

## Last Place

### Beverage container recovery in Ontario

by Clarissa Morawski

**This article on Ontario's beverage-container recovery program concludes the series on Canada's provincial programs. Like Manitoba, Ontario municipalities rely solely on their curbside program to recover beverage containers.**

Though established in 1986 it was only in 1992 that the provincial government passed a regulation mandating the municipal provision of "Blue Box" collection. The 3Rs regulations mandate that municipalities with over 5,000 people set up a curbside collection program to recover materials including aluminum, steel, PET plastic and glass containers, and newsprint.

Also on the books (but not enforced) are the soft-drink regulations (reg. 340 and 357) from 1985, which mandate a 30 per cent refillable market share. Today, refillable soft drinks account for less than 2 per cent of sales in Ontario.

As with other provinces, Ontario brewers manage their own containers through a comprehensive return-to-retail deposit-refund program (with depots in rural areas). In Ontario, 98 per cent of all beer containers sold through the privately owned Beer Store retail chain and through the Liquor Control Board of Ontario (LCBO) are recovered for reuse and recycling.

Driven by intense municipal pressure for a deposit-return system for wine and spirit containers but swayed by industry concerns that such a system would be the "thin-edge-of-the-wedge" for other containers, then-Environment Minister Norm Sterling introduced the Waste Diversion Organization (WDO), which maintains a similar governance model to the one proposed under the defunct Canadian Industry Packaging Stewardship Initiative (CIPSI).

The WDO's primary task is to provide options for a long-term sustainable funding formula for up to 50 per cent of the *net* operating costs of municipal recycling programs (about \$27-million). With industry making-up the majority of the board (eight of 13 votes), municipal and environmental skeptics are con-

cerned that minority representation will limit their ability to influence fund allocation, diversion program design and producer responsibility.

Calculating the recovery rate for (non-beer) beverage containers is difficult because these containers are collected, processed and marketed together with non-beverage containers. Also, aggregate beverage sales data for Ontario by beverage and package type is unavailable. Finally, commercial recycling data is proprietary.

The City of Toronto estimates a recovery rate of about 46 per cent of beverage containers sold to the residential sector through its Blue Box program which is fairly representative of most programs in Ontario. In addition, the Container Recycling Institute, a not-for-profit U.S. research and education organization, estimates that non-deposit return jurisdictions with full curbside programs recover about 48 per cent of all beverage containers. And finally, the Environmental Commissioner of Ontario estimates that 35 per cent of all soft drink containers were recovered in Ontario in 1998.

Based on these estimates it's reasonable to assume that the recovery rate for beverage containers is somewhere between 35 and 50 per cent.

The calculation of "per container" costs for beverage container recovery is difficult because it requires cost allocation for collection, handling, processing and marketing a "basket of goods" to specific materials.

With the introduction of the CIPSI in 1994, the issue of "who pays" came to the forefront of stewardship discussions. At that time the Paper and Paperboard Packaging Environmental Council (PPEC) commissioned a study that proposed an activity-based approach to estimate the cost of collection and processing of different material types. PPEC's study confirmed that volume, not just weight, is the primary cost driver in waste management systems.

Following the general volumetric approach, the City of Toronto undertook several analyses to identify the cost savings of removing beverage containers from the Blue Box program. The analysis determined that container materials incur a net cost of \$265/tonne to collect. In a more detailed analysis, specific container cost allocations were determined. Aluminum cans accrued a net profit of \$481/tonne (\$0.08/container), while PET, HDPE and glass incurred net costs of \$929/tonne (\$.065/2L container or \$.037/600ml container),

\$619/tonne and \$164/tonne respectively. Activity based costing will undoubtedly be a major component of the WDO technical analysis.

The 2.1 billion aluminum pop cans sold annually in Ontario subsidize curbside collection. Despite the fact that half of aluminum cans are landfilled each year (estimated value: \$22-million) recovered cans provide municipalities with about 30 to 40 per cent of their total recycling revenues. Given their value, municipalities are nervous about the increased use of plastic resins for beverage containers and the declining market share of aluminum cans across Canada and the U.S.

To address municipal pressure, the Canadian Soft Drink Association (CSDA) wrote last January to the Association of Municipal Recycling Coordinators and renewed its three-year commitment to use aluminum cans in Ontario. The CSDA commitment makes no mention of a minimum market share for aluminum cans nor does it offer to top-up funding if revenues fall short. For municipalities, this is by no means a revenue guarantee.

Ontario's beverage recovery system is at least 30 per cent less effective than most deposit-return programs in Canada and around the world; it is almost entirely supported by taxpayers and contains no "polluter-pays" incentives to reduce or reuse. Without meaningful and binding recovery targets, notable increases in the recovery of beverage containers in Ontario is unlikely.

While one cannot compare system costs between deposit-return systems (with recovery rates of 75 to 95 per cent) to curbside programs (35 to 50 per cent recovery), it should be noted that low recovery rates are costly in themselves in terms of opportunity lost (e.g., \$22-million aluminum revenue), landfill costs and environmental impacts.



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