

# **ENCORP PACIFIC (CANADA)**



## **STEWARDSHIP PLAN 2014 – 2018**

**Revised Plan – May 30, 2014**

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## Summary of Performance Targets

RECOVERY RATE	TARGET																																																
<ul style="list-style-type: none"> <li>The requirement under the Recycling Regulation – Schedule 1, beverage containers is 75%. The weighted average recovery rate for containers registered within Encorp’s system for the last 5 years (2008 – 2012) has been 79%. Encorp will target an overall recovery rate of 82% by 2018 for the beverage containers included in the B.C. Recycling Regulation that are under Encorp’s Stewardship Plan.</li> <li>The chart below shows the targets by sku for each year 2014 - 2018</li> </ul> <table border="1" data-bbox="418 575 1084 905"> <thead> <tr> <th colspan="6">Recovery Rate Targets (%)</th> </tr> <tr> <th></th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>Glass</td> <td>93.9%</td> <td>93.9%</td> <td>93.9%</td> <td>94.0%</td> <td>94.0%</td> </tr> <tr> <td>Plastic</td> <td>76.2%</td> <td>76.6%</td> <td>76.9%</td> <td>77.3%</td> <td>78.0%</td> </tr> <tr> <td>Aluminum</td> <td>84.1%</td> <td>84.3%</td> <td>84.5%</td> <td>84.6%</td> <td>85.0%</td> </tr> <tr> <td>Polycoat</td> <td>59.1%</td> <td>60.3%</td> <td>61.5%</td> <td>62.6%</td> <td>65.0%</td> </tr> <tr> <td>Other (other metals, bag-in-box and pouches)</td> <td>56.2%</td> <td>57.0%</td> <td>57.7%</td> <td>58.5%</td> <td>60.0%</td> </tr> <tr> <td><b>Total Recovery Rate (weighted)</b></td> <td><b>80.1%</b></td> <td><b>80.6%</b></td> <td><b>81.0%</b></td> <td><b>81.5%</b></td> <td><b>82.0%</b></td> </tr> </tbody> </table>	Recovery Rate Targets (%)							2014	2015	2016	2017	2018	Glass	93.9%	93.9%	93.9%	94.0%	94.0%	Plastic	76.2%	76.6%	76.9%	77.3%	78.0%	Aluminum	84.1%	84.3%	84.5%	84.6%	85.0%	Polycoat	59.1%	60.3%	61.5%	62.6%	65.0%	Other (other metals, bag-in-box and pouches)	56.2%	57.0%	57.7%	58.5%	60.0%	<b>Total Recovery Rate (weighted)</b>	<b>80.1%</b>	<b>80.6%</b>	<b>81.0%</b>	<b>81.5%</b>	<b>82.0%</b>	82%
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CONSUMER ACCESS	TARGET																																																
<ul style="list-style-type: none"> <li>In major urban areas: as the population increases maintain the ratio of population to depots at current levels.</li> <li>Improve consumer access in Metro Vancouver through a combination of new depots and innovative collection methods including public spaces recycling.</li> <li>In smaller centres and rural areas: maintain the current number of depots but promote upgrades and relocations where needed.</li> <li>Continue to test innovative collection options.</li> </ul>	97% of BC’s population within the coverage area defined in the SABC accessibility standard																																																
CONSUMER AWARENESS	TARGET																																																
<ul style="list-style-type: none"> <li>Maintain a net annual awareness of container types and beverage types which carry a deposit at or above current levels.</li> <li>Maintain a net annual awareness of locations to which containers can be returned at over 90%.</li> </ul>	Over 95%  Over 90%																																																
CARBON FOOTPRINT	TARGET																																																
<ul style="list-style-type: none"> <li>Refine greenhouse gas measurement methods and establish a baseline on which to rate future changes by 2016.</li> </ul>	Develop a measurement benchmark by 2016																																																
COOPERATION WITH OTHER STEWARDSHIP AGENCIES	TARGET																																																
<ul style="list-style-type: none"> <li>Work with agents for other stewardship materials to ensure that depots continue to properly manage beverage containers while providing convenience for consumers by accepting a wider range of stewarded products for return.</li> </ul>	Provide consumer convenience																																																
DEPOT CAPABILITIES	TARGET																																																
<ul style="list-style-type: none"> <li>Continue to develop and operate programs which enhance depot capabilities and efficiencies.</li> </ul>	Invest in R & D for enhanced depot capabilities																																																

## Public Consultation

The Ministry of Environment has been explicit in its direction that the key component required of any stewardship plan submitted for its approval must be substantial public and stakeholder consultation. A further Ministry request is that the development of the consultation plan itself should have stakeholder input.

To assist in this process, an early draft of the plan was submitted to a joint meeting of Encorp's Board of Directors and its Advisory Committee. This joint group contains expertise from senior corporate management, marketing, local governments, recycling NGOs and social services.

The following plan was prepared to allow for ease of online stakeholder comments. In addition to online access, the plan was available for review at a series of public meetings held in 6 locations around B.C. There were two easily accessible public webinar sessions held. The time and place of these meetings and webinars were advertised in daily and community newspapers and placed on the Return-It™, RCBC, and SABC's websites along with links to the plan documents.

Following a review of the draft plan there was strong support, particularly from Encorp's Board members, that Encorp should set a high standard for consultation and should exceed the minimums required by the Ministry of Environment.

Following the direction received at this meeting Encorp management outlined a program of direct personal contact through public meetings, paid advertising, use of social media, web-based seminars and a variety of methods that made it easy for stakeholders to submit comments on the plan.

Input received during the public consultation can be found in Appendix 1. Input generally fell into three categories:

- Comments and questions related to products or programs that are not part of the Encorp Stewardship program or are more broadly public policy issues. Encorp has included these in the summary but we may not have responded to them because they are not part of our stewardship responsibilities or plan. In cases where we have responded it was to provide information or clarity.
- Issues requiring clarification of, or coming from, misinterpretation of plan content. In some instances the draft plan text was either unclear to, or misinterpreted by the respondent. In these cases we have provided a response to the input in the Appendix and in some cases adjusted the wording in the draft plan without a change in meaning.

- Areas where feedback resulted in changes to the plan itself. Specifically these changes are as follows:
  - Section 3 – The addition of detail regarding the scope of the plan and the containers covered by it.
  - Section 3 – Added the web hyperlink to the site page where individual brand names of included containers can be found.
  - Section 3b – Unit recovery rates – The target for glass containers have been changed from “above 90%” to “94% or better” and an additional explanation regarding the elimination of the “combination” category.
  - Section 3b – The addition of a chart showing the recovery rate targets by container type and additional notes for clarification.
  - Section 3c – Coverage Summary, a reference to where a list of depots can be found and a section on coverage in comparison to the SABC performance standard.
  - Section 4 – Additional detail regarding the measurement of consumer awareness levels and the list of the methods used.
  - Section 4 – Chart added – Consumer Awareness by Container Type.
  - Section 6 – Included further detail for the polycoat and “other” categories.
  - Section 6b – Expanded information and detail about reduction and redesign of container types.
  - Section 6d – The plan commits to a completion date for a GHG baseline.
  - Section 7a – Expanded information and detail about the physical capacity of depots.
  - Section 7a – Removed the section on Managerial and Operational Capacity.
  - Section 7c – The section on funding sources has been expanded and further clarified.
  - Section 7d – The section on mandatory return-to-retail has been removed from the plan.

*Note:*

- *The recycling regulation references Public Consultation in section 5 (1) (b)*
- *A summary of the public consultation feedback and responses have been added as Appendix 1*

## **Section 1. Introduction**

### **Encorp Pacific (Canada) Beverage Container Stewardship Plan 2014-2018**

This stewardship plan has been produced to meet the requirements of the BC Recycling Regulation which calls for submission of a revised stewardship plan on a regular basis.

The following plan was prepared to allow for ease of online stakeholder comments. In addition to online access, the plan was available for review at a series of public meetings held in 6 locations around B.C. There were two easily accessible public webinar sessions held. The time and place of these meetings and webinars were advertised in daily and community newspapers and placed on the Return-It™, RCBC, and SABC's websites along with links to the plan documents.

All stakeholder comments have been received and included, the plan will be submitted to the Ministry of Environment by December 31, 2013.

#### **Regulatory Context**

This stewardship plan has been produced to meet the requirements of Section 6 of the BC Recycling Regulation which calls for submission of a revised stewardship plan on a regular basis.

#### **About Encorp Pacific (Canada)**

Encorp Pacific (Canada), herein referred to as Encorp, was originally formed as Encorp Pacific Inc. in 1994 and then as an industry product stewardship agency in 1998 to fulfill the requirements of the Beverage Container Stewardship Program Regulation (BC Reg. 406/97-repealed) and the subsequent Recycling Regulation, Schedule 1, Beverage Container Product Category (BC Reg.449/2004). As of 2013, Encorp has been appointed by beverage brand owners as the product stewardship agency responsible for all non-alcohol beverage containers and all alcohol beverage containers except for aluminum beer cans and refillable beer bottles.

#### **Governance**

Encorp Pacific (Canada) is federally incorporated as a non-share capital corporation under Part II of the Canada Corporations Act. The corporation is exempt from income tax provided that strict Canada Revenue Agency rules are observed. This type of incorporation identifies owners as members and not shareholders and places restrictions on the use of operating surpluses.

The corporation is governed by a Board of Directors consisting of representatives of the retail and beverage industries as well as non-affiliated directors with relevant expertise. A list of current Board members is published in the corporation's annual report. This information plus more detail on how the corporation functions is available on the web at [www.return-it.ca](http://www.return-it.ca)

## Section 2. Program Principles

Since its inception, Encorp has operated under the following principles:

- a. Divert used products from landfill and incineration.
- b. Develop and operate a system which provides consumer-friendly and convenient return points throughout the Province.
- c. Manage the system in a cost-effective manner that has the lowest possible impact on consumer prices.
- d. Run a cost-based system in which each container type pays its own costs with no cross subsidization.
- e. Find useable end products which maximize the value of the recovered materials.
- f. Treat all brand owners equitably.
- g. Provide a high degree of transparency in all its operations.

## Section 3. Program History

### a. Chronology

- |           |   |
|-----------|---|
| 1970-1994 | In 1970 British Columbia became the first jurisdiction in North America to impose a deposit/refund system on soft drink cans and bottles. The system was entirely based on return-to-retail with deposits and refunds being managed by retailers and brandowners. |
| 1994      | Encorp Pacific Inc. was established by the major brandowners and retailers to develop and operate a common collection system for all brands, collect and reimburse deposits and to establish a network of depots to divert returns from the major grocers.        |
| 1998      | The Beverage Container Stewardship Program regulation came into force which added all ready-to-drink beverages (except for milk and milk substitutes) to the deposit/refund requirements. Encorp Pacific (Canada) was established.                                |

- 2000 The Ministry of Environment approved a consolidated and amended stewardship plan incorporating polycoat containers.
- 2004 The Recycling Regulation came into effect.
- 2006 Encorp submitted an updated stewardship plan as required by the Recycling Regulation.
- 2007 In July 2007 the Ministry of Environment approved Encorp's stewardship plan.
- 2007 In November 2007, the Ministry of Environment approved an amended stewardship plan for Encorp which incorporated alcohol beverage containers previously covered by a separate stewardship plan produced by the BC Liquor Distribution Branch.
- 2012 Encorp received an approval of the current plan to "remain in good standing" which provides a one year extension to its stewardship plan with the proviso that an updated plan be submitted to the Ministry of Environment by December 31, 2013.

### **Program Scope**

The Encorp Stewardship Plan covers all ready-to-drink beverage containers sold in British Columbia including soft drinks, juice, water, wine, coolers, spirits and non-refillable beer bottles. Refillable beer bottles and all beer cans are part of the Brewers Distributors Ltd. Stewardship Plan and are not part of the Encorp stewardship plan. Milk and milk substitute containers are exempt from the Beverage Container Schedule of the Recycling Regulation and they are included within the Printed Paper and Packaging schedule.

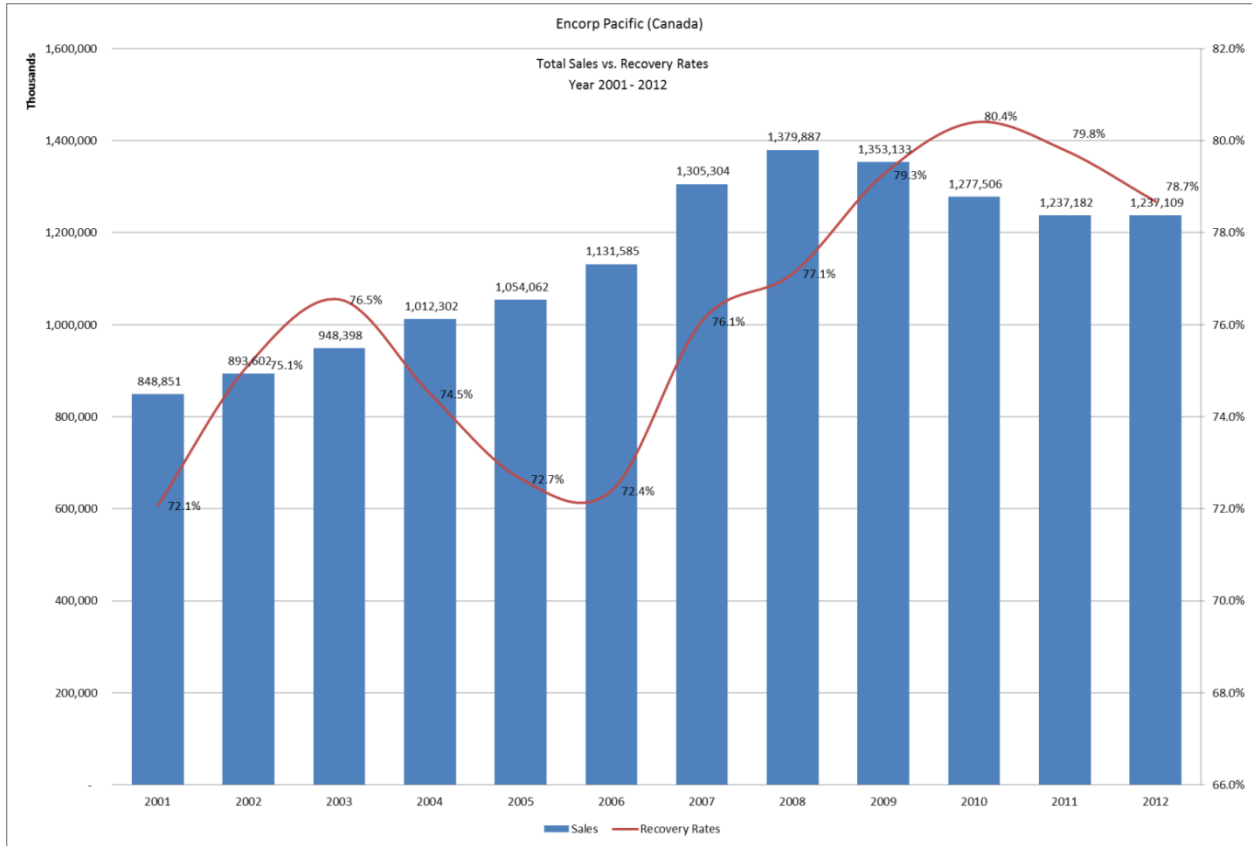
A full, and up-to-date, list of all containers covered by the Encorp plan can be found at: [www.return-it.ca/registeredbrands](http://www.return-it.ca/registeredbrands)

### **b. Sales and Recovery Growth**

The following graph outlines the growth in the number of containers sold since 2001 for which Encorp has stewardship responsibilities. Changes in sales volumes can be noted as events described in the chronology occurred. The graph also shows the percentage of sold containers recovered and recycled with changes occurring in the years following events described in the chronology.



Overall Recovery Rates (see notes below)



**Notes:**

- Beverage alcohol containers entered the Encorp system in 2007.

## Unit Recovery Rates by Category – 2012

The following table shows the major categories of beverage containers by container type, the percentage of total sales each type has and the recovery rate for each type.

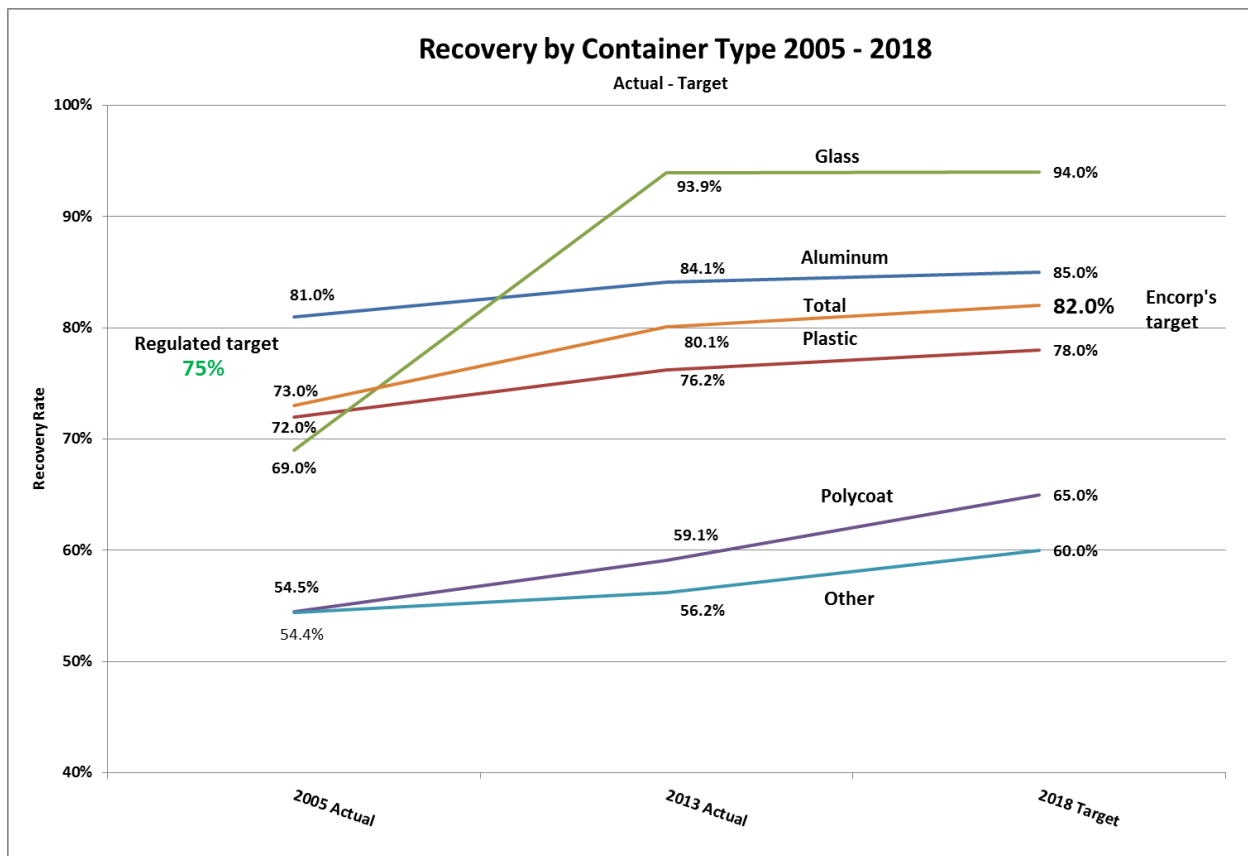
Container type	Percentage of total beverage unit sales (2012)	Recovery Rate (2012)	2014-2018 Performance Objective (Annual Average)
Glass	17%	94%	Maintain recovery rates at 94% or better
Plastic	36%	75%	Achieve recovery rate above 78%
Aluminum	36%	82%	Achieve recovery rates above 85%
Polycoat	10%	57%	Increase recovery rate to 65%
Other	1%	53%	Increase recovery rate to 60%

Overall recovery rate by units

**78.7%**

### Performance Objective 2014-2018

Achieve an overall unit recovery rate of 82%



Note:

1. The performance objective for total recovery is a minimum of 75%. To reach this level for some container types will take longer than this five year plan, however Encorp continuously strives and searches for ways to reach this goal.
2. Encorp's previous stewardship plan listed a category for "combination" containers. The volume of this type of container is now insufficient to warrant tracking as a separate category and is now included in "other".

## Weight Recovery by Commodity – 2012

In addition to unit recovery rates Encorp also calculates commodity weights. The weight of material recovered is the most common measure of recycling performance for product stewardship categories other than beverage containers. In 2012 the overall recovery rate for beverage containers by weight was **88.6%**

Commodity	Weight collected (Tonnes)	Recovery Rate	Weight uncollected (Est.Tonnes)	Percentage of weight uncollected
Glass	70,011	93%	5,525	7%
Plastic	10,884	78%	3,159	22%
Aluminum	5,026	82%	1,094	18%
Polycoat	1,933	64%	1,098	36%
Other	582	52%	544	48%
<b>Total</b>	<b>88,436</b>	<b>89%</b>	<b>11,420</b>	<b>11%</b>

Note: The Recycling Regulation references Unit Recovery Rates by Category in section 5 (a) (i)

### c. Consumer Access to Collection Points

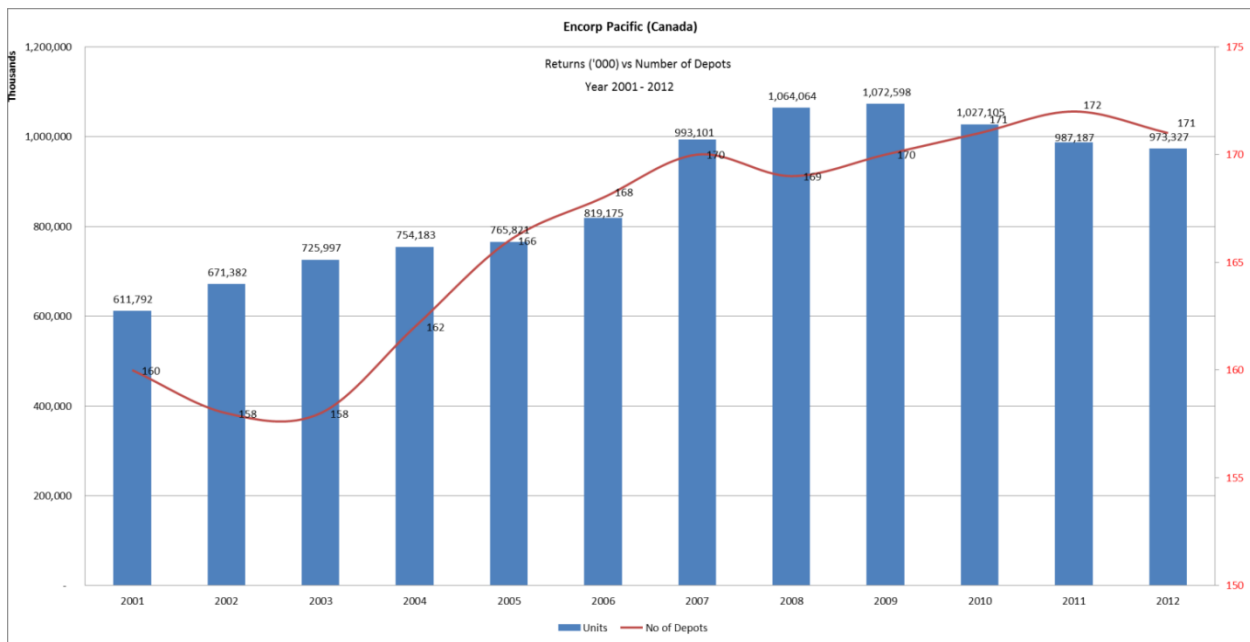
#### Coverage Summary

With 171 authorized Return-It™ depots, 360 major grocery stores, and, not to mention hundreds of small retailers who are required by regulation to accept containers, consumers have access to the most comprehensive network of return points of any stewardship plan operating in BC. At all these points consumers receive a full deposit refund for all Encorp stewarded containers. In addition, Encorp Return-It™ depots provide the backbone for most of the larger stewardship programs operating in the Province. Encorp continues to work collaboratively with other stewardship programs to improve coverage and consumer convenience.

The full list of Return-It™ Depot locations can be found at [www.returnit.ca/locations](http://www.returnit.ca/locations)

## Depot Coverage

The following graph shows the growth in the number of Encorp authorized depots since 2000; with the 2012 count at 171, as well as the total number of containers collected and recycled by the system. As of December 2013 there are 172 depots.



## Depot Coverage in Urban Areas

In the major urban areas of Metro Vancouver, Fraser Valley, Capital and Central Okanagan Regional Districts, the current population serviced by each depot ranges from 35,000 people in Metro Vancouver to 19,000 people per depot in the Fraser Valley with an average of 26,000 people per depot in these urban areas.

The Metro Vancouver ratio is skewed by the lack of depots in the City of Vancouver where there is one depot to service every 80,000 people; compared with the City of Richmond where there is one depot for every 25,000 people. It has been difficult for Encorp to obtain municipal support for depot placement from the City of Vancouver but recent discussions with city officials indicate that a more positive position is possible.

- **Performance Objective for 2014-2018** – Ensure that these Regional Districts receive the same or better level of access as their population grows by opening additional depots at a rate which will reduce the population depot ratio.

## **Depot Coverage in Smaller Communities and Rural Areas**

In smaller centres and rural areas Encorp has established depot coverage based largely upon municipal boundaries and/or population concentrations. The key deciding factor in locating a depot is the volume of business required to sustain a profitable dedicated depot site. Once a depot is operational Encorp's efforts have focused on improving customer convenience and satisfaction with the depot and on improving depot efficiencies.

- **Performance Objective 2014-2018** – In smaller centres and rural areas Encorp will maintain the current number of depots but will assist in relocations or facility upgrades to provide an enhanced customer experience.

*Note: The Recycling Regulation references Consumer access to Collection points in Section 5 (c) (iii)*

## **Return-to-Retail**

The unique and mandatory return-to-retail requirement of the Beverage Container Product Category, Schedule 1 (Section 6[2]) means that there are, potentially, thousands of return points for consumers. However, due to the greater convenience of depots which accept unlimited quantities of all deposit-bearing containers, the vast majority of containers are returned through the depot system. Despite the presumed convenience of return-to-retail, a declining share of containers, currently around 7%, are returned through the retail system. There are approximately 360 retailers from whom Encorp collects containers but there are a number of them which do not collect containers in sufficient volumes to justify service by Encorp transporters.

## **Performance Against Coverage Standard**

The Stewardship Agencies of BC have proposed (October 2013) an accessibility standard for approved stewardship programs. Residents in rural communities with a population of 4,000 or more should have less than a forty five minute drive to a collection facility. For urban communities with a population of 4,000 or more, there should be less than a thirty minute drive to a collection facility. This standard would put 97 percent of the BC population within the coverage area of return locations. Encorp's current network of depots, mobile collectors, commercial collectors and return-to-retail locations exceed that standard. Nonetheless we continue to target areas of population growth or under-service areas as potential locations for new licensed depots.

More detailed information with regard to the Accessibility Standard can be found at [www.bcstewards.com](http://www.bcstewards.com) under the Action Plan tab.

## Section 4. Consumer Awareness

Since 1998 Encorp has conducted regular, and extensive, consumer research to determine attitudes, motivators and habits. This research has been used to develop a multitude of consumer awareness programs designed to inform consumers about which containers are part of the system, deposit levels for containers, how and where to return them and what happens to the collected containers.

Further consumer research has tested the degree of awareness exhibited by BC consumers (those who consume these types of beverages) of the Return-It™ system and it has shown steady progress to the point where virtually all BC residents are aware of the system and the vast majority actively participate in one way or another. Few consumer products have attained the level of awareness achieved by the Return-It™ brand.

Awareness can be grouped into two broad categories:

1. Consumer awareness of types of beverages and/or containers which carry a refundable deposit:

Initial Awareness – 1999 – 42%

Average Net Annual Awareness – 2008-2012 – 99%

**Performance Objective 2014-2018** – Maintain an average net annual awareness of over 95%

**A2 - To the best of your knowledge, can the following types of containers be returned for a refund on deposit?**

	Those who produce that container, awareness there is a deposit	Notes
Aluminum cans	98%	
Plastic bottles	77%	<i>water 85%, confusion with milk skews the results</i>
Glass bottles	75%	<i>non alcohol, non beverage skews results</i>
Drink boxes in individual or multiple serving sizes	80%	
Cartons	56%	<i>confusion with milk</i>
Sub total	77.2%	
Any	100%	<i>Among all respondents those who can name at least one type of beverage or container that can be returned for a deposit refund.</i>

Notes:

- a. The only container under 75% awareness level is Cartons. This is primarily due to consumers confusion with milk containers which do not carry a deposit and are not included under the Beverage Container Schedule.
- b. Encorp provides in each Annual Report the awareness levels of deposit bearing containers by SKU

2. Awareness of Locations to Return Beverage Containers (Depots and Retailers):

Initial Awareness – 1999 – 54%

Average Net Annual Awareness – 2008-2012 – 92%

**Performance Objective 2014-2018** – Maintain an average net annual awareness of over 90%

Consumer awareness is measured annually by a major research firm which polls a sample size sufficient to give results with sufficient statistical validity that operational and marketing decisions can be made from the results. Generally the error factor is +/- 3.5% for studies conducted by researchers on Encorp's behalf.

Because awareness levels are now extremely high, by general marketing standards, Encorp has increasingly added to the scope of research to understand motivation

and behaviors related to recycling to better affect actual behavioral change in non-recyclers and low recyclers. Recent research in this area is summarized in our 2012 Annual Report. This information is collected annually at the same time as awareness data and used as input into marketing and operating plans. Results are reported annually and available in our public annual report.

### **Consumer Awareness and Recycling Participation Marketing Tools**

Encorp employs a broad range of consumer awareness programs to ensure maximum provincial coverage while ensuring that specific target demographic groups are reached. These include, but are not limited to:

- Print advertisements
- Television advertisements
- Transit and outdoor advertising
- Digital & internet advertising
- Social media
- School programs
- Public space programs
- Festivals, events and trade shows
- Consumer contests
- Advertorial pieces
- Informational handouts
- In depot signage & consumer communications
- Dedicated informational websites

*Note: The Recycling Regulation references Consumer Awareness in Section 5 (c) (iv)*



## Section 5. Management of Program Costs

### Financing Model

Encorp's financial statements are independently audited annually by a national Chartered Accountant firm and published on its website as part of its annual report to the Ministry. The audited financial statements show the deposits charged for beverage containers and the container recycling fees (that are charged by the producer to the consumer) that are shown on the consumer sales receipt.

The independently audited statements provide financial transparency and accountability on the management of fees collected.

Encorp's general and administrative costs account for 4% to total revenues. Approximately 80% of the revenues were paid out for direct operating expenses which include handling fees, transportation and processing fees.

Encorp's Board of Directors, through strategic reviews and annual planning sessions, strive to ensure that the Company delivers a highly successful stewardship plan in a cost-effective and efficient manner. Costs for all services are compared to existing market rates on an annual basis.

The funds to pay for the costs of handling fees, transportation, processing, consumer education and administration of used beverage containers come from three sources:

1. Unredeemed Deposits (Unredeemed Deposits represent 19% of the funds Encorp receives) – The percentage recovery rate for each container type varies with most categories being returned at less than 100% of sales. The unredeemed deposit for each container type is used to pay the recovery costs of that specific type of container.
2. Commodity Values (Commodity Values represent 17% of the funds Encorp receives) – The sale of the material collected for each container type is also used to pay the recovery costs of that specific type of container.
3. Container Recycling Fees (Container Recycling Fees represent 64% of the funds Encorp receives) – Where the above two funding sources are insufficient to pay the recovery costs for a specific type of container a non-refundable fee is applied to the container. These fees are reviewed on an annual basis to ensure that they are sufficient to cover only the net costs of recycling that specific container type.

*Note: Encorp maintains eighteen (18) different container types.*

A fundamental principle for Encorp is a cost-based operation in which each container type covers its own expenses with no cross subsidization between container types. For example, collecting and recycling a glass container is significantly higher than an aluminum can based on its weight and its commodity value; therefore the container

recycling fee (CRF) for glass will be significantly higher than the CRF for an aluminum can.

*Please refer to Appendix 2: CRF Table 2009 - 2013*

To ensure this principal is met Encorp has, since its inception, employed a system of contract management to constantly test the market to ensure cost and operational efficiencies. Aside from administrative and quality control functions, Encorp contracts out all other operational aspects such as collection, transportation and processing. The single biggest category of expenses for Encorp, representing 59% of total operational costs, are the handling fees paid to Encorp-contracted depots to collect containers from consumers. Many of Encorp's depot training programs are designed to improve container management efficiencies.

For many contracts a Request for Proposal (RFP) is issued, for others Encorp utilizes independent financial studies to assess whether the best value is being obtained. In all cases the intent is to ensure that costs represent current fair market value. All costs are passed through to the relevant container type with no markup added.

Major costs are detailed in the independently audited annual reports which Encorp has produced, and made widely available to the public, since 2001.

*Note: The Recycling Regulation references Management of Program Costs in Section 5 (c) (i) and 5 (c) (v)*

## **Section 6. Management of Environmental Impacts**

### **a. Management of Collected Materials**

Over 97% of the materials collected by the Encorp system are processed into marketable commodities within North America.

Collected used beverage containers comprise four major material categories:

1. Aluminum

Collected cans are returned to a re-melt facility where they are turned into sheet stock from which new cans are made. It is estimated that 50% of every aluminum can on retailers' shelves has been recycled at least once. Aluminum is also the most valuable commodity collected by the system and is sent, by rail, to a re-melt facility in the U.S.A.

## 2. Plastic

Plastic bottles used for beverages are made from one of two resins, PET, the clear resin used for water or soft drinks and HDPE, the cloudy resin most often used for milk containers. These materials are sent to separate facilities in Vancouver and Calgary where they are washed and pelletized for further processing into new products such as new containers, strapping materials and fibres. A number of beverage manufacturers have introduced recycled content into their packaging.

## 3. Glass

Glass is sent to local facilities where it is crushed into small pieces called cullet. Dependent on location, this cullet is then shipped to facilities where it is made into fiberglass insulation, new bottles, sand blasting material and construction aggregates. The majority of Encorp's collected glass is sent to Seattle, where it is used in new bottles, or to Alberta where it is used to make fiberglass insulation.

## 4. Polycoat

Drink boxes and gable top containers are sold into scrap fibre markets which feed pulp mills. The valuable paper fibre which comprises the bulk of these containers is extracted and used to make cardboard boxes and tissue paper, the residual plastic and aluminum fraction is currently landfilled or otherwise disposed of. Current market demand for paper fibre is strongest in Asia and polycoat materials are being shipped to South Korea.

## 5. Other

Included in this category are foil pouches and plastic bladders from bag-in-box containers. The volume of these containers has been declining steadily and has reached a de minimus level, in total less than 1 percent of recovered materials and falling. Markets for the commodity are intermittent due to the low volume and materials are stockpiled awaiting sale. We regularly work with suppliers and processors to try to find viable methods of recycling this material.

### **b. Management in Accordance with the Pollution Prevention Hierarchy**

#### **Reduce and Redesign**

Reduction in the size and weight of beverage containers has taken two forms:

1. Using a lighter weight material instead of a heavier weight material – such as using plastic or polycoat instead of glass.

- Many brands in the alcohol spirits category have switched from glass to PET containers.
2. Utilizing less material to make a container:
- Wine bottles used by major brands have decreased in weight from 500g to under 400g
  - Major water producers have reduced the amount of plastic used to make containers. Weighing just 9.16 grams the newest bottle contains 27 percent less plastic than its predecessor eco-shape bottle, which was introduced in 2007, and 60 percent less plastic than the original, pre-eco-shape PET bottle first introduced in 2000.

A further design change becoming more commonplace is the use of recycled content in plastic containers. Beverage producers are constantly testing new package materials and designs which may further reduce the volume and weight of containers.

### **Reduction of unused portions**

The reduction of unused portions is not applicable to this product type.

### **Reuse**

There are no refillable containers covered by the Encorp stewardship plan. Containers used for in-home or “u-vintner” wine production are not part of the Encorp system.

### **Recycle**

The primary focus of the used beverage container system is to ensure that materials are recovered and recycled into new products as described in Section 6a.

### **c. Product Lifecycle Management**

Containers for products for human consumption, beverage containers, are free of hazardous materials. As a result there are no environmental concerns with the downstream use of collected commodities. As noted in earlier sections, container designs and materials are under constant review by beverage producers.

Starting fiscal year 2014, Encorp will provide an annual independent assurance report on material management in accordance with the pollution prevention hierarchy under Section 8(2)(d) of the Recycling Regulation.

#### **d. Greenhouse Gas Emissions**

The collection and recycling of beverage containers is a contributor to greenhouse gas reduction. Encorp commenced measuring the actual reduction in GHG emissions generated by the recycling of beverage containers in 2008 with the following annual savings indicated:

- 2008 – 138,000 tonnes
- 2009 – 137,000 tonnes
- 2010 – 99,900 tonnes (restated in 2011)
- 2011 – 94,000 tonnes
- 2012 – 94,000 tonnes

The net amount of GHG reduction depends on the volume and type of containers collected and recycled. Details on methodology, and on variability factors, are published in the annual report. The methodologies used in the GHG Protocol are refined annually as there currently are not any global standards; primarily due to the fact that this kind of reporting is relatively new and history is unavailable. This could, potentially, result in the future easement of prior years' figures.

Calculating and measuring Encorp's environmental footprint is also a process still under development with only a few years' data as yet available. Further refinement of GHG measurement standards is required along with several more years of base data. From this work it will be possible to establish a more specific performance measurement.

#### **Performance Objective 2014 – 2018**

- Refine GHG measurement standards to ensure consistent reporting of the system's overall carbon footprint.
- Establish a base performance measure by which to rate future changes by the end of 2016.

*Note: The Recycling Regulation references Management of Environmental Impacts in Section 5 (c) (vii)*

## **Section 7. System Challenges**

In the 5 year term of this Stewardship Plan, Encorp anticipates confronting a series of challenges.

### **a. Depot Capacity**

The depot network was developed by Encorp as the primary means of collecting beverage containers from consumers. The volume of beverage container collection

covered by Encorp's stewardship plan provides the essential sustaining revenue stream which keeps the depot system financially viable, while other stewardship materials and agencies provide depots with additional income. In turn, the depots are critical to the successful delivery of the Encorp stewardship plan.

The space available to depots is limited by many factors including cost, municipal restrictions, transportation access, etc. Where depots are seen as an existing solution to be utilized for the benefit of other stewardship programs Encorp must work to ensure that the system continues to function efficiently for beverage containers while accommodating these other stewardship programs where feasible. Every Encorp depot collects at least one other stewardship program product. We have identified approximately 139 who currently collect two or more stewardship products, 105 depots take three or more products and 70 take five or more stewardship products. A spreadsheet of these depots and what they collect can be accessed through [www.bcstewards.com](http://www.bcstewards.com) under the Action Plan tab.

### **Performance Objective 2014-2018**

- Encorp will continue to cooperate and participate, where feasible, with other stewardship programs in a manner that will ensure the continued ability of depots to successfully manage beverage containers while providing one drop convenience for consumers.

### **b. Commodity Markets**

Markets for specific commodities have varied not only in price but also in processor demand. Overall, however, the system is aided by the fact that 99% of collected materials have well established markets. Encorp regularly explores alternative, including local, markets and processors in response to changing market conditions.

### **c. Funding Sources for the Deposit/Refund System**

Until recent years Encorp's funding sources for operating the system were almost equally divided between commodity sales, unredeemed deposits and container recycling fees. The volatility of commodity markets and the steadily increasing recovery rate have resulted in container recycling fees becoming the primary source of revenue, now approximately 64% of the total in 2012. As recovery rates rise the marginal cost of recovering additional containers rises. Given, reduced unredeemed deposits and projected higher costs as recovery rates increase, container recycling fees (CRF) are vital to make the deposit refund system work; even if all containers are returned and commodity values decline, the system can still operate. Setting the right CRF, the only funding source under Encorp's direct control, is a financial balancing act that Encorp performs once a year to ensure that the system continues to be able to pay for itself.

## **Section 8. Dispute Resolution Process**

To deal with issues which may arise between the corporation and its suppliers or partners, Encorp has in place a proactive and multi-layered process of consultation. Encorp has consultative groups and committees for its major suppliers of services; these groups include a Council of Depot Operators and an Advisory Committee which includes small brandowners, local governments and other interested parties.

All Return-It™ Depots have signed agreements with either automatic renewals or renewable terms. Any disputes would be resolved using normal commercial legal procedures.

Should disputes arise, senior management becomes directly engaged with assistance from outside parties as necessary. All necessary steps to resolve disputes amicably and acceptably are undertaken, including access to commercial arbitration if necessary.

*Note: The Recycling Regulation references Dispute Resolution Process in Section 5 (c) (vi)*

## **Appendix 1. Public Consultation**

A summary of the schedule of public opportunities and the comments received and responses where applicable are included here.

## **Appendix 2. Container Recycling Fee Table**

A spreadsheet of container recycling fees from 2008 through 2013 is provided for reference here.