

Zero Waste Backgrounder

Transforming Municipalities from Waste Managers to Resource Managers

What does Zero Waste Mean?

Zero waste suggests that the entire concept of waste should be eliminated. Instead, waste should be thought of as a “residual product” or simply a “potential resource” in a continuous, integrated, closed-loop system. Opportunities such as reduced costs, increased profits, and reduced environmental impacts are found when returning these “resources” as inputs to either natural or industrial systems. This may involve redesigning both products and processes in order to eliminate hazardous properties that make them unusable and unmanageable in quantities that overburden both industry and the environment.

Zero Waste strategies consider the entire life-cycle of products, processes and systems in the context of a comprehensive systems understanding of our interactions with nature and search for inefficiencies at all stages. With this understanding, wastes can be prevented through designs based on full life-cycle thinking. Indeed, we should work to "design" our wastes, if any, so that they have future applications.

A growing number of municipalities are adopting a Zero Waste as a long term goal that drives management decisions. Many municipalities are starting with Zero Waste garbage from the events by reducing the amount of waste brought to the site, avoiding the use of disposable foodware and recovering resources for reuse, recycling, and composting. A few examples are described below followed by a list of other resources available from provincial, national and international organizations.

Examples and Resources

Municipality	Example
Provincial	
Bow Valley Waste Management Commission (BVWMC)	<p>Hands on Support</p> <p>The BVWMC helps member communities (the Town of Banff, Town of Canmore and Municipal District of Bighorn) plan and execute Zero Waste Special Events. The Commission will supply planning tools and equipment and even attend the event with their special Toward Zero Waste Resource Recovery Stations, Banners, Flags, Volunteer ID vests.</p> <p>In 2010 the BVWMC celebrated the following achievements:</p> <ul style="list-style-type: none">• Over 30 Special Events• Over 6 tonnes of event waste handled properly• Almost 5 tonnes (80%) of resources diverted from landfill• Best practices demonstrated to thousands of event-goers from across Canada and the world <p>Click here for more information</p>



City of Edmonton	<p>The Way We Green</p> <p>The City of Edmonton's Environmental Strategic Plan The Way We Green has as one of its long term goals, "Edmonton Generates Zero Waste". Currently, approximately 60% of Edmonton's residential waste is diverted from landfill. At the same time, most industrial, commercial, institutional, construction and demolition waste generated in Edmonton is landfilled. One of the plan's objectives is to increase the rates of non-residential landfill diversion to mirror residential rates.</p> <p>The strategic actions identified to meet the objectives include:</p> <ul style="list-style-type: none"> • Establishing , implementing and maintaining a waste management strategy • Using Incentives, education and partnerships to increase participation in waste reduction efforts • Influence and support other levels of government and industry to reduce packaging and design products that do not require disposal. <p>Click here for more information</p>
Town of Canmore	<p>Environmental Sustainability Action Plan</p> <p>The Town's Environmental Sustainability Action Plan includes a recommendation to develop a Towards Zero Waste policy that outlines requirements for the minimization of wastes produced from Town offices and operations. This recommendation is just one example of the steps outlined to reach the desired future state of Resource Conservation and Waste Management in the Community:</p> <p style="padding-left: 2em;">“We are moving towards zero waste by reducing, reusing and recycling the materials we consume. This will minimize the amount of waste ultimately requiring treatment or disposal. The community manages the waste it produces in a responsible and comprehensive fashion. Harm to other systems (air, land, water, and ecosystems) and species is avoided by considering the full range of potential impacts associated with the collection, treatment, transportation and disposal of waste.”</p> <p>Click here for more information</p>
Municipality of Jasper	<p>Guidelines</p> <p>Jasper and Parks Canada partnered to release Towards Zero Waste Events Guidelines to help organize events that maximize diversion (recycling and composting) and minimize waste. The 8 page guide provides straightforward tips organizers can use before, during and after events.</p> <p>Click here for more information.</p>
Regional Municipality of Wood Buffalo	<p>Solid Waste Alternative Process</p> <p>In a presentation given at TEDx Fort McMurray, Kevin Scoble, director of the environmental services department at the Regional Municipality of Wood Buffalo, presented an innovative initiative that will help the municipality achieve its ambitious zero-waste goal.</p> <p>The S.W.A.P. (Solid Waste Alternative Process) initiative will include:</p> <ul style="list-style-type: none"> • The adoption of new waste diversion processes that will enable new types

	<p>of waste materials to be diverted from landfill and be used to produce local goods;</p> <ul style="list-style-type: none"> • The development of an eco-industrial park that will transform the diverted waste materials into new products; • The construction of waste-to-energy facilities that will generate electricity and heat from waste materials that could not be diverted; • The construction of greenhouses that will produce local vegetables and will be powered by waste heat from the waste-to-energy facilities; • The development, in collaboration with the local college, of an integrated centre of excellence that will focus on R&D in waste management. <p>Click here to watch the presentation</p>
YOUR MUNICIPALITY HERE	DOES YOUR MUNICIPALITY HAVE A ZERO WASTE POLICY OR INITIATIVE THAT COULD SERVE AS A MODEL FOR OTHERS TO FOLLOW? IF SO, SEND THE INFORMATION TO RACHEL BOCOCK rbocock@auma.ca
Canadian	
Metro Vancouver, British Columbia	<p>Metro Vancouver Zero Waste Challenge</p> <p>Metro Vancouver and its member municipalities currently divert 55 percent of the more than three million tonnes of waste produced by 2.4 million residents in the region each year. In 2007 the region's Board of Directors adopted a Zero Waste Challenge, expressing a commitment reduce solid waste in Metro Vancouver to the absolute minimum. Based on this commitment, the Board began engaging the community in an examination of the challenges and opportunities that will contribute to realizing a Zero Waste region. The resulting new Integrated Solid Waste & Resource Management Plan commits the region to:</p> <ul style="list-style-type: none"> • Improve reduction, reuse and recycling efforts to increase the diversion rate to 70 percent by 2015, striving for 80 percent by 2020 • recover materials and energy from wastes that cannot be recycled • responsibly managing residuals that remain. <p>The Plan proposes a 42% increase in expenditures on recycling activities, and a 39% decrease in expenditures on disposal.</p> <p>Click here for more information</p>
Regional District of Nanaimo (RDN), British Columbia	<p>Zero Waste- Beyond Recycling</p> <p>In 2002, the RDN committed to "Zero Waste" as its long-term waste reduction and diversion target. Zero Waste initiatives are an integral part of the region's Solid Waste Management Plan, which has set an interim goal of diverting 75% of the region's waste from the landfill by 2010.</p> <p>Some of the Zero Waste programs, projects and research in the Solid Waste Management Plan include:</p> <ul style="list-style-type: none"> • Residential Food Waste Collection Pilot Project • Commercial Organics Diversion Program • Residential Garbage and Recycling Program • Zero Waste Promotion and Education • Illegal Dumping Prevention Program

	<ul style="list-style-type: none"> • Construction/Demolition Waste Diversion Strategy • Solid Waste Composition Study <p>Click here for more information</p>
Regional District of Central Kootenay (RDCK), British Columbia	<p>Resource Recovery Plan</p> <p>RDCK Resource Recovery Services include waste handling facilities, community recycling depots, materials recovery and public education. The goal of resource recovery is to educate people to produce less waste and to encourage healthier environments.</p> <p>RDCK's Resource Recovery Plan is currently being updated. The region has selected "Zero Waste" as an end goal for the RRP. The Plan will be focussing on source reduction as a way of decreasing the amount of residual waste being landfilled.</p> <p>Existing resource recovery initiatives in the region include:</p> <ul style="list-style-type: none"> • Reuse Centres - The majority of the region's waste handling facilities have "Reuse" centres on site. These centres offer a location where residents may place household items that still have use (e.g. small appliances, home decorations, certain kids toys, books, etc.). • Localized Glass Recovery - Glass bottles collected at our recycling facilities are crushed and used as road building material. • Community Partnerships - The RDCK partners with food stores, festivals and local societies to promote resource recovery. • Final Cover Composting Project - All garden/yard waste and discarded wood product is mulched and composted on site at a number of waste handling facilities and then used as final cover at our landfills. • Local Media - Waste reduction advertisements have been appearing regularly <p>Click here for more information</p>
Town of Markham, Ontario	<p>A Resource Management Organization</p> <p>In 2008, Markham Council adopted 'Zero Waste' as a sustainable project to change the municipality from waste managers to a resource management organization. Zero Waste at the municipal level challenges unsustainable purchasing policies, poor packaging design and inefficiency.</p> <p>Markham began the journey towards Zero Waste in their buildings. The Markham Civic Centre, which houses 500 staff, a restaurant, a daycare centre, and many local events, became the first Zero Waste municipal facility in Ontario - diverting 96.5% of its waste from landfill.</p> <p>Markham plans to continue on the road to Zero Waste by making all town buildings Zero Waste facilities. Markham is committed to setting an example for residents through its own operations and transferring its expertise to assist other governments, businesses and local schools to adopt sustainable waste management practices.</p> <p>Click here for more information</p>

Other Organizations	Resources
Provincial	
Recycling Council of Alberta	<p>Information and Networking</p> <p>The RCA's mission is to promote and facilitate waste reduction, recycling, and resource conservation in the Province of Alberta. The Council is a valuable resource for municipalities wanting work towards Zero Waste.</p> <p>It acts as an interface for information and dialogue between industries, governments, environmental groups, and consumers. This networking function is facilitated through regular meetings, as well as special events such as seminars and conferences.</p> <p>The council also delivers a variety of educational initiatives, including workshops, training seminars, conferences and public education campaigns. These initiatives cover a variety of topics related to waste reduction and diversion.</p> <p>Click here for more information.</p>
Canadian	
Environment Canada	<p>Green Meeting Guide</p> <p>Environment Canada's Green Meeting Guide is a practical reference tool for anyone faced with the task of organizing a meeting or conference with the aim of making the event environmentally responsible. It provides information on how to incorporate environmental concerns at every stage of an event.</p> <p>Click here for more information</p>
Green Municipal Fund	<p>Tools and Resources for Building Capacity</p> <p>FCM's Green municipal fund website has a page dedicated to information on waste which includes tools and resources specifically relevant to zero waste including:</p> <ul style="list-style-type: none"> • Solid Waste as a Resource: A Guide for Sustainable Communities • The Town of Markham: Zero Waste at Public Events and Public Spaces Presentation • Towards a Zero Waste Future: Review of Ontario's Waste Diversion Act Presentation <p>Click here for more information</p>
Recycling Council of British Columbian (RCBC)	<p>Priorities for Local Governments</p> <p>In 2009, RCBC released the report, On the Road to Zero Waste: Priorities for Local Governments providing guidance to municipal and regional governments across B.C. on the actions, tools and opportunities available to them to increase the 3Rs and move closer to achieving zero waste.</p> <p>Click here for more information.</p>
International	
A Greener	Events and Festivals



Festival	A Greener Festival Ltd. is a not-for-profit company committed to help music and arts events and festivals around the world adopt environmentally efficient practices by providing education resources and by providing a forum for discussion about how the impact of festivals on the environment can be limited at future events. The site is split into sections looking at discrete areas where festivals organisers and festival goers can make a difference. Click here for more information.
Zero Waste International Alliance	Promoting Alternatives The Zero Waste International Alliance was established to promote positive alternatives to landfill and incineration and to raise community awareness of the social and economic benefits to be gained when waste is regarded as a resource base upon which to build both employment and business opportunity. Click here for more information. (Note: the Alliance's website zwia.org is currently under construction.)
Zero Waste Alliance	The Case for Zero Waste The Zero Waste Alliance is a US non-profit dedicated to providing assistance to industry and other organizations for development and implementation of standards, tools and practices that lead to a more sustainable future through the reduction and elimination of waste and toxics. Its website provides helpful information on the case for <u>zero waste</u> , examples of <u>approaches</u> , and links to <u>further resources</u> . Click here for more information.

