NYPIRG

NEW YORK PUBLIC INTEREST RESEARCH GROUP

TESTIMONY OF THE
NEW YORK PUBLIC INTEREST RESEARCH GROUP
BEFORE THE JOINT SENATE FINANCE AND
ASSEMBLY WAYS AND MEANS COMMITTEE
REGARDING THE 2013-14 EXECUTIVE BUDGET:
ENVIRONMENTAL CONSERVATION
ALBANY, N.Y.

FEBRUARY 4, 2013

Good afternoon. My name is Laura Haight and I am Senior Environmental Associate at the New York Public Interest Research Group (NYPIRG). NYPIRG is New York's largest consumer and environmental advocacy organization, with 20 offices across the state and tens of thousands of supporters. Thank you for this opportunity to present testimony on the proposed FY 2013-14 Executive Budget.

There are many issues that the Legislature will need to address this year outside of the state budget that will have significant environmental and fiscal consequences for the state of New York. These will include:

- renewing the bonding authority for the State Superfund cleanup program, which expires this year;
- reforms to the state's brownfield cleanup program tax credits, which expire in 2015; and
- funding for renewable energy development in New York, through various programs such as Governor Cuomo's proposed NY Sun Act and Green Bank.

AGENCY STAFFING

We continue to be concerned about the hollowing out of the state agency workforce, in particular those agencies charged with protecting New York's natural resources and the health and well-being of its citizens. Staffing levels at the DEC continue to decline, and are at an all-time low. The agency currently lacks the capacity to carry out many of its statutory mandates, and agency resources have been stretched to the limit responding to Hurricane Sandy and other crises. We need to reinvest in the DEC's professional workforce in order to protect the residents of New York and respond to the ever-increasing natural and manmade disasters as our aging infrastructure crumbles and severe storms become more frequent

FUNDING FOR ENVIRONMENTAL PROTECTION

NYPIRG supports the Governor's proposal to transfer $15 million of the annual unclaimed bottle deposit receipts and any additional revenues collected above FY 2012-13 levels into the State's Environmental Protection Fund (EPF). We were pleased to see modest increases in the executive budget proposal for most of the EPF categories, in particular the Solid Waste category, which includes additional funding for Municipal Recycling, the Pesticide Program, and the Pollution Prevention Institute.

The state's environmental funding needs far outpace the increased funding proposed in the Governor's budget. We encourage the Legislature and the Governor to look beyond this budget fiscal year and put in place long term revenue measures to provide critically needed funding for recycling, water quality protection, pollution prevention, sewage treatment upgrades, parks, and other environmental needs.

One option the Legislature should consider is the "Pennies for Parks" program which would place a 5-cent fee on disposable carry-out bags (S.1670-Grisanti and A.1148-Cahill). This program is being successfully implemented in Washington, D.C., which in the first year saw a 50% drop in paper and plastic bag use and generated over $1.5 million to support the Anacostia River Cleanup Fund.

NYPIRG also supports the Governor's proposal to make the waste tire recycling fee permanent.

FUNDING FOR CLEAN ENERGY

We are pleased that the Governor has expressed such strong support for advancing renewable energy and energy efficiency in New York and look forward to seeing more details about these proposals.

To bolster these efforts, we encourage the Legislature to add an appropriation of $252,800 for a comprehensive, independent investigation into the technologies, infrastructure and policies needed for New York to make the transition to a safe, clean and renewable energy supply. The study, *ReNewYork: The Green Energy Path to Jobs and Prosperity,* would provide key information that can inform the state's future energy planning and help New York move confidently toward a carbon-free and nuclear-free future.

BOTTLE BILL REFORMS

The Governor's proposal contains a number of reforms to the Bottle Bill, including tougher enforcement provisions which are expected to generate $4 million in additional revenue for the EPF in the coming year. While we support stronger enforcement and oversight of this program, we are concerned that some of the proposed changes may have the unintended consequence of suppressing bottle and can redemption.

For instance, the Governor's proposal would significantly reduce the number of bottles and cans that most stores across the state would have to take back, limiting redemption opportunities for consumers. Another provision would allow stores to reject containers if they are not "reasonably clean" – a highly subjective term that could lead to abuse. We also have concerns that some of

the changes may adversely impact bottle and can redemption centers which provide a convenient opportunity for customers to return large quantities of beverage containers.

NYPIRG has been closely monitoring the implementation of the new law, which was updated in 2009. We have found that, in addition to its environmental benefits, the bottle bill has resulted in big benefits for businesses. Today we released two surveys on the bottle bill, which are attached to this testimony. The results of these surveys clearly show that the expansion to bottled water in 2009 went smoothly, and that a further expansion of the Bottle Bill would not only help the environment, but help businesses across the state grow and create new jobs.

In a survey of over 1100 people interviewed while returning bottles and cans at supermarkets, **"Shop Where You Drop: A Survey of Consumer Bottle Return Habits,"** NYPIRG found that most were also shopping at the store (68%). Of these, most said they shopped there frequently (81%), and more than half said that they had chosen that store in whole or in part because of the convenience of its bottle return facilities (57%). These findings suggest that retailers who offer convenient bottle return facilities may be benefiting from New York's Bottle Bill by attracting more customers, in addition to the handling fee they get for each container they take back.

In a separate survey of bottle and can redemption centers in New York State, **"More Bottles, More Jobs,"** NYPIRG found that the 2009 amendments to the Bottle Bill fostered business expansion and job creation within this sector. In 2009, the Bottle Bill was expanded to include bottled water, and the handling fee paid to retailers and redemption centers was increased from 2 cents per container to 3.5 cents. Most of the redemption centers surveyed reported that the number of beverage containers redeemed at their facilities had increased significantly and that the changes had had a positive impact on their businesses. A third of the redemption centers surveyed said they had opened after the new law's enactment, and more than half said they had expanded as a result of the new law. Many had opened up new storefronts, hired additional workers, and increased employee wages and benefits.

A previous survey we conducted in 2010 found that three months after the expanded Bottle Bill went into effect, most retailers surveyed were in full compliance with the new labeling and redemption requirements for bottled water.

The Bottle Bill continues to be New York's most effective recycling and litter prevention program, but it could be even better. While this proposal offers a welcome addition of funding for the EPF, a truly "cleaner, greener New York" would maximize the environmental benefits of the Bottle Bill.

We urge the Legislature and the Governor to make additional reforms to the program that would not only increase recycling and make our communities cleaner, but also bring in more revenue for the state, and help businesses grow across the state – a triple win for New York. These include:

- expanding the definition of "water" to include sugar waters, reducing customer confusion
- requiring a deposit on additional noncarbonated beverages, such as teas, sports drinks, and juices
- increasing the refundable deposit, which would increase return rates

We also recommend amending the law to allow beverage companies that use refillable containers to keep the unclaimed deposits in order to offset the higher costs associated with producing refillable bottles. Since the number of these companies is quite small, this would have a minuscule impact on the overall budget.

Unfortunately the DEC has stopped collecting data on the Bottle Bill since the 2009 amendments went into effect. The most recent report DEC has publicized is from 2006-2007, so we have no information about how the updated program is working, what the redemption rates are, and what environmental benefits have been achieved (i.e. tonnage of plastic, glass and metal recycled). We believe it is critically important for the longterm success of this program to resume collecting and publishing these data.

In addition, we believe there is a significant amount of underreporting of beverage sales and redemption in New York. A greater investment in DEC staffing to monitor and enforce the program could yield substantial financial gain as well as better compliance with the program.

In conclusion, the Bottle Bill is first and foremost an environmental measure. We urge the Legislature to continue to improve the program and not to make any changes to the Bottle Bill that would make it harder for people to redeem bottles and cans. The whole point of the program is to encourage recycling.

Last but not least, there are two items that were not included in the proposed Executive Budget and that we do NOT want to see in any final budget agreement.

NO FUNDING FOR FRACKING

The state's environmental review of high-volume horizontal hydro-fracturing (fracking) has not been completed, and we're far from a final product that adequately acknowledges the dangers posed by this invasive industrial process. To date, the state has not conducted a legitimate Health Impact Assessment, instead opting for a limited review that falls far short of what medical and public health experts are calling for. Until the health impacts are truly understood, the state cannot possibly be in a position to move forward with fracking. It would be inappropriate to include money related to this controversial natural gas extraction method in the budget unless those monies are specifically dedicated to conducting a comprehensive Health Impact Analysis. We urge the Legislature to refrain from including any projected revenues from the extraction of natural gas through fracking in the budget. Also, the State should not dedicate funding to issuing drilling permits or otherwise ramping up fracking activity in New York.

NO MORE DELAYS ON DIESEL EMISSION REDUCTIONS

Another item that we urge the Legislature to keep out of this budget is any further delay in implementing the "Best Available Retrofit Technology" (BART) requirement of the New York State Diesel Emissions Reduction Act of 2006 (DERA). According to the Clean Air Task Force, New York ranks second in the nation in terms of negative health impacts from diesel pollution; including respiratory diseases, heart attacks, premature deaths and numerous other health problems monetized at nearly thirteen billion dollars annually in health damages. Heavy diesel engines also emit the majority of black carbon, a powerful climate-warming agent. The DERA law requires state-owned or contracted heavy diesel vehicles and equipment covered by the law to meet modern emissions standards or be retrofitted with a device - such as a diesel particulate

filter - that reduces harmful pollution. This law should have been fully implemented by the end of 2010, but during the past two budget cycles, the Senate majority has pushed to delay implementation of the law. The final budgets in 2011 and 2012 both delayed implementation by an additional year. This law is now scheduled to go into effect by the end of 2013. The technology is available. Much of it is made right here in New York by companies like Corning and the law includes a waiver provision in the event that no suitable retrofit device is available for a particular application. NYSERDA has even developed CleanDieselClearinghouse.org, a website that makes it easy to find the appropriate emissions-reducing device for any vehicle or piece of equipment. It is time for the Legislature to stop kicking the can down the road. We urge you to keep any further delays to this important public health law out of the 2013-14 budget.

Thank you for this opportunity to testify today. I would be happy to answer any questions.

Attachments:

Shop Where You Drop: A Survey of Consumer Bottle Return Habits, NYPIRG 2013

More Bottles, More Jobs: A Survey of Redemption Centers in New York State, NYPIRG 2013

More Bottles, More Jobs

A Survey of Redemption Centers in New York State

By Laura Haight, Elizabeth Moran, Amanda Carpenter, Lainie Lucas, Joseph Stelling, and Christina Cross

Summary

The New York Public Interest Research Group (NYPIRG) conducted a survey of bottle and can redemption centers across New York State to explore how the 2009 revisions to the New York State Returnable Container Act, commonly known as the Bottle Bill, have affected these businesses. Survey results indicate that the revisions to the Bottle Bill, which included an expansion to bottled water and an increased handling fee, have led to the expansion of redemption facilities, job creation, and the opening of new businesses. These results suggest that expansion of the state's Bottle Bill to include additional beverages has the potential to create further growth in the bottle and can redemption sector.

Introduction

Enacted in 1982, the New York State Returnable Container Act, commonly known as the Bottle Bill, requires a 5-cent refundable deposit to be placed on eligible beverage containers. The program originally covered beer and soda sold in New York and was later expanded to include wine coolers. The law requires retailers who sell covered beverages to accept any empty containers back of products that they sell and refund the deposits. The law also requires beverage distributors to compensate retailers for the cost of collecting and recycling empty containers by paying them a small handling fee per container. In 2009, the law was expanded to include bottled water, and the handling fee was increased from 2 cents, which it had been set at since 1997, to 3.5 cents.

Over its 30-year history, New York's Bottle Bill has proven to be a highly effective means of diverting these containers from the waste stream, significantly reducing litter and increasing recycling rates. Between 1983 and 2007 (the most recent year for which the N.Y.S. Department of Environmental Conservation has reported statistics), the Bottle Bill achieved an average redemption rate of 73.1%, more than triple the rate of New York's curbside collection programs.[i]

While the environmental benefits of the Bottle Bill have been well-documented, less heralded have been the program's job creation benefits. The Bottle Bill created an estimated 5,000 new jobs in New York in the year after it went into effect, mostly in the retail sector to handle bottle and can returns.[ii] In addition, the handling fee required under the Bottle Bill spawned a cottage industry of entrepreneurial bottle and can redemption centers, where people can take back unlimited quantities of empty containers purchased from any location. Most of these redemption centers are small businesses, although some are run by nonprofits. In addition, many supermarkets have registered as redemption centers, offering customers the convenience of returning all their bottles and cans, even those products that are not sold there.

By the time the Bottle Bill was updated in 2009, many of the independent redemption centers were struggling to survive and some had been forced to shut down, as rising labor, space and utility costs eroded their slim profit margins while the handling fee remained stagnant at 1997 rates. It was anticipated that some of the changes made to the Bottle Bill in 2009, particularly the expansion to include additional beverage containers and the handling fee increase, would improve the economic viability of redemption centers and encourage more such facilities to open. The purpose of this study was to explore the impacts of the 2009 Bottle Bill updates on small redemption centers in the years immediately following the expansion.

Survey Method

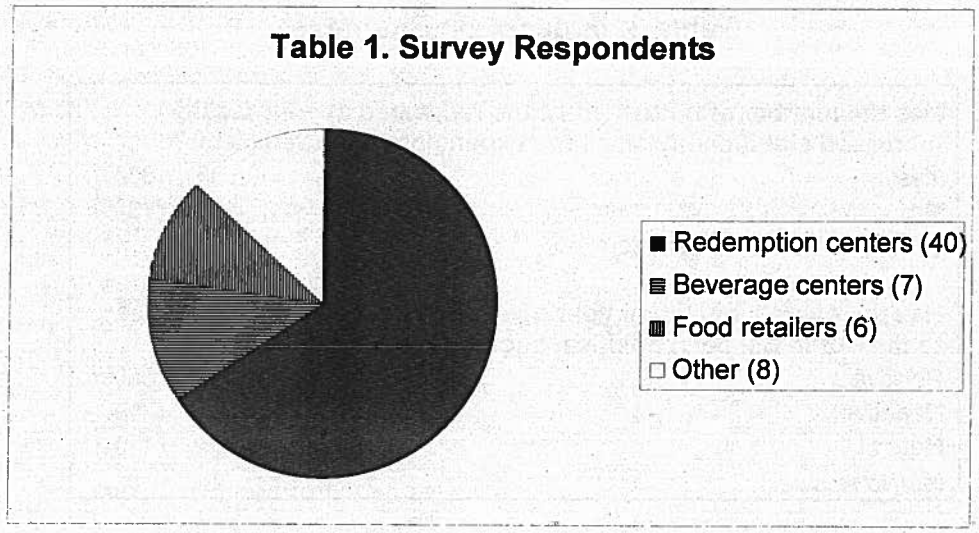
The N.Y.S. Department of Environmental Conservation (DEC) provided NYPIRG with a list of 842 registered redemption centers as of December 8, 2010. That list was then pared down to eliminate duplicate records and large supermarkets, as well as redemption centers for which insufficient contact information was available. Between December 20, 2010 and April 8, 2011, surveyors attempted to contact, via telephone, the 605 remaining redemption centers and conduct a standardized phone survey. Survey respondents were asked a variety of questions, including whether or not redeeming beverage containers was their primary business, how long their facility had been redeeming bottles and cans, and the impacts the recent changes to the law had had on their business. Respondents were also asked if they had any problems complying with the new law. In total, 61 telephone surveys were completed.

Results and Discussion

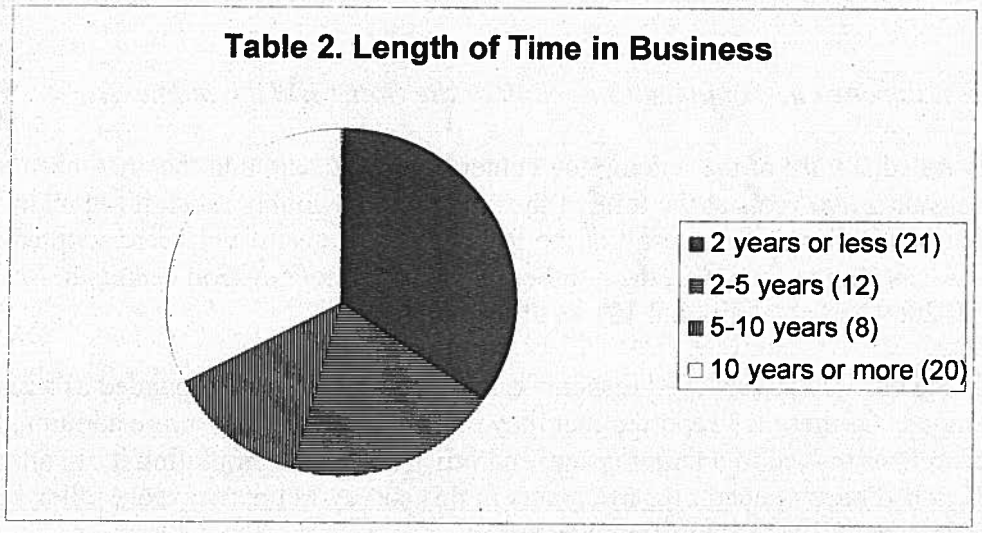
Description of Survey Respondents

Of the 61 survey respondents, 40 (66%) reported that bottle and can redemption was their primary business activity. Of the remaining 21 registered redemption centers, seven were beverage centers, six were convenience stores, delis, or small grocery stores, and the remaining 8

respondents represented a wide range of other activities (including non-profit groups, trucking companies and a racetrack) (Table 1).



A large portion of the respondents (34%) reported that their redemption centers had been operating for two years or less. Many of these indicated that they had opened up their businesses in response to the 2009 changes to the Bottle Bill.



Recent changes to the Bottle Bill have had a positive impact on redemption centers

Respondents overwhelmingly indicated that the 2009 updates to the Bottle Bill had a positive impact on their businesses. 88% of the respondents who had been in business prior to the 2009 revisions going into effect reported that the number of bottles and cans redeemed at their facilities had increased significantly due to the expansion to bottled water (Table 3). The same

percentage reported that the overall impact on their business from the recent changes to the Bottle Bill had been positive.

Table 3. Impacts on Business

Has the number of bottles and cans redeemed at your facility increased significantly since the expansion to bottled water?		
Yes	35	(88%)
No	5	(13%)
NA (open less than two years)	21	
Has the overall impact on your business from the recent changes to the Bottle Bill been positive, negative, or neutral?		
Positive	50	(88%)
Negative	1	(2%)
Neutral	6	(11%)
NA/No Answer	4	

Interestingly, there was little difference between respondents for whom redemption was the primary activity and the other survey participants. The vast majority (90%) of respondents who primarily redeemed bottles and cans reported that the changes to the bottle bill in 2009 had a positive impact on their businesses. However, 83% of the other respondents, including most of the beverage centers and food retailers surveyed, also indicated that the changes had been positive.

Many businesses opened or expanded as a result of the Bottle Bill amendments

As previously noted, a third of the redemption centers surveyed said that they had been in business for less than two years at the time of the survey. Presumably most, if not all, of these facilities were opened directly as a result of the Bottle Bill updates, which were adopted in March 2009. According to the DEC, the number of registered redemption centers in New York grew by 113 in 2009 and an additional 131 as of October 2010.

Nearly half of the businesses surveyed responded that their facility had expanded as a result of the recent changes. Of these, 13 reported that they had opened up one or more additional redemption centers or moved to a larger space, and others were contemplating it. In all, at least 39 new facilities had been opened by participants in this survey in the two years following the 2009 amendments, counting the start-up businesses.

Table 4. Business Expansion

Has your facility expanded as a result of the recent changes?		
Yes	26	(49%)
Planning to	4	(8%)
No/not yet	23	(43%)
NA	8	

The 26 respondents who replied positively to the question about expansion were further questioned about job creation and employee benefits. Of this group, 14 indicated that they hired additional employees, adding at least 40 new jobs (Table 5). Eleven respondents said they raised employee wages, and six increased employee benefits such as health insurance.

Table 5. Job Creation and Employee Benefits

Hired additional workers			Increased employee benefits			Raised employee wages		
Yes	14	54%	Yes	6	23%	Yes	11	42%
No	7	27%	No	16	62%	No	10	38%
NA	5	19%	NA	4	15%	NA	5	19%

While the survey sample size is too small to extrapolate potential job growth throughout the redemption center and retail sectors in New York, the results certainly indicate positive job growth and economic development as a result of the changes made to the Bottle Bill in 2009.

More improvements needed

The final survey question offered respondents an open-ended opportunity to provide comments on the nature of any problems they encountered complying with the new law. Two thirds of the respondents said they had had "no problems." The outstanding concerns were split evenly between "redeemer confusion" – customers bringing back containers for refunds that are not currently covered under the Bottle Bill (such as juice bottles, iced tea, and sugar waters) – and problems with beverage companies, distributors, and third-party entities regarding pick-ups of empty containers and payments of handling fees.

Conclusion

The findings of this survey suggest that the 2009 revisions to the Bottle Bill have benefited redemption centers. Within the first two years, the Bottle Bill updates resulted in new businesses opening up, expansion of existing businesses, new jobs being created, and additional benefits for employees. More follow-up would be required to determine whether this early growth has been sustained, and whether some of the problems encountered by redemption centers with beverage companies, distributors and third-party entities have since been resolved. However the survey results do indicate that a further expansion of the Bottle Bill to include additional beverage containers would foster additional job growth and small business development in New York, while enhancing recycling opportunities.

New York Public Interest Research Group
February 4, 2013

[ii] Beverage Container Deposit and Redemption Statistics (for 10/1/06-9/30/07). New York State Department of Environmental Conservation. www.dec.ny.gov/chemical/8500.html

[ii] *The New York Returnable Beverage Container Law: The First Year*, Report of the Nelson A. Rockefeller Institute of Government to the Temporary State Commission on Returnable Beverage Containers, March 1985.

Shop Where You Drop

A Survey of Consumer Bottle Return Habits

By Joseph Stelling and Laura Haight

Summary

The New York Public Interest Research Group (NYPIRG) surveyed people at retail outlets across New York State regarding their practices while redeeming bottles and cans under the New York State Returnable Container Act, commonly referred to as the Bottle Bill. Survey results showed that the majority of respondents shopped frequently at the same location where they were returning beverage containers. Respondents also overwhelmingly chose to visit that specific retail location partially or mainly due to the convenience of the bottle return system offered by the retailer. In addition, survey results showed that the vast majority of respondents either returned beverage containers while shopping and/or running other errands, or used methods of transportation (foot, bike, mass transit, etc.) that resulted in no additional fossil fuel consumption to bring their beverage containers to the store. Overall, the results suggest possible benefits to retailers who offer a convenient bottle return system and strongly contradict an argument that has been made by some industry opponents that bottle deposit laws lead to increased fossil fuel use and air emissions as a result of consumers returning bottles and cans to the store to recover their deposits.

Introduction

Passed in 1982, New York's Bottle Bill requires a 5-cent refundable deposit to be placed on certain beverage containers sold in New York. Consumers pay a deposit to retailers at the time of purchase and recover their deposit when they return beverage containers to redemption locations such as retailers that sell covered beverages. Over the thirty year history of the Bottle Bill in New York, the system has proven to be a highly effective means of diverting such containers from the waste stream, preventing litter and increasing recycling rates. Between 1983 (the year New York's Bottle Bill went into effect) and 2007 (the most recent year for which the New York Department of Environmental Conservation has reported statistics), the Bottle Bill achieved an average redemption rate of 73.1%, with additional containers being captured by curbside programs.[i]

Despite the Bottle Bill's strong track record, bottle deposit systems have been criticized by opponents seeking to block or repeal bottle bills in New York and other states. One criticism levied by Bottle Bill detractors involves the notion that bottle deposit systems result in additional fossil fuel use and harmful emissions stemming from consumers making separate trips just to return beverage containers. Also, detractors have made claims that the Bottle Bill is burdensome to grocery stores because they have to take back beverage containers from people who aren't shopping at their stores. The goal of this survey was to assess the validity of these common criticisms by looking at consumers' bottle return habits at locations with dedicated bottle return areas.

Survey Method

From October through December of 2011, volunteers gathered survey responses at 96 different retail locations across New York State from 1107 individuals who were in the process of redeeming deposits on beverage containers. Surveyors asked a brief series of questions about respondents' bottle return practices, and recorded their answers in a standard response form for analysis. The results of the survey are descriptive statistics calculated from the collective survey responses across all survey locations and respondents. All survey locations were retail stores (grocery stores, big box stores, etc.) that had a dedicated bottle return area, such as an array of reverse vending machines (RVMs) or a bottle return window.

Results and Discussion

Tables 1 and 2 outline the cumulative responses of survey participants, who were asked a slightly different set of questions based on whether or not they were shopping at the retail location during their visit.

Table 1 - Respondents shopping at location during visit

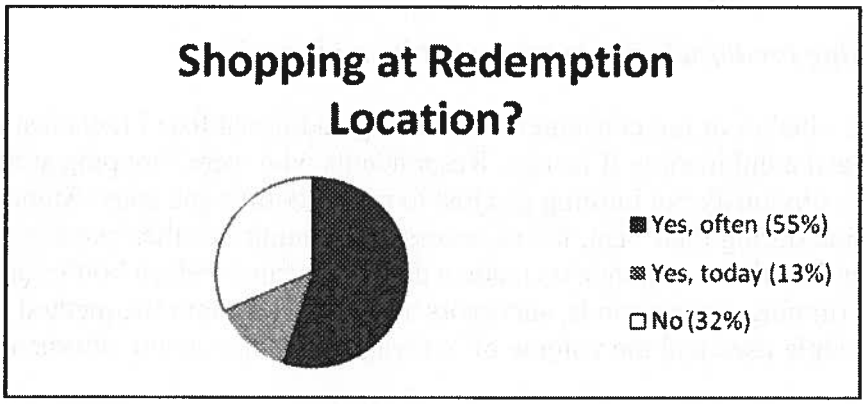
Shopping here today?		Shop here often?		Chosen for convenient return system?	
Yes	756	Yes	609	Yes or Partly	429
		%	80.6	%	56.7
% of total respondents	68.3	No	147	No	327
		%	19.4	%	43.3

Table 2 - Respondents not shopping at location during visit

Shopping here today?		Dedicated Trip?		Method of travel?		Large Quantity (≥72 containers)?		Chosen for convenient return system?	
No	351	Yes	220	Foot/bike/Mass transit	208	Yes	182	Yes or Partly	262
		%	62.7	%	59.3	%	51.9	%	74.6
% of total respondents	31.7	No	131	Car	143	No	169	No	89
		%	37.3	%	40.7	%	48.1	%	25.4

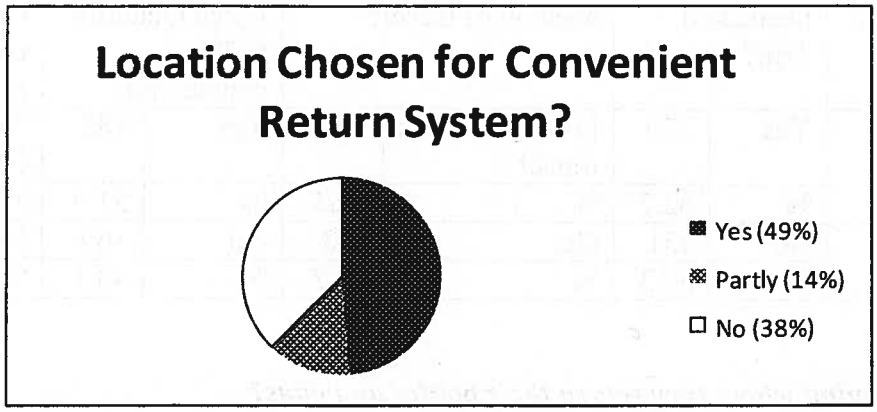
Are consumers shopping where they return their bottles and cans?

We can see from the results in Table 1 that a majority of survey respondents (68.3%) were also shopping where they returned their bottles and cans. Of these, the vast majority (80.6%) indicated that they shop at that location often.



Are consumers visiting a retail location because of the retailer's convenient return system?

Both shoppers (Table 1) and non-shoppers (Table 2) were asked about whether or not they chose to visit the particular retail location where they were interviewed based on the convenience of the bottle return system offered on the premises. A majority (56.7%) of those that were shopping at the retail location as well as returning bottles and cans said that the convenience of the bottle return system on the premises was partly or fully responsible for their choice to visit that location. Not surprisingly, roughly three-quarters (74.6%) of those who were at the location exclusively to return bottles and cans indicated that they had chosen the location because of the convenient return facilities. In total, 62.4% of all survey respondents indicated that the convenient return system offered by the retailer was fully or partly responsible for their choice to visit that location.

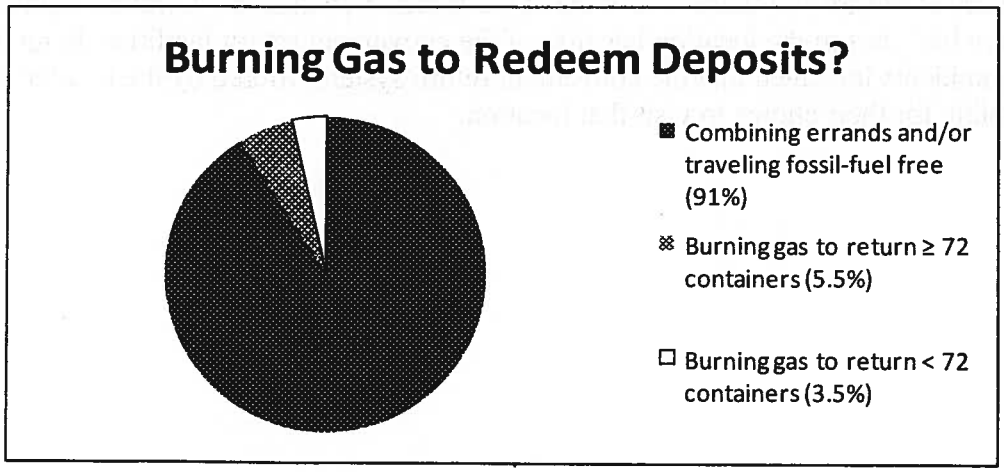


The combination of the facts that (1) the majority of survey respondents shopped at the location where they were returning their bottles and cans, and (2) a majority of respondents identified the convenient return system as a reason for visiting that location, suggests that these retailers may have benefited from offering a convenient bottle return system by attracting additional customers.

Are consumers burning fossil fuels just to return bottles and cans?

In order to determine whether or not consumers were using additional fossil fuels just to return bottles and cans, we looked at a combination of factors. Respondents who were shopping at the location during their visit were obviously not burning gas just to return bottles and cans. Among those not shopping at the location during their visit, it was necessary to inquire further into their activities. In addition to asking whether those respondents made a dedicated trip to return bottles and cans or if they were simultaneously running other errands, surveyors also inquired about the method of travel (foot, bike, car, bus, etc.) people used and the volume of beverage containers being returned.

The results showed that consumers were not wasting fossil fuels or creating additional air emissions to return their bottles and cans. Only 9.1% of survey respondents indicated that they had used an automobile exclusively to return beverage containers, and the majority of those respondents were maximizing the benefit of using their automobile by returning a large volume of beverage containers during their visit. The remainder of those surveyed were shopping at the location during their visit (68.3%), running additional errands (11.8%), or traveled by foot, bike, or mass transportation (10.7%). In fact, just 3.5% of all respondents indicated that they had used an automobile exclusively to return less than 72 beverage containers.



Conclusion

The results of this survey show that the majority of respondents were shopping where they returned their bottles and cans, and chose that particular retail location fully or in part due to the site's convenient bottle return system. This suggests that, in addition to being paid a handling fee for each container they take back through the Bottle Bill, retailers who offer a convenient return system may also be benefitting from the Bottle Bill by attracting additional customers.

In addition, the survey found that most trips to return bottles and cans were combined with shopping or other errands. Of the survey respondents who were making dedicated trips to return beverage containers, only 9% took a car, and of these, most were returning large volumes of beverage containers. These results dispel the notion that bottle deposit systems that require consumers to return beverage containers to retail outlets result in a significant increase in greenhouse gas emissions. This could be further demonstrated through an analysis of the Bottle Bill returns, which far exceed that statewide average recycling rate of 20%. Recycling metal, glass and plastic rather than using virgin materials saves significant amounts of energy and reduces greenhouse gas emissions.[ii]

New York Public Interest Research Group
February 4, 2013

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[i] Beverage Container Deposit and Redemption Statistics (for 10/1/06-9/30/07). New York State Department of Environmental Conservation. www.dec.ny.gov/chemical/8500.html

[ii] Beyond Waste: A Sustainable Materials Management Strategy for New York State. New York State Department of Environmental Conservation. Dec. 27, 2010, p. 19. http://www.dec.ny.gov/docs/materials_minerals_pdf/frptbeyondwaste.pdf