

APRA *News*



Volume 3

Alberta Plastics Recycling Association

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Updating to Begin on Alberta Plastics Recycling Strategy

The Alberta Plastics Recycling Strategy, developed in 1997 through a partnership of APRA, the Edmonton Capital Region Waste Minimization Committee, EPIC and Alberta Action on Waste, is in need of updating and work will commence in 2006.

The first phase will be to gain accurate estimate of the amounts and types of plastics entering the waste stream from all sources and audit the collection and flow of recycled / brokered plastics on the market side.

It is expected that the programs of the Alberta Dairy Council, the Alberta Used Oil Management Association, ARMA and ABCRC will have had dramatic improvements to the collection of plastics, in particular, high density plastics.

Once updated audit information is in place, short and long term strategies for plastic streams that are not effectively recycled can be developed.

New consumer plastic bag site launched

The Canadian Plastics Industry Association has launched a new [consumer web site for plastic bags](http://www.myplasticbags.ca) (www.myplasticbags.ca). The site is designed to drive the recovery and recycling of shopping bags by providing information to consumers on how and where plastic bags can be recycled. Plastics bags are recycled into many items such as new bags and plastic lumber used for decking, siding and park benches.

Forty per cent of Canadians have access to recycling plastic bags through municipal recycling programs and there are extensive retailer take-back programs for plastic bags in western and eastern Canada. Findings of a recent poll done by Decima Research show that 90 per cent of Canadians are eager to recycle their plastic bags, but the actual recovery rates vary from under 10 per cent to over 40 per cent across the country. Here in Alberta, it is estimated that 55% of residents have access to plastic bag recycling through a combination of municipal recycling and retail take-back programs. Our recycling recovery rate is estimated to be around 15%. Reuse of plastic bags for garbage

and, assuming Albertans are similar to Ontarians, is likely at 50% (based upon an independent study undertaken in Ontario), resulting in an approximately 65% reuse and recovery rate for our Province. This shows that Canadians need more information on how and where to recycle their plastic bags to help increase the recycling rate.

The industry web site enables them to find that information by providing a database of municipalities that provide recycling for plastic bags, as well as a database of retail stores across the country that offer at-store, take-back programs for plastic bags. The site is up and running in both English and French.



The new consumer site is www.myplasticbags.ca.

New At-Store Collection Guide for plastic bags



The Best Practices Guide is now available.

municipal curbside programs), as well as the attributes of plastic bags and their increasing popularity with consumers. From there, it details the various steps involved in starting an at-store, take-back program. These steps include:

- ❖ Finding a market
- ❖ Setting up bins
- ❖ Consolidation of bags
- ❖ Baling
- ❖ Costs and revenues
- ❖ Public promotion

The new guide also offers an extensive list of existing retailers with at-store collection programs, along with a list of North American end markets and brokers.

A new guide is now available for those retailers interested in starting their own at-store collection programs for plastic bags. The [*Best Practices Guide for At-Store Collection of Plastic Bags*](#) is available free of charge from the [EPIC web site](#). It brings together those practices already in use in many retail outlets throughout North America.

The Guide touches briefly on the history of plastic bag recycling in Canada (the first country in the world to introduce recycling of plastic bags and film in

EPIC develops brief on energy recovery



Saitama Tobu, Japan, 1995, Capacity 4 x 8.3 Mg

This EFW facility in Japan is aesthetically attractive, fitting in well with its surroundings.

brief deals primarily with the use of municipal solid waste residuals as a clean, reliable and renewable form of energy.

EPIC has developed an information brief on energy recovery to help raise awareness of the important role that energy recovery can play on a number of different environmental fronts. The information

It presents energy from waste (EFW) as a solution to multiple problems, including: being a cost-effective form of energy for municipalities, with substantial greenhouse gas (GHG) emission reductions; providing an economic opportunity (creation of jobs and Canadian businesses); offering a solution for Canada's dwindling landfills and difficulties in citing new ones; and helping Canada meet its Kyoto commitments by eliminating potent landfill gas and by generating energy from non-fossil carbon sources.

The information brief identifies some 40 to 50 per cent of municipal solid waste as residual material that could be used in an EFW facility. It speaks to the fact that EFW is a clean source of energy, referencing for example, comparisons of acid gas emissions to typical coal-fired plants and natural gas facilities.

Canada's four existing EFW plants operate below the permitted dioxin emission levels set by the CCME Canada Wide Standards. In fact, "the annual dioxins (0.04 grams) from an EFW processing 200,000 tonnes/year is equivalent to 1,700 diesel trucks each traveling a typical 91,200 km per year. There are approximately 65,000 of these trucks registered in Ontario". These trucks alone produce almost 40 times more dioxins than the EFW facility would.

The information brief also cites European trends to restrict the amount of biomass going to landfill and the state of EFW around the world. Worldwide, there are 130 million tonnes of EFW capacity in 35 countries in over 600 facilities. The U.S. has a capacity of around 30 million tonnes per year in over 100 facilities in 29 states. Canada has a capacity of 732,524 tonnes spread across four facilities.

In Alberta, the City of Edmonton and the Town of Rimbey are researching the merits of EFW in their operations and a number of private recyclers are

contemplating the use of smaller scale EFW applications to reduce their energy costs and recover value from their recycling residues.

The EPIC information brief discussing the merits of EFW as a viable alternative for dealing with residual municipal solid waste will be posted to the [EPIC web site](http://www.plastics.ca/epic) as a Technical Report and will be available under the "Publications" section. (www.plastics.ca/epic).

Plastics contribute to sustainable building and construction

Plastics have a very important role to play in building and construction and they make a positive contribution to sustainability. For example, the use of plastic housewrap can actually reduce greenhouse gas emissions (GHGs). It takes only 35 litres of fuel to make enough housewrap for one 1,800 square foot house, but that plastic housewrap can save 1,250 litres of heating fuel per year – which reduces GHGs by 1,793 kilograms of carbon dioxide per year.

The use of plastic exterior foam insulation also reduces GHG emissions. Within Canada alone, the use of this plastic insulation cuts GHG emissions by three million tonnes per year – the equivalent of the annual emissions of 700,000 vehicles.

According to a University of Toronto discussion paper, replacing old water mains with plastic ones is another way that plastic contribute to sustainability. The paper suggests that Canada could achieve 10 per cent of its Kyoto targets this way because more energy is required to pump water through leaking and partially blocked old iron pipes. Plastic piping does not corrode, provides superior flow capacity and has a life expectancy measured in centuries.

Plastics also contribute to sustainability in other areas of building and construction, such as vinyl siding, plastic sealants, windows and window frames, wall and floor coverings, decks and structural insulated panels. Already, the use of plastic air barriers in building and construction applications has become an integral part of the energy conservation efforts of the Government in Canada in R-2000 homes.

RECYCLED PLASTICS RESIN PRICING (Source: Plastics News)
For December 19, 2005

Resin/Grade	Clean regrind or flake	Pellets
ABS		
Mixed colors, industrial	24 - 27	36 - 41
POLYCARBONATE		
Clear, industrial	65 - 75	--
Mixed colors, industrial	30 - 35	45 - 50
POLYETHYLENE		
HDPE bottles:		
Natural, post-consumer	49 - 54	55 - 60
Mixed colors, post-consumer	42 - 46	49 - 53
Mixed colors, industrial	40 - 46	46 - 52
HMW-HDPE film, post-consumer	--	38 - 44
LLDPE stretch film	--	39 - 45
LDPE film:		
Clear, post-consumer	--	40 - 47
Colored, post-consumer	25 - 30	37 - 45
PET BOTTLES		
Clear, post-consumer	47 - 56	59 - 69
Green, post-consumer	41 - 45	51 - 56
POLYPROPYLENE		
Industrial	34 - 42	41 - 51
POLYSTYRENE		
Industrial	22 - 27	34 - 39
High-heat crystal, post-consumer	22 - 27	33 - 37
PVC		
Clear, industrial	35 - 45	--

Prices are in U.S. cents per pound for prime resin, unfilled, natural color, FOB supplier, unless otherwise indicated.

Prices are generated from interviews with North American buyers and suppliers. The information provided is based on sources believed to be reliable but its accuracy or timeliness is not guaranteed and no warranties of any kind are provided. *Plastics News* does not intend to specify the price of the materials listed. For price quotes on specific materials, contact the supplier.

APRA is a non-profit association dedicated to making Alberta a model of effective plastic waste management. APRA is affiliated with EPIC, the Environment & Plastics Industry Council of CPIA, the Canadian Plastics Industry Association.

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