

## Plastic Bottles - Good potential to increase recycling across Canada

*By Cathy Cirko*

Current statistics point toward a significant excess of reclamation-wash capacity for both polyethylene terephthalate (PET) and high-density polyethylene (HDPE) bottles in North America. And, according to a newly released report, entitled *An Overview of Plastic Bottle Recycling in Canada*, there are two key areas where the opportunity exists to dramatically increase the capture rate of these two feedstocks. The first is to recycle more non-beverage PET and HDPE bottles from households, like those used for detergents, cleaners, shampoo, etc. According to the report, approximately 46 per cent of household PET and HDPE bottles generated in Canada are comprised of non-beverage bottles, yet only 22 per cent of these are recycled.

The second area of opportunity lies in recycling more beverage bottles in those jurisdictions that do not have a deposit system in place on all beverage bottles (Manitoba, Ontario and Quebec). In these jurisdictions, about 63 per cent of beverage bottles are consumed "away-from-home" in such locations as parks, beaches, commercial establishments, venues, events, etc. Recycling resources in these locations are very limited.

### **Plastic bottle recovery rates**

The report estimates that a total of 235,086 tonnes of plastic beverage and non-beverage bottles were generated in 2002. Of that amount, a total of 84,709 tonnes or 36 per cent were recovered and recycled.

Plastic beverage bottles represented approximately 125,775 tonnes or 54 per cent of all plastic bottles generated. The recovery rate for these bottles is estimated to be 48 per cent.

Plastic bottle recycling in provinces with deposit-return programs for beverage containers was found to be more than two times more effective in recovering these bottles than in those provinces with municipal collection and voluntary depot programs. The report attributes this difference, in large part, to the 5-cent to 20-cent deposit/refund incentive. Deposit/ refund programs for all beverage bottles exist in the provinces of British Columbia, Alberta, Saskatchewan, New Brunswick, Nova Scotia, Newfoundland and Prince Edward Island. The province of Quebec has a hybrid system, with a deposit return on plastic soft drink bottles and a curbside program for other PET plastic bottles. Ontario and Manitoba both have curbside recycling programs.

According to the report, the average recovery rate for beverage bottles in deposit-return programs is 75 per cent, while the average for non-deposit-refund programs is 33 per cent. The report also reveals that approximately 63 per cent of all plastic beverage bottles in Canada are generated in Ontario, Manitoba and Quebec (non-soft drink beverages), where deposit refund programs do not exist.

In the category of non-beverage plastic bottles, the report estimates the total amount generated in Canada in 2002 as 108,782 tonnes. Of that, only 23,575 tonnes or 22 per cent were recycled. When it comes to recovery of non-beverage plastic bottles, British Columbia and Nova Scotia lead the way at 29 and 28 per cent respectively. Ontario comes in third at 25 per cent, while Quebec is fourth at 24 per cent. Some provinces, like New Brunswick and Newfoundland, have very limited to non-existent recovery programs for non-beverage plastic bottles.

### **Milk jug recovery rates**

Plastic milk jugs are not the most common means of delivering fluid milk in many parts of Canada. However, in those regions where jugs are popular (British Columbia, Alberta, Saskatchewan and Nova Scotia), the system in place for their recovery achieves approximately a 50 per cent rate of return. Collectively, the provinces of British Columbia, Alberta and Saskatchewan and Nova Scotia generated 8,145 tonnes of plastic milk jugs in 2002.

### **Motor oil bottle recovery rates**

The provinces of British Columbia, Alberta and Saskatchewan have used-oil recovery programs for used motor oil, filters and containers. The program in British Columbia is the newest one, having launched in July 2003. The recovery rates of plastic oil bottles vary from 18 to 45 per cent, for an average of 33 per cent. Both Ontario and Quebec are currently evaluating similar recovery programs.

### **Room for improvement**

There is a great opportunity to increase the Canadian recovery rate for plastic bottles -- specifically in the beverage and household non-beverage bottles. In relation to beverage bottles, in particular, the recovery rate can be improved dramatically with a renewed focus on capturing "away-from-home" bottles in non-deposit jurisdictions. Implementing collection systems for multi-residential/apartment buildings will also go a long way in bettering the statistics in these jurisdictions.

With respect to non-beverage plastic bottles, the current 22 per cent recovery rate leaves a lot of room for improvement and underscores the need to consider proven curbside collection programs like the All Plastic Bottle Collection program, which has been shown to improve recovery rates of PET and HDPE bottles by as high as 44 per cent. (See [www.plastics.ca/allplasticbottles](http://www.plastics.ca/allplasticbottles) for more information.)

