

**SOFT DRINK VENDING CONTRACTS
AND
RECYCLING**

TOOLKIT FOR CHANGE

PREPARED BY THE

**COLLEGE AND UNIVERSITY RECYCLING COUNCIL
A TECHNICAL COUNCIL OF THE NATIONAL RECYCLING COALITION**



AUGUST, 2000



Greetings:

Thank you for requesting information about campus recycling and soft drink vending contracts. After researching schools around the country, the National Recycling Coalition's College and University Recycling Council (CURC) has prepared this toolkit. It has been designed to provide information needed to help your campus mitigate the impacts of soft drink vending operations on recycling and waste management efforts at your school.

Enclosed, please find the following:

Sample Wording for Bids

Five areas prospective vendors could address in their bids under the category "Environmental Concerns". We recommend a small point value assigned to this factor as well as an evaluation of bid responses by your school's recycling representatives.

Options to Address Environmental Concerns

A menu of options that prospective vendors can choose from when preparing their bids. By offering this menu approach, vendors have greater flexibility and ability to help your recycling program. Some of these options can be included in your request for bids as minimum requirements which an increasing number of schools have chosen to do.

Cost Analysis of Converting from Aluminum Cans to Plastic Bottles

Calculate the economic impacts of handling vendors' packaging choices. A switch to plastic bottles for instance, could impose additional financial demands on recycling and solid waste disposal operations. This presents the case for receiving financial support to help offset these costs.

Case Study Chart

Findings of nine other schools' efforts to gain contractual support.

Increasingly, soft drink vendors are realizing the promotional benefits of recycling and are beginning to show real support for campus recycling efforts around the country. This toolkit is designed to help you take advantage of this opportunity.

We encourage your feedback about this toolkit, including information about your school's efforts, so we may continue to provide current and useful information in future editions. E-Mail cure@stripe.colorado.edu. Information about college and university recycling is available on CURC's website: <http://earthsystems/org/CURC>. Additional copies of the Toolkit are available to CUI members for \$12 (\$20 non-members). For information about membership and on-line access to this document, contact the National Recycling Coalition (703)683-9025 or visit <http://www.nrc-recycle.org>.

Sincerely,

Jack DeBell
University of Colorado
Purchasing Committee Chair, College and University Recycling Council

PRINCIPLE FINDINGS AND RECOMMENDATIONS

- ❖ Products and packaging associated with the vending of soft drinks, teas, lemonades, and juices have direct financial and environmental impacts to the campus.
- ❖ Campus vending machine contracts are lucrative to vendors because they are often multi-year and exclusive, they substitute more profitable plastic containers for aluminum cans, and they reach a highly desirable audience of young adults.
- ❖ The conversion from aluminum cans to plastic bottles will likely place additional collection, processing, and transportation costs on the campus recycling programs while lowering revenues earned from the sale of recyclable materials.
- ❖ Increasingly, vendors have recognized the need to assist campus recycling programs and have provided a wide range of support- ranging from funding assistance and collection of recyclables, to donated equipment and promotional materials.
- ❖ Schools receiving the highest levels of support for recycling have included support provisions into their vending contracts.
- ❖ Vendors are more likely to provide support when schools acknowledge their involvement and provide positive publicity for vendors' efforts.
- ❖ Support for recycling can be affected by lower-than-expected sales goals or contracted quotas. Projecting realistic sales volumes is recommended.
- ❖ Campus recycling representatives ought to be involved in the planning process for vending contracts as early as possible.
- ❖ A menu of requirements along with options that vendors can choose from helps assure the greatest levels of support for the campus recycling program while providing flexibility to vendors. This menu should be included in your Request for Bids document.
- ❖ A reporting requirement allows the vendor to document its contribution to your campus' efforts.

SAMPLE WORDING FOR BIDS

It is recommended that bids for vending contracts include a section dedicated to recycling. The following is recommended wording for such a section:

Environmental Concerns

The _____ (your school) _____ has established a waste reduction and recycling program whose efforts should be considered when completing bid responses. The recycling program recommends four areas that the successful vendor will be expected to address:

1. financial/operational support for recycling
2. waste reduction
3. recycled product use
4. promotional support
5. reporting

In your bid response, include a plan which addresses the four areas listed above. Background information including minimum requirements and options for additional support is available by contacting _____ (your school's purchasing agent and/or recycling coordinator) _____

OPTIONS TO ADDRESS ENVIRONMENTAL CONCERNS IN SOFT DRINK CONTRACTS

Background

The products and packaging entering the campus from vendors' contracts have direct financial and environmental impacts on the campus.

Soft drink packaging in particular has significant effects on a campus recycling program. While revenues from the sale of aluminum may offset recycling costs, plastic bottles generate considerably less revenue by comparison. Moreover, plastic bottles are likely to place additional collection and processing costs on the campus recycling program.

Support for recycling and waste management should be requested from vendors doing business with the school.

Increasingly, vendors have recognized the need to assist campus recycling programs and have provided a wide range of support. The following information has been compiled from campus recycling programs around the country regarding the kinds and amounts of contractual support they receive from vendors.

It is recommended your school review this list to determine which items should be included as requirements and which should be offered as options that, if committed to by vendors in their bid responses, would strengthen their bid.

Objectives

- decrease the generation of vending related solid waste on campus.
- increase materials recycled on campus
- offset expenses for recycling or disposing of materials generated from vending machines on campus
- establish new mechanisms for promoting campus waste reduction and recycling efforts
- promote companies who support the school's recycling effort

Financial / Operational Support for Recycling

Materials

Relative to soft drink distribution, (your school) accepts the following materials for recycling (*check all that apply and provide this information to prospective vendors*):

- corrugated cardboard boxes
- aluminum cans
- PETE plastic bottles
- HDPE plastic bottles
- glass bottles
- other _____

Options for Vendor Involvement

- provide funding assistance to offset collection and processing costs
- recycle corrugated cardboard from soft drink packaging
- deliver cardboard from vending machine stocking to designated recycling locations
- provide collection containers for at special events/and other campus functions

Waste Reduction

Waste Reduction is a preferred waste management strategy and includes:

- reducing the amount of material used to accomplish a task
- reuse of a product in its original form
- use of a refillable or durable product that results in longer useful life

Options for Vendor Involvement

- offer refillable, (dishwasher-safe) plastic cups
- use button-activated dispensers (rather than paddle-activated) so cups can be refilled
- use in-line flow meters and other inventory control methods so cups can be refilled
- return wooden pallets / reusable plastic pallets

Recycled Products

Recycling is an important part of the solution to managing campus solid waste. However, until companies “close the loop” by using products and packages made from recycled materials, recycling will not fully succeed. Soft drink companies are increasingly able to package in containers made, in part, from post-consumer materials.

Options for Vendor Involvement

- provide paper cups made with post-consumer fiber
- provide plastic bottles which contain post-consumer resin
- provide compostable cups and eatingware if appropriate
- provide post-consumer polyester uniforms and promotional clothing

Promotional Support

Students, faculty, and staff care about a company’s commitment to the environment. Companies can help support the recycling program with promotional assistance. (Your School) has offered to reciprocate by acknowledging _____ company’s contributions and providing logo space on donated equipment (*optional*).

Options for Vendor Involvement

- instruct employees in proper recycling procedures
- donate containers and recycling collection equipment (*specify campus equipment needs*)
- provide promotional items like signs and banners

Options for Reciprocal Promotions (from campus)

- provide logo space on vendor-supplied equipment
- issue press releases and reports which highlight vendor /campus accomplishments

Reporting

A reporting requirement allows the vendor to document its achievement towards any environmental support they have provided. Reports also enable the campus to promote the vendor's involvement.

Options for Vendor Involvement

- Provide a description of in-house efforts undertaken at the local distribution facility and examples of involvement in the off campus community.
- If recyclables are to be collected as part of the contract, what recycling rate was achieved? (Based on what was collected and what was sold)

COST ANALYSIS OF CONVERTING FROM ALUMINUM CANS TO PLASTIC BOTTLES

Use an analysis such as the following to help calculate financial impacts of soft drink container choices. If negative financial impacts are projected, assistance from vendors can help offset those impacts. Remember, there are significant variations among school recycling programs. These variations along with differences in local market conditions, will likely affect the outcome of your analysis. Caution is therefore advised.

Sample Formula

step 1 Determine difference in revenues from recycling beverage containers. You will need numbers of vended cans and bottles on your campus. You will also need to know prices paid per pound (or per ton), for recyclable aluminum and plastic

$$\boxed{\text{number of PET plastic bottles}} \div 17.5 \text{ bottles/pound} \times \boxed{\$/\text{lb (or } \$/\text{ton)}} = \boxed{\text{revenue potential [1]}}$$

(or 35,145/ton)¹

$$\boxed{\text{number of aluminum cans}} \div 33.04 \text{ cans /pound} \times \boxed{\$/\text{lb (or } \$/\text{ton)}} = \boxed{\text{revenue potential [2]}}$$

(or 66,080/ton)²

$$\boxed{\text{revenue potential from PET plastic from box [1]}} - \boxed{\text{revenue potential from aluminum from box [2]}} = \boxed{\text{difference in revenues [3]}}$$

Assuming the above plastic containers are recycled at a price of \$160/ton per year with a recycling value of \$160/ton and an annual revenue potential of \$1,062. The same number of aluminum cans (worth \$1,100/ton) has a revenue potential of \$3,995/year. Therefore, the difference in annual recycling revenues would be \$2,933 less if plastic containers are vended instead of aluminum cans.

step two Consider differences in collection and processing costs resulting from increased amounts of plastic bottles on campus. 20 ounce plastic bottles comprise 75 percent more volume than 12 ounce aluminum cans and may be more costly to recycle.³

- containers (i.e. additional containers and/or larger size) []
 - collection frequency (additional routes, personnel, etc) []
 - processing equipment (i.e. machines for densification) []
 - transportation (i.e. additional trips to and from campus) []
 - other differences in costs (new signage, promotional materials, etc) + []
-
- Change in costs [4]

step three Determine net difference in costs as a result of converting all or a portion of vended containers from aluminum cans to plastic bottles:

$$\boxed{\text{change in revenues from box [3]}} + \boxed{\text{change in recycling costs from box [4]}} = \boxed{\text{financial impact on recycling}}$$

¹ University of Colorado, 11/98

² Aluminum Association, 3/99

³ Washington State University, 5/99

CASE STUDY CHART

College/University	Contact	Type of Contract	Recycling Provisions	Other Notes
University of California San Diego	Krista Henkels khenkels@ucsd.edu	Housing/Dining Services 3 years exclusive with Coke	200 containers \$6,700/yr (5years) for collection labor	19,000 students / 17,000 staff 70% PET : 30% Alum. Noted substantially more time required to process PET
Univ of Illinois / Champaign/Urbana	Tim Hoss tmhoss@uiuc.edu	6 year exclusive with Coke	\$53,000 annually (\$26,000/6 mths) from office Business Affairs based on lost revenues from conversion to PET. Included funds for program development to increase recovery of recyclables being thrown away.	50,000 (total population). 72,000 cases/year. \$1/case fund for student activities. Advise: get realistic sales projections and minimum guarantee. Get funding directly from vendor.
University of Oregon	Karyn Kaplan knowaste@oregon.uoregon.edu	3 year non-exclusive with Coke	Waste tax written into RFB. Provides flat fee based on process costs. Includes \$1,000 for equipment, \$6,000 for labor.	21,000 students. Funds provided have not increased comparable to recovery of materials.
University of Nebraska	Dale Ekert dekart1@unl.ed	12 yr. exclusive with Pepsi. \$24 Mill total to the campus. \$ 1 mill pool of promotional funding available to recycling and other campus groups.	120 collection containers and weekly hauling provided by Pepsi. 30% PET vending machines before- 70% PET now. Ability to retain aluminum vending machines based on public preference.	22,000 students. Coke's bid offered \$8,000. Recycling Comm. involvement. Campus constituencies input sought prior to release of RFB. Established liaison to increase consumer represent. and sales.
Northern Arizona University	Kathy Leonardis Kathleen.Leonardi@NAU.EDU	Campus-wide contract	Surcharge of .05/container = \$25,000 annually to recycling program.	Recommend .08 surcharge for 20 oz. containers to compensate for additional collection/processing costs.
Arizona State University	Patricia Chase patricia.chase@asu.edu	Campus-wide contract (excluding athletics). Pepsi provides containers for plastic	Glass replaced with safer aluminum and plastic at ASU's request.	Vending committee created. Recommends similar committee be created at other schools.
Medical University of South Carolina	Christine von Kolnitz vonkolnc@musc.edu		Requires aluminum can vending only to raise funds for "Aluminum Cans for Burned Children"	
Washington State University	Wayne Gash wcgash@mail.wsu.edu	exclusive contract with Coke for 23,000 cases of 20 oz PET vended /year.	Received \$20,000 for capital assistance plus \$10,000 annually	Analyzed cost/volume differences in PET vs Alum: .007 vs .0035 lbs/unit. PET 75% more volume per unit
University of Kansas	Victoria Silva vms@ukans.edu	10 year exclusive with Coke. Recycling director serves on Coke Partnership Council with other campus administrators and students.	Coke provided 100 PETE bins, recycling info on signs, additional special event bins as needed. Coke provided KU Administration with \$100,000 up front, \$10,000 annually. Administration uses these funds to augment student fee support for campus recycling program.	26,000 students/6,000 staff. Funds were collected/allocated by admin (recycling program had some difficulty accessing). Advise: get involved as early as possible, enlist grassroots committee, plan recycling needs before throwing money at problem after plastic comes to campus.