

Appendix B – Cost and Who Pays What analysis by Province

British Columbia		
<i>(Does not include domestic beer)</i>		
REVENUE		Notes
Container Recycling Fees (CRF)	\$ 17,875,808	CRFs are charged directly to consumers at the point of purchase
Unredeemed deposits	\$ 14,898,139	Unredeemed deposits for non-alcohol containers only. LDB retains all unredeemed deposits on wine, liquor, cider, spirits and imported beer. Unredeemed deposits retained by LDB in 2004 were: \$2,046,356.
Sale of recyclables	\$ 13,433,600	
Other income	\$ 290,519	
Contract fees	\$ 11,579,608	Contract fees represent the contract between Encorp Pacific and LDB for collection, transport, processing and marketing LDB containers.
TOTAL	\$ 58,077,674	
EXPENSES		
Handling fees	\$ 32,936,371	
Depot operations	\$ 412,648	
Processing & Transportation	\$ 14,780,558	
Consumer Awareness	\$ 1,649,368	
Administration	\$ 2,401,321	
Loss on foreign exchange	\$ 234,416	
Amortization	\$ 76,838	
TOTAL	\$ 52,491,520	
Surplus / (deficit)	\$ 5,586,154	
Containers sold (not including domestic beer)	1,181,727,603	non-alcohol: 1,012,302,292; LDB managed container sales: 169,425,311
Containers recovered	905,980,857	non-alcohol: 745,182,592; LDB managed container sales: 151,798,265
Un-recovered containers	275,746,746	
COST ANALYSIS		
Net Cost per unit sold (without unredeemed deposit revenue)	\$ 0.033	Represents the system costs net of material revenues divided by the units sold.
Net Cost per unit sold (with unredeemed deposit revenue)	\$ 0.02	Represents the system costs net of material revenues and unredeemed deposit revenue, divided by the units sold. Excluded are LDB unredeemed revenues and handling costs, as they are internalized and not available to the public.
WPW ANALYSIS		
Beverage industry cost	\$ -	
Operating agency cost/surplus	\$ 0.005	
Provincial liquor commission cost/surplus	n/a	

Municipal government cost	-	Costs associated with the management of beverage containers ending up in the waste stream are not available or accounted for in this report.
Recycling consumer cost	\$ 0.012	
Wasting consumer cost	0.061	Total unredeemed deposits including LDB are: \$16,944,495.
Consumer "non-system" related cost	\$ 0.006	Represents what consumers paid in CRF revenue that was not required for operating the system in 2004.

Alberta		
<i>(Does not include domestic beer and all beer cans)</i>		
REVENUE		Notes
Container Recycling Fees (CRF)	\$ 26,645,753	CRFs are charged directly to consumers at the point of purchase
Unredeemed deposits	\$ 16,723,518	
Sale of recyclables	\$ 14,367,707	
Other income	\$ 1,251,281	
(Loss) / Gain on foreign exchange	\$ (153,739)	
TOTAL	\$ 58,834,520	
EXPENSES		
Handling fees	\$ 37,626,194	
BCMB management fees	\$ 362,998	
Processing & Transportation	\$ 7,659,319	
Marketing Technology	\$ 1,258,899	
Administration	\$ 1,513,707	
Amortization	\$ 402,746	
TOTAL	\$ 48,823,863	
Surplus / (deficit)	\$ 10,010,657	
Containers sold (not including domestic beer)	1,135,438,227	
Containers recovered	847,001,810	
Un-recovered containers	288,436,417	
COST ANALYSIS		
Net Cost per unit sold (without unredeemed deposit revenue)	\$ 0.03	Represents the system costs net of material revenues divided by the units sold.
Net Cost per unit sold (with unredeemed deposit revenue)	\$ 0.016	Represents the system costs net of material revenues and unredeemed deposit revenue, divided by the unit sold.
WPW ANALYSIS		
Beverage industry cost	\$ -	
Operating agency cost/surplus	\$ 0.009	
Provincial liquor commission cost/surplus	n/a	
Municipal government cost	-	Costs associated with the management of beverage containers ending up in the waste stream are not available or accounted for in this report.
Recycling consumer cost	\$ 0.015	
Wasting consumer cost	0.058	
Consumer "non-system" related cost	\$ 0.009	Represents what consumers paid in CRF revenue, which was not required for operating the system in 2004.

Saskatchewan		
<i>(Does not include refillable beer)</i>		
REVENUE		Notes
Contract fee	\$ 10,627,000	Saskatchewan Environment contracts the service of collection (via depots), processing and marketing to SARCAN for a fixed rate which changes each year.
Unredeemed deposits	\$ 3,694,390	Saskatchewan Environment will not disclose the amount of unredeemed deposit revenue retained. A conservative estimate was calculated by multiplying the number of un-recovered containers by 10-cents, representing the lowest refund level, and most likely the bulk of un-recovered containers. This is a conservative estimate.
Sale of recyclables	\$ 4,941,943	
Other income	\$ 113,706	
TOTAL	\$ 19,377,039	
EXPENSES		
Collection costs	\$ 10,798,758	
Processing costs	\$ 2,049,171	
Administration	\$ 1,091,963	
Amortization / depreciation	\$ 456,478	
(Loss) / Gain on foreign exchange	\$ 21,532	
TOTAL	\$ 14,417,902	
Surplus / (deficit)	\$ 4,959,137	This surplus revenue is not held by SARCAN; rather it is retained by the Province with EHC revenue, which is excluded from this analysis, as the total amount is not available.
Surplus / (deficit) to SARCAN	\$ 1,307,029	This represents the surplus amount reported by SARCAN at year end.
Containers sold (not including refillable beer)	279,784,524	
Containers recovered	242,840,625	
Un-recovered containers	36,943,899	
COST ANALYSIS		
Net Cost per unit sold (without unredeemed deposit revenue)	\$ 0.034	Represents the system costs net of material revenues divided by the units sold.
Net Cost per unit sold (with unredeemed deposit revenue)	\$ 0.021	Represents the system costs net of material revenues and unredeemed deposit revenue, divided by the units sold.
WPW ANALYSIS		
Beverage industry cost	\$ -	
Operating agency cost/surplus	\$ 0.005	
Provincial liquor commission cost/surplus	n/a	

Municipal government cost	-	Costs associated with the management of beverage containers ending up in the waste stream are not available or accounted for in this report.
Recycling consumer cost	n/a	
Wasting consumer cost	>0.10	This represents the minimum cost per wasting consumer.
Consumer "non-system" related cost	n/a	

Quebec		
<i>Non-refillable beer and soft-drinks</i>		
REVENUE		Notes
Unredeemed deposits	\$ 19,300,000	
Sale of recyclables	\$ 19,200,000	
Direct revenue from bottlers	\$ 2,200,000	
TOTAL	\$ 40,700,000	
EXPENSES		
Handling fees	\$ 20,000,000	
Contribution for L'ISE	\$ 1,500,000	
Penalty payments	\$ 2,300,000	Penalty payments are made by the bottlers to Recyc-Quebec when targets are not met.
Transportation / processing	\$ 14,000,000	Estimate calculated by Recyc-Quebec
Administration cost from BGE to Recyc-Quebec	\$ 800,000	
Contamination costs from non-deposit containers	\$ 2,100,000	These costs are incurred when non-deposit bearing containers are treated as a deposit container. The associated costs are from the handling fee and the refund for a contamination unit cost of 7-cents/unit.
TOTAL	\$ 40,700,000	
Surplus / (deficit)	\$ -	
Containers sold (not including refillable beer)	1,359,000,000	
Containers recovered	990,000,000	
Un-recovered containers	369,000,000	
COST ANALYSIS		
Net Cost per unit sold (without unredeemed deposit revenue)	\$ 0.016	Represents the system costs net of material revenues divided by the units sold.
Net Cost per unit sold (with unredeemed deposit revenue)	\$ 0.002	Represents the system costs net of material revenues and unredeemed deposit revenue, divided by the units sold.
WPW ANALYSIS		
Beverage industry cost	\$ 0.005	As per estimate from BGE the organization that collects funds from the SD industry.
Operating agency cost/surplus	-	
Provincial liquor commission cost/surplus	n/a	
Municipal government cost	-	Costs associated with the management of beverage containers ending up in the waste stream are not available or accounted for in this report.
Recycling consumer cost	\$ -	There are no upfront or backend fees on containers in Quebec
Wasting consumer cost	0.052	
Consumer "non-system" related cost	-	

Nova Scotia		
(does not include refillable beer)		
REVENUE		Notes
Unredeemed deposits	\$ 6,710,744	Unredeemed deposits were calculated by multiplying all unrecovered containers (by type and deposit level) with their deposit amount.
Half-back revenue	\$ 12,800,996	Half-Back revenue was calculated by multiplying all recovered containers (by type and deposit level) with their half-back amount.
Sale of recyclables	\$ 3,755,167	
Other income	\$ 495,302	
TOTAL	\$ 23,762,209	
EXPENSES		
Handling fees	\$ 8,000,000	Estimate provided by RRFB
Cartage/Regional processing, and other operational costs	\$ 5,944,517	Estimated by subtracting handling fees and refunds from total operating costs
Regional processing		
Education and Awareness	\$ 502,458	Represents 35% of RRFB's total E&A costs.
Administration	\$ 1,022,010	Represents 65% of RRFB's total administration costs.
TOTAL	\$ 15,468,985	
Surplus / (deficit)	\$ 8,293,224	
Containers sold (not including domestic beer)	311,822,822	
Containers recovered	246,054,837	
Un-recovered containers	583,164,336	
COST ANALYSIS		
Net Cost per unit sold (without unredeemed deposit revenue)	\$ 0.038	Represents the system costs net of material revenues divided by the units sold.
Net Cost per unit sold (with unredeemed deposit revenue)	\$ 0.016	Represents the system costs net of material revenues and unredeemed deposit revenue, divided by the unit sold.
WPW ANALYSIS		
Beverage industry cost	\$ -	
Operating agency cost/surplus	\$ (0.027)	
Provincial liquor commission cost/surplus	\$ -	
Municipal government cost	-	Costs associated with the management of beverage containers ending up in the waste stream are not available or accounted for in this report.
Recycling consumer cost	\$ 0.052	
Wasting consumer cost	0.012	
Consumer "non-system" related cost	\$ 0.027	

Determining unredeemed deposit revenue and half-back revenue for Nova Scotia

Deposit level	Refund level	Container Type	Sales	Recovery	Un-recovered	Unredeemed revenue	Half-Back revenue
\$ 0.10	\$ 0.05	al	139,845,459	116,550,207	23,295,252	\$ 2,329,525	\$ 5,827,510
\$ 0.10	\$ 0.05	gl	21,151,480	15,938,995	5,212,485	\$ 521,249	\$ 796,950
\$ 0.20	\$ 0.10	gl	10,140,672	9,047,591	1,093,081	\$ 218,616	\$ 904,759
\$ 0.10	\$ 0.05	pet	102,577,065	79,622,642	22,954,423	\$ 2,295,442	\$ 3,981,132
\$ 0.20	\$ 0.10	pet	1,163,862	917,487	246,375	\$ 49,275	\$ 91,749
\$ 0.10	\$ 0.05	hdpe	11,192,584	8,007,265	3,185,319	\$ 318,532	\$ 400,363
\$ 0.10	\$ 0.05	steel	3,829,580	2,672,637	1,156,943	\$ 115,694	\$ 133,632
\$ 0.10	\$ 0.05	gable/tetra	21,922,120	13,298,013	8,624,107	\$ 862,411	\$ 664,901
TOTAL			311,822,822	246,054,837	65,767,985	\$ 6,710,744	\$ 12,800,996

Newfoundland and Labrador		
<i>(Does not include refillable beer)</i>		
REVENUE		Notes
Unredeemed deposits estimate	\$ 5,041,718	Unredeemed deposits are not available through MMSB income statements. An estimate was calculated by multiplying all un-recovered containers (by type and deposit level) with a deposit amount of 8-cents. While there are some refunds worth 20-cents, this is a conservative estimate.
Half-back revenue estimate	\$ 3,472,762	Retained half-back revenue is not available through MMSB income statements. An estimate was calculated by multiplying all recovered containers (by type and deposit level) with a half-back amount of 3-cents. While there are some refunds worth 10-cents, this is a conservative estimate. The income statement does however provide the combined value for unredeemed and half-back revenues. This figure was lower by \$249,301. This amount was deducted from the retained half-back revenue estimate. While both the unredeemed value and half-back values are estimates in this table, added together they represent the accurate value as reflected in the 2004-05 income statement.
Sale of recyclables	\$ 1,943,612	
TOTAL	\$ 10,458,092	
EXPENSES		
Handling fees	\$ 3,770,899	
Regional processing	\$ 703,821	
Freight & transportation	\$ 1,198,709	
Depot fees	\$ 196,920	
Quality assurance and storage	\$ 80,384	
Administration	\$ 1,651,427	
TOTAL	\$ 7,602,160	
Surplus / (deficit)	\$ 2,855,932	
Containers sold (not including domestic beer)	187,090,235	
Containers recovered	124,069,631	
Un-recovered containers	63,020,604	
COST ANALYSIS		
Net Cost per unit sold (without unredeemed deposit revenue)	\$ 0.030	Represents the system costs net of material revenues divided by the units sold.
Net Cost per unit sold (with unredeemed deposit revenue)	\$ 0.003	Represents the system costs net of material revenues and unredeemed deposit revenue, divided by the units sold.
WPW ANALYSIS		
Beverage industry cost	\$ -	

Operating agency cost/surplus	\$ (0.015)	
Provincial liquor commission cost/surplus	\$ -	
Municipal government cost	-	Costs associated with the management of beverage containers ending up in the waste stream are not available or accounted for in this report.
Recycling consumer cost	\$ 0.028	
Wasting consumer cost	\$ 0.08	
Consumer "non-system" related cost	\$ 0.015	

Determining unredeemed deposit revenue and half-back revenue for Newfoundland and Labrador

Deposit level	Half-back	Container Type	Sales	Recovery	Un-recovered	Unredeemed revenue	Half-Back revenue
\$ 0.08	\$ 0.03	al	81,464,989	56,231,656	25,233,333	\$ 2,018,667	\$ 1,686,950
\$ 0.08	\$ 0.03	pet	57,565,810	40,003,557	17,562,253	\$ 1,404,980	\$ 1,200,107
\$ 0.08	\$ 0.03	steel	1,048,543	478,539	570,004	\$ 45,600	\$ 14,356
\$ 0.08	\$ 0.03	gable	3,792,234	1,366,778	2,425,456	\$ 194,036	\$ 41,003
\$ 0.08	\$ 0.03	other	7,092,376	3,856,841	3,235,535	\$ 258,843	\$ 115,705
\$ 0.08	\$ 0.03	tetra	17,710,991	10,916,471	6,794,520	\$ 543,562	\$ 327,494
\$ 0.08	\$ 0.03	glass (li)	18,415,292	11,215,789	7,199,503	\$ 575,960	\$ 336,474
			187,090,235	124,069,631	63,021,480	\$ 5,041,718	\$ 3,722,063