



Brewers Distributor Limited 2009 Annual Stewardship Report

April 1, 2008 – March 31, 2009

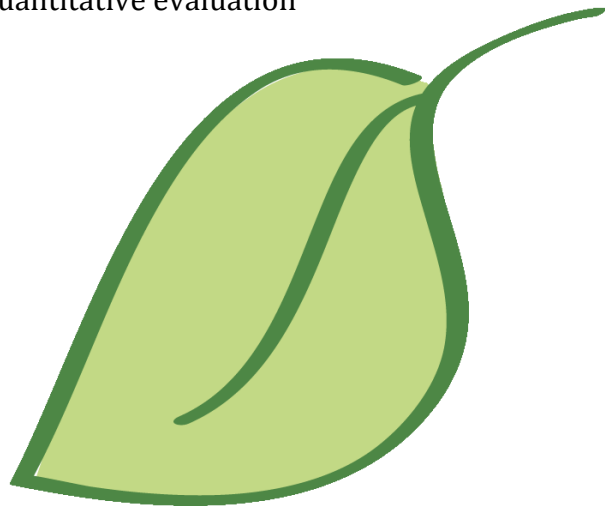


Environmental Principles of the Canadian Brewing Industry

Canadian brewers recognize their responsibility to minimize the impact on the pristine natural resources they rely on to brew some of the world's best beers.

Canadian brewers have been reusing, recycling and reducing packaging waste for over a century. The industry assumes complete responsibility for the end-of-life management of all of its products. This is a level of environmental commitment unmatched by any other Canadian industry.

- Commitment to full producer responsibility
 - * fully self sustained and self funded
 - * accounting for all life-cycle packaging and associated costs
 - * focus on consumer convenience and high service levels to facilitate container returns
- Commitment to environmental protection through reduction and reuse:
 - * 100% of brewer packaging is reusable or recyclable
 - * reducing energy and natural resource consumption, emissions and solid waste through reuse
 - * continually seeking efficiencies and new technologies to reduce materials, energy consumption and waste
- A commitment to continually setting and meeting meaningful performance targets:
 - * effecting policies and programs that ensure high rates of waste reduction, reuse and recycling
 - * ongoing measurement and quantitative evaluation
 - * continual improvement



The Numbers

Beer Brands: 200+

Different SKUs with BDL Containers: 350+

Breweries and Liquor Agents participating in BC: 49

Total Empty Beer Container Return Locations: 1270

Including:

Private Liquor Stores: 676

Government Liquor Stores: 197

Rural Agency Stores: 227

Depots: 170

Percent of British Columbians within 2 kilometres of a return location: 78%

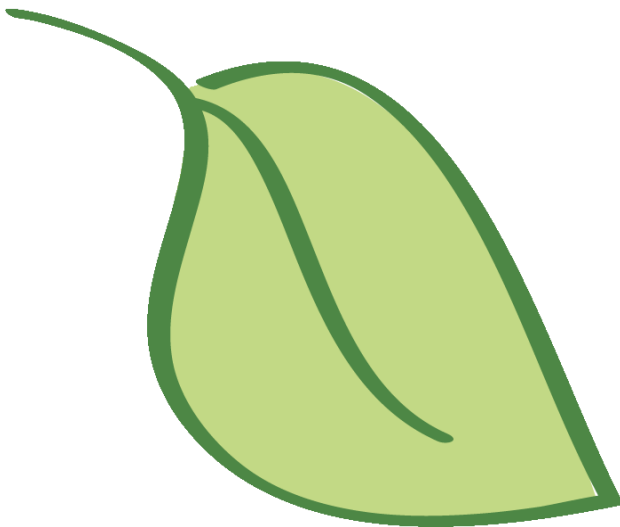
Refillable Glass Bottles Recovered in 2009: 154,554,720

Aluminum Cans Recovered in 2009: 392,850,756

Overall Return Rate: 93.3%

Total Waste Diversion: 56,118 tonnes

Greenhouse Gas Reductions equivalent to number of cars taken from the road: 9,600



1. Executive Summary

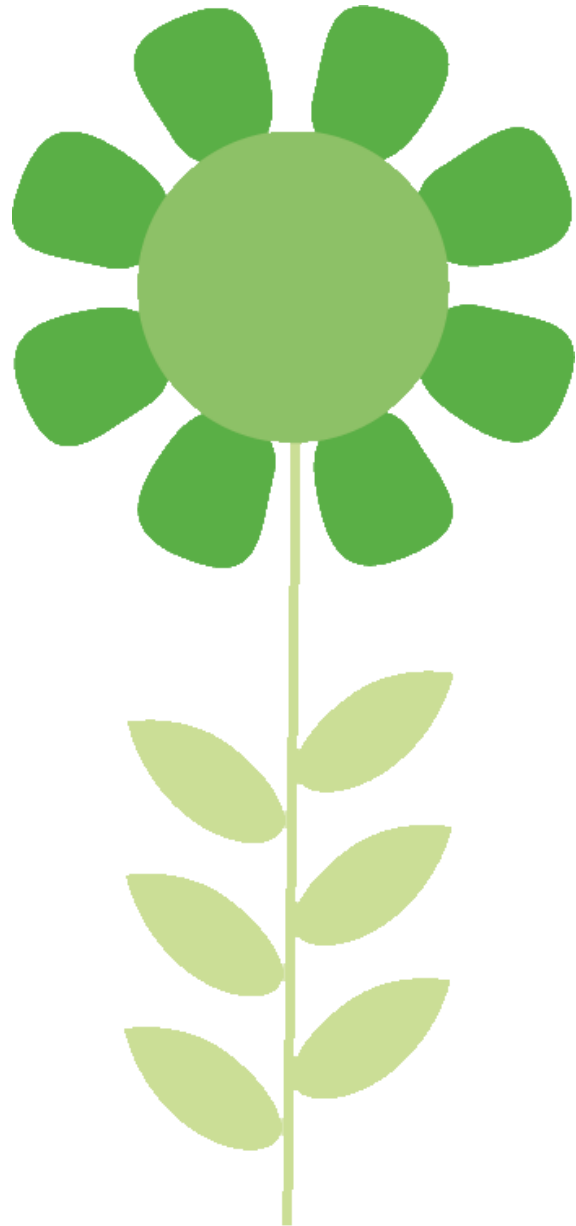
The past year, Brewers Distributor Limited (BDL) and their Product Stewardship network and activities continued to move forward, ensuring consumers are well served as partners in the container return system and that the brewers' environmental commitments continue to be exceeded.

For over 80 years, B.C. Brewers have been a provincial leader in packaging management by sustaining the top container return rates in the province, and country. Year over year, the brewers have maintained or grown the container return rates in most container categories, and fiscal 2009 is no different. This ensures diversion of recyclable materials from our landfills and avoids unnecessary consumption of energy and unnecessary emissions of greenhouse gases.

BDL again expanded the return network in fiscal 2009 with the addition of new full refund depot locations and full refund, unlimited private retail locations. Private liquor retailers continue to be the largest channel for beer sales in British Columbia and are an important partner in facilitating the return of empty beer containers. As of March 31, 2009 BDL has 195 unlimited collection partners and is well on its way to meeting the 2014 target of 347.

Building awareness of the BDL stewardship program continued through point of sale materials for Full Refund retail return centres, beerbottlerefund.com and participation in industry forums including the Hospitality Industry's Annual Convention and Trade Show.

Through 2010, BDL will continue to build upon the environmental benefits of the new warehouse and distribution centre, completed in the Spring of 2009, with the additional space and equipment to manage empty containers and secondary packaging while managing increasing costs. Additionally, efforts will continue to increase the network of return locations to ensure system efficiencies and customer satisfaction is maximized.



2. Programme Outline

Brewers Distributor Limited (BDL) currently has product stewardship responsibilities for refillable domestic beer containers and imported & domestic beer cans sold in British Columbia. These containers include the industry standard brown refillable glass beer bottle, non-standard refillable glass beer bottles and aluminum beer cans. Additionally, BDL is responsible for the stewardship of domestic refillable glass cider and cooler bottles. BDL also distributes and collects beer kegs.

Breweries and other beverage manufacturers represented under the plan include all breweries operating in the province, and imported brewers who designate BDL as their product steward when they obtain Liquor Distribution Branch approval to sell brands in can containers. For a list of brewers, other manufacturers and selected brands covered under the plan see Appendix A.

BDL is a joint venture company owned by Molson Breweries and Labatt Breweries of Canada which distributes beer throughout Western Canada. In British Columbia, BDL's product stewardship functions are funded by fees set by the British Columbia Brewers Recycled Container Council (the Council), a not-for-profit society comprised of representatives from the domestic and import brewing industry selling beer products in BC.

Council member companies combine to represent over 95 percent of beer sold in the province and include a cross section of large and small brewing business interests. The Council was established to provide transparent management of BDL's financial, regulatory and logistical product stewardship requirements.

BDL operates warehousing and distribution facilities throughout British Columbia and distributes beer to all types of provincial liquor stores including government run Liquor Distribution Branch (LDB) outlets, private licensee retail stores (LRS) and LDB rural agency stores (private businesses authorized by the LDB to sell liquor with other goods in smaller or remote communities) as well as bars, restaurants, cabarets and other licensed establishments.

As the province's primary beer distributor, BDL is ideally placed to operate an efficient closed loop container return system. This means that while BDL delivers full goods to over 4,000 retail locations and licensed establishments, including bars and restaurants, they are also picking up empty containers in the same trip. This



minimizes the number of trucks on the road, and reduces BDL's carbon footprint. This convenient and efficient system helps to reduce costs to consumers and improve return rates.

Consumers can return beer containers to the retail locations where beer is purchased or to container return depots. BDL then collects its containers from licensees, retail locations and selected container return depots. BDL has entered into contractual arrangements with a number of private licensee retail operators and container return depots to collect and sort BDL containers. These contracts commit BDL collection partners to remit full refunds and accept unlimited returns when they collect BDL containers.

Refillable bottles collected by BDL are returned to manufacturers for cleaning and reuse on average 15 times.

Beer sold in aluminum cans accounts for over 70% of the domestic beer sold in British Columbia. Aluminum cans collected by BDL are compressed and sent to ALCOA in the United States to be recycled into new cans and other products.

**Refillable beer
bottles are reused on
average 15 times**

Aluminum kegs are collected from licensees and returned to brewers for refilling. Draught beer kegs are reusable and in some instances can last for up to 50 years. Kegs at the end of their lifecycle are crushed and recycled.

BDL's product stewardship system is funded by fees paid by brewers based on their container volumes, any unclaimed portion of consumer deposits on cans, and the revenues BDL obtains on the sale of collected materials such as aluminum and cardboard.

Brewers environmental stewardship goes beyond the regulated container collection system as 100% of brewer packaging is reusable or recyclable. Information on BDL's product stewardship system can be found at www.beerbottlerefund.com.

In the Spring of 2009, BDL moved into a new, custom built warehouse in Port Coquitlam. The custom design is more energy efficient with a lower ceiling height and a green roof. This new location enables BDL to access new transportation infrastructure such as the Pitt



River Bridge and the Golden Ears Bridge, reducing the amount of time idling in traffic to access the Trans Canada Highway. The benefits of the new warehouse will be measurable through fiscal 2010.

**New BDL Warehouse, Port Coquitlam
British Columbia**

3. Educational Materials and Strategies

Previous polling conducted by BDL as part of its 5-year stewardship plan indicates that consumer awareness and satisfaction with return locations and options in BC is high. Ninety-eight percent of consumers are aware deposits apply to beer containers and 93% indicated they are pleased with the level of service and access to return locations. These awareness and satisfaction levels remain strong as evidenced through the sustained high return rates and BDL's efforts to increase return locations.

BDL educational materials and strategies intend to build on high consumer awareness by focusing on improving consumer information about container return options and the availability of full refund deposit locations.

In Fiscal 2009 BDL met all of its 5-year consumer awareness performance targets through the implementation of the following initiatives:

Traffic to the consumer website, www.beerbottlererefund.com continued to grow, experiencing on up to 1200 hits per month. Consumers are directed to the site through search engines, links through external liquor retail websites, BDL advertising and container recycling information websites.

Additionally, BDL continues to provide point of sale materials to all of its collection partners which emphasize to consumers that full refunds are available at these locations.

BDL has continued in partnership with collection partners and other stakeholders to improve awareness of full refund locations.

In F2009, BDL hosted a trade show booth at the BC Hospitality Industry's Annual conference, attended by liquor retailers and pub owners from across the province. Information was distributed regarding the program, plus the opportunity was available for retailers to enroll in the program on site. The Brewers also sponsored the Recycling Council's annual recycling conference in Whistler and continues to sponsor their recycling hotline.

In conjunction with the trade show booth, BDL conducted advertising in the industry publication, *The Publican*. *The Publican* also presented an article on recycling opportunities

We're using the Full Refund Program at both of our stores. It's a bit of a dollar for us and its good for the customers.BDL has been excellent the whole time we've worked with [them]. He comes for the pick up, and we have everything sorted properly on the palette, in the right piles so it's all organized.

Jim Thom,
Wee Jordie's and Big Jim's Spirit
Store in Kitimat,
The Publican Fall 2008



for the liquor industry, including a profile of the brewers refillable bottle, return to retail system and Full Refund arrangement with liquor retailers in British Columbia.

Both the advertisement and the media were designed to improve awareness of the BDL collection system and encourage enrollment of additional licensee retail store operators through the environmental and economic benefits of the program.

BDL has also benefited from the efforts of stakeholder groups such as the Alliance of Beverage Licenses of BC who have solicited feedback and communicated the program to their membership through surveys, newsletters and their website.

Looking forward, BDL will continue to work with collection partners, liquor industry stakeholders and community groups and others to promote awareness about full refund deposit return locations.

4. Collection System Information

Consumers can take back BDL containers to multiple locations including:

- * BC Liquor Distribution Branch stores;
- * Licensee Retail Stores (156 LRS stores are under contractual agreement with BDL to accept unlimited returns and all LRS are required to provide full refund deposits);
- * Bottle Depots (39 depots are under contract with BDL to provide full refund deposits - BDL also pays 45 additional depots for containers collected but is not under formal contractual arrangements with these depots);
- * LDB authorized agency stores (businesses in smaller or remote communities that are authorized by the LDB to sell liquor with other goods).

BDL continues to build the return network on the principle of consumer convenience. BDL is nearing its 2014 target of 45 contracted depots and is positioned to achieve the 2011 total target of 275 contracted full refund locations with 195 enrolled as of March 31, 2009 and well on the way of the 2014 target of 347. Through the next year, BDL will expand promotion and recruitment methods to increase the number of contracted retail locations.



Table 1: BC Container Redemption Locations for Beer Containers

Return Locations	March 2006	March 2007	March 2008	March 2009	Change F06-F09	Percent Change
Depots	170	170	170	170	-	-
Licensee Retail Stores	592	631	654	676	84	+ 14.2%
Government Liquor Stores	208	201	199	197	- 11	- 5.3%
Rural Agency Stores	230	230	228	227	- 3	- 1.3%
Total	1200	1232	1251	1270	+70	+5.8%
BDL full refund contracted collections partners						
Depots	19	30	30	39	20	105.3%
Licensee Retail Stores	74	75	151	156	82	110.8%
Total	93	95	181	195	102	109%



5. Recovery Rates

BDL collects a number of containers and materials on behalf of brand owners. BDL has formal product stewardship responsibilities for domestic refillable glass beer containers, imported and domestic beer cans and domestic refillable glass cider bottles.

Beer Containers:

Table 2: BDL Container Recovery Rates: F2009¹

	Cans	Industry Standard Bottle (ISB)	Non-ISB Refillable Bottle ²	Total
Sales Dozens	35,015,700	10,606,007	3,277,354	48,899,061
Returns Dozens	32,737,563	10,021,656	2,857,904	45,617,123
Return Rates F2008	93.5 %	93.3 %	87.2 %	93.3 %

¹ Beer container return rates are audited annually by S.J.Yeung Chartered Accountant.

² Sales for non-industry standard refillable bottles were provided by the BC Liquor Distribution Branch.

BDL return rates in all product categories exceeded the 85% performance target established under its 5-year plan and are well in excess of the 75% target mandated under *Environmental Management Act* regulations.

In F2009 BDL collected 547 million beer containers under its product stewardship plan and its overall container return rate increased by 1.5 percentage points up to 93.3% from 91.8%. Returns rates for the two largest containers streams, cans and industry standard refillable bottles (ISB), both improved in F2009 with can return rates up 2.9 percentage points and the ISB return rate up 1.5 percentage points. Return rates for non-standard refillable bottles declined to 87.2% due to a growth in sales in this category which outpaced returns. This trend will be monitored to ensure we maintain return rates above our 85% target.

Chart 1: Return Rates by Container Type: F2009 vs F2008

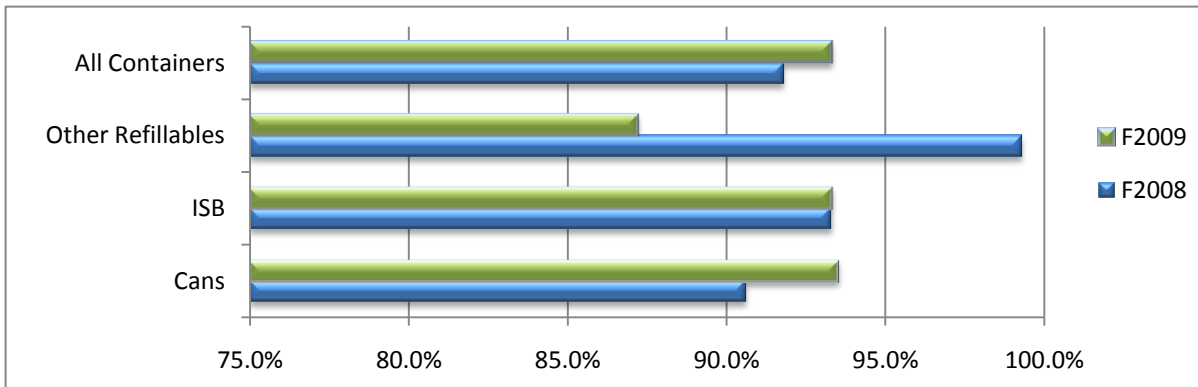


Table 3: Estimate of Unit Returns and Tonnes Diverted by Regional District³

Regional District		Aluminum	Glass	Total
Alberni-Clayoquot	Units (000)	2,768	1,089	3,857
	Tonnes	40	286	327
Bulkley-Nechako	Units (000)	3,170	1,247	4,417
	Tonnes	46	328	374
Capital	Units (000)	33,834	13,311	47,146
	Tonnes	491	3,501	3,992
Cariboo	Units (000)	5,648	2,222	7,871
	Tonnes	82	584	666
Central Coast	Units (000)	264	104	368
	Tonnes	4	27	31
Central Kootenay	Units (000)	5,272	2,074	7,346
	Tonnes	77	546	622
Central Okanagan	Units (000)	16,321	6,421	22,742
	Tonnes	237	1,689	1,926
Columbia-Shuswap	Units (000)	4,789	1,884	6,674
	Tonnes	69	496	565
Comox Valley	Units (000)	5,536	2,178	7,714
	Tonnes	80	573	653
Cowichan Valley	Units (000)	7,168	2,820	9,988
	Tonnes	104	742	846
East Kootenay	Units (000)	5,255	2,067	7,323
	Tonnes	76	544	620
Fraser Valley	Units (000)	23,491	9,242	32,732
	Tonnes	341	2,431	2,771
Fraser-Fort George	Units (000)	8,223	3,235	11,457
	Tonnes	119	851	970
Kitimat-Stikine	Units (000)	3,200	1,259	4,458
	Tonnes	46	331	377
Kootenay Boundary	Units (000)	2,909	1,145	4,054
	Tonnes	42	301	343
Metro Vancouver	Units (000)	204,787	80,567	285,353
	Tonnes	2,972	21,189	24,161
Mount Waddington	Units (000)	990	390	1,380
	Tonnes	14	102	117

³ Unit returns and tonnes diverted have been estimated from provincial totals based on Regional District populations of persons 19 to 90 and their proportion to the provincial total. BDL does not compile sales or collection information by Regional District and given the movement of consumers between districts between purchases and returns, such information may be less accurate than population based estimates.

Table 3: Estimate of Unit Returns and Tonnes Diverted by Regional District

Regional District		Aluminum	Glass	Total
Namaimo	Units (000)	13,514	5,317	18,831
	Tonnes	196	1,398	1,594
North Okanagan	Units (000)	7,329	2,884	10,213
	Tonnes	106	758	865
Northern Rockies	Units (000)	510	201	711
	Tonnes	7	53	60
Okanagan-Similkameen	Units (000)	7,681	3,022	10,702
	Tonnes	111	795	906
Peace River	Units (000)	4,985	1,961	6,946
	Tonnes	72	516	588
Powell River	Units (000)	1,831	720	2,551
	Tonnes	27	189	216
Skeena-Queen Charlotte	Units (000)	1,658	652	2,310
	Tonnes	24	172	196
Squamish-Lillooet	Units (000)	3,314	1,304	4,618
	Tonnes	48	343	391
Stikine Region	Units (000)	99	39	137
	Tonnes	1	10	12
Strathcona	Units (000)	4,025	1,583	5,608
	Tonnes	59	416	475
Sunshine Coast	Units (000)	2,676	1,053	3,729
	Tonnes	39	277	316
Thompson-Nicola	Units (000)	11,605	4,566	16,171
	Tonnes	168	1,201	1,369
Total	Units (000)	392,851	154,555	547,406
	Tonnes	5700.6	40,647.9	46,349

Based on a provincial population of 3.47 million people age 19 and over, the per capita return rate for the province was 157.8 BDL containers per person or about 13 cases of a dozen beer.



Other Packaging Materials:

In addition to managing the containers designated under its stewardship plan, BDL also sells and collects beer kegs and collects and facilitates recycling with respect to a number of secondary packaging materials including cardboard cases, can flats and plastic shrink wrap. In fact BDL collects and recycles all of the packaging that it uses and sells.

BDL Keg Sales:

In F2009 BDL sold over half a million kegs to licensed establishments. Given the efficiencies of the closed loop system related to keg sales, returns are extremely high for these containers at 98.43 % in F2009. This volume is equivalent to over 6.5 million cases of packaged beer. The volume of beer sold in refillable kegs is equivalent to diversion of approximately 1,100 tonnes of aluminum or 21,000 tonnes of glass bottles.

Cardboard and other secondary packaging:

Estimates for F2009, indicate that BDL collected and diverted approximately 2,946 tonnes of cardboard and 84 tonnes of plastic. BDL will continue to develop a monitoring and reporting process that will enable the estimation of return rates related to these packaging streams.

Total BDL landfill diversion equates to approximately 56,000 tonnes.

Table 4: BDL BC Landfill Diversion Summary

Material	Tonnes Diverted
Aluminum	5,701
Glass	40,648
Cardboard	2,946
Plastic	84
Keg Packaging Equivalent⁴	6,739
Total	56,118

⁴ Based on the current package split for bottles and cans related to BC beer sales.

BDL collects and recycles all materials that it uses and sells including:

- cardboard packaging;
- plastic shrink wrap;
- bottle caps;
- plastic can connectors.

BDL keg returns are equivalent to over 6.5 million cases of beer containers collected

6. Life Cycle Management

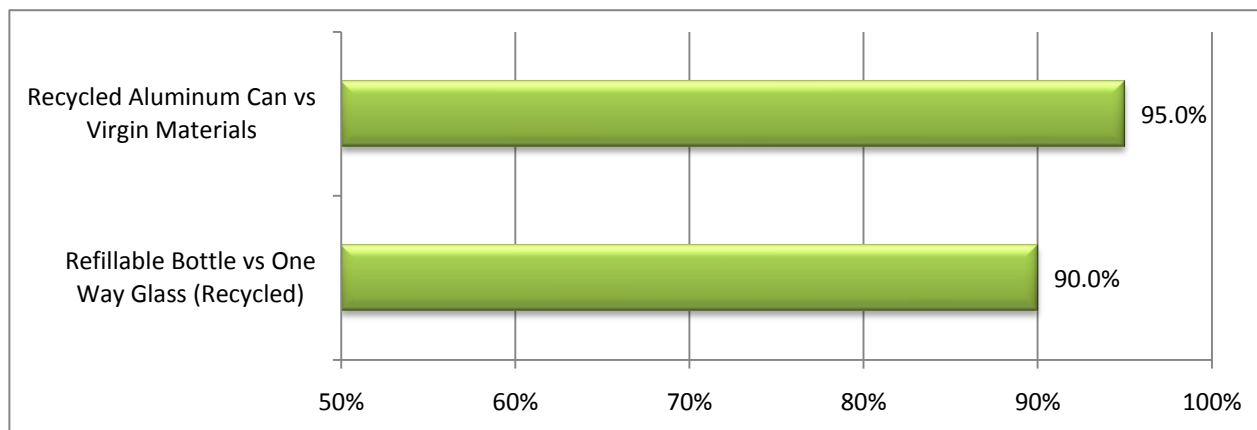
The BDL product stewardship plan embodies several key elements of a successful life cycle management process. The system is fully funded by brewers and their consumers as all costs associated with managing beer containers are incorporated into the price of the product. Extended producer responsibility ensures that brewers have incentives to manage containers and packaging as efficiently as possible.

BDL's closed loop transportation system minimizes transportation costs associated with retrieving empty containers from retailers. Return-to-retail collection, which is convenient for consumers, also encourages high return rates making the overall container management system more efficient.

BDL's distribution practices also support the use of refillable containers such as kegs and glass bottles. Given that refillable beer bottles can be utilized an average of 15 times, the use of refillable beer bottles in British Columbia avoids the production of over 150 million glass bottles annually or over 40,000 tonnes of glass containers. Reduced production requirements generate significant energy and pollution savings in comparison to the use of one-way glass containers (see below).

The Canadian brewing industry has brought about further improvements in the use of refillable containers by adopting an industry standard bottle (ISB). The ISB is leading example of design for the environment. The ISB reduces the cost of sorting empty containers, minimizes inventory storage requirements and improves production efficiencies by eliminating the need for brewers to perform costly packaging line changeovers (associated with different containers for different brands). At present 48 Canadian brewers including 10 British Columbia breweries are signatories to the Industry Standard Bottle Agreement and use the ISB bottle as their principal glass container.

Chart 2: Energy Savings Associated with Container Production



Finally, BDL's product stewardship plan generates exceptionally high return rates for recyclable containers. BDL's return rate for aluminum cans, which represent over 70% of beer containers sold in the province, was 93.5 % in F2009. This represents one of the highest return rates for aluminum cans in North America and a figure that is over 10 percentage points higher than typical return rates for soft drink cans in British Columbia. Given the production of aluminum from recyclable materials uses 95% less energy than the production of aluminum from virgin materials, the BDL product stewardship plan generates significant energy and pollution savings related to the collection and recycling of beer cans.

Pollution Prevention Hierarchy

Manufacturing aluminum from recycled materials reduces harmful atmospheric emissions, waterborne contaminants and solid waste in comparison to virgin production. Similarly, use of refillable glass bottles drastically reduces the amount of glass materials needed to sell a given amount of product. Studies sponsored by the Environmental Protection Agency (EPA) in the United States, enable BDL to estimate the reduction of several pollutants associated with container recovery.

Table 5: Reduced Pollutants Associated with BDL Container Recovery F2009⁵

	Nitrogen Oxides	Sulfur Oxides	Particulate Matter	Solid Waste
Reduced kg of pollutant per Tonne: Recycled versus Virgin Aluminum	31.4	91.3	31.7	4,297
Recycled BDL Aluminum F2009 Metric Tonnes	5,701	5,701	5,701	5,701
Tonnes Avoided Pollutants Cans	179	521	181	24,519
Pollutants (kg) Glass Production per Tonne	1.73	6.1	3.73	66.65
Diverted Glass Tonnes BDL Refillable Glass Bottles ⁶	40,667	40,667	40,667	40,667
Tonnes Avoided Pollutants Refillable Glass Bottles	70	248	152	2,713
Total Tonnes of Avoided Pollutants	249	769	332	27,232

⁵ Pollutant reductions associated with recycled versus virgin aluminum production and glass production from Weitz, Keith A. et al. 2003. *Life-Cycle Inventory Data Sets for Materials Production of Aluminum, Glass, Paper, Plastic, and Steel in North America*. Report prepared by RTI International for the U.S. EPA, Office of Research and Development. EPA-600/Q-03-001. Research Triangle Park, NC.

⁶ Calculated as the difference between the weight of the refillable float versus the weight of one-way containers required to sell the same amount of beer.

**BDL recycling and reuse
reduces atmospheric
emissions, water pollution
and solid waste:**

90% reduction in sulfur oxides

95% reduction in particulate
emissions

99% reduction in heavy metals
released such as mercury and
cadmium



Table 5 provides examples of selected pollutant reductions associated with BDL's product stewardship system. Nitrogen oxide contributes to ground level ozone, acid rain, nutrient overload and global warming and combines with other chemicals to contribute to respiratory problems. Sulfur oxides also contribute to respiratory problems and acid rain. Particulate matter contains microscope solids and liquids that contribute to a variety of health problems such as lung disease and chronic bronchitis.

According to the EPA study, recycling aluminum results in significant reductions in atmospheric emissions. Nitrogen oxides, sulfur oxides and particulate matter emissions are reduced by over 60%, 90% and 95% respectively when aluminum is made from recycled materials.

For F2009, total reductions in emissions of nitrogen oxides, sulfur oxides and particulate matter from aluminum recycling and the use of refillable bottles in BC are estimated at 249, 769 and 332 metric tonnes respectively. According to Environment Canada estimates these reductions equate to approximately 0.30%, 1.15% and 0.31% of provincial industrial emissions respectively for these pollutants.⁷



⁷ Source: Environment Canada National Pollution Resource Inventory 2007

In addition to reductions in atmospheric emissions, BDL container management also generates significant solid waste reductions associated with material production. Aluminum cans are light but making aluminum from virgin material creates solid waste that is four and half times heavier than the aluminum itself. There were 27,232 less metric tonnes of solid waste generated in F2009 related to aluminum recycling and the use of refillable glass bottles. This reduced tonnage is in addition to the 56,118 tonnes of materials annually diverted from provincial landfills. When these totals are combined, BDL's product stewardship program reduces solid waste production by approximately 83,000 tonnes annually - equivalent to \$5.9 million in Vancouver tipping fees.

Although not reported in Table 5 - recycling aluminum also generates significant reductions in waterborne waste. Production of heavy metals such as cadmium and mercury are reduced by more than 99% when aluminum is manufactured from recycled materials.

**BDL product stewardship
reduces solid waste in two
ways:**

**- 27,000 metric tonnes avoided
in the production of packaging
materials;**

**-56,000 metric tonnes in
packaging waste diverted from
landfills.**

**That's equivalent to the
weight of over 20,000 of the
YVR Olympic rings.**



Green House Gas Reductions and Energy Savings

Every can and refillable glass bottle returned by beer consumers contributes to energy savings and reduced greenhouse gas emissions.

Manufacturing aluminum from recycled materials such as beer cans generates enormous energy savings as processing aluminum from bauxite is an energy intensive process. Similarly, reusing a glass beer bottle 15 times eliminates the need to produce a new bottle for every beer sold thereby eliminating the raw material processing and energy requirements associated with making new glass.

GHG reductions equate to removing 9,600 cars off provincial roads

The 52,567 metric tonnes of greenhouse gases avoided annually through the use of can recycling and glass bottle reuse is equivalent to pulling about 9,600 cars off of B.C. roads⁸ or equivalent to the energy contained in 122,249 barrels of oil. The avoided and diverted emissions are also the equivalent of approximately \$520,000 in carbon tax savings for the industry in British Columbia.

Table 6: Energy and Greenhouse Gas Savings BDL Container Recovery F2009⁹

	Glass Reuse	Aluminum Recycling	Total
Tonnes Diverted	40,667	5,701	46,368
Avoided GHG Emissions (MTCO₂E)	15,453	37,114	52,567
Avoided Energy (Gigajoules)	276,536	498,039	774,575

⁸ Based on the assumption that the average car emits approximately 5.46 tonnes of GHG emissions per year. Source US Climate Technology Cooperation Gateway: Greenhouse Gas Equivalencies Calculator: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

⁹ Source for avoided energy and emission multipliers: *Determination of the Impact of Waste Management activities on Greenhouse Gas Emissions: 2005 Update Final Report*, ICF Consulting for Environment Canada & Natural Resources Canada, October 2005. Multipliers for avoided GHG Emissions (eCO₂/tonne) used were 0.38 for glass reuse and 6.51 for aluminum recycling. Avoided energy multipliers used (Gigajoules/tonne) were 6.8 for glass reuse and 87.36 for aluminum recycling. Avoided GHGs from glass bottle reuse (0.38) is not presented in the *Determination of the Impact of Waste Management Activities on Greenhouse Gas Emissions: 2005 Update Final Report*. This multiplier was provided in the previous version of the report from 2004.

7. Fee Information

Costs related to BDL's container collection system are managed by the British Columbia Brewers Recycled Container Council which operates the program on a cost recovery basis.

Refillable bottles

In the case of refillable bottles the Council establishes rates for the collection, sorting and return of containers based on projected and audited costs. Container recycling fee rates are then charged by BDL to the manufacturer in return for access to those refillable containers. Costs associated with cleaning and reusing refillable bottles are borne by the manufacturer. In the case of refillable bottles, manufacturers retain unredeemed deposits and use all of these funds to offset, in part, these total costs.

Recycled Cans

In the case of recycled cans, a container recycling fee is established by the Council and applied to the product's wholesale price set by the Liquor Distribution Branch. In F2009 this fee was set at \$0.00 per can. BDL retains unredeemed deposits with respect to can sales and retains revenues from aluminum material sales to offset, administration, transportation, collection and sorting fees and infrastructure costs. These revenues can vary depending on external factors such as the global cost of aluminum or the value of the Canadian dollar relative to the American dollar.

BDL revenues collected from both cans and bottles pay return location partners for the collection, sorting and return of BDL containers. In the case of the Liquor Distribution Branch, BDL has entered into a 5-year agreement with the agency to pay it fees for each container collected from its stores. Licensee retail stores that sign up as collection partners are also paid a fee for each container collected. BDL has also entered into service agreements with several container return depots for collection and sorting services.

Table 7: BDL Deposit Summary F2009¹⁰

	Cans	Industry Standard Bottle (ISB)	Non-ISB Refillable Bottle¹¹	Total
Deposits Received	\$42,018,840	\$12,727,208	\$3,932,825	\$58,678,873
Refunds Paid	\$39,285,076	\$12,025,987	\$3,429,485	\$54,740,548
Return Rates F2008	93.5%	94.5%	87.2%	93.3%

¹⁰ Deposit amounts audited by S.J. Yeung Chartered Accountant, Calgary, Alberta.

¹¹ Sales for non-industry standard refillable bottles were provided by the BC Liquor Distribution Branch.

Deposit amounts reported in Table 7 are audited annually by S.J. Yeung Chartered Accountant. The Council contingency fund to ensure stable financing with respect to management of can containers was \$1,390,015 as of March 31, 2009.

8. Performance Targets

Table 6: Performance Target Summary

Stewardship Plan Target F2009	Results
<p>1. Maintain 85 % return rate in each container category.</p>	<p>Target Exceeded:</p> <ul style="list-style-type: none"> • Recovery Rates F2009: <ul style="list-style-type: none"> ○ 93.5% Cans ○ 92.8% Refillable Glass Bottles
<p>2. Increase the number of collection partners under contract with BDL to offer full-deposit refunds. Target 275 by 2010 and 347 by F2014</p>	<p>Target On Track:</p> <ul style="list-style-type: none"> • 195 contracted container collection partners as of March 31, 2009
<p>3. Improve Consumer Awareness through various initiatives:</p> <ul style="list-style-type: none"> • launch new consumer website; • rollout POS full-refund materials to collection partners; • advertise in community/industry recycling publications; • partner with community groups, NGOs on awareness initiatives. 	<p>Target Achieved:</p> <ul style="list-style-type: none"> • www.beerbottlerefund.com maintained • all collection partners receive POS materials as of June 2007; • Advertisements in: <ul style="list-style-type: none"> ○ Publican Trade Show Publication ○ Featured in Publican Article on Container Management Best Practices, Fall 2008 • tradeshow booth at Fall 2008 Hospitality Industry Conference; • sponsor of RCBC Annual Conference and consumer information hotline.
<p>4. Benchmark BDL collection of secondary packaging materials</p>	<p>Target on track for 2010:</p> <ul style="list-style-type: none"> • New plastic recycling contract will be in place mid-F2010 at BDL Coquitlam

Appendix A

Domestic Brewers and Selected Brands (Refillable Bottles)

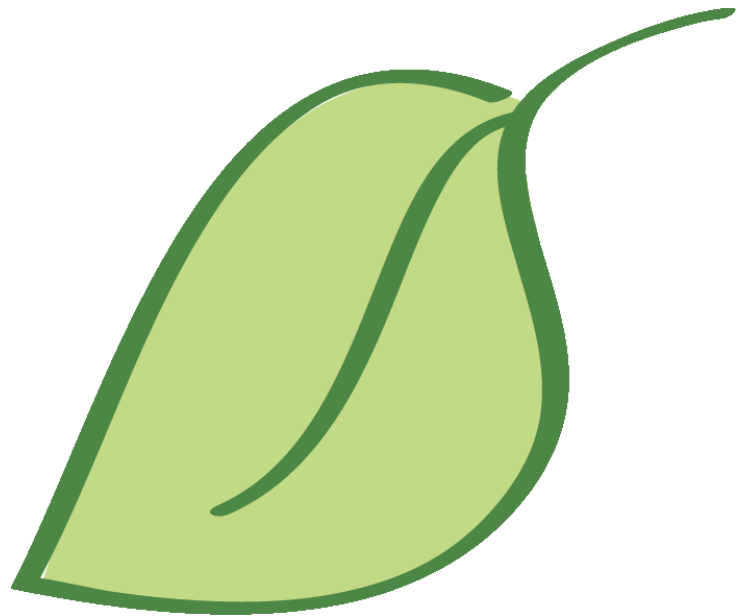
Brewer	Selected Products
Bear Brewing	Black Bear Ale
Big Rock Brewery	Grasshopper Wheat Ale, McNally's Extra Ale, Traditional Ale
Fireweed Brewing Corporation	Cutthroat Pale Ale, Hophead IPA, Spy Porter
Granville Island	Brockton IPA, Cypress Honey Lager, English Bay Pale Ale
Labatt Breweries	Kokanee, Labatt Blue, Alexander Keith's, Budweiser
Mark Anthony Group	Okanagan Cider, California Cooler
McAuslan Brewing	Apricot Wheat Ale
Molson Breweries	Rickards Red, Canadian, Coors Light, Miller Genuine Draft
Moosehead Breweries Ltd	Moosehead Lager
Nelson Brewing	Nelson After Dark Ale, Blackheart Oatmeal Stout
Russell Brewing	Cream Ale, Extra Special Lager
Sleeman Brewing Co.	Sleeman Cream Ale, Honey Brown Lager, Okanagan Spring Extra Special Pale Ale, Unibroue Blanche des Chambly
Vancouver Island Brewing	Piper's Pale Ale, Island Lager
Vincor International	Grower's Cider, Canada Cooler
Yukon Brewing	Arctic Red

Import and Domestic Suppliers and Selected Brands (Cans)

Agent/Brewer	Sample Brand
Amador Importers	
Atlas Wine Merchants	
Big Rock Brewery Limited	Rock Creek Cider, Traditional Ale
Bowen Island Brewing	Special Light, Irish Cream Ale, Traditional Lager, Honey Brown Lager, Extra Pale Ale
Bruce Ashley Group	

Calibrium International Limited	
Carlsberg Canada Inc.	Carlsberg Lager
Central City Brewing Company Limited	Red Racer Lager, Red Racer Pale Ale
Charton-Hobbs Inc.	
Culin Importers Ltd.	
Diageo Canada Inc. (Dorval)	Smirnoff Ice
Diamond Estates Wines & Spirits B.C.	
Fernie Brewing Company Limited	First Trax Brown Ale, Rocky Mountain Genuine Lager
Fireweed Brewing Corporation	Thirsty Beaver Amber Ale, Kelowna Pilsner
Granville Island Brewing Co. Limited	Brockton Ipa, Honey Lager, English Bay Pale Ale
Great Western Brewing Company Ltd	Gold
Hi-Bridge Consulting Group	Yanjing Beer
Independent Distillers (Canada) Limited	Alive Grapefruit
Innovative Commodity Imports Limited	
Labatt Breweries Of British Columbia	Alexander Keith's, Kokanee, Budweiser, Stella Artois
Lighthouse Brewing Co. Ltd.	Beacon Ipa, Race Rocks
Lmp Wines Inc.	Asahi
Lothar Heinrich Agencies Ltd.	Warsteiner
M.J.S. Beverage Concepts Int'l	
Mark Anthony Group Inc.	Mike's Hard Lemonade
McClelland Premium Imports Inc.	
Meagher's Distillery (B.C.) Ltd.	
Molson Brewery B.C. Ltd.	Heineken, Coors Light, Rickard's Red
Moosehead Breweries	Lager
Nelson Brewing Co.	Wild Honey Organic, Face Plant Ipa
Northam Brewery	
Okanagan Spring Brewery Ltd.	1516, Pale Ale, Strongbow

Pacific Western Brewing Co. Ltd.	Cantebury Dark, Pacific Dry
Premier Brands Limited	Holsten
Premium Beer Company Inc.	Mooshead Lager
Russell Brewing Company Ltd.	Cream Ale, Extra Special Pale Ale
Sebucom International Corporation	
Sleeman Breweries	Honey Brown
Sunny Star Import Export Limited	
The Barley Mill	
The Cannery Brewing Company	Anarchist Amber Ale
The Kirkwood Group	Radeberger Pilsner
United Distributors Of Canada	
Vancouver Island Brewing Co.	Island Lager, Pipers Pale Ale
Whitehall Agencies Ltd.	





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