



## Waste Reduction Week October 19-25, 2009

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

Through the theme **Too Good to Waste**, WRW aims to inform and engage Canadians about wasteful practices and their environmental and social ramifications. But, exactly how can we protect our environment by conserving resources, reusing materials and recycling?

This kit provides you with information and tips on the 3Rs - reducing, reusing and recycling; as well as educational and promotional materials and activities to use as a guide for your WRW initiatives. We hope that you will use this kit to learn more about the importance of reducing waste and how you can play an important role in contributing to waste-free living.

### Welcome to the Waste Reduction Week Business Kit

Whether you are a business owner, investor, manager or employee, we encourage you to read through the following information. The purpose of this kit is to help you examine the type of business you are connected to and the products that your company is producing. For example, does the business have a negative environmental impact and if so what kind of steps are you willing to take to help turn that around? This kit will introduce you to easy-to-follow concepts, helpful resources and tools to consider when looking at reducing the waste that your business generates and how this can affect your productivity and bottom-line. Immediate actions are needed now more than ever so we thank you for taking the initial steps in greening your business and our future.

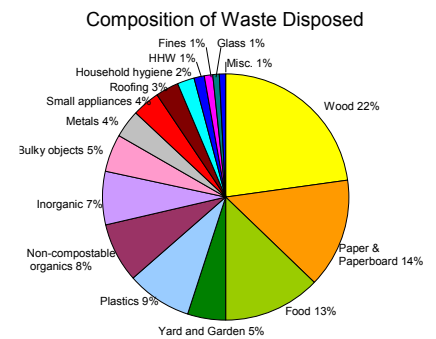
Waste costs more than you may realize. When you consider the materials, the costs of treatment, energy and waste labour, the real price tag on waste is often 5 - 20 times the cost of actual disposal.

### Why should your business consider waste reduction initiatives?

The strength of the Canadian economy has traditionally been measured in terms of production and consumption. Rising income among Canadians leads to rising consumption, resulting in disposal of packaging from cars, clothes, food and other materials into the environment. Generation of solid waste therefore generally increases as the country becomes more prosperous. When the demand for goods and services increases, industry takes in more energy, metals and minerals, water, forest, fishery and farm products and excretes liquids and solid waste - some of which are non-biodegradable and persistently toxic. The waste then makes its way into landfills, backyards, junkyards and the ocean.

When we use the environment as a place to dump our waste, the resources available for future generations are polluted and degraded. When the actual cost of using these scarce resources is accounted for economically, consumers and manufacturers will begin to see waste as a resource and then redefine business goals to minimize their overall impact.

While many large companies have invested in various environmental initiatives, small to medium sized enterprises (SMEs) have found it more difficult to address waste reduction and sustainability issues. This difficulty arises from the perceived challenges associated with "greening" your business and the absence of models to show that such initiatives are possible, useful and profitable. This kit will introduce you to concepts and tools to consider when looking at reducing the waste which your business generates and how this can affect your productivity and bottom-line.



A 600-watt photocopier left on standby for 24 hours a day uses about \$750 of electricity in a year. If this machine is turned on only during normal working hours, two thirds of this electricity will be saved.  
New Zealand Ministry for the Environment

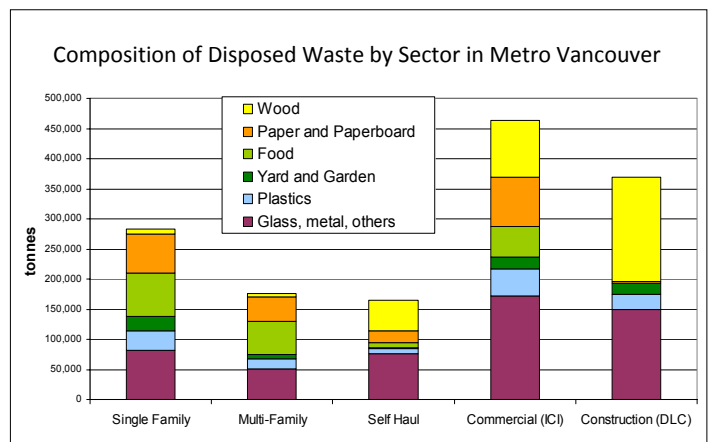


## STEP ONE: Reduce – the first and most important ‘R’

Minimize the consumption of materials by doing more with less and buying products with little or no packaging. Reducing waste is the best method of controlling waste since it involves minimizing the intake of materials in the first place. This can be done by cutting down on the amount or toxicity of waste in the design, manufacturing, purchase and use of materials. Reducing waste makes good business sense because every pound of waste you generate costs your businesses money.

### Key advantages to business for reducing waste include:

- Reduced waste disposal fees and savings in material and supply costs
- Reduced pollution
- Revenues from marketing reusable materials
- Savings from more efficient work practices
- Improved compliance with regulations
- Enhanced corporate image
- Improved employee morale through employee involvement
- Enhanced customer trust



### Initiatives may include:

- Organize employees into teams to develop simple and innovative practices that can be used to reduce waste
- Redesign or create products that are durable, reusable and have less packaging to reduce waste
- Form partnerships with other interested groups, such as suppliers, haulers, trade associations and other businesses that have successfully implemented source reduction initiatives
- Communicate efforts to customers and encourage their feedback to help support the initiatives and overcome concerns about the impacts on product quality or customer service

## STEP TWO: Conduct a Waste Assessment

A waste assessment can help determine the weight, volume and the types of waste materials being generated. Looking at what your business generates will help to identify options to reduce, reuse or recycle. Waste assessments can also often improve existing recycling and composting programs by identifying materials that may still be going to landfill.

It may not sound exciting, but measuring waste is essential. By determining how much your business wastes, both in quantity and cost you can calculate potential savings, track progress, benchmark and convince others. Literally walk around your site. Depending on the size of your organization, a waste assessment form may vary. The waste assessment can be used as a starting point to collect information on the volume and type of waste produced by your business as well as your disposal and recycling costs.

# Conduct a Waste Assessment

Waste Reduction Week

By the age of 6 months, the average Canadian has consumed the same amount of resources as the average person in the developing world consumes in a lifetime.  
Recycling Council of Ontario

Recycling one tonne of newspaper saves 19 trees, 3 cubic metres of landfill space, 4,000 kilowatt hours of energy, 29,000 litres of water and 30 kgs of air pollution.  
Recycling Council of Ontario

## 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 management and employees
- Availability of staff to assist with the assessment
- A plan that indicates a clearly identified 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 your business the assessment can take a few hours or a few days
- Safety! If it is necessary to handle waste make sure to take the necessary precautions, such as wearing gloves and other appropriate safety equipment

## 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 form for each location
- Sort materials from each bag into categories and weigh each category
- Enter data into forms

## 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 forms

## After the Assessment:

- Analyze the assessment data and make recommendations to formulate a Waste Reduction Action Plan
- In addition to conducting a waste assessment, businesses can evaluate their purchasing, manufacturing and distribution processes for opportunities to use less material, reduce waste and increase productivity



# Conduct a Waste Assessment



**Location:** \_\_\_\_\_

**Date:** \_\_\_\_\_

# WASTE ASSESSMENT FORM

| Material                        | Source | Recycled (Y/N) | Disposal<br>Lbs per week | Disposal<br>Tonnes per<br>year | Comments |
|---------------------------------|--------|----------------|--------------------------|--------------------------------|----------|
| Mixed Paper                     |        |                |                          |                                |          |
| Corrugated<br>Cardboard         |        |                |                          |                                |          |
| Newspaper                       |        |                |                          |                                |          |
| Glass Containers                |        |                |                          |                                |          |
| Metal Food<br>Containers        |        |                |                          |                                |          |
| Beverage Con-<br>tainers        |        |                |                          |                                |          |
| Scrap Metal                     |        |                |                          |                                |          |
| Plastic<br>Containers           |        |                |                          |                                |          |
| Scrap Plastics                  |        |                |                          |                                |          |
| Pallets                         |        |                |                          |                                |          |
| Batteries                       |        |                |                          |                                |          |
| Tires                           |        |                |                          |                                |          |
| Electronics                     |        |                |                          |                                |          |
| Appliances                      |        |                |                          |                                |          |
| Compostable<br>Organics         |        |                |                          |                                |          |
| Fluorescent<br>tubes or CFLs    |        |                |                          |                                |          |
| Gypsum                          |        |                |                          |                                |          |
| Printer and<br>Toner Cartridges |        |                |                          |                                |          |
| Wood or Yard<br>Trimblings      |        |                |                          |                                |          |
|                                 |        |                |                          |                                |          |
| <b>Totals</b>                   |        |                |                          |                                |          |

### STEP THREE: Investigate Green Procurement

While packaging is sometimes necessary for health and shelf life reasons, one look at store shelves will alert you to the trend for increasingly excessive packaging. By taking a few extra moments to consider the alternatives before you buy, you can save money and reduce trash.

Green procurement is the purchase of “green” products and services that can reduce the negative effect on human health and the environment when compared to other products or services that serve the same purpose. A Procurement Policy is a commitment a company makes to the environment to minimize negative environmental impacts by ensuring the procurement of “green” services and products that:

- Reduce toxicity
- Conserve natural resources, materials and energy
- Maximize recyclability and recycled content

The Policy usually specifies the recycled content of purchased items such as stationery or toner cartridges. There is a wide range of recycled stationery available including envelopes, fax paper, mailing labels, files and document wallets, flip charts, storage boxes and Post-It notes.

By defining your purchasing priorities in a Procurement Policy, you are sending the message to your suppliers, employees and other stakeholders that your business is serious about waste reduction.

#### Your businesses Procurement Policy may include the following elements:

- A general preference for recycled products
- A price preference, whereby your business is willing to pay a higher price (such as 5% or 10% more) for recycled paper or recycled products
- A set-aside goal where a certain percentage of all purchases must have recycled content.

The International Institute for Sustainable Development provides useful information, resources and best practices for green procurement as well as a certified office products database. The website can be found at: [www.iisd.org](http://www.iisd.org)

The format of a Procurement Policy will vary from business to business. It is important for businesses to begin by first committing to the policy that will be established. It will be used as a guide when materials are acquired and specify the relationship with partners such as suppliers. On the following page is an example of how a Procurement Policy can be drafted for your business.

#### Green Products

A green product is one that is less harmful than the next best alternative, having characteristics including, but not limited to, the following:

- Is recyclable - local facilities exist that are capable of recycling the product at the end of its useful life
- Is biodegradable - will not take a long time to decompose
- Contains recycled material (post-consumer recycled content)
- Has minimal packaging and/or the manufacturer will take-back the packaging
- Is reusable or contains reusable parts
- Has minimal content of and use of toxic substances in production
- Produces fewer and/or less polluting by-products during manufacturing, distribution, use and/or disposal
- Produces the minimal amount of toxic substances during use or at disposal
- Makes efficient use of resources - a product that uses energy, fuel or water more efficiently or that uses less paper, ink or other resources
- Is durable - has a long economically useful life and/or can be economically repaired or upgraded

Recycling one ton of glass saves about nine gallons of fuel oil.  
Recycling Council of Ontario

Nearly 55% of every aluminum can is made from recycled aluminum.  
American Recycler



## Commitment:

In order to minimize environmental impact throughout the lifecycle of products, we will endeavour to develop or purchase products with little environmental impact during the production process, during the use of the product, and at the time of disposal. We will also procure parts and materials with little environmental impact, so called “green procurement” and abide by the following guidelines:

- We will set environmental targets in all areas.
- We will not limit our activities to observation of laws/regulations of where we conduct business.
- We will always consider waste reduction by the more efficient use of resources and recycling of a product. We will also seek to acquire products that are more durable, recyclable, reusable and of a high quality.
- We will enhance the environmental understanding and awareness of all employees.
- We will actively disclose our environmental efforts to our customers, local communities and other interested parties to foster further understanding.

## Objective

To minimize our environmental impact, materials, parts, and other goods will be procured with priority given to suppliers demonstrating excellent environmental performance.

## Policy

Concern for the environment shall be the cornerstone of all our operations. Safety and environmental impact shall be a prime consideration at every stage of a product’s lifecycle, from design, development and manufacturing, customer usage and disposal, to reuse and recycling. [Company’s name] shall conduct business with suppliers who actively undertake various environmental initiatives as well as those that implement our requests.



## Matters related to Supplier Management

### Waste Minimization Plan/Environmental Management System

We request that our business partners establish a Waste Minimization Plan or Environmental Management System which incorporates energy saving activities, reduction in waste produced and efficient management of chemical substances.

### Compliance to laws

Suppliers shall respect applicable environmental laws. Suppliers shall not have experienced any punitive action due to breach of such law in the last two years.

### Information sharing

At the request of [company's name], all requested environmental information must be disclosed by supplier(s), including all waste reduction initiatives.



## Matters related to Products

### Management of chemical substances

Products supplied to [company's name], including solvents, cleaning agents and other products supplied are forbidden from containing compounds such as Carbon Tetrachloride and Chlorofluorocarbon (CFC) which are carcinogens and ozone depleting substances.

### Manufacturing process

We shall not do business with suppliers who use prohibited substances or compounds in their manufacturing process of any products or materials procured.

### Purchasing

When purchasing products or services for use in our business operations, we shall seek to:

- Acquire less hazardous or non-hazardous materials (i.e. some inks, paints, cleaning solvents)
- Order supplies by voice mail or electronic mail
- Consider using optical scanners, which give more details about inventory, allowing more precise ordering
- Where appropriate, order supplies in bulk to reduce excess packaging
- Avoid ordering excess supplies that will never be used, take up space and can become waste
- Buy recycled materials which have at least 50% post-consumer recycled content

### What next...

Once the waste assessment is complete and green procurement has been addressed, you can begin to draw up a Waste Reduction Action Plan with short, medium and long-term objectives, giving each a deadline, costs and benefits. This plan will require the support of senior management, as well as the Board and investors.

## STEP FOUR: Create a Waste Reduction Action Plan

**Cutting waste** - it's not just about turning off lights, or fixing leaky taps. It's reducing the production, use or disposal of anything that isn't reused or sold by your business. It is not just manufacturers or big companies that can make a real difference. Every business produces waste, and every business can cut it.

Think about your own organization. Which of these do you use or produce?

- Water
- Inks and paints
- Gas
- Electricity
- Paper, board and packaging
- Solid waste
- Office and computer equipment
- Solvents and chemicals



A good Waste Reduction Action Plan will take into consideration all aspects of your business operation - from what you buy from suppliers, to manufacturing, right through to waste disposal. If you can cut down on waste anywhere within your business, your savings will go straight to the bottom-line, and you'll reduce negative impacts on the environment. Here is a basic plan format to get you started.

**Here are some things to keep in mind when creating your action plan...**

- Be systematic and think in the short, medium and long term. Some changes can occur overnight, but others will take much longer and require careful planning.
- Quantify financial savings, payback periods and quantities of waste reduced.
- Communicate and broadcast your successes to keep everyone motivated.
- Maintain the momentum, remembering that the project needs driving not just this week, but this month, this year and the next.
- Let potential partners and customers know about your environmental credentials and apply for awards and recognition. This could give you a real advantage over your competitors.

### Waste Reduction Action Plan Sample Template

| Material            | Minimization Action |  | Target   | Cost/Benefit   | Priority                 | Who   | Date                |
|---------------------|---------------------|--|--|--|--------------------------|---|---------------------|
| Printer Paper       | Reduce              | Encourage the use of email, online document editing and enable double sided printing.  | To reduce the amount of paper usage by 5 reams per week. | Initial costs to ensure that all printers are equipped with double-sided capabilities and paper that is purchased has recycled content. Benefit will be overall reduction in purchasing costs. | 1 - High Short-term goal | Facilitated by office manager and implemented by all staff. | 17th December, 2008 |
|                     | Reuse               | Use paper only printed on one side for drafts and notebooks.   |  |  |                          |   |                     |
|                     | Recycle             | Ensure all paper is source separated for recycling contractors to collect and that purchased paper has post-consumer recycled content. |  |  |                          |   |                     |
| Next Waste Material | Reduce              | Etc.   | Etc.   |  |                          |   |                     |
|                     | Reuse               |  |  |  |                          |   |                     |
|                     | Recycle             |  |  |  |                          |   |                     |

### Planning your activities for Waste Reduction Week

#### STEP 1: Proclaim Waste Reduction Week

- You can proclaim WRW in your 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

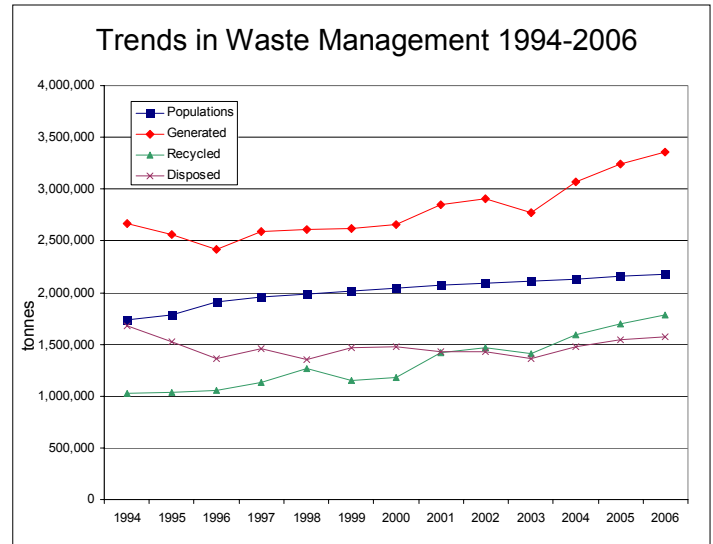
- Determine what help you will need to meet your objectives and identify organizations and people that can assist you.
- Partnerships help you share financial/human resources, provide a larger pool of knowledge, skills and contacts and raise the profile of your event.
- Potential partners may include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

## I can make a difference at my desk

- I can proof read documents on my computer rather than printing them off
- I can turn off my monitor when I go into a meeting or before I go home
- I can extend the margins of my documents to reduce paper use
- I can turn off my computer at the end of the day
- I can print double sided documents
- I can use a paper clip rather than a staple
- I can put old double-sided documents in the recycling bin
- I can use one-side-good paper to print internal documents and faxes
- I can order business cards that are printed on recycled paper
- I can have a conference call meeting rather than driving somewhere
- I can use a travel mug at my desk rather than bringing in disposable cups
- I can remind my co-workers to do the same

Turning off your PCs at night and on weekends will save you an average of \$100 annually.  
The Eco-Efficiency Centre

For every tonne of garbage North American's throw out, manufacturers dispose of 5 tonnes and primary industries, like mining and logging dispose of at least 20 tonnes.  
Statistics Canada

More than 140 000 tonnes of computer equipment, phones, televisions, stereos, accumulate in Canadian landfills each year. That's enough uncrushed electronic waste to fill up BC Place every 15 years.  
Environment Canada

25% of the energy used to manufacture cardboard is saved when the cardboard is recycled.  
The Eco-Efficiency Centre



## Other Resources

### Recycling Council of BC

Recycling Hotline: 604-RECYCLE (732-9253) or 1-800-667-4321

Email: [hotline@rcbc.bc.ca](mailto:hotline@rcbc.bc.ca)

[www.rcbc.bc.ca](http://www.rcbc.bc.ca)

### Metro Vancouver's Sustainable Business Services

Phone: 604-451-6575

Email: [business\\_services@metrovancover.org](mailto:business_services@metrovancover.org)

[public.metrovancover.org/smartsteps/Pages/default.aspx](http://public.metrovancover.org/smartsteps/Pages/default.aspx)

### Sustainable Purchasing Network

Phone: 604-488-5350

Email: [info@buysmartbc.com](mailto:info@buysmartbc.com)

[www.buysmartbc.com](http://www.buysmartbc.com)

### Waste Reduction Week in Canada

[www.wrwcanada.com](http://www.wrwcanada.com)

### Encorp Pacific - beverage container and electronics recycling

[www.encorp.ca](http://www.encorp.ca)

### Battery Recycling

Big Green Box: [www.biggreenbox.com](http://www.biggreenbox.com)

Rechargeable Battery Recycling Corporation: [www.rbrc.org](http://www.rbrc.org)

**Happy Frog** - a comprehensive directory of green businesses and sustainability-minded organizations

[happyfrog.ca](http://happyfrog.ca)

### Lighthouse Sustainable Building Centre

[www.sustainablebuildingcentre.com](http://www.sustainablebuildingcentre.com)



Thank you for your participation in  
Waste Reduction Week!

