

La Table de concertation sur la récupération des CRU non consignés



Final Report | february 2007 Summary

Prepared by Gaïa Environnement inc.



SUMMARY

Origin and Operations of the Issue Table on Recycling Non-Refundable SUCs

In 2005, a number of associations, businesses and organizations came together to form the Issue Table on Recycling Non-Refundable Single-Use Containers (Issue Table). The members of this group began from the premise that selective collection is an effective means of recovering beverage containers consumed outside the home, and that much could be done to optimize performance.

Given the potential of some 1 000 000 tonnes of recyclable materials generated by the municipal sector, the members of the Issue Table believe that selective collection offers impressive possibilities for improved performance. They believe that in view of its efficiency and potential yield, selective collection offers the best opportunities for meeting the goal of significantly increasing recovery rates of non-refundable single-use beverage containers.

The members of the Issue Table are:

- Danone Naya Waters Inc.
- Nestle Waters Inc.
- La Société des Alcools du Québec (SAQ)
- Canadian Council of Grocery Distributors (CCGD)
- Association des Embouteilleurs de Boissons Gazeuses du Québec (AEBGQ)
- Association des Embouteilleurs d'Eau du Québec (AEEQ)
- Canadian Bottled Water Association (CBWA)
- RÉSEAU Environnement
- Conseil de la Transformation Agroalimentaire et des Produits de Consommation (CTAC)
- Éco Entreprises Québec (ÉEQ)
- The Coca-Cola Bottling Company
- Pepsi-QTG Canada

To provide for the operations of the Issue Table, to carry out the necessary studies and projects and to coordinate their actions, the members set up a fund of \$300,000. The contributors to this fund are:

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- Danone Naya Waters Inc. - \$100,000
- Nestlé Waters Inc. - \$100,000
- La Société des Alcools du Québec - \$60,000
- AEBGQ - \$25,000
(Association des Embouteilleurs de Boissons Gazeuses du Québec)
- AEEQ - \$5,000
(Association des Embouteilleurs d'Eau du Québec)
- CBWA (Canadian Bottled Water Association) - \$5,000
- RÉSEAU Environnement - \$5,000

Gaïa Environnement Inc. was given the mandate of Project Director. Under this mandate, Gaïa Environnement would coordinate the work of the Issue Table, perform the research and analysis required, design, carry out and evaluate the projects selected and prepare reports and recommendations. All documents published by the Issue Table are hosted on the firm's web site (www.gaia-environnement.com).

Results of the Systems Evaluated

Projects conducted for the Issue Table were selected after a search of the most relevant and reliable reference data and a review of current practices in container recycling systems. A summary of this research is presented in the Issue Table's Strategic Action Plan (<http://www.gaia-environnement.com/pdf/GAIA-planStrategique.pdf>).

The information collected led to the development of an initial project consisting of analyzing and evaluating a system already in place (Project I) and of four projects to implement systems adapted to particular contexts (Projects II, III, IV and V). The latter projects were conducted in sectors offering few or no adequate recycling services.

Each project was the subject of a context-specific performance protocol, notably with regard to choice of facilities, collection service and identification of materials (<http://www.gaia-environnement.com/pdf/GAIA-RapportEtape-31juil06.pdf>).

Presentation and analysis of results and projections to larger scales are presented in the detailed Final Report.

PROJECTS CARRIED OUT BY THE ISSUE TABLE IN 2006
SUMMARY EVALUATION OF EFFECTIVENESS

Project	Principal parameters	Results
<p>I Curb-Side Ville-Marie</p>	<ul style="list-style-type: none"> • System already in place in Ville-Marie • 124 Écho-Héritage bins with three openings: fibres, containers, waste • Bins provided by the manufacturer, garbage collection by the city, recycling collection sub-contracted to OSBL 	<p>Potential (fibres and containers):</p> <ul style="list-style-type: none"> • 85% by weight of the 3 sections of Écho-Héritage bins, and 44% by weight of nearby waste receptacles, are recyclable materials. <p>Recovery:</p> <ul style="list-style-type: none"> • 500 to 800 kg per year per container under current conditions. • Up to 1.5 metric tonnes of fibres and containers per year if optimized. <p>Comments:</p> <ul style="list-style-type: none"> • Collection frequency (1/week) not adjusted to need. The bins overflow and recyclable materials are found in waste receptacles. • Signage inadequate (labels ripped off, text instead of pictograms, errors in descriptions of acceptable materials); objects thrown in waste receptacles instead of appropriate sections of recycling bins.
<p>II Metro Terminals AMT</p>	<ul style="list-style-type: none"> • 2 sites • 2 recycling islands per site with three openings: fibres, containers, waste • Côte-Vertu site: islands outdoors • Longueuil site: islands indoors • Collection and maintenance by private contractors (one for recyclables, one for garbage) 	<p>Potential (containers):</p> <ul style="list-style-type: none"> • Côte-Vertu: 2.3 tonnes (34 000 units) / year • Longueuil: 3.7 tonnes (63 500 units) / year <p>Recovery:</p> <ul style="list-style-type: none"> • Côte-Vertu: Recovery of 32% of containers generated • Longueuil: Recovery of 76% of containers generated <p>Comments:</p> <ul style="list-style-type: none"> • The Côte-Vertu terminal is located in a borough where it serves less than 50% of households (Saint-Laurent). • The gap between results at the two sites indicates that communities should be carefully assessed before choosing locations for recycling facilities. • The project shows great potential for the recovery of containers. At the Longueuil site, performance was very close to the <i>Policy's</i> objectives for the ICI sector and higher than the recovery rate for refundable single-use containers, despite the fact that the system was installed in public areas and therefore uncontrolled.

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Project	Principal parameters	Results
<p style="text-align: center;">III Shopping Centre</p> <p style="text-align: center;">Promenades de l'Outaouais</p>	<ul style="list-style-type: none"> • 1 mid-sized shopping centre (164 stores) • 9 recycling islands in food court (2 islands monitored) • 8 recycling bins beside waste receptacles in aisles of public areas (all 8 monitored) • Daily collection and maintenance by shopping centre staff • Collection by private contractor 	<p>Potential (containers):</p> <ul style="list-style-type: none"> • 6 metric tonnes (or 122 000 units) / year <p>Recovery:</p> <ul style="list-style-type: none"> • Average recovery rate of 78% for the shopping centre as a whole, where recycling facilities were present. <p>Comment:</p> <ul style="list-style-type: none"> • Performance recorded during the project's evaluation period (average recovery rate 78%) indicates it is worth expanding to all shopping centres in Quebec.
<p style="text-align: center;">IV Family Type Restaurants</p> <p style="text-align: center;">Pacini</p>	<ul style="list-style-type: none"> • 3 restaurants • Four 360-litre bins per restaurant • Collection and maintenance by private contractor 	<p>Potential (glass containers only):</p> <ul style="list-style-type: none"> • From 2 to 2.5 metric tonnes (4 000 to 5 000 units) / restaurant / year <p>Recovery:</p> <ul style="list-style-type: none"> • Once managers are committed and employees informed and trained, with an agreement to participate and a system in place, 100% of containers can be recovered, <u>well above targets set in the Policy.</u> <p>Comments:</p> <ul style="list-style-type: none"> • Quantities were significant both in weight and number of units. It is therefore highly recommended to set up systems in this type of enterprise.
<p style="text-align: center;">V Storefront Businesses</p> <p style="text-align: center;">Beloeil</p>	<ul style="list-style-type: none"> • 35 clients joined the project - different stores and institutions. • Service integrated into weekly municipal curbside selective collection using 360-litre rolling bins. • Collection by the same private contractor. • Customer service by the collection contractor. 	<p>Potential:</p> <ul style="list-style-type: none"> • Hard to evaluate. Sector too vast. <p>Recovery:</p> <ul style="list-style-type: none"> • Participation rate of 50% of invited stores and institutions. • Once there is a commitment to participate, 100% of containers can easily be recovered, <u>well above targets set in the Policy.</u> <p>Comments:</p> <ul style="list-style-type: none"> • The project proved that a standard offer to supply 360-litre rolling bins with weekly curbside collection service would fill the needs of the vast majority of establishments.

General Observations

- In all locations studied, both public and private, the recycling potential is significant.
- In all locations studied, recovery rates of containers are high, in many cases exceeding targets set in the *Policy*.
- In public places:
 - the proportion of containers is low among recyclable materials as a whole; the real challenge will lie in fibre recovery, since fibres constitute by far the greater part of potentially recyclable materials;
 - when facilities are present, they are used extensively;
 - when no facilities are present or nearby, users throw recyclable materials into waste receptacles instead of taking them home or waiting till they find a suitable facility;
 - when signage is adequate, recyclable materials are correctly placed in the right facilities.
- In private places, where recycling potential can be evaluated precisely, employee awareness and ease of collection are the leading success factors.

Recommendations

1. Simplicity

Access to facilities, ease of use and clear instructions are the keys to success. Recycling facilities should permit the recovery of ALL categories of recyclable materials, using the same approach as that offered to households (separated or pell-mell), with standard signage (pictograms rather than texts).

2. Numerous collection points

Users will not carry their recyclable materials far, if at all, instead disposing of them in the first container they find. It is therefore preferable to provide numerous small facilities instead of centralized islands of large-format containers.

3. Concentration on Targeted Sectors

It is highly desirable for specific sectors to be targeted, so that maximum effort can be devoted to installing and managing effective recovery systems. For each type of location, it is crucial to assess the residual materials present, the type of facilities that would be most appropriate, what means of communication would be most effective, which collection modes are available and how best to compile the results obtained.

4. Universal Reflex

Large-scale public awareness campaigns, like the three-year province-wide campaign planned by public corporation RECYC-QUÉBEC, should include a series of messages on the importance of recycling ALWAYS AND EVERYWHERE. In this way, the reflex created among citizens in the home should continue to operate during activities outside the home. Of course, such a campaign requires that recycling facilities be present, for it will generate increased demand by consumers and users for recycling services.

5. Coordinated Funding

Funding programs for municipalities (the compensation regime for selective collection, landfill tipping fees, etc.) should be harmonized to facilitate financing, and their criteria or modalities should favour the setting up of effective recycling systems, especially in targeted sectors.

6. Optimal Results

Since in the short term it is impossible to serve all locations, decisions to install facilities should be based on the real potential performance of each sector. For example, in sectors where citizens are not served at home, service in public places will not give satisfactory results.

7. Favoured Investments

In Quebec, 34 sorting centres for recyclable materials are in operation, and most are at present underutilized. In recent years, a number of operators have made significant investments to modernize their equipment and to increase capacity for the volumes of recyclable materials that could potentially be recovered. However, some investments are currently suspended. In effect, the revenues of sorting centres are based on the sale of various categories of recyclable materials. The highest prices are for aluminum and PET plastic, two materials used in the fabrication of beverage containers. The possibility that the deposit system could be expanded to an as yet undetermined number of new products has created great uncertainty as to the future earnings of these enterprises, because collections from the deposit system do not go to sorting centres but directly to recyclers. Not only investments but jobs are at risk.

Giving formal recognition to the priority accorded selective collection, and concrete form to the various programs aimed at optimizing it, should help to relieve this uncertainty.

Short-, Middle- and Long-Term Outlook

The table on the following page presents a summary of programs contemplated in the short, middle and long term, the activities planned, the stakeholders involved and the periods targeted.

In the short term, the members of the Issue Table wish to facilitate the setting up of recycling programs in municipalities and businesses similar to those studied. In parallel, discussions are under way with new partners interested in joining the group. Its mission will be quickly redefined and its structure adjusted if necessary.

The Table will also be involved in two long-term programs that will be launched in the Spring of 2007, one being addressed to the owners of restaurants, bars and hotels, the other to municipalities and focusing on recycling in public areas. These programs are

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being developed in partnership with a number of stakeholders interested in optimizing recovery.

RECOVERY OF RECYCLABLE MATERIALS OUTSIDE THE HOME
SUMMARY OF SHORT, MIDDLE AND LONG-TERM PROGRAMS

Horizon	Programs (1)	Partners involved (2)	When
Short term	<p align="center">Program for Large-scale Expansion of the Projects Studied</p> <p>Investment: \$50,000</p> <ul style="list-style-type: none"> • Target clientele: municipalities, restaurant owners (with wine sales), managers of shopping centres • Disclosure of project results and presentation of a Guide to Managing a Recycling Program • Talks to associations, invitations to group meetings 	<p>Issue Table members</p> <p>Notably: - Danone-Naya - Nestlé Waters - SAQ</p>	February 2007 - October 2007
Short term	<p align="center">Issue Table Permanent Staff</p> <p>Investment: to be determined</p> <ul style="list-style-type: none"> • Confirmation of interest among certain new groups • Redefinition of structure (executive and consultative) 	Present and future Issue Table members	January 2007 - March 2007
Middle and long term	<p align="center">Program for Recycling in Hotels, Bars and Restaurants</p> <p>Investment: to be determined</p> <ul style="list-style-type: none"> • Technical and financial assistance to set up and manage recycling • Costs of operations potentially reimbursed by the industry following modalities of the compensation regime for selective municipal collection 	Present and future Issue Table members	April 2007 - March 2010
Middle and long term	<p align="center">Program for Recycling in Public Areas</p> <p>Investment \$3.6 million</p> <ul style="list-style-type: none"> • For municipalities • Funding of recycling facilities in public areas • Costs of operations potentially reimbursed by the industry following modalities of the compensation regime for selective municipal collection 	Recyc-Québec, ÉEQ, CSQ, BGE, Association des Alumineries du Québec, present and future Issue Table members	April 2007 - March 2010
<p>Funding of these programs depends on current conditions being maintained in terms of the financial responsibility of each partner. Should new financial obligations arise for one or more partners, whether legislative, regulatory, administrative or other, the sums implied by these new obligations would be deducted from the program(s) by the partner(s) concerned.</p>			

(1) These programs will be coordinated.

(2) Conditional on certain approvals pending.

SAQ: Société des Alcools du Québec; ÉEQ: Éco Entreprises Québec; CSQ: Collecte Sélective Québec; BGE: Boissons Gazeuses Environnement

In December 2005, the members of the Issue Table decided to devote the necessary resources to demonstrate their belief that the selective collection of recyclable materials is the ideal means of achieving the objectives of the *Quebec Residual Materials Management Policy, 1998-2008*. Since little serious effort had been given to optimizing selective collection, they chose to evaluate the real performance of small-scale systems in types of locations where little or no research had been done.

Concretely, the results of these projects demonstrate that selective collection, meticulously implemented, is an effective means of achieving the objectives of the *Policy*.

The members of the Issue Table have demonstrated the extraordinary potential of an approach based on thoroughness, professionalism and synergy among partners, and have shown in particular how important it is to concentrate on specific, shared, well-defined objectives. Joining with RECYC-QUÉBEC and the Ministère du Développement Durable, de l'Environnement et des Parcs, they intend to continue their efforts. To this end, they have undertaken to set up a variety of programs to improve performance in targeted sectors, in collaboration with numerous private, public and organizational partners. These programs will have short-, middle- and long-term horizons.