



9.0 WASTE

Goal

Adopt a goal of Zero Waste to secure the environmental health of the Thunder Bay region, thereby reducing greenhouse gas emissions, conserving and protecting our natural resources, and creating employment opportunities as a sustainable community.

Why it Matters...

Each person in Ontario produces 640 kilograms of solid waste annually (Stats Canada, 2000). Much of this waste is potentially useful as it contains materials that could be reused and/or recycled. Canada throws away the energy equivalent of millions of barrels of oil per year, with significant economic, social, environmental and cultural impacts. In addition to the substantial costs of waste collection and disposal, the production of waste creates GHG emissions and toxic substances. The approximately 99, 232 tonnes of waste sent to landfill in Thunder Bay in 2005 produced approximately 47,800 tonnes of GHGs - 3% of the community's total GHG emissions.

In 1994, the Ontario 3Rs Waste Regulations (O. Reg. 101/94-105/94) were enacted by the Ministry of the Environment with a goal of reducing municipal waste 50% by 2000. This required waste audits, waste reduction work plans and source separation programs for major generators including municipalities, hospitals, offices, hotels, "big box" stores, educational institutions (350 students+), multi-residential buildings (six units+), large manufacturers, and construction and demolition projects. The goal has not been met, and much more work needs to be done to raise awareness of the regulations.

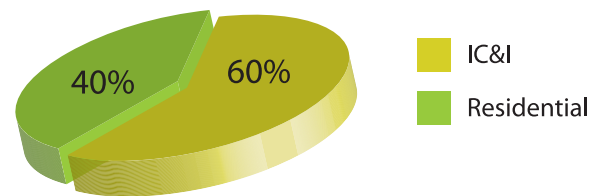
What is "Zero Waste?"

Zero waste is a philosophy related to the redesign of our resource-use system. It strives towards maximum waste reduction through the most efficient use of natural resources and materials and the maximizing of recycling. The term waste is replaced with resource. A growing number of municipalities across Canada are adopting the philosophy of Zero Waste.

Thunder Bay's Zero Waste Action Team is a leader in this field, promoting the concept since 1992.

In Thunder Bay waste management planning is not new, but requires greater resolve to act and greater support from the decision-makers and the community. A variety of plans have proposed new and progressive ways to deal with our waste such as the 1998 Waste Reduction Program (included 12 strategies to achieve a 50% waste diversion target), and the Task Force on Garbage Collection (mandated by the 2004 New Foundations Living Strategic Plan and completed in 2007). The City is continuing to work on implementing some of the recommendations approved in 2007.

Source of Waste in Thunder Bay by Sector



The total local residential diversion rate including curbside/depot recycling, household hazardous waste depot, leaf and yard waste collections and all other diversion program tonnage was 22.5% in 2005. To assist Thunder Bay in developing sustainable waste management solutions and programs to meet the needs of our community, a long range comprehensive Integrated Waste Management Master Plan is recommended. This plan will give municipal waste managers and the community guidance and direction to manage waste and resources based on a long range strategy, consultation, and cooperation between all sectors. It will also optimize resource recovery and economic development opportunities and ensure compliance with current and pending legislative requirements.

Some materials such as fluorescent lights and electronic waste contain toxic chemicals such as lead, or mercury, which pose health and environmental risks. Mercury is highly toxic and is found in coal, fluorescent lights, thermostats, thermometers and some types of switches. Residents may bring mercury-containing products to the Household Hazardous Waste (HHW) Depot at the John St. Landfill or to depots set up by EcoSuperior in conjunction with local businesses. Other HHW may also be brought to the HHW depot at the John St. Landfill. As a result of concerns about potentially hazardous electronic waste going to landfill, the Zero Waste Action Team (ZWATeam), worked with the City and IC&I sectors to facilitate the establishment of the Pack Pros Plus E-Waste Collection Depot in 2004. This has resulted in 45,454 kgs of e-waste being diverted from the landfill in Thunder Bay and the region annually, and created new direct jobs.

Litter has a negative effect on the quality of life and economy of our community. Rather than the current concentration on cleaning up, primary emphasis should be put on prevention and public education, before litter hits the ground, as has been the goal of Litter Free Thunder Bay. Each year, thousands of people participate in the City's annual "Spring Up To Clean Up," helping to clean up stray garbage littering our streets. One major component of this litter is plastic bags. The Provincial Government aims to reduce the use of plastic bags by 50% by 2012. Plastic bags take many years to break down, are made of oil (a non-renewable resource), and cannot be burned or buried safely. Strategies to reduce their use and promote alternatives are under way in Thunder Bay.

Green purchasing decisions reduce the impact on the landfill, and can be made by everyone. Our local chapter of Habitat for Humanity works to reduce construction waste by promoting the reuse of building materials through its Restore. Several local organizations also collect used clothing and household goods for reuse, reducing the impact on the landfill. On a larger scale, green procurement policies have been adopted by many organizations and businesses that purchase vast quantities of goods and services. Typically focusing on products made with sustainable or recycled materials, have a limited amount of packaging and are produced as locally as possible, a green procurement policy encourages the life-cycle analysis of all products purchased.

Objectives and Recommended Actions

9.1 Develop and implement a long-range comprehensive, Integrated Waste Management Master Plan adhering to Zero Waste principles.

- Increase waste diversion to extend the life of the existing John Street Landfill Site.
- Achieve full cost recovery in the solid waste management system as outlined in the 2004 New Foundation Living Strategic Plan.
- Update the City of Thunder Bay internal waste diversion handbook and build upon its successes to increase waste reduction and diversion in all corporate departments.
- Promote and participate in provincial environmental stewardship and waste minimization programs.
- Promote and encourage extended producer responsibility for all products.

9.2 Increase the reduction and diversion of hazardous waste.

- Explore opportunities to increase accessibility and diversion of household and small business hazardous waste.
- The City and EarthWise Community Partners will work together to continue to increase the effectiveness of the mercury reduction programs.

9.3 Expand on leaf and yard waste collection and other composting initiatives.

- Promote and enhance the existing composting program.

9.4 Increase waste reduction and diversion in the residential sector.

- Encourage the responsible disposal of E-Waste and develop solutions for diverting historical e-waste.
- Reduce the use of plastic shopping bags by a minimum of 50% by 2012.
- Develop an education and marketing strategy to address the challenges and misconceptions in participating in recycling and waste diversion opportunities within the residential and multi-residential sectors
- Promote the 6Rs: Rethink consumer behaviour, Refuse unnecessary products and packaging, Reduce consumption, Repair broken items, Reuse and Recycle materials through comprehensive social marketing programs
- Share experiences and successes with others in the region.

9.5 Reduce littering in Thunder Bay through a preventative approach with an emphasis on public education and incorporate recycling/litter prevention opportunities for people at play and away from home.

- Develop a litter awareness program about the social, economic and environmental costs of litter, focusing on litter prevention.

9.6 Work with large and small IC&I waste generators to develop and implement waste reduction/diversion strategies.

- Encourage compliance with Ontario's 1994 3Rs Waste Regulations.
- The City will continue to work with small business to develop cost-effective solutions to increase waste reduction and diversion.
- Identify new economic development opportunities.
- Reduce the life-cycle cost of industrial infrastructure.
- Provide incentives and enact bylaws to divert resources from landfill.

9.7 Develop and promote green procurement capacity within Thunder Bay by adopting sustainable environmental and ethical purchasing policies (SEEPP).

- Develop a municipal Corporate Green Procurement Policy based on social and environmental ethics.
- Work with EarthWise Community Partners to promote this policy in the wider community.

WHAT CAN I DO?

- Reduce your waste production.
- Think before you buy – look for products with little packaging, buy in bulk or use reusable containers.
- Buy locally manufactured/grown materials and products.
- Use reusable containers and bags for lunches, and when shopping.
- Compost all acceptable organic matter. You'd be surprised at how you can reduce your weekly disposal needs. No room to compost outside? Get some worms and start an indoor vermicomposter!
- As a consumer society it is important to practice the 6 "Rs" related to waste reduction; Rethink, Refuse, Reduce, Reuse, Repair and Recycle in that order. Recycling should be the last step in reducing the amount of waste sent to the landfills each year.