

Reduce

Definition

Source reduction, also called waste prevention, means consuming and throwing away less. Source reduction can be achieved by purchasing durable, long-lasting goods, as well as seeking products and packaging that represent a reduction in materials, energy consumption or toxicity.

Why Reduction?

The most effective way to reduce waste is to not create it in the first place. Reduction saves natural resources and cuts waste management costs. By designing, manufacturing, purchasing, or using materials in ways that reduce the amount or the toxicity of trash created, less waste is generated and fewer natural resources are used.

Municipalities can do a great deal to reduce the use of resources in their own operations and community. It can be as simple as just changing day-to-day practices such as cutting down on the amount of printing or printing on both sides of the paper to instituting a full-fledged procurement policy. Improving procurement practices is perhaps the most effective tool municipalities have to reduce waste. By changing procurement practices, municipalities can not only reduce the amount of material they consume in the first place (which saves money!), they can also send a strong message to industry to produce high quality products that do not have unnecessary packaging, are durable and recyclable at the end of their life.¹

There are many examples of municipal initiatives and resources to support action some of which are included below in the following categories:

- Procurement
- Bottled Water Sales Bans
- Single Use Plastic Bag Reduction Initiatives
- Yard Waste Reduction Initiatives

Benefits of reduction activities include:

- Saving money
- Reduced disposal
- Reduced extraction of virgin materials

Costs to municipalities will generally include the staff time necessary to implement or change programs and processes and promoting these changes to the wider community as examples that residents and local businesses can follow.

¹ This is also an important step in implementing Extended Producer Responsibility (EPR) which shifts the burden of managing waste from municipalities to the producers and consumers of goods. More information on EPR can be found on the "Recycle" page.

Examples and Resources

Procurement

Governments are significant purchasers in Canada. As such, their activities impact the local and national economy and can influence both the price and the availability of goods and services, including construction services. By considering environmental performance in the procurement process, municipal governments are in a position to influence the demand for environmentally preferable goods and services, while encouraging industry to respond to the escalating use of environmental standards in global markets.

Municipal Examples

Municipality	Initiative
Provincial	
City of Calgary	<p>Procurement Policy</p> <p>The City's Sustainable, Environmental and Ethical Procurement Policy (SEPP) provides guidelines to govern procurement activities. This means purchasing products and services at reasonable prices while considering key environmental and social benefits such as minimal packaging, or other sustainability aspects over the entire life-cycle of the product or service.</p> <p>Click here for more information.</p>
City of Edmonton	<p>Purchasing Policy</p> <p>The City's Sustainable Purchasing Policy encourages staff to purchase quality products, services and construction at competitive prices while considering key environmental and social benefits over the entire life-cycle of the product or service, including:</p> <ul style="list-style-type: none"> • Reduced resource requirements • Recyclability • Minimal packaging • Durability • Total cost of ownership <p>Click here for more information.</p>
YOUR MUNICIPALITY HERE	<p>DOES YOUR MUNICIPALITY HAVE A PROCUREMENT POLICY OR INITIATIVE THAT COULD SERVE AS A MODEL FOR OTHERS TO FOLLOW? IF SO, SEND THE INFORMATION TO RACHEL DE VOS, rdevos@auma.ca</p>
National	
Town of Caledon, Ontario	<p>Green Purchasing</p> <p>The Town of Caledon's Purchasing Bylaw features a municipal Green Purchasing Policy that supports the Town's environmental commitment by requiring the procurement of goods and services that will minimize the Caledon's impact on the environment and provide the best value for the Town.</p>

	<p>Considerations include:</p> <ul style="list-style-type: none"> • Durability and reusability of an item • Non-toxic or least toxic options • Whether an item is compostable or biodegradable • The reduction of waste and the efficient use of resources, including energy <p>Click here for more information.</p>
City of Vancouver, BC	<p>Sustainable Purchasing</p> <p>The City has adopted a corporate procurement policy that embeds sustainability and ethical (SE) considerations into the procurement process rather than having them as an add-on or separate policy. The SE elements of the policy are being phased in over time.</p> <p>In 2012, the goal was to incorporate SE considerations into all public calls for goods and services over \$75K (over \$200K for construction).</p> <p>Click here for more information.</p>
City of Waterloo, Ontario	<p>Green Procurement</p> <p>The City of Waterloo's green procurement policy provides guidelines to ensure the City is purchasing products that minimize consumption of energy and water and that are more environmentally appropriate.</p> <p>The policy focuses on the following objectives:</p> <ul style="list-style-type: none"> • Increase the purchase of green products and services consistent with the demands of mission, efficiency and cost-effectiveness • Reduce the amount of solid waste we generate • Reduce consumption of energy and natural resources • Expand markets for green products and services <p>Click here for more information.</p>

Additional Resources

Other Organizations	Resources
Provincial	
Government of Alberta	<p>One Simple Act</p> <p>The Government of Alberta has developed a Green Purchasing Guide under their One Simple Act initiative. The guide provides seven steps to creating a green purchasing plan, as well as details on green purchasing products and a purchasing toolkit.</p> <p>Click here for more information.</p>

Recycling Council of Alberta (RCA)	<p>Green Procurement Policy Template</p> <p>The RCA developed a green procurement template to make it easier for organizations to develop their own green procurement policy. The RCA is hoping that this template will serve as a catalyst for organizations who want to have a green procurement policy, but are not sure where to start. Just fill in the blanks, or use the information provided to develop your own customized policy.</p> <p>Click here for more information.</p>
University of Alberta (U of A)	<p>Green Purchasing</p> <p>The University of Alberta is committed to integrating sustainability into the many aspects of university life. Green purchasing is one key practice that anyone responsible for purchasing at the U of A can incorporate to help advance the university's sustainability leadership and performance.</p> <p>The U of A provides six simple steps on how to make your purchase green that can apply to municipalities interested in green procurement.</p> <p>Click here for more information.</p>
National	
Buy Smart Network	<p>Buying Sustainably</p> <p>The BuySmart Network (formerly the Sustainability Purchasing Network) is a key source of information and education on sustainable purchasing. Administered by the non-profit Fraser Basin Council, BuySmart benefits from the participation of leaders in business, public bodies and non-profit organizations who are willing to share procurement strategies and learn from each other.</p> <p>BuySmart works with organizations of all types – private, public and non-profit sector – helping them create their own strategies to buy smarter. It's an opportunity for progressive organizations to forge healthier, greener and socially beneficial supply chains in Canada.</p> <p>Click here for more information.</p>
EcoLogo Program	<p>Certification</p> <p>The Canadian EcoLogo (also known as Environmental Choice) helps consumers identify products and services that have been independently certified to meet strict environmental standards that reflect their entire life cycle – from manufacturing to disposal. EcoLogo standards are designed so that only the top 20% of products available on the market can achieve certification. More than 7,000 products – from paint to paper – carry this logo.</p> <p>Click here for more information.</p>
Government of Canada	<p>Policy on Green Procurement</p> <p>As part of its ongoing commitment to improve the environment and the quality of life of Canadians, the Policy on Green Procurement seeks to reduce the environmental impacts of government operations and promote</p>

	<p>environmental stewardship by integrating environmental performance considerations in the procurement process.</p> <p>The Government's Office of Consumer affairs provides an online list of common environmental labels and claims in Canada to help consumers understand some of the common green logos and symbols seen when making purchases.</p> <p>Click here for more information.</p>
International	
<p>California Sustainability Alliance</p>	<p>Guide for Local Governments</p> <p>To help local governments improve their sustainability and reduce their environmental impacts, the California Sustainability Alliance has developed a guidebook for local governments thinking of adopting an environmentally-friendly procurement and purchasing plan.</p> <p>The Local Government Green Procurement Guide lays out eight steps for greening an organization's procurement policy:</p> <ul style="list-style-type: none"> • Form a green purchasing team • Conduct a baseline inventory • Establish environmental criteria • Develop green bid specifications • Take advantage of partnership opportunities • Establish a green procurement policy • Educate staff and residents • Regularly review policies for updating <p>Click here for more information.</p>
<p>Commission for Environmental Cooperation (CEC)</p>	<p>North American Green Purchasing Initiative</p> <p>Since 1994, Canada, Mexico and the United States have collaborated in protecting North America's environment through the North American Agreement on Environmental Cooperation (NAAEC).</p> <p>Accordingly, the NAAEC established an intergovernmental organization - the Commission for Environmental Cooperation (CEC) - to support cooperation among the North American Free Trade Agreement (NAFTA) partners to address environmental issues of continental concern, including the environmental challenges and opportunities presented by continent-wide free trade.</p> <p>The North American Green Purchasing Initiative (NAGPI) by the CEC provides background and rationale for why governments and businesses should follow green procurement practices and ways to make sustainable purchases.</p> <p>Click here for more information.</p>

<p>National Association of State Procurement Officials (NASPO), United States</p>	<p>Green Purchasing Guide NASPO provides an online Green Purchasing Guide intended to be a straight forward, easy-to-use document that provides purchasers with a basic understanding of the concept and benefits of green purchasing, offers recommended steps and proven strategies to enable the implementation of a green purchasing program, and supplies links to other resources offering detailed information on specific elements of the process.</p> <p>Click here for more information.</p>
<p>Responsible Purchasing Network (RPN)</p>	<p>Responsible Purchasing The Responsible Purchasing Network (RPN) is an international network of buyers dedicated to socially responsible and environmentally sustainable purchasing.</p> <p>Officially founded in 2005, RPN is a program that is advised by a voluntary Steering Committee of leading procurement stakeholders from government, industry, educational institutions, standards setting organizations, and related organizations.</p> <p>Click here for more information.</p>

Bottled Water Sales Bans

According to peer reviewed research, 96 – 162 million barrels of oil are consumed annually to produce, transport and dispose of bottled water (Polaris Institute, 2009). At the same time, tap water meets stringent safety guidelines and is a fraction of the cost of bottled water. Municipalities can stop selling bottled water at their facilities and make tap water more accessible.

Municipal Examples

Municipality	Initiative
National	
<p>City of London, Ontario</p>	<p>Sales in City Facilities In 2008 the City passed a resolution that “single- use bottled water will no longer be sold in the City Hall cafeteria, from City- owned or city administered concessions and vending machines in public facilities...”</p> <p>This resolution also included provisions for a public awareness campaign and an assessment of tap water availability in these locations.</p> <p>Click here for more information.</p>
<p>City of Toronto, Ontario</p>	<p>Water Bottle Ban in City Parks and Facilities In December of 2008, City Council approved a water bottle ban to take effect in January of 2012. The ban, which affects most of Toronto's parks and park facilities, prohibits the sale and distribution of water bottles in all Civic Centers, City facilities and parks.</p>

	Click here for more information.
Town of Ajax, Ontario	<p>Choosing Tap Water</p> <p>On June 4, 2009, Ajax Town Council approved a public education campaign titled "Tap into it!" to encourage residents and staff to adopt the principle and philosophy of choosing tap water over bottled water. The Town has taken the first step in removing bottled water from its public meetings, Town operated concessions, and vending machines. The Town will continue to phase out the sale of bottled water at special events, and remaining concessions as current lease agreements expire.</p> <p>Click here for more information.</p>
YOUR MUNICIPALITY HERE	<p>DOES YOUR MUNICIPALITY HAVE A BOTTLED WATER REDUCTION POLICY OR INITIATIVE THAT COULD SERVE AS A MODEL FOR OTHERS TO FOLLOW? IF SO, SEND THE INFORMATION TO RACHEL DE VOS, rdevos@auma.ca</p>

Additional Resources

Other Organizations	Resources
National	
The Council of Canadians	<p>Blue Communities Project Guide</p> <p>The Council of Canadians is a non-profit social action organization that advocates for clean water, fair trade, green energy, public health care, and a vibrant democracy.</p> <p>The Blue Communities Project calls on communities to adopt a water commons framework by:</p> <ol style="list-style-type: none"> 1. Recognizing water as a human right. 2. Banning the sale of bottled water in public facilities and at municipal events. 3. Promoting publicly financed, owned and operated water and waste water services. <p>Click here for more information.</p>
International	
Blue W	<p>Water Bottle Refill Locations</p> <p>The Blue W is a unique community-based program dedicated to promoting municipal tap water as a healthy, easily accessible alternative to purchasing bottled drinks. Blue W provides mapped details on where to find clean, free, public and commercial sources to fill your reusable bottle without compelling you to make additional purchases - just look for the Blue W decal in participating shop and restaurant windows.</p> <p>Click here for more information.</p>

Single Use Plastic Bags Reduction Initiatives

Between 500 billion and one trillion plastic bags are used worldwide each year. Manufacturers of plastic bags introduce tonnes of carbon emissions into the atmosphere annually, whereas a sturdy, reusable bag will last for years, and only needs to be used five times to have a lower environmental impact.

Municipal Resources

Municipality	Initiative
Provincial	
Bow Valley Waste Management Commission (BVWMC)	<p>Reduce the Use</p> <p>The BVWMC (Town of Banff, Town of Canmore and Municipal District of Bighorne) leads a 'Reduce the Use' campaign to encourage residents and businesses to use plastic bags responsibly. The Commission has partnered with local businesses who are reducing plastic bags in their operations and provides information to the public on the costs of limited use plastic bags and the benefits of reusable bags.</p> <p>Click here for more information.</p>
Regional Municipality of Wood Buffalo	<p>Prohibition</p> <p>On September 1st 2010, the RMWB's bylaw prohibiting the use of single use plastic bags came into effect. The purpose was to eliminate the distribution of single use shopping bags in the Regional Municipality of Wood Buffalo to help reach the goal of reducing the waste stream going to the landfill by 50 percent by 2012.</p> <p>Click here for more information.</p>
YOUR MUNICIPALITY HERE	<p>DOES YOUR MUNICIPALITY HAVE A PLASTIC BAG REDUCTION POLICY OR INITIATIVE THAT COULD SERVE AS A MODEL FOR OTHERS TO FOLLOW? IF SO, SEND THE INFORMATION TO RACHEL DE VOS, rdevos@auma.ca</p>

Additional Resources

Other Organizations	Resources
Provincial	
Government of Alberta	<p>In 2008, Albertans took home nearly 741 million plastic bags. To curb this upward trend, Canada's major grocer, retail, and drugstore associations signed a voluntary memorandum of understanding to reduce plastic bag distribution by 50 per cent by 2013.</p>

	<p>Results are now available from the third and final annual report. The link below provides further detail about plastic bag reduction results achieved in Alberta between 2008 and 2013.</p> <p>Click here for more information.</p>
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Yard Waste and Water Reduction Initiatives

When most people think of xeriscaping (also known as eco-scaping or nature-scaping), they think of water conservation. However landscaping that uses native plants to mimic the natural vegetation not only requires less water, it also reduces the need for cutting and pruning which contributes to yard waste.

Municipal Resources

Municipality	Initiative
Provincial	
City of Brooks	<p>Xeriscaping Demonstration Park</p> <p>The City of Brooks' Veteran's Park East has been converted into a xeriscaping demonstration park. The park contains a rain water capture system, permeable surfaces, water wise plants, and mulch used as ground cover instead of turf, decreasing the amount of yard waste produced. Maintenance is reduced as is the need for irrigation water.</p> <p>Additionally, two xeriscaped flowerbeds were planted in Brooks by the Girl Guides with help and funding from the Environmental Advisory Committee.</p> <p>Click here for more information.</p>
City of Calgary	<p>Grasscycling</p> <p>The City encourages its residents to leaving clippings on the lawn after mowing. Grass clippings will quickly decompose, returning valuable nutrients to the soil.</p> <p>Grasscycling:</p> <ul style="list-style-type: none"> • Improves lawn quality • Saves the time and energy it takes to bag, rake and dispose of your clippings • Reduces the amount of fertilizer and water needed • Benefits the environment by reducing organic waste in the landfill <p>Click here for more information.</p>
City of Edmonton	<p>Eco-Landscaping</p> <p>The City of Edmonton's website includes an extensive section on eco-landscaping. Eco-landscaping includes a number of practices that are easy</p>

	<p>on the environment and your pocketbook. It includes designing your yard to conserve water, using selective plantings, collecting rain water, watering wisely, backyard composting, mulching, grasscycling and using a push or electric mower.</p> <p>Click here for more information.</p>
City of Lethbridge	<p>Principles of Xeriscaping</p> <p>As part of its Resource Management Initiative the City has produced a guide <i>Xeriscape: The Seven Principles of Landscape Water Conservation</i>, which provides information on waste reducing strategies such as mulching.</p> <p>Click here for more information.</p>
City of Medicine Hat	<p>Xeriscaping Demonstration Garden</p> <p>The Xeriscape Demonstration Garden is a collaborative initiative between the City of Medicine Hat and Medicine Hat College, to educate local and regional homeowners about alternatives to traditional landscaping while promoting practices that conserve water and protect the environment. The city also provides an online brochure, 7 Steps to Xeriscaping.</p> <p>Click here for more information.</p>
Strathcona County	<p>Ecoscaping</p> <p>Strathcona County provides information on their website about the benefits of ecoscaping to help residents create attractive, low-maintenance, and water efficient landscapes which leave a small environmental footprint.</p> <p>Click here for more information.</p>
Town of Cochrane	<p>Naturescaping</p> <p>Both new and established residents are encouraged to reduce their lawn area with naturescaping or xeriscaping. A naturescaping demonstration site was established at a water pumping station in a residential neighbourhood, to enable residents to explore the possibilities up close.</p> <p>Under the Land Use Bylaw, the minimum naturescaping requirement for residential areas is 25%. Many home owners are 100% naturescaped or xeriscaped. Commercial properties must be 100% naturescaped.</p> <p>Click here for more information.</p>
Town of Okotoks	<p>Xeriscaping Tips</p> <p>The Town of Okotoks has created a Xeriscaping Brochure to assist residents in xeriscaping their yards. There are also several xeriscaping demonstration sites located in the town that incorporate the various principles of xeriscaping to achieve beautiful low maintenance landscapes.</p> <p>Click here for more information.</p>

YOUR MUNICIPALITY HERE	DOES YOUR MUNICIPALITY HAVE A YARD WASTE OR WATER REDUCTION POLICY OR INITIATIVE THAT COULD SERVE AS A MODEL FOR OTHERS TO FOLLOW? IF SO, SEND THE INFORMATION TO RACHEL DE VOS, rdevos@auma.ca
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Additional Resources

Other Organizations	Resource
Provincial	
Government of Alberta	<p>Tips for Reducing Leaf and Yard Waste</p> <p>The Alberta Government published a report as part of a plan to assist Albertans to switch from disposing leaf and yard waste in the landfill to recycling it.</p> <p>Recommendations include:</p> <ul style="list-style-type: none"> • Develop a strong market pull for compost to ensure it is recycled and returned back to work • Institute a measurement and monitoring system to determine current disposal rates and future improvements • Establish partnerships and multi-stakeholder teams to help link compost producers with consumers and support the recommended actions • Establish leaf and yard waste diversion targets and timelines for reaching those targets • Promote the expansion of composting infrastructure • Develop communication, education and training for those that manage leaf and yard waste and the resulting compost • Demonstrate provincial government leadership to model the way in managing leaf and yard waste <p>Click here for more information.</p>
Oldman Watershed Council (OWC)	<p>Grass to Xeriscape</p> <p>The OWC provides a Cost Benefit Analysis and Qualitative Study available on their website. The objective of this study was to develop a cost benefit analysis of converting from traditional lawn, to a Xeriscape landscape for City of Lethbridge residents. A survey was conducted among selected residents with visible Xeriscape aspects to their gardens.</p> <p>Click here for more information.</p>