

Municipal Resource Kit



WASTE
REDUCTION
WEEK
IN CANADA

Waste Reduction Week in Canada

Semaine canadienne de réduction des déchets

Welcome to the Waste Reduction Week Municipal Kit

By participating in Waste Reduction Week in Canada you are about to start your municipality on an exciting campaign of waste reduction that has become an annual event involving thousands of Canadians from across the country.

The Waste Reduction Week in Canada Municipal Resource Kit provides municipalities with information and tips on reducing, reusing and recycling in addition to educational and promotional materials and activities to use as a guide for your WRW initiatives.

The Waste Reduction Week in Canada Steering Committee would like to thank you for doing your part to carry on the tradition of WRW and safeguarding the environment. Use these resources and contacts to assist your community, school or business to make every week Waste Reduction Week!



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Too Good to Waste!

What is waste?

Historically, the definition of waste according to Webster's 1913 Dictionary was: "lying unused; unproductive; worthless; valueless; refuse; rejected".

Today, the Oxford English Dictionary defines waste as: "eliminated or discarded as no longer useful or required".

A waste not want not proverb:

"If you use a commodity or resource carefully and without extravagance you will never be in need".

This proverb reiterates the theme for WRW in Canada, "Too Good to Waste". So let's start thinking of items that we would otherwise discard as: "resources that we conserve, reuse or recycle to protect our environment".



What can I do?

Start practicing the 3Rs in everyday life. Whether you are at home, at school or at work, think about how you can reduce, reuse or recycle your waste to turn it into a resource. All of us have an important role to play in reducing waste.

Why waste reduction?

If we can reduce the amount of waste that is produced in the first instance, we are conserving resources and limiting the need to reuse or recycle. Canadians produce more than 31 million tonnes of waste annually¹, that's 2.7kgs per person per day. In perspective, that's the same volume of waste being generated as piling up 31 million average family cars. Nearly 40% of this waste is generated at home with the remainder coming from commercial, industrial, construction and demolition sources. Of the waste we are generating, we are diverting less than 25%.

Most of our waste is buried in landfills. For waste to decompose in a healthy environment, such as your compost pile, it requires air and water. These are not present deep in the landfill, and as the waste slowly decomposes and reacts with what is around it, it can produce a leachate which may end up in our groundwater system, not to mention creating greenhouse gases such as methane and carbon dioxide. In properly managed landfills, leachate is collected and treated along with greenhouse gases. According to Environment Canada², landfill sites account for 38% of Canada's total methane emissions. It is up to each of us as individuals, communities, schools or businesses to consider what we are throwing away and the environmental impact this is causing. We need to look for alternatives that will promote waste reduction and help to protect our environment.

1. Statistics Canada, Environment Accounts and Statistics Division

2. Environment Canada www.ns.ec.gc.ca

Too Good to Waste!

Reducing

Reducing the amount of waste produced in the first place, is by far the most efficient way of conserving resources and protecting our environment. We are all responsible for the waste we produce, so think: what do you throw away each day? When you avoid making waste in the first place, you don't have to worry about reusing it or recycling it later.

At work or school:

- Reduce paper use by using both sides
- Pack your lunch in reusable containers
- Rent items that are not used very often
- Purchase products with recycled content

When shopping:

- Reduce waste by avoiding over packaged or unnecessary disposable items
- Avoid food packaged in individual servings—where feasible and safe, buy in bulk
- Buy drinks in refillable containers where available
- Use your own cloth bags

As a community encourage your neighbors and friends to do the same. As a business reduce the amount of packaging you require for your products or the amount of materials used to make your product.

Reusing

Reusing items give the resources they were originally made from another life, while reducing pollution and conserving the energy that comes with the manufacturing process or recycling the items.

- Purchase durable products that can be repaired and reused.
- Donate things to or purchase household items and clothing from charity shops or have a yard sale. You will be amazed - one person's trash is another's treasure!

- Reuse jars and containers for storage.
- Donate reusable equipment to schools, churches or other charity organizations.
- When shopping consider buying used items. There are many "used" stores that offer refurbished items that work as good as new.

Recycling

Recycling and purchasing products made with recycled materials is the next way we can conserve resources. If we can't reduce waste by avoiding it, and it can't be reused, can we recycle it? 17 million Canadians (nearly 2/3 of us) have access to recycling.³

- Recycle in the garden by composting organics such as food scraps, leaves and yard trimmings.
- At work, separate items for recycling - this can save your business money in disposal costs.
- At school, consider setting up a recycling program.
- At home, use the recycling services provided by your municipality or take end-of-life items back to where they were purchased or other take-back centers.
- When shopping consider the material that the item is made from and packaged in. Have the resources already had a previous life? Are these resources renewable? How much of it is made up of recycled content? And only purchase materials which can be recycled again.

Register

Register your community, business, organization and school activities and events for WRW in Canada on the website at www.wrwcanada.com, view resources, download a kit and get more ideas on what else you can do to contribute to the success of Waste Reduction Week in Canada.

Municipal Waste Reduction in Canada

Municipalities all across Canada are affected by waste management issues every day. Reducing the amount of waste produced in a municipality is beneficial for a number of reasons:

- It reduces the need for landfill space
- Saves valuable natural resources
- Cuts down on greenhouse gas production
- Saves the community money by reducing disposal costs

Your municipality probably already has some form of waste reduction program in place. However, you may not be aware of all of the options that are available to you. Here is an overview of various waste reduction programs that are happening throughout the country and examples of where they have been a success.

Drop-Off Systems

In a drop-off system, residents deliver their recyclables to a central location or depot. Drop-off systems offer convenience and low operating costs. In most cases, the depots are located at frequently visited locations. Some of the materials collected through this system include mixed paper, cardboard, plastic bags, and metal cans.

Deposit/Refund

A deposit/refund system charges a fee on a container at the time of purchase. This fee is partially or fully refunded when the item is returned to a collection facility. An example of this system is the beverage container recycling system that is common in most regions in Canada. During the 2003-2004 fiscal year, Saskatchewan's beverage container recycling program collected 237 million designated beverage containers. That's a recovery rate of approximately 87%.



User Pay

User pay systems involve the application of a fee or tax. These systems support the “polluter pays principle” and are meant to encourage environmentally responsible behaviour. A user pay system has been implemented in several municipalities in BC such as Burnaby and Surrey, where residents are limited to one or two containers of garbage per week. Residents who need to dispose of more than the weekly garbage limit must purchase an over-limit ticket for \$2-\$3 per bag.

Special Collection Days

It is important to keep hazardous products, such as cleaners, paints, pesticides and electronics out of our landfills. In some provinces some of these items are not permitted in regular waste and are collected through stewardship programs or via special round-up days. For example, successful electronic waste round-ups have been held in a number of municipalities, including Whitehorse, Calgary and Winnipeg. Other municipalities and regional districts, in Nova Scotia and Alberta for instance, have permanent and mobile collection facilities for hazardous wastes.

Municipal Waste Reduction in Canada

Curbside Systems

Curbside systems collect recyclables at curbside through the use of various sorting methods, including multi-coloured containers, and take them to a central processing facility. Markham, Ontario has recently implemented a “3-Stream” curbside program to reach its diversion goal of 70%. This means that each household sorts its waste into three streams: recyclables are put into a blue box, organic materials go into a green bin and leftover garbage is placed in garbage bags.

Organics Collection

Many municipalities have a program for diverting organic waste from landfills. In some cases, there are drop-off sites for leaves and yard waste and in others curbside pick-up of organic material is available. Some municipalities rely on backyard composting programs and supply households with composters. Residents in Halifax and other municipalities in Nova Scotia are supplied with green carts for collecting organics. These are picked up once every two weeks and once a week in July and August.



Christmas Tree Recycling

Once Christmas is over each year, many municipalities provide temporary depots to collect Christmas trees for recycling. Through the “Lets Chip In Program” in Winnipeg, Manitoba residents can drop off their trees to be recycled and then return later for free wood chips. Aside from these programs, there are lots of things your municipality can do to participate in Waste Reduction Week. Following are a series of suggestions, tips and specific tools for conducting a waste aware activity or holding your next community event.

Proclaim Waste Reduction Week!

Issue a proclamation of Waste Reduction Week and your municipality’s participation in it. See the sample proclamation form in the next page.



(Name of Municipality)

hereby recognizes

Waste Reduction Week in Canada

As a municipality, we are committed to conserving resources, protecting the environment and educating the community.

We recognize the generation of solid waste and the needless waste of water and energy resources as global environmental problems and endeavor to take the lead in our community toward environmental sustainability.

We have declared _____ Waste Reduction Week in
Date

Municipality

Signed

Date

Name and Position

evaluation

Conduct a Waste Assessment

Waste assessments can be helpful in determining the effectiveness of current waste management systems and in identifying opportunities for improvement in waste management strategies. They provide estimates of the amount of material available for source reduction, reuse, recycling and compost initiatives. The information here can help you perform waste assessments in your municipality. Additional sources of information are available in the resource section of this kit.

Basic equipment for Assessment:

- Scale for weighing garbage
- Gloves for each assessor
- Tarp or plastic sheet for sorting garbage
- Containers or extra bags for sorting and weighing sorted materials
- Copies of the worksheets

During the Assessment:

- Collect samples and be sure to label samples with important information, such as the location from which the sample was taken
- Use a different worksheet for each location
- Sort materials from each bag into categories and weigh each category
- Enter data into worksheets

After the Assessment:

- Analyze the assessment data and make recommendations for a waste management strategy

You can also try measuring your municipal waste. GAP refers to the "Generally Accepted Principles" for measuring municipal waste flow. Although this tool is not utilized in all Canadian jurisdictions, it does allow municipalities to report their waste flow information in a consistent manner and to compare their results to those of other municipalities.



Before the Assessment...consider:

- Existing waste reduction and disposal activities, including recycling and waste separation activities and methods of waste collection currently employed
- Whether or not waste generation increases or decreases at certain times of the year
- If waste flow has a daily/weekly pattern
- What types of waste are generated and where it is generated

Also ensure:

- The selection or appointment of an assessment Coordinator
- Support from the community and approval from management
- Availability of staff or volunteers to help with the assessment
- A plan that indicates a clearly identified study area
- Selection of representative samples - consider factors such as sources of waste and seasonal variations
- The samples are appropriately collected and labelled for identification purposes
- Adequate time for the assessment. Depending on the detail of the assessment and the size of the study area the assessment may take several days to complete
- Safety! If it is necessary to handle waste make sure to take the necessary precautions, such as wearing gloves and other appropriate safety equipment

Too Good to Waste!

Date: _____

Sample Location: _____

Waste Assessment Sheet

Material	Weight of Each Sample				Recyclable	Reusable	Compostable	Total Weight
	1	2	3	4	Y/N	Y/N	Y/N	
Cardboard								
Newsprint								
Non-recyclable paper								
Compostable waste								
Scrap tires								
Paint								
Glass containers								
Beverage containers								
Wood								
Textiles								
Low-density polyethylene plastic								
High-density polyethylene plastic								
Other plastics								

Please feel free to add your own materials in the blank rows.

This assessment tool can also be used in municipal building activities to assess the amount of waste being generated, disposed of and recycled. The data can then be used to develop a Waste Reduction Action Plan with practical steps to address each material. A good resource with information on where to start can be found at:

www.ecorecycle.vic.gov.au/resources/documents/action_plan_template.doc

Waste Reduction Action Plans

Here is a sample of what your action plan may look like.

Material	Source	Quantity	Current Management	Opportunity	Actions	Priority
Cardboard	Incoming components	100 m ³ /year	Sent to landfill	Reduce	Approach component suppliers re: the possibility of introducing a reusable and returnable packaging system.	1
				Reuse	Approach companies about the possibility of purchasing cardboard boxes for reuse in other applications	2
				Recycle	Implement a recycling system. This will require a dedicated bin for cardboard combined with staff training/education—periodic visual checks will also be required to determine if (& how much) cardboard is being disposed to general waste.	3
Paper	Office copy paper (A4 & A3)	200 reams per year	Estimated that 2/3rds of the paper would end up as waste	Reduce	“Audit” current copier and printer technology to determine which machines are capable of double siding.	2
					Introduce purchase or lease policy requirement that all new copier and printer technology has double-side capability.	3
					Implement paper reduction methods such as: <ul style="list-style-type: none"> • Default double side printing/copying • Training staff to edit documents electronically rather than in hard copy • Maximize use of electronic circulation for documents • Evaluate hard copy distribution lists to ensure only those that actually use the information are on the list. 	1
					Ongoing training/awareness raising for staff on reducing paper usage (e.g., not printing out emails, etc.)	4
					Monitor and report paper usage on regular basis (reams per person and total usage).	5
				Reuse	Printing draft reports, etc. on paper already used on one side.	6
					Reuse of paper for notes, etc.	7
				Recycle	Introduce paper recycling bins to areas that generate waste paper.	8
				Buy Recycled	Consider purchasing paper with recycled content.	9

Source: http://www.ecorecycle.vic.gov.au/resources/documents/action_plan_template.doc

buying green

Implement or Investigate Green Procurement

Green procurement is the selection of products or services that have a reduced effect on human health and the environment compared to competing products or services that serve the same purpose. There are a number of benefits associated with buying “green”. Environmental purchasing links directly to local environmental improvements, stimulates business for environmentally responsible companies, sets a strong example for local businesses and other purchasers, and can save money for businesses, organizations and governments. Green procurement can be achieved by considering product characteristics such as energy efficiency, packaging, waste disposal, resource use, transportation, and pollution generated to make the product.

Start a Green Procurement Program for Your Municipality:

Before you implement a green purchasing plan, make sure that you rally support from all levels of management and from all department and divisions. You should then evaluate your current purchasing program to identify areas of improvement. Successful environmental purchasing policies generally include the following elements:

- A specific policy objective
- A policy statement
- Quantifiable goals with set deadlines
- Key definitions
- Policy requirements
- Set priorities for which product categories should be addressed first and over time
- Guidelines based on the life cycle approach
- Monitoring and reporting
- Relationship and affect with other policies
- References
- Example specifications

Environmental Purchasing Challenges:

Lack of Support

An organization must have commitment from all levels, including senior management, the purchaser and the supplier in order to successfully implement a green procurement program.

Lack of Understanding/Knowledge

Many organizations are not familiar with the concept of green purchasing or with the options that are available to them. Purchasers may receive inconsistent messages about environmental purchasing and believe that green products are unavailable, unreliable or too expensive.

Availability of Green Products

Organizations may not know how to find suppliers of green products and local distributors may only carry small amounts of these products.

Purchasing Habits

When purchasing has been done a certain way for a long time it may be difficult to adopt a new mentality. Also, relationships may have been formed between the purchaser and certain suppliers that are difficult to break.

There are many resources that can help you organize your new procurement program. For links to suppliers of green products and services visit www.ecologo.org/en/

Check out an existing municipal procurement policy to get you started at:

www.region.halifax.ns.ca/legislation/adminorders/documents/procurementpolicy.pdf

green events

Other ideas to reduce waste in your community

Organize a Community Yard Sale

Everyone has items in their homes that they no longer want or need. One way to keep them out of the landfill is to organize a yard sale in which the whole community can participate. Advertise your plan to hold a community yard sale throughout the municipality to find out who would like to participate. Pick a date and get everyone involved in making signs with the date, time and location of your sale. Use tags or stickers to pre-price each item. Group the merchandise and display them so shoppers can easily see everything. Make sure that you have a cash box on-hand with lots of change and small bills. If there are still items left when the sale is over you may want to save them for your next community yard sale or donate them to a charity.

Host an Industrial Materials Exchange

Businesses often produce waste products that could be useful as raw materials for other industries. Industrial material exchanges are becoming very popular as a way to reduce the amount of industrial waste produced within a community. Municipalities can organize a one-day materials exchange conference during Waste Reduction Week. Local businesses can be invited to come and list the wastes they produce and the raw materials they require. As a result, a number of material exchange opportunities or new business ideas may become apparent. Businesses can then contact each other to arrange pick-up of various waste products. The National Materials Exchange Network is a useful source of information which provides contact details for a number of operating Materials Exchange Programs across Canada. Visit their website at:

www.recycle.net/recycle/exch/

Some provincial/territorial contact details are available in the resource list.



Consider waste reduction and recycling at Special Events

There are many opportunities when conducting special events to reduce waste and recycle materials. A special event may be anything from a street fair, to a concert or a sporting event. Managing waste diversion and recycling services will enhance the profile of an event and result in the public, sponsors and the media supporting your environmentally responsible event. The Sydney 2000 Olympic experience has shown that waste diversion from landfill from special events can reach up to 75% by recycling cardboard, paper, food and drink containers and composting organic material such as food scraps, paper plates and biodegradable cutlery (Resource NSW). More recently, London's (UK) bid to host the 2012 Olympic Games has emphasized green credentials by making a commitment to recycle, and to buy recycled by signing up to the Mayor's Green Procurement Code.

Of course, recycling can be successful at any sized event given a few steps are followed to ensure proper management. For example, the Essex-Windsor Solid Waste Authority in Ontario will work with the organizing committee at a special event to ensure maximum capture of recyclables and minimum contamination levels (www.ewswa.org/recycling/special-event-recycling/)



Guidelines for a successful Waste Wise Event

Commitment

Firm policies must be in place for others to follow. Insert a clause into an event application or agreement which states that events seeking to be held within your municipal area must prepare a waste management plan for the event.

Event Packaging

By controlling the materials to be used by your suppliers, caterers, stall holders and retailers, you are able to use packaging that suits the recycling system.

Event Equipment

Selection of equipment is very important in helping the public separate their waste into recyclable groups and reducing contamination. Be flexible, and have an equipment supervisor on-site to coordinate extra bins or moving bins.

Management System

Bins and equipment need to be positioned strategically and regularly checked. When and where should equipment be installed? When should it be cleared and who is responsible for what?

Standard Signage

Signs for waste and recycling bins should be clear and easy to read. Consider developing a suite of uniform signage that can be used at home, at work or in public places. This way, wherever people go they will quickly recognize which bin is for what type of waste.

Communication & Promotion

Communicating your activities before the event will be crucial to your program's overall success. It alerts the community to your efforts and contributes to the positive perception of the event.

Evaluation

What benefits were gained? How much material was successfully diverted from landfill? A meeting with event participants will also provide you with some good feedback. Conduct a waste audit to quantify and promote your achievements in the media.

Source: Resource NSW

Your Waste Reduction Week

Planning Your Waste Reduction Week Activities

Kits have been designed specifically for municipalities, schools and businesses. They are full of information, resources and ideas to help you plan your WRW activities. For the individual, resources are available online including such tools as shopping guides, instructions to build a home composter, energy conservation advice and even a survey to measure your ecological footprint. There are also a number of steps you can take when planning your WRW activities and events to ensure your time and resources are spent effectively.

STEP 1: Proclaim Waste Reduction Week

- Local governments have been asked to declare the third week of October as Waste Reduction Week. Has the week been declared in your area? If not, encourage your Mayor and council to do so.
- You can also proclaim WRW in your school, organization or place of business to raise the profile both internally and to those people you deal with day-to-day.

STEP 2: Set objectives

- Identify the waste issues you want to address and the specific actions you want people to take.
- Set the objectives you want to meet, ensuring that they are measurable and achievable.

STEP 3: Develop partnerships

- Determine what help you will need to meet your objectives and identify organizations and people that can assist you.
- Partnerships help you share financial/human resources, provide a larger pool of knowledge, skills and contacts and raise the profile of your event.
- Potential partners may include local businesses, schools, manufacturers, government or environmental groups.

STEP 4: Become informed

- Learn about existing programs in your local area and design your activities to build on them.
- Gather information as specific as possible to your community and use this to measure the success of your activities.

STEP 5: Target your audience

- Decide who you want to target or motivate to help you identify potential motivators and barriers. Is it staff, local government, students, management, neighbours or some other group?

STEP 6: Use an approach that will encourage longer term behavioural change

- Quantify your results in environmental impact as well as economic savings.
- Challenge your audience to meet or beat a challenge or initiatives taken by another group or competitor.
- Build on people's motivations for reducing waste and provide information on the larger scale impact of participating - personalize your communication to make it vivid.
Raise the profile of your activities through the media and offer discounts, prizes or financial incentives to participants.
- Obtain a commitment from people to participate as most will then be more likely to follow through.
- Use word-of-mouth as a form of free advertising, this also fosters a sense of ownership.

STEP 7: Measure achievement and remember to say Thank You

- Your measure of success will be determined by the objectives you set. Measure your achievements directly and ensure that all who participate in your activities or events are given feedback on the success of their efforts.
- Thank everyone who helped you make your WRW activities and events happen. People who feel appreciated will be more willing to participate again.

References and Resources

References

1. Statistics Canada, Environment Accounts and Statistics Division

2-3. Environment Canada www.ns.ec.gc.ca

Government of Canada
www.ns.ec.gc.ca
Environment Canada
www.ec.gc.ca/education

Introduction to Waste Audit Guide
The Resource and Recovery Fund Board
www.rrfb.com/pdfs/RRFB_Waste_Audit_Guide.pdf

Purchasing Management
Association of Canada (PMAC)
777 Bay Street, Suite 2701
P.O. Box 112
Toronto, Ontario, M5G 2C8
Tel: (416) 977-7111 Fax: (416) 977-8886
Email: info@pmac.ca
www.pmac.ca

Resources

Municipal Waste Management

Extended Producer Responsibility Toolkit
Federation of Canadian Municipalities
http://www.sustainablecommunities.fcm.ca/files/Capacity_Building_-_Waste/EPR_Toolkit.pdf

The National Waste Reduction Handbook:
An Introduction to Source Reduction and
Recycling for Municipal Decision-Makers,
1991, National Round Table on the Environment
and the Economy
[openlibrary.org/b/OL18778613M/
National_waste_reduction_handbook](http://openlibrary.org/b/OL18778613M/National_waste_reduction_handbook)

Pitch-In Canada
www.pitch-in.ca

Green Procurement

Buy Green: A Handbook on Environmental
Public Procurement
[ec.europa.eu/environment/gpp/pdf/
buying_green_handbook_en.pdf](http://ec.europa.eu/environment/gpp/pdf/buying_green_handbook_en.pdf)

Environmental Choice Program
www.terrachoice.com

Waste Audits

Ontario Ministry of Environment and Energy:
A Guide to Waste Audits and Reduction
Work plans for Industrial, Commercial and
Institutional Sectors
[http://www.ene.gov.on.ca/environment/en/resources/
STD01_076174.html](http://www.ene.gov.on.ca/environment/en/resources/STD01_076174.html)

Federation of Canadian Municipalities
24 Clarence St.
Ottawa, ON K1N 5P3
www.fcm.ca

Municipal Waste Association
127 Wyndham St. N., Suite 100
Guelph, ON, N1H 4E9
Tel: (519) 823-1990 Fax: (519) 823-0084
www.municipalwaste.ca

Industrial Materials Exchange

Canadian Chemical Exchange
(514) 229-6511

BC Industrial Materials exchange
(604) 683-6009
www.bcimex.ca

Manitoba Waste Exchange
(204) 257-3891

Canadian Waste Materials Exchange
(416) 822-4111

Ontario Waste Exchange
(416) 822-4111, ext. 512

Bourse Quebecoise des Matieres Secondaires
(514) 762-9012

Acknowledgements

The information presented in this Waste Reduction Week kit has been drawn extensively from many different organizations, publications and websites. We wish to say thanks to all the individuals who have provided time and advice in the writing of this publication.