

Exclusive:

## Low Cost for New Brunswick Beverage Container Management

The August/September issue of *Solid Waste & Recycling* magazine explored the surprisingly low cost of beverage container recovery in Alberta's deposit-refund system. Producer responsibility for beverage products is now practiced in Alberta, Newfoundland, British Columbia, and New Brunswick. In these provinces, manufacturers and/or distributors of beverages are responsible for the recovery, collection, transportation, processing, and marketing of empty beverage containers for reuse or recycling.

Now, newly available audited data from the province of New Brunswick suggests that, where industry manages its own containers, it's able to reduce system costs resulting in an effective and efficient container recovery program.

### How it works

In New Brunswick, depot-based recovery of beverage containers is based on a "half-back" deposit-refund system. In a half-back model, the full deposit is returned to consumers upon redemption of refillable containers and half of the deposit is refunded to consumers upon redemption of non-refillable containers. Of the retained portion of the deposit for the non-refillables, 2.174 cents is used to help defray the cost of container collection by depots. (The depot "handling fee" for a non-refillable container is 3 cents.) The remainder accrues to an "Environmental Trust Fund" (a dedicated revenue stream used for provincial environmental initiatives) and tax revenues.

The system is run by three separate agencies: Rayan Industries collects alcoholic beverage containers and beer cans; Moosehead Breweries and Labatt Breweries collect refillable beer bottles; and, Encorp Atlantic Inc. collects the largest volume of material, non-alcoholic beverage containers.

Encorp provides container waste management services to 92 non-alcoholic beverage producers and distributors registered with the New Brunswick Department of the Environment. The company was formed in 1992 when changes to provincial policy stipulated that beverage containers (except those used for dairy and unpasteurized cider) must be reused or recycled and that producers develop container management plans that set

an 80 per cent recovery target.

### Diversion rates & costs

Since its launch in June 1992, public support for the province's deposit-refund program has been consistently strong. The beverage container management system has been successful in obtaining high recovery rates in a relatively short time, posting a 77.71 per cent recovery rate in 1996 after only four years of operation.

The chart above is a summary of Encorp Atlantic's *Audited Income Statement* for 1995-96. Its recovery system is financed primarily through unredeemed deposits and the sale of recovered materials. As already mentioned, container handling costs are partially covered by the pool of the non-refundable portion of the half-back deposit collected. It's important to note that during the operating year presented above the company was involved in several significant revenue-generating projects that also helped finance the system. For example, Encorp Atlantic took advantage of the high price of secondary PET by importing material, adding value through processing, and then reselling it. Today, Encorp also sells information services for the management of empty beverage containers.

However, since 1996, Encorp has seen not only a decrease in the price of PET, but also (like residential recycling programs across Canada) a decrease in aluminum recovery. In 1996, Encorp collected approximately 63.231-million aluminum cans and 36.941-million

PET bottles, compared with 57.965-million cans (8 per cent decrease) and 45.797-million PET bottles (24 per cent increase) in the last twelve months. Further decreases in aluminum recovery will negatively affect the company's bottom line.

The net per-container cost to consumers of recovering containers through the system is calculated by adding the charge of 2.174 cents that contributes to the depot handling fee, minus Encorp's net profit per container. This assumes that profits or losses are passed on to offset costs to consumers, which is consistent with industry's contention that any costs of producer responsibility programs are always passed on to the consumer. In 1996, this net cost was about 1.65 cents per container sold.

Some argue that it's misleading to treat the unredeemed deposits as revenue because it's ultimately a cost to consumers. However, unredeemed deposits only constitute a cost to those consumers (in the case of consumers in New Brunswick, 22 per cent of containers purchased) who *choose* not to return their containers. In essence, the "polluter pays" principle is at work, and these funds help defray system costs. In New Brunswick, those who don't return containers pay an extra 10 or 20 cents, depending on the container size. ♻️

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New Brunswick Non-Alcoholic Container Management Statement of Income March 31, 1996		
Net revenue from unredeemed deposits	\$5,215,910	Based on 166,009,568 containers sold and a 77.71 per cent recovery rate. Glass, Aluminum, PET, and other.
Revenues from the sale of materials	\$4,555,712	
<b>Total Revenues</b>	<b>\$9,768,622</b>	
<b>EXPENSES</b>		
Collection and processing	(\$3,673,575)	
Handling fees	(\$3,956,448)	Encorp is mandated to pay depot operators \$.03 per container recovered.
<b>Total Expenses</b> (plus opening inventory, minus closing inventory)	<b>(\$7,595,888)</b>	
<b>OPERATING INCOME</b>		
Administrative costs	(\$787,766)	
Other minor expenses and revenues	\$43,514	
Income tax	(\$566,252)	
<b>Total Profit</b>	<b>\$862,230</b>	
<b>Net profit per container</b>	<b>0.52 cents</b>	Net profit divided by 166,009,568
<b>Net system cost per container to consumers</b>	<b>1.65 cents</b>	2.174 cent consumer contribution to the handling fee minus net profit per container (assumes profits or losses are passed on to offset costs to consumers).