

## Beyond recycling

Edmontonians reach out in many ways to reduce waste and take care of Edmonton's environment. The City supports a variety of sustainable waste practices such as:

- **Waste-to-biofuels facility** – an innovative gasification facility to be constructed at the Edmonton Waste Management Centre will enable Edmonton to divert up to 90% of residential waste from landfill. It will convert non-recyclable and non-compostable material to methanol and ethanol. It will be operational by 2012.
- **Reuse fairs** – started in 1992, Reuse Fairs bring together communities and charities to collect and distribute needed items for local programs. Since 2000, nearly 100 fairs have been held.
- **Edmonton Reuse Centre** – based on the ongoing success of Reuse Fairs, the Edmonton Reuse Centre was opened in 2007. It offers all the benefits of Reuse Fairs year-round.
- **Reuse and recycling directory** – an online service launched in 2005 for residents to find local charities, service agencies and businesses interested in reusable household items. Over 250 references are listed at [www.edmonton.ca/reusedirectory](http://www.edmonton.ca/reusedirectory).
- **Master Composter/Recycler Volunteer Program** – since 1991, more than 600 graduates from the City's award-winning course have served as "green" ambassadors in their communities, promoting composting, recycling and reuse.
- **Backyard Composting Education Centre** – located at John Janzen Nature Park, composting and grasscycling workshops are held to demonstrate how organic waste can be put to good use in homes and gardens.
- **Grasscycling** – leaving lawn clippings on the lawn as you mow is actively promoted as an easy way for homeowners to substantially reduce their waste. In Edmonton, 40% of homes practise grasscycling.
- **Christmas tree recycling** – approximately 600,000 natural Christmas trees have been collected since January 1990. The chipped trees are composted.
- **Beverage container recycling** – beverage container return depots in Edmonton collect more than 24,000 tonnes of aluminum, glass, plastic and poly-coated beverage containers annually.
- **Construction and demolition recycling** – asphalt shingles, drywall, concrete, wood waste and brush are recycled at the Edmonton Waste Management Centre.

## E-Waste recycling

Using cutting-edge processes and equipment, the Global Electric and Electronic Processing Inc. (GEEP) facility processes all types of electric and electronic materials for recycling. In 2009, GEEP processed more than 450,000 televisions, computers and monitors.

## Recycling is good for the local economy

Over 90% of the material collected for recycling is sold. Many companies in the Edmonton area are directly involved in processing recyclable materials:

- **Can-Cell Industries Inc.** – newspapers and mixed paper are turned into cellulose insulation.
- **EMCO** – cardboard, boxboard and mixed paper are used to make building paper and shingles.
- **Alta Steel** – household metal is used to make rebar and tractor/grader blades.

## Recycling is good for the environment

Because of recycling, landfill space, natural resources and energy are conserved and less landfill gas (a major contributor to greenhouse gas emissions) is released into the atmosphere.

- Producing aluminum from scrap instead of bauxite cuts energy use and air pollution by 95%. It also greatly reduces greenhouse gases. Recycling 500 tonnes of aluminum is equivalent to removing 1,732 cars from the road in one year.
- Making paper from discards instead of virgin timber saves forests, reduces energy use by up to three quarters, requires less than half as much water and reduces greenhouse gases. Recycling 500 tonnes of paper is equivalent to removing 285 cars from Edmonton's roads.



## Questions?

For information about recycling or any City of Edmonton waste service, please visit our website at [www.edmonton.ca/waste](http://www.edmonton.ca/waste) or phone **311**.

# Recycling Facts

## Edmonton, a global leader in waste reduction

Since initiating a curbside recycling program in 1988, **Edmonton has become a global leader in effective urban waste management.** Through recycling, reuse and composting programs, **the City diverts close to 60% of residential waste from landfill.** The goal is to divert 90% by 2015.

### The world looks to Edmonton for answers on recycling. Here's why:

- Edmonton has one of the most comprehensive and convenient recycling systems anywhere.
- All residents and small businesses can recycle with the Blue Bag program for single family homes, the Blue Bin program for apartments and condominiums and Recycling Depots throughout the city for all residents and small businesses. In 2009, over 55,000 tonnes of recyclables were collected through the three programs.
- Edmonton has an 89% voluntary participation rate in its curbside Blue Bag recycling program.
- Edmontonians consistently rate the City's recycling and waste collection as a municipal service they are highly satisfied with.
- The use of Eco Stations (year-round household hazardous waste depots) increases by 15% each year. In 2009, 183,000 vehicle visits were made to the Coronation and Strathcona stations.

In 1988, when curbside recycling was first introduced, only glass bottles and jars, household metals and newspapers were collected.

Today, the program includes plastics, cardboard, boxboard, magazines, milk cartons, phone books and more. Residential organic waste is composted and many more materials are also recycled through Eco Stations, the Edmonton Waste Management Centre and privately owned beverage container depots.

When a planned waste-to-biofuels facility is operational, non-recyclable and non-compostable material will be converted to methanol and ethanol. By 2015, 90% of residential waste will be diverted from landfill.



# Comprehensive user-friendly recycling programs

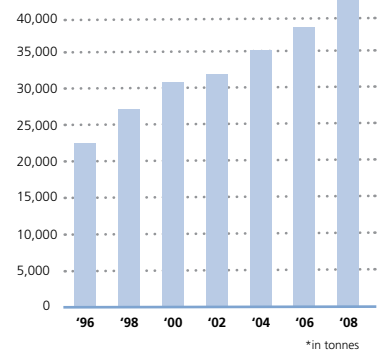
All Edmonton residents and small businesses can recycle through convenient recycling programs:

## Blue Bag Curbside Collection for houses, duplexes and fourplexes

Residents simply place unsorted recyclables into blue, see-through plastic bags. Collection is efficient and convenient. Close to 90% of single family households voluntarily recycle.



Total Blue Bag Volumes Collected\*

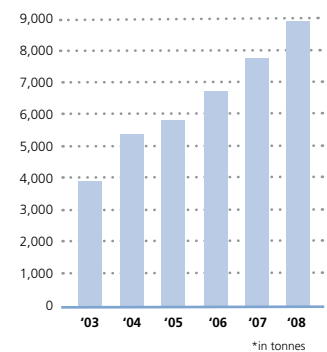


## Blue Bin Recycling for apartments and condominiums

Residents place clean, loose recyclables into a blue recycling bin located right on site. As with the Blue Bag program, no sorting is required. Of those residents with Blue Bins on their site, 81% participate in the program.



Total Blue Bin Volumes Collected\*

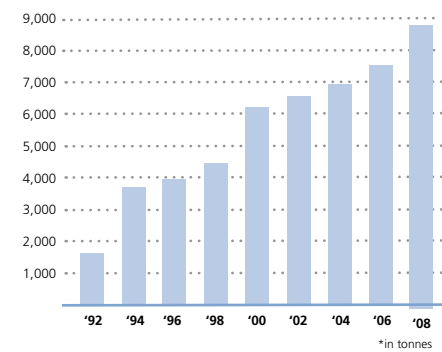


## Community Recycling Depots for all residents and small businesses

Edmonton's recycling needs are further served by Community Recycling Depots located at shopping malls throughout the city. Recycling Depots accept the same materials as the Blue Bag and Blue Bin programs, and provide 24-hour access at 20 locations.



Total Depot Volumes Collected\*



## The Edmonton Composting Facility

A large portion of Edmonton's household waste is organic matter (food waste, garden trimmings, grass, paper) that can be composted. The Edmonton Composting Facility processes that material (along with municipal sewage biosolids) into a rich soil supplement. With composting and recycling combined, Edmonton is capable of diverting 60% of residential garbage from landfill.

## Why is composting good?

Compost is a soil amendment that offers many long-term benefits. It helps soil retain water, improves porosity, maintains soil pH balance, and adds nutrients. In addition to agricultural and horticultural uses, compost can be used to reduce dependence on chemical fertilizers, to control erosion and to improve contaminated soils.



## The environmental choice

- Far less waste is sent to landfills.
- Local land improvement results from the availability of quality compost to restore organics to soils.
- Methane gas, produced as organic waste decomposes in landfills, contributes to global warming. By diverting organic waste from landfill, greenhouse gas emissions are reduced.



## Recycling at Eco Stations and the Edmonton Waste Management Centre

Eco Stations are comprehensive drop-off facilities for household hazardous waste, recyclables and landfill waste.

- In 2009, 183,000 visitors brought in paint, pesticides, electronics, oil products and more.
- There are three stations:
  - **Ambleside** 14710 Ellerslie Rd (opened 2009)
  - **Coronation** 11440 – 143 St. (opened 1999)
  - **Strathcona** 5150 – 99 St. (opened 1995)

Residents can also bring waste and recyclable materials to the Edmonton Waste Management Centre (EWMC). Much of the material brought to Eco Stations and the EWMC is recycled or reused.

## What does it become?

**usable paint** (including full or partially full aerosols) → made available for free to the public (Edmontonians have received over 370,000 litres of free paint since the first Eco Station opened in 1995)

**unusable paint** → recycled into new paint

**antifreeze** (glycol) → becomes antifreeze

**motor oil/oil filters** → recycled by oil recycler or used as fuel

**car batteries** → plastic casing becomes new plastic casing; lead cells become new lead cells; acid is reused in the production of polystyrene

**fluorescent tubes** → glass is used in the manufacture of fibreglass; aluminum end caps are sent to an aluminum smelter; mercury is distilled into usable mercury.

**tires** → becomes rubber paving stones, livestock cushions

**plastic oil containers** → cleaned and recycled into various plastic products

**computers and small appliances** → recycled by Global Electric and Electronic Processing

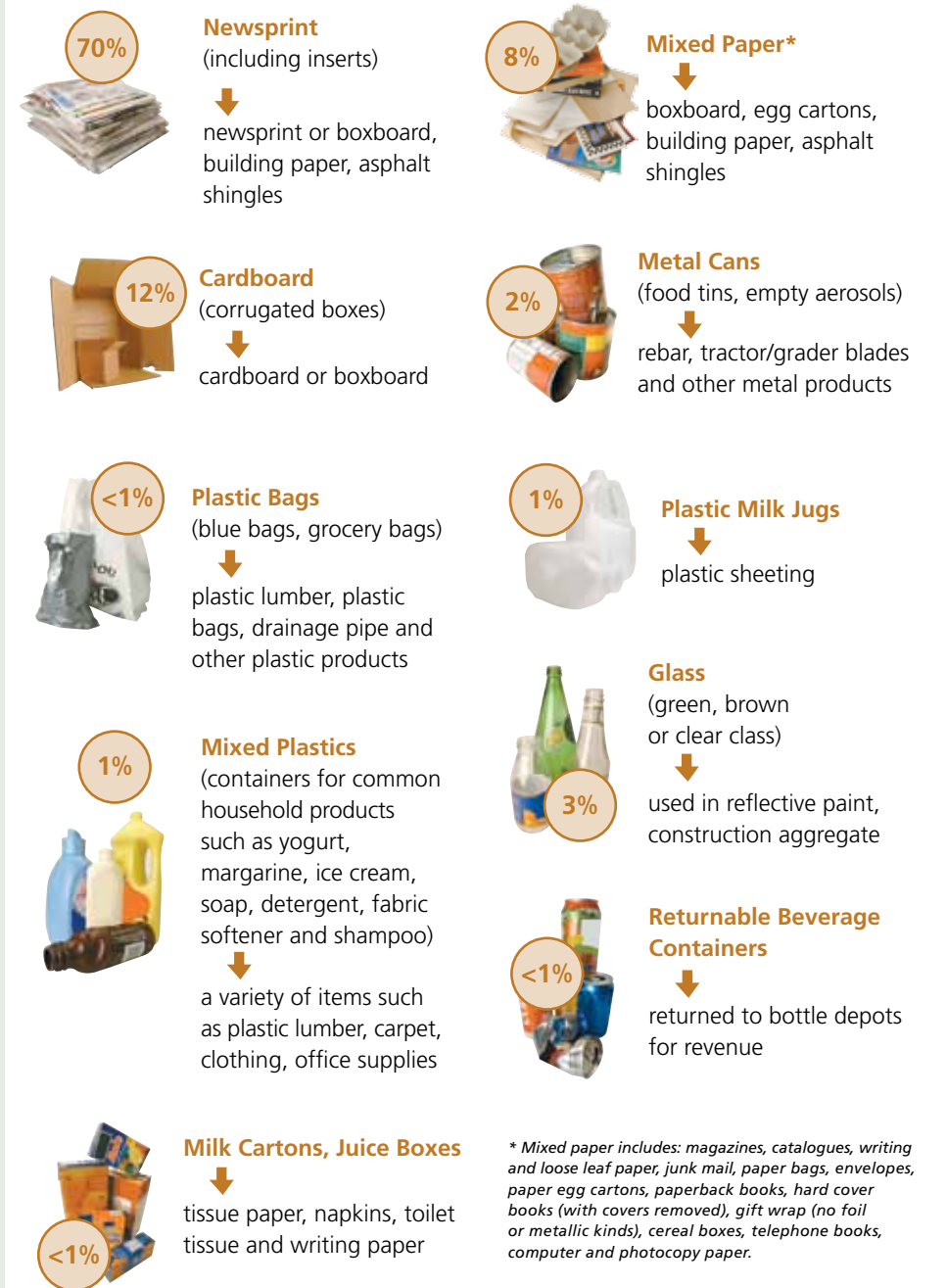
**aerosol cans** → recycled as rebar or tractor/grader blades

**large appliances, disposable propane/butane cylinders, and all scrap metal** → recycled as rebar or tractor/grader blades

# World-class sorting and processing facilities

The Edmonton Waste Management Centre, located in northeast Edmonton, hosts a unique collection of waste processing facilities. Collected recyclables are processed at the Materials Recovery Facility (MRF), one of the most advanced mixed material recycling operations in North America. This 6,000 square metre (64,000 ft<sup>2</sup>) facility processes approximately 40,000 tonnes of recyclables per year.

## What comes to the Materials Recovery Facility from Blue Bags and Recycling Depots? (by weight) And what does it become?



\* Mixed paper includes: magazines, catalogues, writing and loose leaf paper, junk mail, paper bags, envelopes, paper egg cartons, paperback books, hard cover books (with covers removed), gift wrap (no foil or metallic kinds), cereal boxes, telephone books, computer and photocopy paper.