

anadian provinces today operate more than 45 different steward-ship programs for products such as tires, oil, paint, pharmaceuticals, batteries, household hazardous waste and, of course, beverage containers. Milk packaging traditionally has been sacrosanct because it is a so-called "basis staple" and therefore should not carry any additional costs, including packaging stewardship costs.

More recently, however, milk packaging has been pulled into the stewardship arena (see Table 1 and above map). In fact, the dairy industry has entered voluntarily into various stewardship agreements on its own. But, it should be noted that consistent with these industry-led initiatives was the very real threat of expanding deposit-return programs that would have included milk containers in Alberta, Saskatchewan and Nova Scotia.

Alberta

Change began in Alberta in the fall of 1998

when the provincial

Minster of Environment gave local dairies an ultimatum to either implement a voluntary recycling initiative or join the deposit return program. The industry was given two years (starting July 1999) to meet a 75 percent recovery rate for high-density polyethylene (HDPE) milk jugs. In July 2001, the program

expanded to include polycoated milk cartons.

Administered by the Alberta Dairy Council (St. Albert), the program relies on community and municipal participation to drive the collection of used containers. The key financial instrument is the "top-up" payment for Recycling Authorities — municipali-

ties, nonprofit agencies, bottle depots and private companies registered with the program. Top-up payments provide a guaranteed floor price for milk jugs and cartons that are collected and shipped to market. A \$25 per metric ton transportation supplement is offered for recycling outside of urban centers, which helps to offset the costs of moving material to markets. Public communications and education also are financed by the dairy industry.

Funds are gained through fees provided by the dairy industry on each unit sold in the

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Province Type of program	Alberta Voluntary/ industry MOU	Saskatchewan Voluntary/ industry MOU	Manitoba Municipal curbside/drop-off	<u>Ontario</u> Municipal curbside	Quebec Municipal curbside	<u>Nova Scotia</u> Voluntary industry MOU
Industry funding Four-liter plastic jugs	\$0.02	\$0.02	None	Deposit-return	TBD	
Cartons and jugs > 1 lite		\$0.01		TBD		\$0.005 per fluid liter sold
Cartons and jugs < 1 lite	r \$0	\$0				
Recovery fees/revenues Plastic jugs	Average \$400/ metric ton	\$400/metric	80% of the net costs	TBD	TBD	
Cartons	Average \$225/ metric ton	\$150/metric ton	of municipal recycling	TBD	TBD	\$326/metric ton
Recovery targets	Jugs: 55% by 2002 65% by 2003 75% by 2004 Cartons: 35% by 2003	75%	None	TBD	TBD	27% by 2000 32% by 2001 39% by 2002 43% by 2003 45% by 2004 47% by 2005
Recovery rates 2000-2001	Jugs: 42% Cartons: NA	Jugs: 29% Cartons: 8% after 7 months	Jugs: 23% Cartons: 20%	Jugs: 29% Cartons: 17%	NA	44%

Notes: There currently are no significant developments in other Canadian provinces. All monetary figures are in Canadian currency. Currency conversion is not recommended because recovery fees are relative to the cost of goods in both Canada and the U.S.

MOU Memorandum of understanding.

TBD To be determined. Not available. Source: CM Consulting, 2002.

province (all monetary figures are expressed in Canadian currency): two cents per four-liter HDPE jug and one cent per jug or carton equal to or over one liter. Units under one liter carry no fees.

While the dairy industry is proud of its initiative, the performance falls far short of what the government asked. Before the program began, the recovery rate on milk jugs was 31 percent. After year one, the rate increased to 40 percent and, by the end of year two, it climbed slightly, to 42 percent. This prompted the government to revisit its targets:

- 55 percent for milk jugs by June 2002
- 65 percent for milk jugs by 2003
- 75 percent for milk jugs by 2004
- 35 percent for cartons by 2003.

The dairy industry has not released 2001-2002 performance figures, and all eyes are on the Alberta government and what actions it will take if once again the targets are not met.

Saskatchewan

Established in early 2001, the Saskatchewan program is similar to Alberta's. Consumers are asked to return empty milk containers to bottle depots or participate in local municipal recycling initiatives. SARCAN (the agency that administers the program on behalf of the dairies) reports a recovery rate of 29 percent of jugs after one year, and 8 percent for cartons after seven months.

In general, the per-unit fees are passed on to the consumer, but sales have not been affected despite the price increase.

Nova Scotia

In February 2000, the Atlantic Dairy Council (Halifax) and the Nova

Scotia Milk Processors (located throughout the province) signed an agreement with the province as well as municipal authorities that implemented a milk carton recovery program. Municipal authorities collect containers through their curbside program and receive funds for collection, processing, transportation, marketing, promotion, education, administration and amortized capital costs involved in carton recycling.

In addition to funding municipalities, the agreement outlines a series of industry initiatives. Specifically, industry will integrate recycling considerations into the manufacturing and packaging process; provide technical research into reprocessing waste materials; integrate secondary resources into the manufacturing and packaging processes; and provide industry leverage to enable the recycling message to reach the entire audience of potential recycling participants.

In 2001, municipalities were receiving about \$326 per metric ton of material recovered. Municipalities keep any revenues generated from the sale of the material. Costs are estimated based on the "basket of goods" gross cost, multiplied by 3 percent (representing the weight of cartons in the recycling stream). For the dairy industry, this represents half a penny per fluid liter sold in the province. Prior to implementation, the recovery rate was 22 percent. By 2001, the rate had increased to 44 percent.

Manitoba

In Manitoba, municipalities that choose to include polycoated and plastic milk containers in their curbside or drop-off programs receive a financial subsidy from the Manitoba Product Stewardship Corp. (Winnipeg) of about \$152 and \$128 per metric ton in rural and urban centers, respectively. This represents about 80 percent of the net system costs for the "basket of goods." In Manitoba, all funds are raised through a two-cent eco-tax placed on all nonrefillable, nondairy beverage containers. The overall program goal is 50 percent diversion. To date, MPSC reports recovery of 20 percent of carton container material and 23 percent of HDPE container material.

Ontario and Quebec

For the two largest Canadian provinces, the future of milk container recycling lies in the hands of municipal authorities. Currently, both provinces have passed legislation that will require brand-owners to help finance municipal recycling efforts to the tune of 50 percent. However, the development of associated packaging regulations for Ontario is pending, and the regulation for Quebec is in early draft form. In Ontario, polycoated containers currently are recovered at a rate of 17 percent.

Markets

Milk container packaging in Canada is made up of polycoated car-

tons, clear HDPE jugs and film pouches (mostly in Ontario and Quebec). From a recycling perspective, mature HDPE markets exist in western and central Canada and the northern U.S.

In western and central Canada the polycoated carton market is soft, with material moving, but very little associated salvage value. In the east, markets for polycoated are more erratic. In general, small economies of scale do not warrant capital investment in market development.

Whichever stewardship model a province chooses to adopt, dairies across Canada are realizing that some form of financial responsibility is imminent. In addition, the threat of deposit return for milk containers continues to menace the milk industry as recovery for its packaging makes only marginal gains compared to deposit return.

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