). Producers are the brand owners, first importers and manufactures of products and packaging. EPR will encourage producers to reduce packaging and waste by making them responsible for disposal and therefore motivated to reduce waste. EPR programs are now in place for tires, electronics, hazardous waste, and batteries. The Blue Box program will transition to EPR starting in 2023.

The Region will transition our Blue Box program to EPR July 1, 2024. This means that the Region would no longer be involved in the collection, processing, or marketing of blue box material as the producers take over the responsibility for these activities.

Producers have begun planning their programs and are getting organized – we look forward to seeing what the new Blue Box program will look like after transition.

Conclusion

After Rethink, Reduce and Reuse – Recycle is a great way to decrease the amount of waste being sent for disposal. By separating your recyclables, you can significantly reduce the amount of waste your household generates. And by reducing waste, we will significantly reduce pollution and greenhouse gas emissions in Durham Region and prolong the need to expand waste management infrastructure for waste disposal such as increased energy from waste and landfill capacity.