sanitation
Jessica S. Tisch Commissioner

Testimony of
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New York City Department of Sanitation

Hearing before the
New York City Council Committee on Sanitation & Solid Waste Management

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Oversight: The State of NYC Recycling
Intro. 494 – A Study on Single-Use Plastics

Good afternoon, Chair Nurse and members of the City Council Committee on Sanitation and Solid Waste Management. My name is Jessica Tisch, and I am Commissioner of the New York City Department of Sanitation. I am joined today by Gregory Anderson, Deputy Commissioner for Policy and Strategic Initiatives, and Bridget Anderson, Deputy Commissioner for Recycling and Sustainability. Thank you for the opportunity to testify this afternoon on recycling in New York City.

First, I want to discuss a related topic – organics. In just two weeks on October 3, DSNY will roll out weekly collection service for leaf and yard waste, food scraps, and food-soiled paper to *every household in Queens*. The single-largest expansion of a composting program in New York City history, and soon to be the largest composting program the country.

It's also the simplest and easiest organics program we have ever rolled out. All Queens residents – from single-family homes to garden apartments to high-rise condos – will have weekly collection service. Queens residents can check their collection schedule at nyc.gov/dsny. The night before your collection day, you can put your yard and leaf waste in a paper or plastic bag or the bin of your choosing. If you set out food waste, you can do so in a brown composting bin or use your own bin with a lid. Order a free brown bin by October 1 at nyc.gov/curbsidecomposting, or just get a sticker to use your own bin. *It's that easy.*

The best part is that many Queens residents already separate their leaf and yard waste, we're just asking that they put it out on a different day. And separating food scraps into containers with lids will fight rats and help clean up our streets, closing down the all-you-can-eat buffet that has allowed rat populations to thrive.

As I've said before the next time we roll out an organics program must be the last. We have spent the last month laser-focused on creating a successful foundation for this program. We have more than 80 staff daily in the field going door-to-door to educate residents and encourage them to participate. And we've delivered 15,000 new brown bins, with thousands more on the way. I am confident that New Yorkers will participate in this new program.

We are also excited to be working toward another important goal – waste containerization. Today, we have expanded our clean curbs pilot to three boroughs, and we are well on our way toward our goal of having clean curbs installations in all five boroughs by the end of the year.

However, this is a small step toward this goal. We are also advancing a citywide study of waste containerization, funded in the Fiscal Year 2023 adopted budget. We expect this study will be completed in the first half of 2023 and will provide a comprehensive blueprint for rolling out waste containerization in a uniform, adaptable, and scalable manner across New York City. This approach will be a game changer for our public spaces – reducing rat populations, cleaning up our streets and improving the pedestrian experience in our neighborhoods.

Now I'll turn to the topic of today's meeting – recycling.

First, a little background.

New Yorkers have been recycling for more than a hundred years. In the nineteenth century, rendering plants, scrap dealers, and an informal network of rag and bone pickers ensured that most usable discards were given a new life. In the early 20th century, during the world wars and Great Depression, New Yorkers used and reused products out of a sense of civic duty, necessity, or both. By the 1960s, however, rapid economic changes made products both cheaper and more disposable. Recycling all but ceased to exist. Everything went together into one trash chute – often to an incinerator in the building's basement – or into one trash can at the curb.

Our modern recycling programs were born out of the environmental movement of the 1970s and 80s, beginning with grassroots efforts to collect recyclable products like cans and newspapers at the neighborhood level. The City instituted its first recycling program in 1985, collecting old newspapers in Greenwich Village, before expanding to other neighborhoods and material types. Local Law 19 of 1989 codified the City's mandatory curbside recycling program and is the foundation for the program we have today.

While that program has been through ups and downs over the last 33 years, including a suspension of glass and plastic recycling during the economic crisis that followed 9/11, the program we have today is strong.

Today, DSNY collects two recycling streams: (1) metal, glass, plastic, and cartons in the blue bin and (2) paper and cardboard in the green bin. Last fiscal year, we collected 616,000 tons of these recyclables from New Yorkers, diverting these items from landfill and helping to create new products.

But to truly understand this program and talk about "the State of NYC Recycling," we have to answer two questions: What actually is recycling? And is it working?

The first seems relatively easy. You "recycle" your soda can when you put it in the blue bin at home, at work or at school. But it's not so simple. That soda can is not actually recycled until it gets made into a new product – part of another soda can or a roll of aluminum foil. From the time you put your soda can in the blue bin, there are several more steps along the way. Building staff have to make sure the cans and bottles from your apartment stay separate in the trash room and when they're put out at the curb. And DSNY has to pick it up separately, using dedicated compartments or trucks.

Then, once it has been collected, the thousands of tons of recyclables each day have to be sorted to further separate them into their component parts and to remove contamination – non-recyclable trash that shouldn't be there in the first place. This separation is a crucial step. The City and its recycling processors have invested hundreds of millions of dollars into state-of-the-art facilities and technology to sort out different kinds of plastics, metals and glass into more than a dozen different categories. This technology includes advanced robots that identify types of plastic and pluck them off a conveyer in a fraction of a second and optical sorters that use machine learning to refine their capabilities over time. It also includes the other end of the spectrum – dozens of workers manually sorting out contaminants before the products get bailed for sale to manufacturers.

Creating these high-quality, low-contamination commodity bales is critical for the next step: sale. Recyclable products have to compete with virgin materials as inputs in the global supply chain. They are subject to the same economic forces that affect the cost of other raw materials, and their value fluctuates alongside the cost of oil and raw steel, with new global trade policies, and with the rising and falling tide of the world's economy.

Only once the soda can has been separated, collected, sorted, bailed, sold, and remanufactured into a new product can it be truly considered recycled.

The second question is more complicated. Recycling is working in New York City, in that waste products that New Yorkers separate get turned into new products each and every day.

At our last hearing in June, I used the example of paper products, which I'll repeat here. Thanks to our long-standing partnership with the Pratt Industries paper mill on Staten Island, when you throw a newspaper in your green bin in Manhattan today, it will be barged to Staten Island to become a pizza box sold in Brooklyn next week. That's recycling at work.

But we can do more. Of all the paper and cardboard in the waste stream, we only capture about 51% of it in the green bin, according to our 2017 waste characterization study. For metal, glass, plastic and cartons, that figure is 48%. That means nearly half of everything that could be recycled ends up in the trash.

These capture rates drive our overall diversion rate. Recyclables make up about one-third of the waste stream. So, with recyclables alone the best diversion rate we could achieve would be 33%. For Fiscal Year 2022, the curbside diversion rate was 17%. But it could be better.

We are working to improve recycling rates in several ways. First, we offer our zero waste building maintenance training program to train building staff on best practices for how to recycle and improve building operations. This program also offers a peer-to-peer network for building supers and porters to share what works in different building types and conditions.

DSNY also conducts communications campaigns on social media and in community media outlets to reinforce recycling messaging and remind residents what *should* and *should not* go in the recycling bins. We work with our partners at DOE to train the next generation of New Yorkers on zero waste practices, including recycling and composting. And we use enforcement as a tool to encourage behavior change and better compliance with recycling laws.

The City is also taking a major step forward in commercial recycling through the implementation of the commercial waste zones program. This will close a regulatory loophole that allowed private carters for too long to refuse to collect recyclables, and we project it will nearly double the commercial diversion rate, from 25% to more than 44%.

Legislation

Now, I'll turn to the bill on today's hearing, Intro 494, sponsored by Chair Sandy Nurse. This bill would require DSNY, in coordination with the Departments of Consumer and Worker Protection, Department of Environmental Protection and Mayor's Office for People with Disabilities, to conduct a comprehensive study of new policy initiatives that would reduce the sale, distribution and use of single-use plastic items and advance environmental justice through the reduction of such items.

The City has taken a leadership role on reducing single-use plastic items for more than a decade. In 2019, we implemented a far-reaching ban on polystyrene foam products, including plates, cups and packing peanuts. Given New York City's size and economic position, this ban influenced the larger market and pushed some national brands to phase out foam products entirely. It has since been replicated by New York State, New Jersey, and other jurisdictions around the country.

We have implemented a ban on single-use plastic bags and five-cent fee on paper bags at retail stores, which have reduced the amount of single-use bag waste in New York City. And we are working to implement the plastic straw bill, which we will begin to enforce in November.

Each of these restrictions on single-use plastics has taken effect since the completion of our 2017 waste characterization study. Our next waste characterization study, under way now, will be an important opportunity to evaluate the impacts of these policies to inform future planning. We look forward to discussing with the City Council how to align these studies and reduce single-use plastics.

Conclusion

Thank you for the opportunity to testify on this important topic and for your continued support as we work to create a clean, safe, healthy, and sustainable City. I am now happy to answer any questions.

OFFICE OF THE BROOKLYN BOROUGH PRESIDENT

ANTONIO REYNOSO
Brooklyn Borough President

City Council Committee on Sanitation & Solid Waste Management
Oversight hearing: The State of Recycling in NYC 9/20/22

Good afternoon Chair Nurse and members of the committee, and thank you for giving me the opportunity to speak today. I appreciate you holding a hearing on this important issue, because the fact is, the state of recycling in New York City is discouraging.

Increasing our diversion rate from landfill helps the city by reducing greenhouse gas emissions from landfills and waste trucks; keeping plastics out of our environment, especially our oceans, waterways, and storm drains; and it saves the City money. Yet while our current diversion rate of approximately 17% is higher than the national average (which is about 5-6%), it's still lower than some other US cities, such as Los Angeles, which diverts about 60% of its waste. Not to mention other countries like Germany, which has a national diversion rate of about 70%. New York City always strives to be the national example, but in this case, we are falling short.

For too long, our recycling capabilities have been dependent on global markets, a problem that was exacerbated by China ending its international purchasing of recyclables in 2018. In response, we need a new, comprehensive set of innovative policies that not only help us recycle more, but also address the creation and dissemination of single-use plastics before they ever reach the recycle bin. Intro 494 will help us get there by finding the right policies that will work for our city.

That said, we already know some other solutions that we can start implementing today. These include:

- **Pass Intro 559:** aka the "Skip the Stuff" bill, which would create an opt-in mechanism for single-use plastic utensils, napkins, and condiments from restaurants, food delivery apps, and online delivery platforms. So many of these items are immediately thrown away, especially when people can eat at home with their own reusable utensils. I hope to see this bill get a hearing in the Committee on Consumer and Worker Protection soon.

- **Enforce the plastic bag ban:** As Chair of the Sanitation Committee in the previous two terms, I was proud to champion ridding our city of plastic bags. However, earlier this year, a report in City Limits found that limited education and enforcement efforts have hampered implementation, especially within smaller businesses, where cost is a concern. The City should continue to do public outreach and education about the policy, including giving away reusable bags.

- **Prioritize recycling in the implementation of Commercial Waste Zones:** I was concerned to learn that before RFP responses were finalized, DSNY implemented a last-minute change to the requirements giving more flexibility to the pricing differential between recycling and refuse. I am hopeful that this has not disincentivized respondents from submitting robust waste diversion plans, and encourage DSNY to place a high priority on proposals that will push our commercial recycling efforts forward.

- **Pass the Zero Waste bills:** The bills heard at June's Sanitation Committee hearing, including Intros 274 and 275 on the City's zero waste goals, Intro 280 on establishing community recycling centers in every community district, and Intro 244 requiring universal curbside organics collection, would be transformative. I was pleased to see the recent expansion of curbside organics collection in Queens, but will continue to push until we have a citywide, mandatory program that runs year-round.

- **Support State policies for Extended Producer Responsibility and a Better Bottle Bill:** As I mentioned, we must work on curbing plastic waste at its source. Especially as more people are ordering delivery, regulating packaging is becoming more critical. One of the reasons Germany has such a robust diversion rate is that the country has had strong regulations requiring producer responsibility for packaging waste since 1991. Governor Hochul has called for a statewide EPR policy, but ultimately it was not included in this year's budget. Additionally, an updated Bottle Bill that expands the types of beverage containers covered and increases the deposit amount would improve what's called "New York's most successful recycling program."

I know these are just a few of the many potential policies that our City and State can implement to improve our recycling rate, keep these harmful plastics out of our landfills and waterways, and promote environmental justice for our communities. I appreciate your time today and look forward to working with you on these efforts and more.

STATEMENT OF THE NATURAL RESOURCES DEFENSE COUNCIL
BEFORE THE NEW YORK CITY COUNCIL
COMMITTEE ON SANITATION AND SOLID WASTE MANAGEMENT
REGARDING
THE STATE OF RECYCLING IN NEW YORK CITY

September 20, 2022

Good afternoon, Chair Nurse and Members of the Committee. My name is Eric A. Goldstein, and I am the New York City Environment Director at the Natural Resources Defense Council ("NRDC"). As you know, NRDC is a national, not-for-profit organization, active on a wide range of issues around the nation, across the globe, and in New York City, where we have had our main offices since our organization's founding in 1970. For decades, one of NRDC's top regional priorities has been to transform trash-handling here from primary reliance on landfilling and incineration to making waste prevention, recycling, composting and equity the cornerstones of a more sustainable, 21st century trash policy.

I am pleased to be here today to testify at this important oversight hearing and to support Intro 494, which would require the Department of Sanitation -- in consultation with other city agencies -- to undertake a comprehensive study identifying ways to reduce fossil-fuel based, impossible-to-recycle single-use plastic items.

I. Recent History of New York City's Recycling Program

In 1989, the New York City Council passed landmark legislation to jumpstart citywide recycling in the nation's largest city. Local Law 19 required the Department of Sanitation to designate materials that New Yorkers had to separate for recycling, to collect those materials at curbside, and to ensure that by the end of the program's fifth year, the Department was collecting at least 4,250 tons per day of the City's residential and institutional trash for recycling (which was estimated to be 25% of the Department-collected waste at that time). The law also included a similar mandate for the collection of recyclables generated by restaurants and businesses and collected by private carters. Then-City Council Speaker Peter F. Vallone called the recycling bill "one of the most significant pieces of legislation in the history of the city." And then-Mayor Ed Koch's Sanitation Commissioner, Brendan Sexton, who ultimately supported passage of the legislation, told the New York Times: "We are going to recycle like crazy."

Things haven't quite worked out that way. Over the years, budget cuts, rule changes, suspension of recycling collections, inefficient public education efforts and variations in enforcement confused residents and dampened participation. As a result of these and other factors, including often tepid City Hall support for the program, the Department's recycling collections did not grow to reach the levels established in the 1989 statute. Even today, more than three decades after passage of the law, the tonnage requirements set forth in the 1989 law are not being achieved. The residential

recycling rate remains under 20 per cent. (In fact, according to the recently released FY'22 Mayor's Management Report, the residential recycling rate declined from 18 per cent in FY'18 to 17 per cent in FY'22.) And with respect to the commercial waste stream, we simply lack the data to determine with accuracy how much recycling, if any, private carters have been able to achieve.

II. Why Care About NYC's Recycling Rate?

Of course, 17 per cent recycling is not nothing. (And the actual percentage would certainly be higher if we had data to add in the tonnage of beverage containers being recycled, under the separate, New York State-mandated Returnable Beverage Container law.) We thank the Sanitation Department men and women who have been collecting these recyclables for their good work. And we are proud of the operations of Sims Recycling on the Sunset Park waterfront and the Pratt Industries paper recycling facility on Staten Island.

But we are nowhere near maximizing the potential of this sensible strategy.

Some may say, "So what?" "Why care whether the city boosts recycling rates, or even recycles at all?" Here are three reasons:

First, there's the issues of environmental protection and environmental justice. The City's failure to meet even modest recycling goals means that, even 33 years after the passage of Local Law 19, the overwhelming bulk of the city's trash is exported to landfills (the 3rd largest source of climate-destroying methane emissions in the nation) and incinerators (a major localized generator of air pollutants). Making matters worse, both landfills and incinerators are too often located in Black and brown communities (like the Essex County incinerator in Newark, New Jersey -- where much of Manhattan's waste is sent every day).

Second, the economic impacts of these export policies are detrimental to taxpayers. Tipping fees at the out-of-city landfills and incinerators are high. And the city is spending nearly ½ billion dollars every year to send waste to these environmentally troublesome operations.

Finally, by exporting waste and not building up recycling and composting operations, the city is missing the opportunity to create good-paying, blue collar jobs for New Yorkers.

III. Seven Steps to Boost Recycling in New York City

Here are seven steps the City Council and the Department of Sanitation can and must take to improve on what has been accomplished and enhance the contribution that recycling can make to the city's environmental and economic health:

- Enact Universal Curbside Composting Legislation, Intro 244 – Food scraps and yard waste are the single largest portion of the residential waste stream. But the overwhelming bulk of these organics is now sent to incinerators and landfills. That's crazy. Intro 244 -- spearheaded by Councilmembers Shahana Hanif, Sandy Nurse and 31 other co-sponsors – would direct the Department to establish a curbside organics collection operation. Passage of this bill is the single most important step the Council can take to boost recycling levels in the city. Meanwhile, we appreciate the intent of the Adams Administration to advance curbside composting in Queens, which is set to begin next

month. But we are nervous about key aspects of the program. We are concerned that not enough has been done to educate Queens residents on the why and how to separate organics, about policies involving the distribution of bins, and about the planned suspension of organics collection during the winter months and how that start-and-stop approach will affect participation over the long term. In short, this latest Queens effort is no substitute for mandatory, citywide curbside organics collection legislation, which we urge the Council in the strongest possible way to advance without delay.

- Focus on Recycling & Composting When Awarding Commercial Waste Zone Contracts – Local Law 199 of 2019 promises to transform commercial waste handling by dividing the city into 20 waste zones and directing the Department to award no more than three contracts per zone to private carters who meet specified criteria. One criterion that Commissioner is obligated to consider when awarding waste zone contracts is the carters' plans "to support waste reduction, reuse and recycling among commercial establishments within the zone" and "for offering organics collection services to a broad range of establishments within the zone…." To boost commercial recycling, the Department must give significant weight to these criteria when reviewing waste zone bids.

- Advance Waste Prevention Policies, Starting with Passage of Intro 559 – Waste prevention and reuse are at the top of the New York State Solid Waste Hierarchy set forth in the State's Solid Waste Management Act of 1988. This strategy appears even above recycling as the state's preferred trash-handling method. Yet while City officials have often talked about waste prevention, much more can be done. One place to start is for the Council to enact Intro 559. With 27 co-sponsors, led by Councilmembers Velasquez and Bottcher, this bill would direct restaurants and other food service establishments to provide take-out items such as plastic utensils, plates, and cups, as well as ketchup, mustard, and other condiments, only "upon request." In addition to cutting back on millions and millions of unwanted handouts, this reform would save eateries several thousand dollars every year in reduced operating costs.

- Ensure Full School System Recycling and Provide Recycling Services to NYCHA Residents – We were pleased to hear Sanitation Commissioner Tisch testify at a previous hearing as to the Administration's commitment to have separate composting collections at every city school building by September 2023. We hope that this schedule holds and that the city's commitment also includes making every school a Recycling Champion school; in its FY'24 budget, the Council should ensure sufficient funding to GrowNYC, which has successfully run the Recycling Champions program, to make this happen. As for recycling at the New York City Housing Authority, this Committee's most recent hearing wisely focused on those problems. While NYCHA management faces many significant challenges, the agency is the city's largest landlord and should comply with the city's recycling law by providing its residents with the same opportunity to recycle that all other city apartment dwellers are entitled to receive. Solving the waste-handling, recycling, and related rat infestation problems at NYCHA developments will take continuing, aggressive City Council oversight.

- Strengthen Recycling Public Education – Apple, Google, Ford and Toyota are very well-known established consumer brands. But every year, they spend tens of millions of dollars (probably more) to build brand awareness and educate the public about the benefits of their products. Here in New York, residents continue to move into the city from across the country and indeed the world. They speak dozens of different languages. They and many other New Yorkers are unfamiliar with the details of the city's recycling program and how to participate. The Department needs to undertake an ongoing, crowd-tested public education program that explains how and why to recycle if we don't want to continue misdirecting half of our recyclables to landfills and incinerators.

- Step Up Recycling Enforcement for both Residential and Commercial Waste – Enacting new statutes is necessary, of course. But, ultimately, enforcement of the law is what really counts. And when it comes to enforcing requirements for participation in recycling programs, government efforts have been inconsistent. On the residential side, enforcement should not be punitive, but reasonably applied along with ongoing public education efforts. But according to the just-released 2022 Mayor's Management Report, the number of summons issued for recycling violations declined from over 84,000 in FY '18 to just over 32,000 in FY '22. COVID-19-related considerations can justify some, but certainly not all, of this precipitous fall-off. An enhanced DSNY enforcement effort is necessary to deal with the shortcomings in residential recycling participation and boost the capture rate of designated recyclables. At the same time, there has been little if any enforcement of commercial recycling rules. Swift implementation of Local Law 199 of 2019 is needed to establish commercial waste zones with contracts that require stepped-up separation and collection of recyclables.

- Enact Intro 494 and Develop a Plan to Slash Single-Use Plastics in NYC – Single-use fossil-fuel based plastics present environmental problems at every stage of their existence – from extraction, to manufacture, to transportation, to disposal. They overwhelmingly end up in polluting landfills and incinerators or as litter on our streets, in our parks or along our waterways. With fossil fuels expected to decline as a motor vehicle fuel over the next decade, the oil and gas industry views the manufacture and sale of single-use plastics as a growing profit center. But less than 10 percent of plastics are being recycled. And industry forecasts project that the manufacture of single-use plastics will double over the next twenty years. If the city wants to have any chance of achieving its Zero Waste goals, it should jump-start a new campaign to slash environmentally problematic single-use plastics by enacting Intro 494. (As we have previously testified, another thing the Council should do is to enact a resolution opposing State legislation that would green light "chemical" or so-called "advanced recycling" – techniques that are unproven, pollution-generating and supported primarily by the oil and gas industry and their financial allies and beneficiaries.)

Thank you, Chair Nurse and members of the Committee, for your leadership on these important issues. We look forward to working with you to boost environmentally sensible and economically preferable strategies for recycling in New York.

Draft 2 Written City Council Sanitation Testimony on State of Recycling 9-20-22

Maggie Clarke, Ph.D.
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I am Maggie Clarke, Ph.D. I am speaking as chair of the Manhattan Solid Waste Advisory Board's long range planning committee. As well I have been on the National Recycling Coalition's Board of Directors for almost 10 years, and on the New York State Association for Reduce, Reuse, and Recycle (legislative committee) for over 25 years and the Manhattan SWAB almost 30 years.

The State of Recycling in New York City is mixed, with some successes but many issues that must be addressed to have a successful recycling program. While NYC is successful at offering recycling to all residents including in big apartment buildings, we fail at educating and motivating all residents to recycle. Only half of our recyclable materials are diverted for recycling and half is exported, at great environmental and economic cost, to landfills and incinerators. And since 34% of the waste stream has been designated as recyclable, capturing only half leaves us with a 17% diversion rate. The national diversion rate is double this. On the west coast diversion rates are often 60 or 70%.

Our goal should be to capture 100% of recyclable materials. In order to do this everyone must participate all the time. To achieve this we must have a clear understanding of what motivates and interferes with everyone recycling all the time. Behavior science tells us that the readiness of people to participate ranges from eager beavers, who need only information to participate to those who are hostile and everything in between. Most people require motivation. Participating must be convenient, and thankfully, we have curbside collection. But other people require that friends, family and neighbors participate to feel comfortable doing it. Others require monetary or other incentives, and those who are hostile would participate only if sufficient disincentives are present (fines or other punishment). DSNY education approaches focus mainly on the eager beavers. Yet the City was successful in motivating many to get vaccinated by addressing all the aforementioned groups. Much more money was spent on this effort than the small sums allocated for recycling every year.

.In addition to correctly designing educational materials and approaches to reach all the readiness types of people, it is known that different people receive information differently. This varies with demographics. Some read brochures, others won't, but will watch TV or listen to radio. Some get it from their kids in school or subway ads. Social media works for some. We must use all these approaches consistently, just as the advertising industry does to get people to buy their products.

We need to understand the readiness of our population to participate, quantify how we are encouraging and discouraging participation. We don't measure participation rates here but we should be, across demographics and across the City. We should also survey the population to understand New Yorkers' attitudes and motivations to participate in recycling.

Finally, in order to have well-designed and well-implemented education and outreach, it must be funded sufficiently. The City has never funded this adequately, and has done things that discourage New Yorkers from participating. Starting and stopping or cutting back on programs has caused our diversion rate to suffer over the years. We cannot keep doing this. And we should look to model cities to see how to optimize our education and motivation programs. Seattle and San Francisco fund their programs at over $3 per person per year. Austin funded its program at $1 per household per Month and achieved about 90% participation. New York City has been spending 86 cents per person per year. It's no wonder our capture rate is so poor.

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How can public participation be redesigned, understanding what constitutes a successful set of approaches?

The capture rate for recyclables has been only 50% for a very long time. This indicates the need for improvement, since to reach Zero Waste, 100% program participation, collection, processing and marketing are necessary. As a result the City's diversion rate from export to disposal at landfill and incinerators is less than 20%.

How to optimize diversion rate? Participation, which we don't have figures for in New York City), is related to Capture Rate (percent of targeted materials collected). The City has collected capture rate data by district per month for many years. Across the 59 community districts the capture rate ranges from less than 25% to 60% for the recycling program. This is a metric that must rise towards 100% as educational programs improve.

Studies to bolster participation

A first step in improving participation is to better know the population's knowledge, attitudes and motivations for or against recycling. I've conducted surveys (2 pages filled out in person) for my Ph.D. dissertation in the mid-1990s and from 2003 to 2005[1] and have published reports on them. One of many facts learned in 2004-2005 is that 60% of the respondents didn't recycle every time because they either forgot or were confused. Clearly the City's recycling education program needs improvement.

If we are serious about zero waste, participation rate for recycling and other zero waste programs must also be near 100%. If we are not planning ways to achieve that, we will not reach zero waste. There are west coast cities that have achieved near and over 75% diversion rates. We should be learning from them. The Mayor recently said he wanted to learn from other cities (like Chicago / crime). More details on model cities are described below.

In addition to research, the City Council and new Mayor need to remediate the damage done from various stops and starts and generate positive feelings towards recycling. Universal curbside collection and maximized convenience as well as sufficient, well-designed education and outreach for the recycling/organics program are required for maximized participation and therefore, optimal cost/benefit for recycling/organics collection. The MSWAB offers its expertise to review draft educational materials and program design, and partner with DSNY on perfecting these as we did prior to 1993.

Strategy for Maximizing Public Participation in Government Programs -

a. There are several steps for individuals to transition from nonparticipation to participation. Ignoring any in the education/outreach process reduces participation
b. understanding that the population has 5 components, and each needs a separate educational approach
c. different demographics get information on programs in different ways; these must be addressed d. multi-prong educational campaign program design (optimize and implement all approaches - print, media, social, peer ads, bribes, convenience, enforcement),
e. campaign elements consistently applied and optimized (one and done doesn't work - the advertising industry spends billions and repeats and changes messaging to change behavior), f. public participation pilots (to test, tweak and optimize what works),
g. attention to having pilots in districts with the range of housing densities in the City (single-family to ultra dense high rises),
h. sufficient funding with City Council direction to DSNY to ensure that education and enforcement are done effectively.

All of these are described in more detail, below.

The Keys to Increasing Public Participation: Behavior change / educational programs: Important themes:

A. Changing behavior involves a number of steps and educational programs need to address all of these, and programs and educational materials should be designed to succeed in getting everyone to continue to participate.

[1] Optimizing recycling in all of New York City's neighborhoods: Using GIS to develop the REAP index for improved recycling education, awareness, and participation
Optimizing Recycling in All the Neighborhoods of New York City: The Roles of Demographics, Education, Barriers, and Program Changes

Awareness of the program	**Comprehension** of program purpose and elements	**Motivation** to participate	**Attitude** towards recycling	**Intention** to participate	**Convenience** and ease, of participating	**Continuing** to participate

If any of these steps is not optimized, the job of the educational program is not done and participation rate will suffer. The percentage of materials captured will suffer. The City's programs have focused on the first two with its brochures and occasional media or subway campaign, but not so much on motivating or changing attitudes of those who are questioning, disinterested or resistant. And those who had a bad experience recycling will cause them to not continue to participate.

We learned that when the City creates negative feelings towards its recycling program (as it did in 2002 when glass and plastic recycling stopped for 1-2 years), the diversion rate suffers long-term. By 2001, 8 years after recycling began, the diversion rate had reached 21%. Today, almost 30 years after recycling began, we are only around 18%. The SWABs and the City Council all warned the City in 2002 that canceling the recycling programs would cause permanent damage to participation rates. Causing negative feelings against your recycling program is at odds with motivating and changing attitudes, and is the opposite of what is needed. The previous Mayor made the same mistake in 2020 canceling the organics collection program as it was growing steadily, and it is likely, based on previous experience, that attitudes will sour and the participation rate will suffer long-term. Funding for zero waste programs must be consistent in order to reach Zero by 2030 or close to it.

B. The universe of people is divided into 5 groups in terms of readiness to participate. To be effective, all educational programs and materials must be targeted to achieve high participation rates in all of these 5 groups. Each requires a different set of educational and programmatic approaches to reach them successfully. These groups are:

1. those who are eager to do the behavior change,

2. those who will do it if it's convenient and won't cost them time or money,

3. those who will do it if their peers (friends, family, neighbors) are doing it,

4. those who will only do it if they receive monetary incentives, and

5. those who will only do it if it will cost them (e.g., money, job, freedom) not to do it.

Readiness to participate

Eager Beavers	**If Convenient**	**If Peer support**	**Need Bribes**	**Most Resistant**

Eager Beavers: Tell them what to do, and how to do it, and if it's possible, they will participate.

Convenience: For recycling participation this means curbside collection on a sufficiently frequent basis. It also means that the program has to be easy to follow.

Peer support: To participate, people in this group need to be assured that members of its demographic group, neighborhood, family and friends are participating. In the NYC Covid-19 vaccine campaign, TV ads featured people of different ethnic and demographic groups, including various immigrants, pregnant mothers, young men, among others who changed their mind and explained why they now wanted to participate (get the vaccine). NYC's recycling program would

greatly benefit from funding to create a similar, multifaceted campaign. Ad campaigns have infrequently been used by DSNY. One memorable TV recycling ad in the late 1990s included Mayor Giuliani and Yankees manager Joe Torre – opinion leaders for some. But the City rarely has had TV and radio ads to encourage recycling participation.

Incentives: As resistance to behavior change increases, mere knowledge, convenience, and peer acceptance of a program are insufficient to convince the last two groups. In the vaccine campaigns free metrocards and even $100 cash were offered to members of this group. Nothing has been offered to incentivize participation in recycling in New York City. In many thousands of cities and towns the equitable system of billing (Pay as you Throw) incentivizes residents to participate by charging for waste management based on weight, while allowing recyclables to be picked up for free. As recently as a couple of years ago the City had planned to study "Save as you throw" and even had RRS subcontracted to SERA (the experts in Pay as you throw), and then suddenly pulled out. In 2000 USEPA Region II put on a day-long conference in part to encourage NYC to use Pay as you throw, to no avail. In 1997 a $250,000 grant from NYSERDA was about to be awarded to independent researchers, to build and test in NYC, infrastructure to measure the weight of garbage using scales and barcode reading systems to be installed in chutes and studied in apartment buildings. NYSERDA knew that the technology was likely sound, but needed to know that there would be a market for such a PAYT infrastructure for apartment buildings, so they asked DSNY to attend a meeting. Unfortunately, DSNY would not and the grant was never awarded. USEPA has data going back decades demonstrating how PAYT is the single most effective means of incentivizing program participation. The City should be researching how to accomplish Pay As You Throw in apartment buildings and phasing it in, at first in single-family neighborhoods and eventually to more densely packed housing districts.

Most Resistant/Hardest to reach: When bribes don't work, then the last resort is providing sufficient disincentives for continuing to not adopt the new behavior must be employed. In the vaccine campaign, we saw people losing their jobs, and similar. The City has not done a good job of enforcing its mandatory participation requirement. With half the recyclables still in the trash, it should be very easy to find bags of garbage with recyclables. Fines is the only mechanism that the City has at its disposal to disincentivize not participating, but it must be done sufficiently and equitably across the city and the different housing types. Apartment buildings should be fined as often as single-family homes and universities and other institutions. Enforcement records and fines (who/when/how much) should be available online through NYC Open Data and in studies so that all can see how effective the program is and how it needs to be improved. Adequate funding must be provided to allow for increased enforcement.

The Example of Covid-19 Vaccinations vs. NYC recycling education campaigns:

What forms of education and outreach are best suited to motivating each of the above groups to participate? The Department of Health campaign to overcome vaccine hesitancy/resistance is instructive.

This agency's outreach was designed for each of the five groups. It would be Very useful to compare the individual elements of the DOH campaign vs. DSNY's campaign over a year's time including costs. We are usually flying blind not knowing this kind of data. A study of the Department of Health's $140 million campaign to overcome Covid vaccine hesitancy/resistance [1] would be instructive since both are attempting to change behaviors in the entire population. DOH has been deploying outreach designed for each of the five "readiness to participate" groups and the TV ads are frequent and varied. It would be very useful to compare the individual elements of the DOH's advertising campaign to DSNY's campaign over a year's time including costs. In addition, it would be instructive to measure the cost of the DOH giving incentives to participate and the effectiveness of their disincentive program (e.g. threatening jobs etc). More recently it has been reported that a study was made showing vaccination rate by borough and by race/ethnicity in order to target future motivational efforts. In addition, 2600 City government workers have been fired for not getting vaccinated.

NYC's motivation campaign to get people vaccinated should be very similar in structure and approach to the campaign to motivate an increase in participation in recycling. But because the two programs do not address all 5 kinds of people (less and more resistant to behavior change requests), both campaigns have not been equally successful at convincing those who are hardest to convince. Vaccinations have been made convenient, located in many places; curbside collection is the most convenient for recycling, but DSNY persists in the opt-in program and dropoffs which are only convenient for those in the most already motivated to recycle. The vaccination campaign uses a wide variety of people and their stories of

learning/accepting behavior change in their TV ads to effect peer encouragement; the recycling education campaign hardly addresses this. The vaccination campaign bribes New Yorkers with transit cards, $100, etc; the recycling campaign does not pay New Yorkers to recycle. The vaccination campaign requires vaccination to travel, to work, to go to school, etc taking jobs etc from those who refuse vaccination; the recycling campaign has a badly enforced program with low penalties for not recycling. If the City were to design, fund, and implement the multi-prong, targeted approaches for curbside collection that the vaccination campaign has done, focusing on resistant individuals, to increase recycling participation, more would participate and costs would go down.

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[1] City health department has spent nearly 140m on vaccine advertising

It would be instructive for the City Council to fund a study showing how much does the City's vaccination behavior change campaign cost NYC compared with the recycling education campaign and what each achieved in participation rate. How many ads have been on TV, radio, etc per month? How have the ads varied? How specific is the targeting? What is the advertising budget for each element and which media are used? How many staff are required? How much does it cost to set up and maintain vaccination locations, how much to bribe people to get vaccinated? What could be done better? We need these kind of data to design effective programs.

By contrast to the Covid-19 outreach strategies, DSNY applies a one size fits all approach. This approach, using a single brochure, will not work except to those inclined to participate (the eager beavers group). Those who are more resistant have not been reached. Those who are more resistant need to be reached with additional targeted outreach, marketing and incentives. If we are only reaching those most ready to participate, we should not be surprised that the capture rate is rarely above 50%. We can look to the more successful approaches taken to encourage New Yorkers to get vaccinated for Covid-19. That strategy targeted outreach and incentives to all of these groups.

To be effective, educational programs need to reach all demographic groups. Different demographics get their information from different sources. Some read (brochures, newspaper articles, websites). Some get their info from TV and radio. Others get info from their children learning it in school and bringing it home. Some hear from friends and neighbors. Some get info from subway ads and billboards. Some use Google. And as the advertising industry shows us (e.g Liberty Mutual, Geico), repetition and variety of the message using different approaches is what works, not one and done. DSNY must not only have adequate funding but should design and implement a multi-approach, consistently applied, targeted approaches to education. Since DSNY's approach usually focuses on print and having information on its website (not a convenient means of imparting information to the vast majority who are not seeking it out), the capture rate is only half effective, only reaching those who are most interested in recycling to start with. Funding should also be provided to conduct more research/survey studies to get to know more about NYC residents' preexisting attitudes regarding recycling and the impact of barriers to participation on them. Decades of chronic under-funding has caused great damage to the program's participation.

Historical insufficient funding for public education/ participation program

The City's underfunding of recycling has been a hallmark of recycling education and outreach since the beginning due to misunderstanding the role and importance of participation in reducing costs and lack of political will to have a high participation goal. In the 1990s recycling was threatened with cancellation more than once on the basis of the per ton cost of collection being so high. But DSNY did not understand that in order to fill the trucks and make the economics work, everyone needs to participate all the time. In order to have that there must be sufficient, targeted outreach. We spend 86 cents per capita per year. Both Seattle and San Francisco spend over $3 per capita per year. Since DSNY is only reaching those most ready to participate, we should not be surprised that the capture rate is rarely above 50%.

Can we compare New York City to other cities' effective curbside recycling and organics collection programs?
How can we know how much funding is needed to address all the types of people and housing density districts? We can

compare collection routes in New York City with other jurisdictions that have the same types and range of housing density districts. There are many that fit the bill. It is easy to envision a small district of ultra dense housing in both San Francisco and New York City. We should be looking at those large jurisdictions that are successfully diverting a large majority of recyclables and organics from disposal. If there are collection truck routes in dense urban areas, smaller apartment districts, brownstone districts and single family homes, say in San Francisco, we can learn lessons from those. It's best to compare the efficiency and design of NYC programs with successful, zero waste cities that have the same range of housing density districts as NYC (ultra high rise, mid-, low- level apartments, brownstones, duplexes, single family), for example San Francisco, Seattle, Toronto, Vancouver.

San Francisco has had a 3 bin program (trash, mixed recyclables and organics) for well over a decade, sending the latter to a vast composting site in the Valley and shipping compost to the vineyards up north. If the demographics are similar in those districts, the programs should be similar. We should be looking at those large jurisdictions that are successfully diverting a large majority of recyclables and organics from disposal. If there are collection truck routes in dense urban areas, smaller apartment districts, brownstone districts and single family homes, we can learn lessons from those. It's best to compare the efficiency and design of NYC programs with successful, zero waste cities that have the same range of housing density districts as NYC (ultra high rise, mid-, low- level apartments, brownstones, duplexes, single family), for example San Francisco, Seattle, Toronto, Vancouver.

Model Cities for Recycling education. If we are serious about reaching zero waste, we need to plan ways to target, in program and other initiatives, and capture and appropriately recover close to 100% of what we discard; participation rate must also be near 100%. There are model cities that have achieved near and over 75% diversion rates and aggressively working towards zero waste. We should be learning from them. The Mayor recently said he wanted to learn from other cities (e.g., Chicago / crime).

We can study the stellar example of Austin, TX which succeeded in achieving 85-95% participation by increasing funding for educational programs to $1/household/month (which is roughly $5/person/year). This was done in combination with a Pay as you throw program, USEPA endorsed, as the best incentive program to motivate residents to dispose of less and reduce, reuse and recycle more. We should be striving to do likewise. Underfunding of recycling participation enhancement programs over many years has kept our diversion rate below 20% and roughly half the recyclables are exported as trash.

As of 2019 both San Francisco and Seattle spent over $3/person/year on education programs and staff and have achieved far greater diversion rates than NYC, closing in on zero waste. They have collected organics and recyclables for many years and divert most material from disposal. NYC, by comparison, spends 86 cents/person per year. (Interviews conducted by Manhattan Borough President's office in 2021) These two cities have 70- 80% diversion rates compared with ours (17-18%). You get what you pay for.

Pay As You Throw (Incentive) - a wise path for New York City

Unlike their counterparts in many thousands of other localities large and small, New York City residents do not pay directly for garbage collection. Everyone pays the same no matter how much they dispose of. The cost is buried in the tax structure. It's an inequitable system that does not reward conservation behaviors. New York City was recently planning to spend $1 million to study their branded "Save As You Throw", a billing system which would financially reward prevention, reuse, and recycling behaviors. Since the 1990s USEPA has recommended this system as the single most effective method to incentivize public participation. The first step should be to fund the delayed study of Pay as You Throw, design and conduct pilots for different housing density neighborhoods, and then roll it out in the single-family areas, gradually moving to more densely populated neighborhoods.

Comparisons: In 2019 both San Francisco, and Seattle spent over $3/person/year on education programs and staff and have achieved far greater diversion rates than NYC. They have collected organics and recyclables for many years and divert most material from disposal. NYC, by comparison, spends 86 cents/person per year. (Interviews conducted in 2021) These cities have 70- 80% diversion rates compared with ours (17-18%). You get what you pay for.

The Example of Covid-19 Vaccinations vs. NYC recycling education campaigns: NYC's motivation campaign to get people vaccinated should be very similar to the campaign to motivate an increase in participation in recycling. Both programs want behavior change for the entire population. But because there are 5 kinds of people (less and more resistant to behavior change requests), both campaigns have not been equally successful at convincing those who are hardest to convince. Vaccinations have been made convenient, located in many places; curbside collection is the most convenient, but DSNY persists in the opt-in program and dropoffs which are only convenient for those in the most accepting of recycling. The vaccination campaign uses a wide variety of people and their stories of learning/accepting behavior change in their TV ads to effect peer encouragement; the recycling education campaign hardly addresses this. The vaccination campaign bribes New Yorkers with transit cards, $100, etc; the recycling campaign does not pay New Yorkers to recycle. The vaccination campaign requires vaccination to travel, to work, to go to school, etc taking jobs etc from those who refuse vaccination; the recycling campaign has a badly enforced program with low penalties for not recycling. If the City were to design, fund, and implement the multi-prong, targeted approaches that the vaccination campaign has done, focusing on resistant individuals, to increasing recycling participation, more would participate and costs would go down.

How much does the City's vaccination behavior change campaign cost NYC compared with the recycling education campaign? How many ads are on TV, radio, etc per month? What is the advertising budget, which media are used?, How many staff are required? How much does it cost to set up and maintain vaccination locations, how much to bribe people to get vaccinated? How does this compare to the campaign to encourage recycling behavior?

Mandatory is more effective than voluntary (opt-in) or dropoff collection programs. Unlike their counterparts in many other localities, New York City residents do not pay directly for garbage collection. New Yorkers would only benefit indirectly by their participation in recycling. New York City was once planning to study Save As You Throw, an equitable billing system which rewards prevention, reuse, and recycling behaviors. Since the 1990s USEPA has recommended this system as the single most effective method to incentivize public participation. Since incentives are not in place and no direct benefit accrues to New York recyclers, mandatory compliance proves effective over voluntary participation. A 1979 U.S. Environmental Protection Agency study found that 50 percent of mandatory programs had participation rates equal to or exceeding 50 percent. The National Solid Waste Management Association, in a study of 26 voluntary and 13 mandatory programs, found average voluntary participation to be 34 percent and average mandatory participation to be 55 percent.

How to optimize diversion rate? Participation is related to Capture Rate (percent of targeted materials collected). Across the 59 community districts the capture rate ranges from less than 25% to 60% for the recycling program. It is far less in those districts where organics are collected. This is the metric that must rise towards 100% as educational programs are targeted towards different groups as to their readiness to participate..

Diversion rate (percent of all discards diverted from disposal) should not be confused with capture rate. Diversion rate is the main metric for overall evaluation of a program's success and progress towards zero waste.

Other Recyclables. The City has sometimes hired vendors to collect textiles at dropoff sites (e.g. Wearable Collections), but has never collected used textiles and clothing curbside; it's always been the less convenient drop off or opt in programs. DSNY's waste characterization studies should make clear which other recyclable and reusable items should be targeted. And its almost 30% "Other" category should be studied so that we know specifically what is included there.

Conclusion

It is clear that in order to optimize the effectiveness and economics of our recycling programs, participation is key. Continuing to export half of our recyclables for disposal is irresponsible from the point of view of the environment and climate change. The City's recycling program needs to move towards a mandated goal of 100%, utilizing best practices for well-designed and well funded education programs outlined above, prioritizing curbside as the best method of collection, as well as a mandated goal of 100% targeting of materials in order to approach zero waste. With participation less than 50% and targeting of materials now the 34% that is recyclables, explains the roughly low 17% diversion rate. Improving the education and enforcement programs, even by 50%, would have a significant positive impact on the diversion rate and

potentially on economics.

MANHATTAN SOLID WASTE ADVISORY BOARD (MSWAB)- ORGANICS COMMITTEE

SANITATION COMMITTEE HEARING TESTIMONY - STATE OF RECYCLING

September 20, 2022

I'm Allison Allen, MSWAB member and Chair of its Organics Committee

It was an unexpected surprise to see organics expanded throughout Queens and we hope this is just the beginning toward a citywide expansion. We hope there is excitement and momentum building in Queens but we ALSO have concerns that the lack of marketing, education and outreach could result in lackluster results in the early phases. We are concerned that the program as currently designed ends after three months. Starting and stopping is not a good way to achieve success. We urge the Mayor and Council not to rush to any early judgements.

We hope the program will be given the time needed to allow the DSNY and Council to find the funding required to adequately promote the program, work through initial start-up issues and ultimately bring more awareness about why this is an important program.

We need to do MUCH more to ensure the overall population understands how organics, methane emissions and zero waste connects to climate change as well as taxpayer's dollars spent to export waste, that is really not waste, to hopefully prompt change in their behavior. As this hearing takes place during Climate Week, we should ALL also identify more climate week type opportunities and collaborate with those organizers to push out waste related messaging on an ongoing basis.

The organics program, in the 7 districts with curbside collection currently, is experiencing a number of problems including building management resistance and lack of participation which hopefully are being addressed as a priority.

We would like to see more transparency and data on NYC Open Data to be shared and analyzed in order to develop targeted approaches to boost engagement and participation.

The Commissioner has said she has concerns about mandatory organics - that people need time to use the program. I also hear concerns about how enforcement is a concern and needs to be addressed. However, I don't see why a grace period or other work around methods could be developed similar to other laws.

In prior testimony (included in the appendix), I've outlined how we can find funding from:

- The reduction in export contract payments resulting from the decrease of organics in the export waste stream. These $ can be reallocated toward building the local infrastructure to process organics locally, create green jobs and more.
- Partnerships with other agencies (ie. DOH, DOE, DOT, LinkNYC) are key and offer opportunities, budgets and marketing assets that should be leveraged to support organics - especially DOH's rat portal. There are many missed opportunities there as outlined in my testimony regarding the Rat Action Plan package of bills (included in the appendix).

- Council members on the relevant committees should be discussing organics in all these other agency committee meetings and also the Finance Committee

The MSWAB created an organics recycling guide, we intend to distribute, Would be helpful to know DSNY's marketing and media plan for the Queens expansion in advance, so we can supplement and not duplicate efforts. **The upcoming holiday seasons (including Halloween pumpkins) are a tremendous and timely opportunity to promote composting.**

It's clear that organics collection is critical for achieving NYC's Zero by 2030 goals. Although we have yet to hear a commitment to this goal from the new administration, it cannot continue to be kicked down the road.

We urge the council to continue pushing for an equitable mandatory organics program. We recommend implementing mandatory immediately in the 7 districts with service to test and tweak tactics to ensure a successful roll out citywide. We hope that the Mayor's expectations are being managed accordingly so that he does not judge the Queens program after 6 month or a year. He needs to commit to zero waste by 2030 and give the organics rollout time and funding it needs to succeed!

REGARDING BILL # 494 - A Study of Single Use Plastic
Although unrelated to organics, we support the intent of this study but would need the ability to review it first before we can support it. In the meantime, the upcoming Waste Characterization Study presents a good opportunity to begin looking at the size and scope of the single use plastics problem immediately (as the study begins next month) and should identify and report on single use plastics in its findings.

At the same time, we should be developing and promoting more messaging and communications on how to avoid single use plastic – another important and much needed effort to reach the public with an educational/marketing campaign, which could be tied in to any talking points related to addressing NYC's litter problem.

The plastic bag ban was a great start, but we're now concerned that reusable bags are also being discarded (Fresh Direct is the most egregious example). Many of these "reusable" bags market themselves as recyclable - but that is debatable.

Finally, while a Single Use Plastics study will help, we can ALL see the single use plastics that litter our streets every day which often cause our litter baskets to overflow. We need to explore and pilot alternative options to target the culprits - the source of this litter which is easy to see as much of it is branded waste from Dunkin Donuts, Starbucks, McDonalds to name just a few. We don't have to wait for a waste characterization study (WCS). Any of us can do our own study by analyzing a litter basket on our block. Perhaps something that can be tied in with any litter clean ups organized by Council Members.

The Skip the Stuff bill is also a long overdue and much needed step in the right direction and should be called for vote asap to avoid the debacle that caused the bill to fail unnecessarily in the final days of last year's session.

We encourage Council Members to follow the work of organizations that are actively focused on this issue, such as Beyond Plastics.

APPENDIX

PRIOR TESTIMONY

MANHATTAN SOLID WASTE ADVISORY BOARD (MSWAB)

ORGANICS COMMITTEE - SANITATION COMMITTEE HEARING TESTIMONY

June 15, 2022

I am Allison Allen, Member of the MSWAB and chair of its organics committee.

We support all the zero waste bills and thank all council members that have solidified NYC's commitment to Zero Waste by 2030, as we have fallen way behind**.** MSWAB has separately provided suggested amendments for these bills that outline ideas for how best to advance toward city wide mandatory organics collection, zero waste goals and also for what we should do immediately to raise awareness and participation in the brown bin program.

We suggest that organics collection be made mandatory immediately in the 7 districts that currently receive organics collection service. These districts should be redefined as pilots to test and tweak a variety of marketing and outreach tactics to determine what works best to maximize resident participation, before a city wide rollout. The districts should also be revised to make them more representative of the overall city population as the current 7 districts are 22% more white than the population.

Anyone who is concerned about how their NYC taxpayer dollars are spent should be made aware that the cost of not having a mandatory organics program is actually greater than the cost of having it.

The city is spending approximately $193M in FY23 paying waste haulers to transport just the organic waste to bury in landfills and burn in incinerators that pollute their local communities (including the Ironbound in Newark). That does not include the significant environmental, social, health and opportunity costs (as outlined by IBO). which brings our annual cost to discard organics alone, to almost a quarter billion dollars in FY23:

- Fiscal Cost = $193M for organic export/bury/burn
- Environmental Costs - $28M/FY23 - the cost of carbon and methane emissions from burning and burying organic waste
- Opportunity Costs - an estimated additional $12-22M/FY23 of lost revenue forfeited for compost & clean energy sales
- Environmental Justice/Social Costs - polluted communities burdened with incalculable but SIGNIFICANT health impacts
- Rat Mitigation - cost savings unknown
- TOTAL $233M + unknown costs

After Fresh Kills landfill was closed in 2001, the city chose waste export as the alternative for disposing of waste. It's clear that waste export is not a sustainable, long term waste management policy and it's way past time to pivot away from this harmful

process which has cost the city approximately $4 billion over the last 10 years, in fiscal costs alone.

Those billions could have been much better spent improving the recycling program, building the local infrastructure and educational outreach required to divert the valuable organic material for compost and clean energy, processing it locally into a commodity and creating green jobs, while reducing the environmental and social harms. Organic waste makes up 41% of NYC's exported residential waste stream. Let's cut our losses now, combat climate change, help the environment and environmental justice communities and reduce the number (and stink) of black garbage bags clogging our streets and sidewalks.

We have no choice but to pay now or pay much more later if we continue with ever increasing waste export costs, now projected to skyrocket due to inflation. FY24 costs could likely reach half a billion dollars, but if we start diverting more organic material immediately we can gradually bring these export costs down going forward, earmarking those savings for investment in the infrastructure and operational elements required to build and market a robust organics program locally. Taxpayers should be made aware that mandatory organics collection is the much better fiscal, environmental and social alternative.

LEVERAGE NYC'S RAT PROBLEM: With all the recent interest and focus on containerized waste pilots, I urge all Council Members to include and amplify the message that we already have a free rat proof, waste containerization program available to residents with DSNY's brown bin program. Any talk and messaging about litter, rats and containerization should also mention the existing brown bin program for collecting organic waste. It is all interrelated and we need the brown bins to get the same amount of press coverage as the rats! However, the curbside collection program is rarely mentioned in press articles that cover rats, containerization or litter. Rats are likely to continue to make news and we need to better leverage their free earned media to promote the brown bin program.

LEVERAGE DEPARTMENT OF HEALTH & BUDGET: There are also many missed opportunities in conjunction with the Department of Health Rat Portal/Academy and related communications programs. We need to ensure DOH does MUCH more to promote the free brown bin program in conjunction with 311 rat complaints and on the rat portal. We need to better connect those dots and leverage their significant budget as it does not appear that DSNY ever receives adequate marketing budget which has likely contributed to the dismal recycling diversion and participation rates.

For example, anyone calling 311 with rat complaints should be provided information about the brown bin program. Information on enrolling in the brown bin program should be provided on the online rat portal as well as any and all rat related touchpoints. Please note my email on this issue, pasted below, which I sent to DOH last year. COVID was apparently the excuse for not being able to change anything, but this is simple stuff and the COVID crisis has subsided for now.

Recently, a MSWAB member (along with hundreds if not thousands of other New Yorkers) received a mailed letter from DOH, alerting her to a high level of rat reports in her area. The letter (pasted below) was mailed and contained a one page bulleted list of what she should do about rats. It would have cost nothing to have included an additional bullet about the free brown bin program with encouragement to enroll as a rat mitigation tactic. As this was a mailer, there could have easily been a separate insert included with information on the curbside organics program. This could be done at minimal (if any) additional cost and should start immediately. I have personally asked DOH (see my email pasted below), but we need Council Members to make this request to make it happen. Council Member Velasquez may be able to best spearhead as she serves on both the sanitation and health committees.

Building owners and property managers in areas where rat populations are high should also be targeted with information on the curbside organics program. Currently DSNY requires building owners and managers to sign up for the program to receive service and they are a proven significant roadblock. They need to be informed about the connection between rats and organics left in easily opened plastic bags. I have obtained a testimonial letter from a building super that indicates how his building is cleaner, chute costs reduced and other benefits. We need more materials like this and word of mouth shared amongst building management, wherever possible.

We also see a new package of rat related bills introduced by Council Members Abreu, Nurse and Bottcher. One of the bills requires covered trash receptacles in areas with repeated rodent infestations. These areas should also be considered for immediate mandatory organics collection. Remove the food from the trash and the rats will move elsewhere. As these Council Members are out talking about these new rat bills and addressing the rat problem, there is a perfect opportunity to also incorporate messaging about how important it is to enroll in the brown bin program as a free way to containerize food waste NOW - whether or not your area is one of the 7 existing districts receiving service, so that DSNY can quantify the demand. We suggest that areas that index highest for rats also receive mandatory curbside organics collection services immediately.

Thank you!

Allison Allen's 2021 email to Dept of Health asking for additional brown bin mention/promotion on Rat Portal & 311complaints

Thanks so much for getting back to me! I will sign up for an event, but I see so many more opportunities to promote the brown bin program via other DOH channels as you manage rat complaints for the city.

For example, would be great if info on the brown bin program could be added to various pages of your website, so the info is available to the general public, including those that call into 311 with rat complaints. These pages (and others) would be a great place to promote the link between deterring rats by enrolling in curbside composting (or taking your food waste to a local food scrap drop off site):

https://www1.nyc.gov/site/doh/health/health-topics/rats.page

https://www1.nyc.gov/site/doh/health/health-topics/rats-working-in-your-community.page

https://www1.nyc.gov/assets/doh/downloads/pdf/rats/2021/what-happens-to-your-rat-complaint.pdf

Also, can the info be pushed out to those buildings that have been found to have rat activity - per your portal? Do you have a way to send out a mass email?

https://a816-dohbesp.nyc.gov/IndicatorPublic/Rats/

As your agency is on the front line combatting rats, I'm hoping you can promote this resource via any and all channels available to you, including social channels. I see that you posted the rat academy events on twitter, but would be great to promote the brown bin program to residents and how it's another tool for controlling rats if you have a rat problem in your area. Would help reach those people who aren't able to sign up for the rat academy

I'm happy to help in any way as rats are a real problem for so many New Yorkers while there is a great, free, solution available which will also help divert organic waste from the mainstream to produce compost and clean energy. Food waste comprises 41% of the waste the DSNY exports to landfills where it emits harmful greenhouse gases, so there are so many reasons to enroll in this program!

LETTER/MAILER RECEIVED FROM DOH RE: RATS - SHOULD INCLUDE INFO ON ENROLLING IN DSNY BROWN BIN PROGRAM -

I reiterate that this was in the mail. Could have included an insert on the brown bin program or at minimum an additional bullet on this list which would have cost $0 as DOH was already incurring the cost of this mailer

NYC Health

NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Dave Chokshi, MD, MSc
Commissioner

WARNING: False statements made herein are punishable as a class A misdemeanor pursuant to section 210.45 of the Penal Law. Affirmed under penalty of perjury.

What you should do next:

1. Inspect your property. Thoroughly investigate your property for signs of rats and other conditions that contribute to rats. Review your enclosed inspection report and visit the Rat Information Portal (www.nyc.gov/rats) for more information on how to identify droppings, active rat runs, and evidence of gnawing, tracks or burrows. You may choose to hire a licensed pest management professional to assist you with this problem. The Rat Information Portal (www.nyc.gov/rats) will help you select a pest management professional that can help you identify conditions that have led to the presence of rats on your property and manage the problem safely.
2. Clean up your property. Sweep up droppings and wash away rub marks. This will discourage rats from returning.
3. Keep rats from getting the food they need. Store garbage in hard plastic or metal containers with a tight getting lid. Do not put garbage out on the street more than one hour before pickup.
4. Eliminate the places rats can hide, nest and breed. Remove clutter and debris from your yard, basement and landscaping. Pest-proof your property by repairing holes and cracks.
5. Talk to others on your block. Managing rats is a community affair, and your property is probably not the only one that has signs of rats. Everyone in a neighborhood has to work together to solve the problem, since rats can quickly move from one property to the next. Neighbors can coordinate cleanup efforts, share in the hiring of licensed pest management professionals, and have a bigger impact by working together.
6. For more information on rat prevention download the guide "Preventing Rats on Your Property" at www.nyc.gov/rats or contact 311 and request a copy of the booklet.

Sanitation & Public Housing Joint Hearing - Rat Mitigation Bills - June 21, 2022

Testimony of Allison Allen (allisonaallen@aol.com):

I testified at last week's sanitation committee hearing regarding the zero waste bills, which included a bill for mandatory city wide organics collection. I talked about rats, as there has been much attention (and press coverage) understandably focused on NYC's litter and rat problems and overall support of waste containerization pilots. But very little mention that we already have an existing, free food waste containerization program - DSNY's brown bin program. There is a direct connection between rats, litter, organic waste and the curbside brown bin program that should be underscored and stressed. I ask all council members to help amplify and elevate that message in any discussion of rats, litter and the new rat action plan. We need to do everything possible to promote enrollment and increase participation in the DSNY brown bin program and highlight that we already have free rat proof brown bins available in 7 districts currently. If DSNY saw a groundswell of new enrollment requests from high rat areas, perhaps they could justify adding new districts to help combat rats.

Rats are good at getting free press. If the brown bins could share in their coverage, we might raise awareness and increase much needed participation in composting. I heard in the hearing today that every council member has a litter and rat problem in their district. If you are talking about rats, litter or waste containerization, please mention the rat proof brown bins and encourage enrollment.

I support all the rat mitigation bills with some amendments. It's an important step to require an annual report from DOH (per bill #414), as DOH could also be doing much more to promote brown bins to combat rats as one easy, effective and free rat mitigation tactic. We very much need DOH to step up the partnership with DSNY to better make the connection and co-promote related to rats at every possible touchpoint. For example:

- The DOH Rat Portal should provide information and links to enroll in the brown bin program throughout the website, on multiple pages.
    - I personally asked DOH (see my email pasted below), but we need Council Members to make this request, to make it happen.
        - Council Members Velasquez and Barron may be best able to spearhead as they serve on the sanitation and public housing committees as well as the health committee.
- The Rat Academy should strongly encourage enrollment in the brown bin program as a free rat mitigation tactic available now.
- All 311callers with a rat complaint should be given information on the brown bin program and transferred to someone that can help them enroll, if requested
- Anyone who has received a rat violation should be encouraged (if not mandated) to enroll in the brown bin program.
- Any and all DOH rat related communications should include information on the brown bin program, where feasible
    - For example, here is a letter that DOH mailed to a colleague about mitigating rats in her area. I would guess that hundreds if not thousands receive this mailer. It's a missed opportunity to promote the brown bin program by simply adding a 7th bullet to this letter - which would cost nothing. As this is a mailer, there could have also been a separate insert on the brown bin program - also at no additional cost, other than to make copies:

NYC Health

NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Dave Chokshi, MD, MSc
Commissioner

WARNING: False statements made herein are punishable as a class A misdemeanor pursuant to section 210.45 of the Penal Law. Affirmed under penalty of perjury.

What you should do next:

1. Inspect your property. Thoroughly investigate your property for signs of rats and other conditions that contribute to rats. Review your enclosed inspection report and visit the Rat Information Portal (www.nyc.gov/rats) for more information on how to identify droppings, active rat runs, and evidence of gnawing, tracks or burrows. You may choose to hire a licensed pest management professional to assist you with this problem. The Rat Information Portal (www.nyc.gov/rats) will help you select a pest management professional that can help you identify conditions that have led to the presence of rats on your property and manage the problem safely.
2. Clean up your property. Sweep up droppings and wash away rub marks. This will discourage rats from returning.
3. Keep rats from getting the food they need. Store garbage in hard plastic or metal containers with a tight getting lid. Do not put garbage out on the street more than one hour before pickup.
4. Eliminate the places rats can hide, nest and breed. Remove clutter and debris from your yard, basement and landscaping. Pest-proof your property by repairing holes and cracks.
5. Talk to others on your block. Managing rats is a community affair, and your property is probably not the only one that has signs of rats. Everyone in a neighborhood has to work together to solve the problem, since rats can quickly move from one property to the next. Neighbors can coordinate cleanup efforts, share in the hiring of licensed pest management professionals, and have a bigger impact by working together.
6. For more information on rat prevention download the guide "Preventing Rats on Your Property" at www.nyc.gov/rats or contact 311 and request a copy of the booklet.

The DOH annual report should also include a detailed budget for rat mitigation, outreach, communications, mailings, pest extermination contracts, etc.. This should be added to bill #414..

Building owners and property managers in areas where rat populations are high should also be targeted with information on the curbside organics program. They need to be better informed about the connection between rats and organics left in easily opened black plastic bags as well as other building benefits. I understand that DSNY does have some materials and does outreach. DOH should do the same in their communications.

DOH should also be monitoring buildings with high rat populations that start using the brown bins to track any reported improvements or changes.

Bill #460 requires buildings with repeated rodent infestations to use rat resistant trash receptacles. These buildings should also be considered for immediate mandatory organics collection in DSNY's rat proof brown bins. Remove the food from the trash and the rats will likely move elsewhere.

Bill #459 includes that buildings set out trash 4am-6am but many buildings don't have staff at that hour. In addition, there are concerns that street dining sheds are major contributors to the problem and that fines in areas surrounding them have increased

significantly. Perhaps when increased street cleaning and litter basket pickups resume, we will see some decrease, but DOH should look into how many dining sheds are in these areas and hold the businesses more accountable.

As Council Members are out talking about how great the new waste containerization pilots are, I hope you will all make an effort to also include messaging about the brown bin program as a free way to containerize food waste NOW - whether or not your area is one of the 7 existing districts receiving service. I would like to see areas that index highest for rats, receive mandatory curbside organics collection services immediately wherever possible.

Lastly, I ask for an update on NYC's rat contraception measures, related costs and metrics. From what I have seen in the news (see link below), this was apparently a successful tactic used by the MTA in the subways in 2017 and would like more information on why it has not been expanded.

https://www.nydailynews.com/new-york/nyc-deploy-rat-birth-control-attempt-curb-breeding-article-1.3065641

Rats only live for a year and give birth 6-7 times a year, producing 84 offspring. Contraception may very well be more effective than extermination and is less dangerous to other animals and people. There have been a number of recent incidents of dogs ingesting rat poison and getting sick.

https://www.westsiderag.com/2022/06/21/more-exposed-rat-poison-surfaces-in-the-neighborhood-another-dog-sickened

I ask the Council to find out what happened to the contraception program and see if it makes sense to reintroduce or reinstate additional pilot tests and add to the legislation. NYCHA would be a great place to start.

Allison's email to Dept of Health re: adding brown bin mention/promotion to Rat Portal, 311, etc

I will sign up for a Rat Academy event, but I see so many more opportunities to promote the brown bin program via other DOH channels as you manage rat complaints for the city.

For example, would be great if info on the brown bin program could be added to various pages of your website, so the info is available to the general public, including those that call into 311 with rat complaints. These pages (and others) would be a great place to promote the link between deterring rats by enrolling in curbside composting (or taking your food waste to a local food scrap drop off site):

https://www1.nyc.gov/site/doh/health/health-topics/rats.page

https://www1.nyc.gov/site/doh/health/health-topics/rats-working-in-your-community.page

https://www1.nyc.gov/assets/doh/downloads/pdf/rats/2021/what-happens-to-your-rat-complaint.pdf

Also, can the info be pushed out to those buildings that have been found to have rat activity - per your portal? Do you have a way to send out a mass email?

https://a816-dohbesp.nyc.gov/IndicatorPublic/Rats/

As your agency is on the front line combatting rats, I'm hoping you can promote this resource via any and all channels available to you, including social channels. I see that you posted the rat academy events on twitter, but would be great to promote the brown bin program to residents and how it's another tool for controlling rats if you have a rat problem in your area. Would help reach those people who aren't able to sign up for the rat academy

I'm happy to help in any way as rats are a real problem for so many New Yorkers while there is a great, free, solution available which will also help divert organic waste from the mainstream to produce compost and clean energy. Food waste comprises 41% of the waste the DSNY exports to landfills where it emits harmful greenhouse gasses, so there are so many reasons to enroll in this program!

Manhattan Solid Waste Advisory Board

Written Testimony for the Textiles Committee
9/20/22 City Council Sanitation Committee State of Recycling Hearing

I'm Sharon Silbermann, testifying as the Textile Committee Chair for the Manhattan Solid Waste Advisory Board.

NYers throw **400 million pounds** of apparel and textiles into our municipal waste stream annually. Our charities, overrun with donations, ship ***mountains*** of leftovers to foreign markets unable to absorb this excess. In turn, what goes unsold gets dumped on ***their*** beaches, and in ***their*** oceans and deserts.

Designers and brands source virgin materials because they're deceptively cheap, plus there's ***not enough recycled fiber***, at scale, to satisfy the demand. Virgin fiber production into textiles accounts for the ***MAJORITY of GHGs*** in fashion along with the water and energy used in the agricultural and manufacturing processes. ***Recycled*** fibers eliminate ***virtually all*** virgin fiber processing!

NY State recently introduced the Textiles Act aimed at developing an animal and plant fiber textile manufacturing industry.

NYS has also introduced the Fashion Act, which would hold apparel manufacturers responsible for mapping supply chains, reporting impacts, setting reduction goals, and disclosing their materials usage.

These, along with federal initiatives to re-shore production and invest in recycling that builds the circular economy, begs the question why NYC isn't aggressively pursuing circular textile recycling as a green industry capable of supporting all these legislative proposals while developing a multibillion dollar opportunity ***RIGHT HERE IN NEW YORK CITY*** where we have both ***Circular City AND Zero Waste Initiatives***!

Apparel and textiles are responsible for roughly ***8% of GLOBAL GHG*** emissions.
Per Sanitation's characterization, ***TEXTILES*** are ***6% of NYC's waste stream***. Their collection, transportation and disposal cost ***$93 million*** in 2018. Textiles are ***the fastest growing of ALL*** waste stream categories. The industry is forecasted to grow an ***additional 63% by 2030***, ironically, our deadline for lowering GHGs by 50% and achieving Zero Waste! If unaddressed, this would increase NYC's ***annual textile waste*** to ***625 million pounds***, and skyrocket costs to ***$151 million annually in just 7 years***! This should be spent on curbside collection, education, sorting, and building circular recycling infrastructure. 65% of our wardrobes are polyester which ***NEVER*** biodegrades, while natural fiber content produces methane in anaerobic landfill conditions.

At scale, recycled content should cost no more than virgin content whose ***REAL COST*** is never realized in the environmental and health harms it causes. ***This is the basis*** for the need for effective ***Textile EPR legislation***, for imbedding block chain for transparency to consumers and fiscal responsibility by manufacturers when their products' end of life cost taxpayers millions in waste management fees.

Please USE your position to make the only choices that make any sense. And please let the MSWAB help you create effective legislation and implement measures to achieve Zero Waste for apparel and textiles!

My contact is below; please reach out with any questions or requests.

Thank You!
Sharon Silbermann
Chair, Textile Committee, Manhattan Solid Waste Advisory Board
sharonsilbermann@gmail.com
(917)742-6357

Written Testimony for the Recycling and Reuse Committee
9/20/22 City Council Sanitation Committee State of Recycling Hearing

Good Afternoon.
I'm also representing the Residential Recycling and Reuse Committee. I will make three points concerning the state of recycling in residential buildings.

The first concerns educating residents about the why and how of recycling. To optimyze participation and drive efficient resident behavior, we advocate here for sufficient resources to explain the science and to reinforce the message that when we engage in proper waste diversion, we greatly reduce the quantity of trash that goes to landfills and incinerators. In turn, this reduces global warming and the disproportionate burden on environmental justice communities.

"Methane, created in landfill conditions, is **more than 25 times** as potent as carbon dioxide at trapping heat in the atmosphere.

To achieve optimal waste diversion and correctly separate recyclables and organics, residents need to learn **why** this is so important and **how** to do it properly. Currently, the Department of Sanitation devotes just 50 cents per person annually for overall education and outreach as compared, for example, to San Francisco and Seattle, which allocate $3 per person annually. Our Sanitation Department must do more to educate the public and make waste diversion less confusing as well as mandatory.

Our second point concerns establishing a lease rider which would explain to new and potential residents that recycling is required under the law and how to correctly comply. Details provided at lease signing, when people tend to be more focused and attentive, will help correct confusion about how to recycle. By educating residents on recycling, landlords and co-op boards demonstrate that they're serious about recycling rules. The result is that building waste management staff will spend less time on correcting recycling and organics diversion mistakes.

The lease rider would be a requirement for all buildings in New York City, just as recycling, itself, is required. Does the city want to add requirements for building managers to handle? Are recycling requirements worth having?

Mandating curbside composting would be yet another requirement and is the third point we want to cover. In our current voluntary composting program, residents who want to divert their food, yard, and food-soiled paper waste may not have access to an organics composting option if their building managers or co-op boards simply do not want to participate in the program.

Non-participation reduces diversion rates, raising the collection cost per pound that is diverted, making a voluntary program too expensive to support. Mandating participation means that building managers and co-op boards would lack the freedom to choose how they manage organic waste streams that, in landfills, produce dangerous methane.

Freedom of choice is an American value that we might respect if adhering to it wouldn't mean less tonnage to landfills and incinerators, and less damage to the environment. Mandated recycling and organics collection is intended to protect the public at large from the increasingly serious impacts of the climate crisis caused by overconsumption and the reckless production of GHGs in landfills and incinerators.

Mandated citywide organics collection, for all residential buildings, especially in a city of 8.5 million with Zero Waste and Circular City initiatives, is the only way we will achieve these climate goals in an affordable manner! No mandates may mean less drama for building managers, but substantial drama and enormous **public** expense when we experience flooding, drought, fires, and record heat and cold temperatures. Let's support mandated curbside composting and reduce the likelihood of environmental hazards.

Delivered Orally by: Sharon Silbermann
Chair, Textile Committee, Manhattan Solid Waste Advisory Board

Written Testimony by: Joyce Bialik
Chair, Residential Recycling and Reuse Committee, Manhattan Solid Waste Advisory Board

Testimony of Alexis Hidalgo
Equitable Policy and Programs Fellow
New York League of Conservation Voters
Committee on Sanitation and Solid Waste Management
The State of NYC Recycling
September 20th, 2022

Good afternoon, my name is Alexis Hidalgo and I am the Equitable Policy and Programs Fellow for the New York League of Conservation Voters (NYLCV). NYLCV represents over 30,000 members in New York City and we are committed to advancing a sustainability agenda that will make our people, our neighborhoods, and our economy healthier and more resilient. I would like to thank Chair Nurse for the opportunity to testify today.

As it stands, New York City produces more than 14 million tons of trash every year. Organic waste in landfills releases methane, a potent greenhouse gas, and 120,000 metric tons of carbon dioxide. Plastic, which can be difficult and expensive to recycle, is also a large contributor to the waste stream.

It is communities of color and low income communities who are most burdened by the amount of solid waste we landfill and incinerate because they are disproportionately likely to live near these polluting facilities - or more accurately, these facilities are disproportionately likely to be built near them. These higher rates of pollution caused by waste cause higher cases of asthma, cancer, and other health issues and compound existing environmental and racial inequities in these same communities that live and work here.

Single-use plastics, which have become increasingly popular, have only further highlighted the issues plaguing our recycling system. According to the Mayor's Office, about 36 million pounds of single-use plastic is found in the city's waste stream per year. While single-use disposable items may be convenient for a moment's notice, their harmful impact on the environment can last years. Plastic items, including those labeled as "biodegradable plastics", take decades to break down and do not completely biodegrade. Enforcing more strict policies to reduce the output of single-use plastics is necessary to combat the threat they pose to the environment and public health. However, in this process, we must also understand that some single-use plastics are necessary for some people with disabilities. Therefore we must also make sure that no one gets left behind, hence why we should ensure there are alternatives, such as compostable options, in place.

It is imperative we reduce the amount of waste we send to landfills and incinerators. Intro 494, would help do this through a comprehensive study of new waste policy initiatives that would reduce the sale, distribution, and use of single-use plastic items in the city. Especially important to include in this study are extended producer responsibility policies. Extended producer responsibility (EPR) has the ability to reduce the amount of waste sent to landfills by shifting the cost of responsibly disposing of a product from local governments to manufacturers and creating a financial incentive for reducing the production of plastic and other costly-to-recycle materials. These policies both reduce waste production in the first place and ensure that the waste we do have to deal with is easier to recycle. EPR policies that also increase environmental justice accountability are critical - this includes banning harmful chemicals from packaging materials.

We need a major rethinking about how we deal with our waste. This is why NYLCV supports Int. 494, which would help identify comprehensive waste policy initiatives for our City. Waste diversion and progressive recycling programs are integral to fighting climate change, achieving environmental justice, and will further our State and Citywide climate goals.

NYLPI
JUSTICE THROUGH COMMUNITY POWER

New York Lawyers
for the Public Interest, Inc.
151 West 30th Street, 11th Floor

Testimony of Justin Wood
New York Lawyers for the Public Interest
New York City
Committee on Sanitation and Solid Waste Management
September 20, 2022

Thank you, Chair Nurse, and members of the Sanitation and Solid Waste Management Committee for the opportunity to speak at today's committee hearing. My name is Justin Wood, and I am the Director of Policy at New York Lawyers for the Public Interest (NYLPI).

Every time we shine a light on New York City's recycling and waste reduction systems, we find a disturbing retreat from the zero waste and pollution reduction goals that our government set only a few years ago. As we gather here during Climate Week, horrific flooding in Puerto Rico and Pakistan and severe drought conditions throughout much of the world are just one the constant signs that governments are not doing nearly enough to reduce greenhouse gas emissions – including the 12% of New York's emissions caused by burying and burning millions of tons of solid waste.

Especially for environmental justice communities near incinerators, landfills, and transfer stations, a recycling rate is much more than just a slogan or abstract goal.

Just eight miles from where we sit at City Hall, the Covanta Essex incinerator is burning 2,600 tons of solid waste every day in Newark - a city in which more than 26% of residents live in poverty, and about 75% of residents are Black or Latino. Much of this waste is recyclable, compostable, and unnecessary, and much of it comes from Manhattan. In just the last two years alone this facility has racked up 50 environmental violations including releases of opaque smoke, excessive CO2 emissions, and failing to follow safety protocols for hazardous waste.

In addition to the alarming decline in municipal recycling, we remain incredibly concerned by the chronically low recycling rate for the enormous waste stream generated by commercial businesses, including offices, restaurants, and retail stores. As of now there is little data available on how the private waste companies

serving businesses perform, but the few signs we have are not good: for example, one of the largest private recycling and transfer facilities in NYC filed reports with the state DEC showing a paltry recycling rate of 12% in 2021 – down from just 18% in 2019.

Finally, recycling and waste reduction programs can and should be a source of thousands of high-quality, family-sustaining green jobs in and near New York City. Studies show that recycling and composting create far more jobs than landfills, incinerators, and transfer stations. For example, the SIMS Municipal Recycling facility that processes much of NYC's residential recycling stream in Sunset Park, Brooklyn employs more than 100 people with full health benefits and union representation. Investing in more effective waste diversion programs should go hand in hand with expanding and building these kinds of facilities and ensuring that they create career opportunities for the communities most negatively impacted by pollution from our current, export-to-disposal solid waste system.

We thank Chair Nurse and members of the Committee on Sanitation for continuing to exercise your oversight authority to look at both the root causes for this underperforming system, for your efforts to ensure robust implementation of existing laws and programs, and for advancing several key bills that would begin to turn the tide on our burgeoning waste problem.

Top priorities include:

- Passage of Intro 494, the bill being heard today, which mandates a comprehensive study of plastics in our waste stream and would appropriately involve the Mayor's Office for People With Disabilities in this process.

- Amendment and passage of Intros 274 and 275 which would put the city's Zero Waste by 2030 goal into law and require DSNY to report annually on progress toward this goal for all waste streams.

- Continuing Council oversight to ensure robust implementation of Local Law 199 of 2019 (Commercial Waste Zones). The upcoming ten-year contracts between the City and private sanitation companies have the potential to sharply increase recycling, composting, food donation, and waste reduction programs, and if if sufficient incentives are "baked in" to the new system to reward businesses and waste companies that successfully reduce the amounts sent to landfills and incinerators. For example, Los Angeles'

contracts with private waste haulers include an enforceable goal to reduce disposed waste from each commercial zone by 65% from 2019 to 2025, and contracted waste companies may be assessed damages in the future if they fail to meet annual targets.

- Introduce and pass Intro 559 the "Skip the Stuff" bill, which will help source-reduce the amount of single-use disposable plastics from restaurants in our residential and commercial waste streams.

- Finally, recycling of organic waste via composting and anaerobic digestion is a necessary complement to metal, glass, and plastic recycling, and investment in organics recycling systems, containers, and public education help reduce contamination of paper and other "dry" recyclables with food waste. We urge Speaker Adams to immediately pass Intro 244 which would mandate universal food scrap recycling by 2024 and has large majority support on the Council.

As ever, we are appreciative of this committee's efforts to turn the tide on a rising sea of municipal waste which negatively impacts New Yorkers in so many ways, and we look forward to continuing to work with you to advance solutions.

Thank you for the opportunity to testify today.

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NYPIRG NEW YORK PUBLIC INTEREST RESEARCH GROUP

TESTIMONY
OF THE
NEW YORK PUBLIC INTEREST RESEARCH GROUP
BEFORE THE
NEW YORK CITY COUNCIL
COMMITTEE ON SANITATION AND SOLID WASTE MANAGEMENT
September 20th, 2022
New York, N.Y.

Good afternoon. My name is Ryan Thoresen Carson, and I am the Environmental Campaign Coordinator for the New York Public Interest Research Group (NYPIRG). NYPIRG is a non-partisan, not-for-profit research and advocacy organization. Consumer protection, environmental preservation, public health, healthcare quality, higher education affordability, and governmental reforms are our principal areas of concern.

We appreciate the opportunity to testify before the New York City Council Committee on Sanitation and Solid Waste Management on the need for real solutions to the city's solid waste crisis. While we support any effort to reduce single-use plastics, we offer a more direct approach to greatly reduce plastic pollution.

Introduction

We have a solid waste, toxics, and plastic pollution crisis. A January 2022 international report found the world is beyond the toxic tipping point. This scientific study, published in the journal *Environmental Science & Technology*, found that "the total mass of plastics now exceeds the total mass of all living mammals," a clear indication that we've crossed a boundary.[1] Crucially, production of single use plastics shows no signs of slowing down and have been exponentially increasing. Since 1950, there has been a fifty-fold increase in plastic production. This number is expected to triple by 2050.[2]

The scale of the solid waste issue in New York City is truly massive. New York creates over 14 million tons of trash every year.[3] Between July 1, 2020, and June 30, 2021 New York City shipped out 3.4 million tons of household trash, up from 3.2 million tons just the year before.[4] New York City's solid waste disposal practices place a tremendous burden on environmental justice communities. For one, waste is trucked to garbage transfer facilities that are often in the City's environmental justice communities. Additionally, a large portion of the City's solid waste is then brought to the Covanta garbage incinerator in Newark, New Jersey, in an environmental justice neighborhood. The hazards of breathing air contaminated by heavy truck traffic and incinerator emissions is well-documented, including increased rates of asthma and respiratory ailments. On top of that, the cost to the city is

[1] *Environmental Science and Technology*, "Outside the Safe Operating Space of the Planetary Boundary for Novel Entities," January 18, 2022, https://doi.org/10.1021/acs.est.1c04158
[2] Carrington, Damien, "Chemical pollution has passed safe limit for humanity, say scientists," *The Guardian*, January 18, 2022,https://www.theguardian.com/environment/2022/jan/18/chemical-pollution-has-passed-safe-limit-for-humanity-say-scientists
[3] Goldenberg, Sally, "New York City fails zero waste pledge. Why it's going backward." *Politico,* April 22, 2022, https://www.politico.com/news/2022/04/22/zero-waste-new-yorkers-recycle-00026708
[4] Ibid.

tremendous as well, with the total cost of disposal costing the city $452 million dollars.[5] Waste reduction efforts will not only clean up our city, but also save taxpayers money.

City Council Intro 494

NYPIRG applauds the New York City Council, and particularly Committee Chair Nurse, on its push to move New York City towards its stated solid waste goals. Banning single-use plastics fights climate change, reduces pollution, and saves the city money. However, we are concerned that this measure, while surely well-intentioned, simply does not go far enough fast enough. Directing the Department of Sanitation to evaluate policies to ban single-use plastics and produce a report by 2023 kicks the plastic can too far down the road. We urge the City Council to pass comprehensive laws now that ban single-use plastics outright, and to pass resolutions in support of two state bills sponsored by the Assemblyman Englebright and Senator May to update the state's bottle deposit law and to require 50% reduction of plastic packaging in a decade, and only consider this legislation as a supplement to that effort.

The American public is quite clear where it stands on the issue of single-use plastics. People want action. A recent national poll by Oceana found 81% of American voters support national, state, and local policies that reduce single-use plastic.[6] Reducing, reusing and recycling solid waste will reduce our climate emissions, especially for petroleum-based plastics.

While the American public may be clear on their desires for government action, the industry is headed in the opposite direction. Over 99% of plastics are sourced from fossil fuels.[7] The most common source of plastic resin in the United States is natural gas. This means the more plastic society uses, the longer the fossil fuel industry is kept running. When Coca-Cola, PepsiCo, and Keurig Dr Pepper combined to pour 121 million tons of greenhouse gasses into the atmosphere, they eclipsed the entire climate footprint of Belgium. [8]

Further, looking at hamsters, researchers have found that microplastics appear to lead to blood clotting in mammals.[9] Inhaling burnt plastics is a well known cause of cancer, as many of the chemicals within plastics are made of carcinogens.[10] In fact, China's much publicized decision in 2018 to stop importing our solid waste, was cited as a matter of public health.[11] Not that this decision stopped America from finding other poorer and developing countries to accept our waste such as Bangladesh, Laos, and Ethiopia.[12] Microplastics have been found to cause both allergic reactions and cell death in humans.[13] We are also now at a point in which we can inhale nanoplastics.[14] The science is clear that our reliance on any plastics, not just single-use plastics, is a detriment to local and global human health.

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[5] *Ibid.*

[6] Oceana, "Single-Use Plastic and National Parks Survey," January 22, 2022. https://usa.oceana.org/wp-content/uploads/sites/4/Plastics-Polling_National-Parks-Only_Ipsos-Reviewed.pdf

[7] https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf, pg.1.

[8] Elgin, Ben, "Big Soda's Addiction to New Plastic Jeopardizes Climate Progress," Bloomberg,July 12, 2022.

[9] Thompson, Andres, "From Fish to Humans, A Microplastic Invasion May Be Taking a Toll," Scientific American, September 4th, 2018. https://www.scientificamerican.com/article/from-fish-to-humans-a-microplastic-invasion-may-be-taking-a-toll/

[10] Campanale C, Massarelli C, Savino I, Locaputo V, Uricchio VF. A Detailed Review Study on Potential Effects of Microplastics and Additives of Concern on Human Health. Int J Environ Res Public Health.

[11] Sara Kiley Watson, China Has Refused to Recycle The West's Plastics. What Now?, N.P.R. June 28, 2018, https://www.npr.org/sections/goatsandsoda/2018/06/28/623972937/china-has-refused-to-recycle-the-westsplastics-what-now.

[12] Erin McCormick et. al., Where Does Your Plastic Go? Global InvestigationReveals America's Dirty Secret, The Guardian, June 17, 2019,,https://www.theguardian.com/us-news/2019/jun/17/recycled-plastic-americaglobal-crisis.

[13] Parker, Laura, "Microplastics are in our bodies. How much do they harm us?" National Geographic, April 25, 2022, https://www.nationalgeographic.com/environment/article/microplastics-are-in-our-bodies-how-much-do-they-harm-us

[14] ibid.

We are simply running out of time. NYPIRG suspects that a study on the elimination of a single-use plastic product would find what much of the global science community agrees on, it should be banned.

The simplest and most effective approach to tackle the single-use plastic scourge would be to pass laws that outright ban the sale of single-use plastic products, while encouraging sustainable alternatives. We know that these bans work. New York has banned plastic bags and polystyrene foam, and New York City recently adopted an upon-request straw policy. These are important steps that must be added to.

It is critically important for New York to take bold action to reduce solid waste and plastics at the source, starting with packaging, especially packaging containing plastics and toxic chemicals, and starting with an expansion of the State's most successful recycling program, the bottle deposit law. There are two bills in the state legislature that would establish these needed policies which I will describe later in my testimony. Studies show that unless we make serious and drastic changes to the way that we approach solid waste, we are not meeting a pivotal moment, not just in New York City, but globally.

City Government Advocacy for a Statewide Extended Producer Responsibility

While this introduction is a step in the right direction, the City Council has a unique opportunity to bolster statewide organizing efforts that would drastically reduce solid waste not just in New York City, but statewide. In addition to the Introduction above, a statewide policy currently under consideration in Albany can buoy the City's Zero Waste by 2030 goal, and we urge the Council's continued support.

The state must create an Extended Producer Responsibility (EPR) program or Plastics & Packaging Reduction policy. EPR requires companies to be financially responsible for mitigating the environmental impacts of the packaging they use to sell and transport their products. Nearly 30% of the waste stream is packaging, much of it unrecyclable. Other than through deposits on beverage containers through the state's successful bottle bill, companies have no financial responsibility for the waste management of product packaging, and no requirements to reduce packaging waste or design packaging for recyclability. In fact, the State's draft Climate Action Council Scoping Plan calls for an effective and strong Extended Producer Responsibility (EPR) program on waste reduction, and expanded container deposit programs.[15]

A significant contributor to our waste and plastic pollution crisis is the fact that consumer brand-owners have no financial responsibility for the solid waste management of their product packaging. They have no requirements or incentives to reduce packaging waste, create reusable products, make packaging easier to recycle, or boost market demand by using more recycled content. EPR requires companies to be financially responsible for mitigating the environmental impacts of their product packaging, through reduction, recycling and reuse.

Municipalities have no control over the type of packaging materials that companies put into the marketplace, much of which are unrecyclable. The companies who are creating the packaging waste problem, including plastics and toxic contaminated packaging, should be accountable for the end of cycle disposal and recycling of their product packaging. An effective EPR policy holds producers responsible for the life cycle management of their products; modernizes and improves the recycling system; creates mandatory standards for waste reduction, recycling, and recycled content; includes strong accountability and enforcement frameworks; and phases out toxics in packaging.

[15]New York State Climate Action Council, "New York State Climate Action Council Draft Scoping Plan 2021," December 20, 2021.

New York's recycling rate is 18%.[16] In regions where EPR exists, rates can exceed 70%.[17] It is estimated that more than 860,000 tons of recyclable materials are trashed each year in NY.[18] The current recycling system places financial burdens on municipalities to collect, manage and market recyclable materials while companies are disconnected from end-of-life management. The value of recycling does not cover the cost to manage, in fact, in parts of the state recycling expenses exceed disposal costs.

In her 2022 State of the State address, Governor Hochul outlined the need for a statewide EPR program. The New York City Council chose to endorse the Governor's Article XII budget bill for this program in Resolution 55-2022. While the Governor and City Council's intentions were admirable, the proposed EPR program was deeply flawed.

The devil was in the details. Firstly, it had no rates or standards for reductions. Secondly, it would have opened a doorway to eliminating the state's incredibly successful bottle deposit program. Finally, it would have given the packaging industry an equal seat at the negotiating table in deciding how the state would pursue its waste reduction goals. The state would not ask Exxon Mobile's opinion on how to reduce climate emissions, yet it was comfortable asking the plastic industry for best practices around plastic reduction.

Additionally, Governor Hochul's flawed EPR legislation would have opened the door to pyrolysis, the process by which plastic waste is burned to create a low-grade fuel. Pyrolysis, which burns plastics down, has recently been rebranded by the fossil fuel industry to be referred to as "advanced recycling." Unfortunately, there is nothing advanced about this technology. It comes with all of the same risks associated with the burning of plastics. Advanced recycling pollutes our air and water and disproportionately harms low-income communities and communities of color. These facilities also require large energy inputs and are major climate change polluters, not to mention seriously undermining effective waste reduction efforts.

Organizations across the state were successful in blocking this bad EPR bill. Following Governor Hochul's comments in her State of the State address in support of EPR principles and solid waste reduction, Assemblymember Steve Englebright (Long Island) and Senator Rachel May (Syracuse) have introduced the country's most ambitious EPR policy, which would detoxify and reduce packaging by 50% over the next decade.[19] NYPIRG is waging a statewide campaign to educate and engage people about the need for an *EPR Packaging & Plastics Reduction Act*, and advocate for the state to approve the bill and substantially reduce solid waste and plastics pollution. We ask that the City Council join us in endorsing a bill with far more impact than the bill they are currently on record as supporting.

The Extended Producer Responsibility program outlined in **S.9164/A.10184** would be the most ambitious in the country, an opportunity for New York to lead nationally on a global issue. Key features include:

1. Requires companies to gradually reduce their packaging by 50% over 10 years, which can be achieved by either eliminating packaging and/or switching to reuse and refill systems.
2. Requires companies to transition 90% of their remaining packaging over 12 years to be either recyclable, compostable, or made of recycled content.

[16] Kamczyc, Alex, "Association of Plastic Recyclers endorses New York recycling proposal," Recycling Today, March 24, 2022, https://www.recyclingtoday.com/article/association-of-plastic-recyclers-endorses-new-york-hochul-recycling-plan/#:~:text=New%20York's%20average%20recycling%20rate,for%20recycled%20resin%2C%20Alexander%20says.

[17] New York League of Conservation Voters, "NYLCV Supports Legislation Seeking to Modernize Recycling System in New York State," February 25, 2022.

[18] Editorial Board, "NYS recycling needs a new model - EPR," Newsday, March 28, 2022, https://www.newsday.com/opinion/editorials/epr-recycling-extended-producer-responsibility-ijy7ye2r

[19] Beyond Plastics, "Comparison of Extended Producer Responsibility (EPR) Bills in New York," May 31, 2022, https://static1.squarespace.com/static/5eda91260bbb7e7a4bf528d8/t/62963bb513b9c25235aafb82/1654012854119/ComparisonNYEPRBills.2022-0524.pdf

3. Eliminates known toxic substances, including PFAS, mercury, lead, and formaldehyde from packaging, making packaging safer for consumers and more recyclable.
4. Transfers the responsibility for managing packaging waste from taxpayers to the companies that caused the problem, putting the economic burden where it belongs.
5. Provides funding to local governments for waste reduction programs, recycling, and waste disposal through the use of new fees, which are adjusted based on the environmental impacts of the packaging.
6. Prohibits the burning of plastic and waste-to-fuel from being considered recycling, protecting communities from this new source of pollution.
7. Includes accountability and enforcement mechanisms such as reporting and auditing requirements.
8. Requires collection and reporting of data that will provide insight into local recycling and waste management systems.

City Government Advocacy to Expand and Modernize the State's Successful Bottle Bill

We urge the Council's continued support for another critical statewide policy – the modernization of New York State's 40-year-old Bottle Deposit Law. The bill (A. 10184/ S. 9164), which was introduced by Assemblymember Englebright and Senator Rachel May, would increase the deposit from a nickel to a dime and would expand the types of containers to sports drinks, iced teas, juices, wine, and liquor that New Yorkers consume each year. Dairy products and infant formulas containers would be exempt. The law has been extremely successful in boosting the state's – and city's – recycling rates and has reduced litter. Expansion would bring immediate and long-lasting financial and environmental benefits to the city's solid waste programs. It is essential that the Committee on Sanitation and Solid Waste support efforts to improve the state's Bottle Bill and call upon our elected officials in Albany to act now.

Enacted in 1982, the New York State Returnable Container Act ("the Law"), commonly known as "the Bottle Bill," requires a 5-cent refundable deposit to be placed on eligible beverage containers. Upon passage, the Bottle Law covered only beer and soda sold in New York. (It was subsequently expanded to cover wine coolers and water bottles.) The Law requires retailers who sell covered beverages to accept returns of empty containers for the products they sell and to 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.

New York City and other municipal recycling programs are particularly struggling with glass breaking in their recycling streams. When glass breaks in curbside containers it can "contaminate" or render unrecyclable for the municipality much of the other materials. The expansion of the Bottle Bill to include non-carbonated beverage containers, wine, spirits, and hard cider would remove from curbside recycling a significant portion of the glass containers that municipal recycling programs are struggling with. Currently, glass containers pose a daunting challenge for municipal recycling programs already grappling with a decision by China to stop accepting some of the United States' recyclate material (or recyclables).[20]

Even when recyclable materials are not contaminated by broken glass, the costs of recycling containers that are not covered under the state's Bottle Bill are too high for many municipalities. For example, the costs associated with collecting and processing PET plastic bottles and glass per ton are higher than revenues per ton for scrap material.[21] States that have a bottle deposit are 46% more likely to recycle PET plastic bottles than states that do not.[22]

[20] Watson, Sara, "China Has Refused To Recycle The West's Plastics. What Now?," *NPR*, June 28, 2018, www.npr.org/sections/goatsandsoda/2018/06/28/623972937/china-has-refused-to-recycle-the-wests-plastics-what-now.
[21] Container Recycling Institute, "Cost of Curbside Recycling for Beverage Containers," May 31, 2018, https://www.container-recycling.org/images/stories/PDF/Fullnetrecyclingcostcurbside10-18-18%20V2.pdf.
[22] Container Recycling Institute, "Container Deposits: The Rockstars of Recycling," https://legislature.vermont.gov/Documents/2022/WorkGroups/House%20Natural/Bills/H.175/Witness%20Documents/H.175~Susan%20Collins~Container%20Deposit%20Handout~2-24-2021.pdf.

Expanding the Bottle Bill would reduce or eliminate these costs for municipal programs by creating a financial incentive (the deposit) for consumers to return and an obligation (the law) for retailers to accept these containers, relieving the burden on local government recycling programs.

Municipal curbside programs and bottle deposit programs are more effective together and create a comprehensive approach to recycling. States with Bottle Bills have better recycling rates than non-deposit states. According to the *Container Recycling Institute*, states with Bottle Bills have a beverage container recycling rate of around 60%, while non-deposit states only reach about 24%.[23]

As referenced earlier, requiring a deposit on containers has helped to boost recycling and reduce litter. Not surprisingly, those overall benefits are ones found in New York City as well. At a minimum, "canners" have financial incentives to collect unredeemed deposit containers and return them to redemption centers. Expanding the containers covered by the law will reduce the stresses put on the city's solid waste systems and increasing the deposit to a dime[24] would further incentivize "canners" to redeem those containers not returned by consumers.

While a material recovery facility (MRF) may argue that increasing the deposit on containers would impact the facility's bottom line and make the costs of recycling prohibitive, that is not the whole story. Curbside recycling and bottle deposit systems work best in *tandem*. The operational burdens and financial costs of the city's waste management system would be alleviated through an increased deposit. The lost revenue from material that would be recycled through the bottle deposit would be relatively insignificant when compared to avoided collection and disposal costs[25].

MRF revenue comes from two streams. While selling the collected recyclable material is a method of funding, it pales in comparison to the money that they make from their throughput fee. Simply put, the city will be charged less as there will be less waste to handle. Per the Congressional Research Service, "Deposit systems skim potential sources of revenue from curbside programs, but they also reduce the operating costs of curbside programs. Local governments would appear to achieve greater diversion of solid waste from disposal at a lower cost per ton if both a bottle bill and a curbside collection program were in place.[26]"

In a report prepared by DSM Environmental Services Inc. for the Massachusetts Department of Environmental Protection, a bottle bill modernization was estimated to reduce costs for Massachusetts municipalities, even after netting out potential lost revenue. The report estimated the total savings to be between $3.8 and $6.5 million dollars annually. Because material is diverted to other avenues through the bottle bill, savings are primarily due to reduced collection and disposal costs.[27]

Conclusion

New York City often finds itself in a position where it is hamstrung by Albany from passing legislation as ambitious as it would like. However, the City Council has a unique role to play in the consideration of statewide measures

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[23] Container Recycling Institute, Bottle Bills, www.container-recycling.org/index.php/issues/bottle-bills

[24] The 5-cent deposit established in 1982 has not been adjusted. Had it been merely adjusted for inflation; the deposit would be nearly 15 cents today.

[25] Container Recycling Institute, "Cost of Curbside Recycling for Beverage Containers," May 31, 2018, https://www.container-recycling.org/images/stories/PDF/Fullnetrecyclingcostcurbside10-18-18%20V2.pdf

[26] Bottle Bills and Curbside Recycling: Are They Compatible? James E. McCarthy, Specialist, Environment and Natural Resources Policy
Division. January 27, 1993.

[27] 3 DSM Environmental Services, Inc for Massachusetts Department of Environmental Protection, "Analysis of the Impact of an Expanded Bottle Bill on Municipal Refuse and Recycling Costs and Revenues – FINAL LETTER REPORT": July 21, 2009.

that could impact not just New York, but the entire world. While NYPIRG applauds the New York City Council's efforts to continue addressing the city's solid waste concerns, we also believe in the leadership of this committee to pursue more robust and effective policies. We must lead so that the state may follow, much like in the fight to ban plastic bags. The science is clear, we must ban single-use waste in New York City–the sooner, the better.

Thank you for the opportunity to testify today. NYPIRG looks forward to working with the New York City Council so that the City's growing solid waste problem is no longer "dumped" in an Newark incinerator, but instead a comprehensive solid waste reduction plan is implemented to achieve the 2030 zero waste goal through reduce, reuse and recycle program improvements with reporting and accountability measures baked in. New Yorkers deserve a much cleaner, more sustainable city grounded in the principles of environmental justice.

Testimony presented to the Sanitation and Solid Waste Committee of the NY City Council By Jacquelyn Ottman, September 20, 2022

Good afternoon Councilwoman Nurse and the members of the Sanitation and Solid Waste Committee. Thank you for holding this hearing, and allowing me to testify.

I am Jacquelyn Ottman. I am an expert in marketing environmentally preferable products and behaviors to consumers. I am past chair of the Manhattan SWAB, and, as the founding chair of its Residential Recycling Committee, the principal author of two guides that share best practices for encouraging participation in recycling and organics collection in NYC's multifamily buildings. They can be downloaded for free from the ManhattanSWAB.org website, at this link:
https://www.manhattanswab.org/residential-recycling-guides

I also teach the residential and commercial recycling courses to superintendents and other building worker members of the Local 32BJ. I sit on my building's coop board.

In addressing ways to enhance recycling in NYC, please consider these two issues: One, **how to increase recycling participation in multifamily buildings, where a large percentage of the City's residential waste emanates;** and, Two, **re-establish the Citywide Recycling Advisory Board.**

On average, across the country, multifamily buildings recycle at **half** the rate for single family homes. I suspect NYC's multifamily buildings recycle at less than this. Why? Because of two key challenges. The first is **diversity** – half of New Yorkers don't speak English as a primary language. The second is the **transient nature of NYC residents.**

DSNY signage, even if it is placed near recycling bins per regulations, isn't enough! Responsibility to get residents to sort properly and keep up with the constant stream of new residents primarily flows directly to building staff, who are ill equipped to play recycling educator and monitor.

A strong chorus exists for large-scale communications efforts — which I wholeheartedly support, and have presented testimony about, many times over the years. Until funds can be allocated, there are other less costly ideas that can be explored. They include:

1. Require **clear bags instead of black** for trash — even on a periodic basis — so it is easier to spot recyclables;

2. **Require mandatory recycling lease riders** with annual reminders. The purpose: to notify residents of their recycling responsibilities, and how recycling works in their own building.

3. **Require mandatory zero waste training for building staff,** who often don't understand themselves how the NYC recycling system works.

4. My final suggestion is to **reinstate the Citywide Recycling Advisory Board** (CRAB). The CRAB was required by Local Law 19 of 1989, beyond the boroughwide Solid Waste Advisory Boards. **It last met around 2010.** Staff-supported by DSNY, among its accomplishments, it convened two roundtables that included experts from other cities. The roundtables made significant contributions into the design of Sims, our current city-supported MRF and organics systems.

Boston, Portland and Berkeley have such advisory boards. They are composed of representatives from various city agencies and other sectors. A key goal for your committee would be to convene such a NYC Zero Waste Advisory Board in time to inform the next Comprehensive Solid Waste Management Plan, due for adoption by 2026.

Thank you for the opportunity to present these remarks.

Jacquelyn Ottman is immediate past chair of the Manhattan Solid Waste Advisory Board. The founder of its Residential Recycling Committee, she was the principal author of two Guides prepared to share best practices for encouraging recycling and organics participation in NYC multifamily buildings. They are entitled, “Creating a Culture of Recycling and Reuse in your NYC Multifamily Building”, and “Engaging Residents of NYC Multifamily Buildings in Organics Collection.” They are available as Free PDF downloads from this link: https://www.manhattanswab.org/residential-recycling-guides

Ottman is also the principal instructor of commercial and residential recycling for the educational arm of the 32BJ, the union representing local residential and commercial building workers.

The author of *The New Rules of Green Marketing: Strategies, Tools and Inspiration for Sustainable Branding,* now in its third edition, since 1989, as an independent consultant, Ottman has been advising Fortune 500 firms, the U.S. EPA’s Energy Star program and the USDA’s Certified Biobased label on environmental marketing strategies.

A native New Yorker, she resides on the Upper East Side, where she is a past president of the East 69th Street Association and serves on her building’s co-op board, where she oversees waste and energy and climate-related programs.

###

New York City Council Committee on Sanitation and Solid Waste Management
Oversight Hearing on
The State of NYC Recycling on Tuesday, September 20th at 1PM

Good afternoon fellow citizens, advocates, Chair Nurse and members of the Committee on Sanitation and Solid Waste Management and the Department of Sanitation. Thank you for your commitment to our city.

My name is Georgi Page and I'm an Organizer with 350Brooklyn, an environmental organization that works locally to fight the global climate crisis, with a focus on fossil fuels. My concern is mainly with plastics and their incredible damage to our environment and our bodies from the beginning to the end of their lifecycle. There are microplastics in our oceans, animal life, the food we eat and in placentas at the very beginning of life. It has to stop immediately. Immediately.

So I am here today to voice my frustration at the lack of action and progress on 6-7 of commonsense waste bills that are pending in the City Council and which I believe should be scheduled for a vote as soon as possible if we are to meet our climate goals - and we MUST meet our city's climate goals because there is no other option: for the vast majority of us life is short and there is no 'planet B'. :

- CLIMATE: Recycling is a **critical** component of NYCs 20-year climate plan
- COST: Exporting our garbage to other communities in other states is NOT a solution and costs New York City taxpayers $290 million in 2007, not including the cost of collection. With better recycling we will EARN money, instead of SPEND it.
- POLLUTION: Failure to recycle plastics properly, in particular, is leading to more and more burning of waste and toxic chemicals poisoning our air and water. We are using way more plastics than is necessary not because we need them but because the oil and chemical industries want the profits, so they pay for legislation and lobbyists and mandates that support the production and use for more plastics, and they fight any legislation that seeks to limit plastics. We are watching this closely.

For these reasons it's not enough to simply commit to pilots: we must accelerate and redouble our efforts to **pass LAWS citywide. Our organization supports ALL of the pending Zero Waste legislation and as we table every weekend this legislation is also overwhelmingly supported by the citizens of Brooklyn. They are CLAMORING to sign on in support. They even give us their email addresses! So 350Brooklyn reflects the opinions of these citizens and we ask that you redouble your efforts to reach them and teach them. We need you to work backward from the goal of 'saving the planet' and pass the following legislation with HASTE - ESPECIALLY including support for Extended Producer Responsibility at the state level. We must leave no stone unturned and we must ask more of our citizens, because they really do care!:**

- Intro 244 - Universal Residential Composting
- Intro 280 - Requiring 1 recycling center in each community
- Intro 281 - 3 easily accessible drop-off sites

- Intro 274 - Establishes a goal of zero waste
- Intro 275 - Department of Sanitation to report on progress towards zero waste
- Intro 0559 - the Skip The Stuff would require businesses to only offer plastic utensils upon request.

When I moved to New York City some 20 years ago I didn't expect to find a city that is so shockingly behind-the-times and legging so far behind other leading global cities. But while some of you may see it as an unattainable dream - **I see goals, dreams, visions, ambition and hope as a critical part of this mission and this conversation. We are accepting too much of the status quo. Door-to-door canvassing with all hands on deck seems like an appropriate level of response to the crisis we find ourselves in, but it would be great to see regular, consistent and more creative mobilizations like this. We are New York City, we have a wealth of creativity here: let's make it lit! Let's talk to each other! Let's use Influencers - there's one on every block!**

Again 350Brooklyn volunteers table at Prospect Park every weekend - it would make sense to see DSNY or NYC Parks representatives separating and managing waste on site and reminding people how to be good stewards of their parks, as well as raising awareness and educating folks as 350Brooklyn have committed to do. 350Brooklyn talks to citizens about Universal Residential Composting not as an opportunity to grow the vermin population, but as a rat mitigation strategy! I collected leaves in a 'feel-good' event at my park…only to see them put into plastic bags destined for a landfill! We need City Agencies and Departments to walk the walk and make their points directly and more efficiently, though action.

- Cities like San Francisco are recycling at least 80% of their waste and getting close to zero waste because they adopted aggressive goals.
- Countries like Germany, Austria, South Korea and Wales have managed to attain at least 56% diversion rate - with South Korea even managing to recycle 95% of its food waste since 1995, that is just 27 years and it has been due in large part to an ambitious agenda promoted by non-profits in that country.

New York City, on the other hand, has a residential recycling rate that is stagnating at 17% - half of what we could be recycling - and this has barely advanced since 2010. We need to move more aggressively!

We are failing abysmally at meeting our critical climate goals. We must focus on setting aggressive GOALS, REDUCING our over-consumption of plastics and other recyclables, becoming more EFFICIENT in the recycling of objects we do consume, making sure that we establish reporting and creating ambitious benchmarks for ACCOUNTABILITY. Ambition is not just for the private sector anymore, it's for citizens, as well.

We don't need more long-drawn-out studies, we need to do what's necessary NOW - especially when we can look to pilots in other cities. Speaker Adams must schedule a vote on the pending legislation and Council Members must show the courage to lead.
And we must start NOW. The Climate Crisis is here.

Dear Committee on Sanitation and Solid Waste Management;

My name is Jan Thompson and I am a co-lead of the Plastic Free working group at 350 Brooklyn. First of all, I want to thank the Dept of Sanitation for everything that they are doing towards effecting a solid recycling and composting program. I know there is great effort involved. It is my hope that we can become a beacon that other cities look to as a model for recycling, composting and legislation that promotes producer responsibility and curtails the use of single use plastic.

1. (INT-0494) A Study on Single Use Plastics

Would require a comprehensive study of new waste policy initiatives that would reduce the sale, distribution and use of single-use plastic items in the city and advance environmental justice through such reduction.

My testimony is as follows:

- Plastics have ballooned in popularity since post WW2 and have played a helpful role in many ways. But there is also a very dark side to plastic as most of us already know so I'll be brief.
- They come from fossil fuels and therefore contributing to climate change
- They create a lot of landfill, since most are not able to be recycled. They take hundreds of years to break down.
- They are now so pervasive that they can be found everywhere from our drinking water to the human placenta as one of the latest disturbing studies has found.
- We know that certain plastics can cause hormone disruption and have been known to lead to cancer. There are numerous studies out there that one can already find on this.
- Bioplastics and compostable plastics are unfortunately offering false promises. Educating the public on what bin to put these in is one issue, since they are often thrown into recycling not composting. But the fact that they are not easily composted and can in fact take dozens of years to break down is not widely publicized- therefore we consider these to fall into the category of what we would call "green washing."
- We are in favor of the study if
    - It will be helpful to pass future legislation to reduce single use plastics. It has been somewhat frustrating to see all the legislation that is needed to manage single use plastic in our city and state, such as the plastic bag ban and the straw ban, which my group wholeheartedly supported. But

there is a need for a **more overarching bill** so we don't need dozens of bills to curtail each type of single use plastic,

- It would be great if the study would also provide better statistics on the amount of and types of plastic waste we have in NYC, and include recommendations to make these more recyclable, such as requiring manufacturers to use certain types of plastics.
- It would be helpful if the study can help quantify how the poorest and most vulnerable populations are being affected by single use plastics.

2. The State of NYC Recycling

- We are in favor of the Skip the Stuff bill and enforcement of the plastic bag ban and straws on request law.
- We feel we urgently need an Extended Producer Responsibility law - I know this is currently being worked on at the state level but maybe if it does not happen there, the city could consider it.. EPR laws will hold producers responsible for the types of packaging they create and penalize them when they release something that cannot be recycled.. An example where an EPR law could be helpful would be to penalize companies who add resins to their plastic, which Commissioner Tisch cited make it impossible to recycle. Germany is an excellent country to study for the success of EPR as mentioned.
- Cities like London have come close to meeting goals where recycling and organic trash outpace the amount of landfill trash that is collected. We can and should study the methods used.
- Commissioner Tisch stated that organics represent 30% or more of total waste in New York City and yet we collect only about 1%. Thank you for going door to door in Queens. I do feel however that we need a broader marketing campaign to educate the public via media such as signage, tv and radio, subway ads etc. There are still myths that need to be overcome such as it going to landfill and drawing rats. Also we need to show how EASY it can be to compost. And how the effort we put in is going to reduce the methane in our atmosphere and WHY that's important. We need to INSPIRE people to do it, then and only then will they do it.

To recap I support the Study on Single use Plastics and evolving our recycling system to be world class, without introducing chemical recycling, bioplastics or other false solutions. One way we can do this is a stronger EPR and Bottle Bills and to actually enforce some of the single use plastic bills that have already been passed. We need a major PR / Media plan to get the word out to residents of New York City and train them on recycling and composting methods.

Thank you for listening and all your efforts to help reduce single use plastic and other waste.

Sincerely,

Jan Thompson
350 Brooklyn, Plastic free

My name is Susan Boyle, I've made Brooklyn my home for the past 26 years (aside from one year living in the Bronx). I am an active member of 350Brooklyn and co-leader of the Plastic-free working group.

This testimony is in support of INT-0494 a Study of Single Use Plastics –this study should kickstart a comprehensive effort to reduce the sale, distribution and use of single use plastics- and advance environmental justice through such action. This study can look at how New York City can reboot the entire recycling system; including composting.

New York City has a giant waste problem- this study and the subsequent legislation and actions will change that! The improvements we enact can make New York City the national and international leader in the realm of recycling and waste handling. NYC should extract all the value we possibly can from trash. Food waste alone is 40% of NYC's waste! This is almost HALF of our trash that we could be collecting and turning into valuable compost. The compost can be used by the Parks Department to improve our soils and make our city more resilient during rain events. The benefits of a robust, city wide, mandatory, and efficient composting program are endless. The following legislation will help NYC get to where it needs to be.

- Universal Residential Composting

  (Intro 244) Council Member Hanif's proposed legislation would mandate universal residential composting by the end of 2023 for nearly every building in New York City. This bill also requires DSNY to report the total amount of organic waste diverted and increases education and outreach by requiring residential buildings to distribute information to tenants.

- Community Organics and Recycling Empowerment (CORE) Act

  Majority Leader Powers' CORE Act consists of:

- Intro 280 - Requires at least 1 recycling center in each community and the collection of recyclable materials like electronics, textiles, and other materials for recycling, which cannot be disposed of into our general waste stream.
- Intro 281 - Would substantially increase equitable access to composting and recycling in New York City by requiring at least 3 easily accessible drop-off sites for organics in all community districts.

- Zero Waste Mandate and Reporting

  Council Member Nurse's legislation mandates that the administration meet New York City's Zero Waste goals by 2030, and requires DSNY to report on the city's progress toward sending zero waste to landfills.

  Intro 274 - Establishes a goal of zero waste for New York city by 2030.

  Intro 275 - This bill would require the Department of Sanitation to report on the City's progress toward sending zero waste to landfill by 2030. more

- NEW: Skip The Stuff Intro 0559

  The Skip the Stuff bill - Intro 0559 – would require restaurants to provide plastic utensils, condiments, chopsticks, napkins and plastic plates to take-out or delivery customers only upon request.
  This sensible bill will:
    - Cut down on plastic waste and other trash
    - Save NYC's restaurants money every year in reduced operating costs.

We all know that the production and use of single use plastics has become unsustainable. Single use plastics can be avoided. We need to provide great alternatives that work well for all income levels. Consider glass. Though glass can be infinitely recycled without losing quality, it doesn't play well with other materials. When glass is collected alongside other recyclables, breakage and mixing with paper and plastic results in material contamination, making recycled glass costly and uncompetitive relative to virgin material. Consequently, less than 25% of glass is recycled today.

Reusing glass containers rather than recycling comes with significant environmental benefits. Glass bottles that are reused multiple times generate 57-85% fewer greenhouse gas (GHG) emissions compared to other packaging.

Recent efforts from advocates and industry have shown increased interest in circular economy legislation including deposit return systems, minimum recycled content requirements, and extended producer responsibility.

Fortunately, important new initiatives have already been proposed at the state level which use Extended Producer Responsibility (EPR) where financial and physical responsibility for recycling and reuse is shifted away from the general public to producers. This also includes the use of incentives to incorporate environmental consideration into the design of their products and packaging.

These EPR initiatives include a proposal to revamp the NYS bottle bill by upgrading and modernizing our bottle return system. The proposed modernizations include updating bottle return machines and increasing the number of drop off sites, deposit amounts from $0.5 to $0.10 and the types of bottles that can be returned. Because bottles and cans are redirected away from landfills and dumps.

Thank you for Considering this testimony and for holding this hearing.

Sincerely,

Susan Boyle
Dean St Apt
Brooklyn NY 11239
tengrandfab@gmail.com

The State of Recycling in NYC

Good afternoon Chair Nurse, members of the Committee on Sanitation and Solid Waste Management and fellow citizens.

My name is Michele Greenberg. I live in District 39, I am a constituent of Councilmember Hanif and a volunteer with 350Brooklyn an affiliate of a global organization countering climate change at the local level.

For many years, I have seen the heartbreaking images of plastic garbage floating out in the ocean. I also recently learned that almost all plastic is made from fossil fuels and that plastic use has increased exponentially in the past few years. This means that the manufacture of plastic harms us not only through pollution of land and waterways, plastic production is energy-intensive, produces greenhouse gas emissions AND if production increases at the current rate, is expected to account for 15-19% of total carbon emissions by 2050.

This was upsetting to learn about and made me want to do everything I could to reduce the amount of plastic I use in my daily life. I also started to notice how much of my food and cleaning supplies come in plastic packages, many of which are not recyclable. Right now, in order to stop buying food and personal hygiene products that come in plastic packaging, I would have to stop buying cereal, meat, pasta, yogurt, cheese and many types of bread, vegetables and fruit not to mention toothpaste, deodorant, shampoo, dishwashing liquid and detergent to wash clothes. So, despite my valiant attempts to use less plastic, there is currently very little that I can do if I want to keep eating and stay clean! Clearly something new has to happen at the governmental level if we are to see the change we need in time to avert catastrophe.

Fortunately, there are already important new initiatives proposed at the state level which use Extended Producer Responsibility (EPR) where financial and sometimes physical responsibility for recycling and reuse (such as with returnable milk bottles) is shifted away from the general public to producers. Given the extreme lack of recycling markets at this time, this idea is not only obvious, it is essential! EPR also includes the use of incentives to incorporate environmental consideration into the design of each company's products and packaging.

These EPR initiatives also include a proposal to revamp the NYS bottle bill by upgrading and modernizing our bottle return system. NY was the first state to enact a bottle bill (in 1982) which had the goal of decreasing litter. Now we know that it is important in many other ways including having positive impacts on climate change, the state's economy and our social fabric. Modernizing includes updating outdated bottle return machines, increasing the number of drop off sites, increasing deposit amounts from $0.5 to at least $0.10 and increasing the kinds of bottles that can be returned to include such categories as wine bottles. Because bottles and cans are redirected away from landfills and dumps, in NYS 331,900 metric tons of co2 will be reduced annually, $70.9 million will be saved by redirecting recyclables away from curbside collection systems and 5.4 billion additional beverage containers will be recycled each year yielding, in NYC alone, 167,000 tons of high -value material annually.

These proposed actions are brilliant, have been shown to work in Canada and Europe, save money AND go a long way to save our planet in an area that everyone agrees is in dire need of an overhaul. Unfortunately, the original bill that was proposed close to 2 years ago wasn't included in Governor Hochul's budget so another bill was introduced in May of this year. But if New York City, as the largest city in the country, would once again take the lead and pass a similar bill here in NYC (along with scheduling votes for all of the composting, recycling and Zero Waste Legislation that is currently pending a vote), we would have the opportunity to do something critical to our survival: making this planet saving model a reality and showing our state, country and world that stopping climate change is not only possible, but can be a win-win for everyone including individual people, government and corporations.

Thank you.
Michele Greenberg
Reeve Pl
Brooklyn, NY 11218

American Chemistry Council | Plastics Division

20 September 2022

Electronic Delivery

Honorable Sandy Nurse, Chair, and
Members, Committee on Sanitation & Solid Waste Management
City Council, City of New York, State of New York
250 Broadway
New York, NY 10007

In re: Public Comments: Int. 494-2022, relating to: a local law in relation to a study of "single-use plastics".

Dear Chair Nurse and Members,

On behalf of the American Chemistry Council's (ACC) Plastics Division and its member companies, thank you for this opportunity to provide public comments to Int. 494, relating to: a Local Law in relation to a study of "single-use" plastics.[1]

ACC and our members are deeply committed to creating a more circular economy for plastics. That is why ACC and its plastic members were among the first to establish ambitious, forward-thinking goals that all plastic packaging in the United States is reused, recycled, or recovered by 2040 and that all U.S. plastic packaging is recyclable or recoverable by 2030.[2] Achieving these goals will require industry, manufacturers, brands and retailers, recyclers, and waste haulers, as well as citizens, communities, non-profits, academics, and federal, state and local governments to come together to support policies and programs to increase the supply of and demand for recycled materials and create the circular economy we all want.

Public policy, especially on health, climate change and the environment, must be developed based on data and science – not ideology. To guide the City Council in its development of future public policy on climate and material use, this study should be expanded to study the comparative benefits, resource use, resource efficiency and carbon impact across the full life cycle of materials, such as plastics, steel, aluminum, glass, textiles, wood, and paper. The study should cover raw material extraction, production, transportation, packaging, use, disposal, and all methods of materials recovery. These findings should inform the city to further guide public policy on materials use and climate change. We believe the study results will help inform sound, science-based decision making. City policies should consider materials' life cycle impacts, as well as contributions to optimizing resources, conserving energy, preserving material and food, and reducing greenhouse gas emissions.

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[1] Sandy Nurse, "A Local Law in Relation to a Study of Single-Use Plastics," Pub. L. No. Int. 494 (2022), https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=5669050&GUID=90EBE187-205A-46D3-ACA0-5A35CE627918&Options=ID|Text|&Search=494.

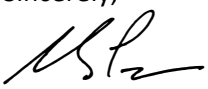
[2] "U.S. Plastics Resin Producers Set Circular Economy Goals to Recycle or Recover 100% of Plastic Packaging by 2040," Media release (American Chemistry Council, May 9, 2018), https://www.americanchemistry.com/chemistry-in-america/news-trends/press-release/2018/us-plastics-resin-producers-set-circular-economy-goals-to-recycle-or-recover-100-of-plastic-packaging-by-2040.

ACC recommends fair consideration of the economic and environmental benefits of plastics. Int. 494 directs different city departments to conduct a comprehensive study of new waste policy initiatives that would reduce the sale, distribution and use of single-use plastic items in the city and advance environmental justice through such reduction. This assumes that reducing plastic items is always environmentally preferable, before the study is completed. Plastics are critical to modern society, from lightweighting vehicles reducing their emissions, to sealing and insulating our offices and homes, to delivering essential health care, preserving food and preventing food waste, and contributing to an overall higher quality of life. These are just a few ways that plastic innovations are necessary for a better, more sustainable future.

ACC believes that an amended study will help transition the city to a more circular economy. In addition to these suggestions, ACC also suggests the city consider other elements of the "5 Actions for Sustainable Change."[3]

Again, we urge the committee **to amend Int. 494**. Please find our specific suggestions attached. Thank you for this opportunity to provide information to the Committee. If you have any questions or if we may be of further service, please feel free to contact Margaret Gorman, ACC's Senior Director for the Northeast Region at (518) 432-7835 Ext. 1903 or Margaret_Gorman@AmericanChemistry.com.

Sincerely,



Adam S. Peer,
Senior Director, Plastics Division
American Chemistry Council

Attachments

[3] "5 Actions for Sustainable Change," Industry report (Washington, D.C.: American Chemistry Council, 2021), https://www.plasticmakers.org/files/d6b3a34b9a88b1a6ee4da0a73b24562d740f80e4.pdf.

Suggested Amendment, relating to: Comprehensive Study, to:

Int. 494-2022, relating to: a local law in relation to a study of single-use plastics

On page 1, line 12, ***delete***:

"plastics"

On page 1, line 16, ***delete***:

"plastic"

On page 2, line 18, ***delete***:

"plastics"

On page 2, line 27, after "city;" ***insert***:

"Each evaluation under this act shall consider total lifecycle of (1) human, (2) economic, (3) and environmental benefits and impacts pursuant to generally accepted frameworks and standards and compared to alternatives. Such evaluation shall include meaningful public participation and comment pursuant to generally accepted frameworks and standards."

On page 2, line 28 and 30, delete:

"plastics"

Sandra Goldmark
Assistant Professor of Professional Practice and Director of Campus Sustainability and Climate Action, Barnard College
Senior Assistant Dean for Interdisciplinary Engagement, Columbia Climate School

Testimony for the *Sanitation Oversight Hearing on The State of NYC Recycling on September 20th*

9/21/22

Barnard College is a liberal arts College for women located on the Upper West Side, affiliated with Columbia University. Barnard is committed to equitable and inclusive climate action, as articulated in our 2019 Climate Action Vision. Our goal is to build equitable, inclusive climate responses, and to equip our students to do the same, whatever their personal or professional path. One key aspect of Barnard's unique approach to climate action has been a comprehensive assessment of the full scope of emissions: our on-site combustion (Scope 1), our purchased electricity (Scope 2), and our indirect, consumption-based emissions (Scope 3). We developed a unique calculator to track these hard-to-measure Scope 3 emissions, and found that they represent as much as 60% of our total emissions. The impacts of consumption extend far beyond emissions, to habitat loss, waste, plastic pollution, and more. Barnard's urban campus is in many ways a microcosm of the larger metropolis: the C40 report indicates that large cities' consumption based emissions are largely undercounted – and under-addressed. The legislation before the Council today is a critical step towards analyzing, measuring, and reducing consumption-based emissions, waste, plastic pollution and other environmental and social harms.

I want to take a moment to thank Manhattan Borough President Mark Levine and the prime sponsor of Introduction 0494, Councilmember Sandy Nurse, for their leadership, and Councilmembers Joseph, Abreu, Restler, Cabán, Holden, Bottcher, De La Rosa, Sanchez, Stevens, Richardson Jordan, Dinowitz, Menin, Won, Powers, Marte, Hudson, Barron, Louis, Gennaro, Ossé, Schulman, Avilés, Ayala, Ung, Riley, Salamanca, Velázquez, Brooks-Powers, Rivera, Brewer and Farías for their engagement with this pressing issue. As we've seen on our campus, we can not only look at emissions from buildings and electricity: we must address consumption, waste, and indirect emissions.

Barnard's findings on the outsize impact of consumption hold true at the larger, citywide scale. As of 2020, urban centers like ours are responsible for 72% of global greenhouse gas emissions. What's more, consumption-based emissions from the world's 100 largest cities represent 10% of global emissions. In order to maintain the goal of keeping global temperature

rise below 1.5°C as established by the Paris Agreement, indirect, urban, consumption-based emissions must be cut by 50% by 2030. As these figures prove, consumption – and the subsequent waste baked into our consumption habits from beginning to end – is a huge problem for cities like ours. The toxic byproducts of our material world, from plastic waste to harmful runoff in our waterways, disproportionately harm low income communities and communities of color, a massive equity issue for the city to tackle. One place to start is with single-use plastics, one of the largest drivers of urban consumption and waste. By mandating a study aimed at the eventual reduction in use of throwaway plastic products, this bill has the potential to help New York City better understand our plastic waste so that we can change for the better.

At Barnard, in addition to measuring our indirect consumption-based emissions, we are taking aggressive steps to reduce them. We are building a Circular Campus, partnering with private entities like the award-winning startup Rheaply, the Morningside Area Alliance, local non-profits, schools, community organizations, and faith-based organizations to reduce waste, emissions, and increase access, affordability, and community resilience. By adopting Rheaply as our campus reuse platform and scaling our move-in/move-out programming, we have onboarded 740 students to our reuse platform, diverted 13 tons of waste from landfill, and saved our students more than $50,000 in dorm and class supplies over the past year. Our circularity strategy started in Barnard's theatre department, where, by intentionally scaling reuse of materials for our sets and costumes, we not only reduced departmental waste, we were able to save money, redeploying our budget to support artist fees, increasing design fees by 58% and prop artisan compensation by about 70% since 2016. These types of co-benefits are a hallmark of circularity, and can be harnessed at the city level as well.

Circularity is an antidote to waste and planned obsolescence. It is a powerful tool in the fight against climate change, waste and inequity, but we're not using it to the extent we should be. Data released in 2021 show that only about 8.6 percent of the global economy is "circular." The World Resources Institute calculates that by "doubling global circularity in the next 10 years, global greenhouse gas emissions could be reduced by 39 percent by 2032." In addition to reducing waste and emissions, a truly circular city also brings social and economic benefits by increasing access to high quality goods, building community resilience, benefiting local businesses and creating local jobs.

Reducing single use plastics and analyzing New York's waste streams is an important step. The opportunity presented by this study, however, extends even further. The only way to reduce waste is to look at the source, and to create alternatives that are sustainable from cradle to grave. This legislation can be a key part of transforming New York into a truly "circular city," where waste and emissions are reduced and community resilience fostered.

Big cities are the perfect place to develop and scale circular systems, and circularity is a refreshingly simple ideology: It requires us to produce and buy only what we need, take good care of our things and repurpose them when they're no longer of use. This ancient practice is already a familiar, but too often informal, part of our daily lives. From neighborhood swaps to

compost sites to public libraries to building retrofits and preservation, circularity is all around us. This proposed study, and the potential it unlocks for the reduction of waste, and single use plastics in particular, is a crucial step on the road to a more sustainable, equitable, and circular city.

CITIZENS BUDGET COMMISSION

240 West 35th Street ■ Suite 302 ■ New York, New York 10001

Testimony on the State of New York City Recycling

Submitted to NYC Council Committee on Sanitation and Solid Waste Management

September 20, 2022

Ana Champeny, Vice President for Research, Citizens Budget Commission

Thank you for the opportunity to testify today. I am Ana Champeny, Vice President for Research at the Citizens Budget Commission (CBC), a nonpartisan, nonprofit think tank and watchdog devoted to constructive change in the finances and services of New York State and City governments. CBC has conducted research on the City's solid waste management system for decades.

While recycling in New York City has improved in recent years, collection productivity remains low, collection costs remain high, and many recyclables are ultimately disposed of with refuse. Increasing recycling with a focus on cost-effective strategies can deliver both fiscal savings and environmental benefits. CBC recommends that the City:

- Institute a volume-based fee for waste and tailor it to incentivize recycling, organic composting, and waste reduction;
- Negotiate operational and work-rule changes with labor that would improve productivity of recycling and refuse collection; and
- Expand organic composting by increasing drop-off sites, encouraging use of in-sink disposers, and piloting on-site anaerobic micro digesters in buildings, instead of a citywide curbside collection program.

NYC's recycling rates continue to lag its relatively modest 23 percent goal, despite some recent improvement. Since fiscal year 2011, the City's overall curbside diversion rate—the share of curbside waste that is recycled—increased just 1.6 percentage points, from 15.4 percent to 17.0 percent in fiscal year 2022. Other cities have achieved higher diversion rates; for example, Seattle's diversion rate was 62.7 percent in 2020.

New Yorkers continue to throw many recyclables out with the trash. According to the Department of Sanitation (DSNY) 2017 Waste Characterization Study, the capture rate—the share of recyclable material properly sorted—was only about 50 percent. The other half was mixed with garbage and destined for disposal. Low diversion and capture rates have clear negative environmental consequences, as refuse waste is sent primarily to landfills, which in 2020 generated nearly 81,000 metric tons of carbon dioxide, or 3 percent of the City's annual greenhouse gas emissions.

Low capture and diversion rates also have negative fiscal consequences. In fiscal year 2021, refuse disposal cost the City $203 per ton, while recycling processing cost $53 per ton. For each additional ton of recyclables properly sorted and recycled, the City would have saved $150.

Increasing the quantity recycled would also improve collection productivity and reduce recycling collection costs. Recycling collection cost $615 per ton in fiscal year 2021, 80 percent more than the $342 per ton cost of collecting refuse. Collection costs per ton are high because the average recycling truck fills just half of its capacity per shift. Productivity declined in fiscal year 2022, with DSNY collecting 5.2 tons of recycling per truck shift, down from 5.8 in 2021. Half-empty trucks represent low productivity.

More recyclables at the curb would increase productivity without requiring additional truck shifts, thereby reducing the collection cost per ton. A volume-based fee, which CBC has supported since 2015, directly connects a resident's waste collection and disposal cost with the amount of waste they generate. These fees can incentivize residents to reduce the total amount of waste they throw out as well as to properly separate recyclables, by offering free or substantially lower fees for recycling collection. The fees could also be structured to encourage participation in specialized recycling programs, such as organic composting or textiles recycling. The City had planned to undertake a study about how to implement a volume-based fee in New York City, given the challenges posed by dense, high-rise apartment buildings with limited space to store recyclables; it contracted with a consultant in 2018 but halted the study before any funds were expended. CBC urges the City to reconsider conducting this study.

Other approaches that could improve collection productivity include using GIS technology to optimize collection routes; negotiating work-rule changes that would increase productivity, such as enabling longer shifts or routes that cover more distance; and increasing in the use of one-worker automated collection vehicles, where appropriate.

Beyond traditional paper, metal, glass, and plastic recyclables, the largest opportunity to increase recycling in the City is organic waste, which comprises 34 percent of the waste stream. Previous efforts at curbside organic collection have been plagued by low participation; in fiscal year 2020, New Yorkers separated just 4 percent of organic waste suitable for composting. Given the

limited volume of organic waste that was separated, the curbside organic program faced low productivity and high collection costs, possibly reaching $1,700 per ton. In 2016, CBC estimated a citywide curbside organics program could cost between $177 million and $251 million annually and would likely face operational challenges due to the current lack of regional organic waste processing capacity. In fact, DSNY has sent organic waste 253 miles away to Auburn, further raising disposal costs and offsetting some of the environmental benefits of composting with additional vehicle-miles traveled.

Given the inefficiency of curbside collection of organics, the City should pursue alternatives, such as expanding drop-off sites, encouraging in-sink food disposal, or incentivizing use of anaerobic micro digesters. The City's current 209 organics drop-off sites translate to 1 site per 42,000 people. Additional drop-off sites could help divert more organic waste, especially when paired with volume-based fees, and incentivize private organics processors to open new capacity in the region. In-sink disposal units, while common in most of the United States, are rare in New York City due to a prior ban, which was overturned in 1997. According to CBC's research, incentivizing their use could divert 149,000 tons of organics per year, reducing the volume of organics in the waste stream by 14 percent. Other options could include exploring the use of on-site anaerobic micro digesters, which could help reduce organics waste in larger apartment buildings. Recent advances in micro digesters have improved their feasibility, and buildings can sell the biogas produced to help recoup costs.

Improving recycling in New York City is both fiscally and environmentally prudent. However, increasing the City's diversion rate will require creating incentives for New Yorkers to properly separate their waste and using cost-effective strategies to encourage organics recycling. Paired with improvements to collection productivity, these strategies could generate substantial savings that could partly be used to support recycling. Thank you again for the opportunity to testify. I am happy to discuss the details of any of these recommendations in greater detail.

NYC Council Sanitation Committee Hearing September 20. 2022 1 PM

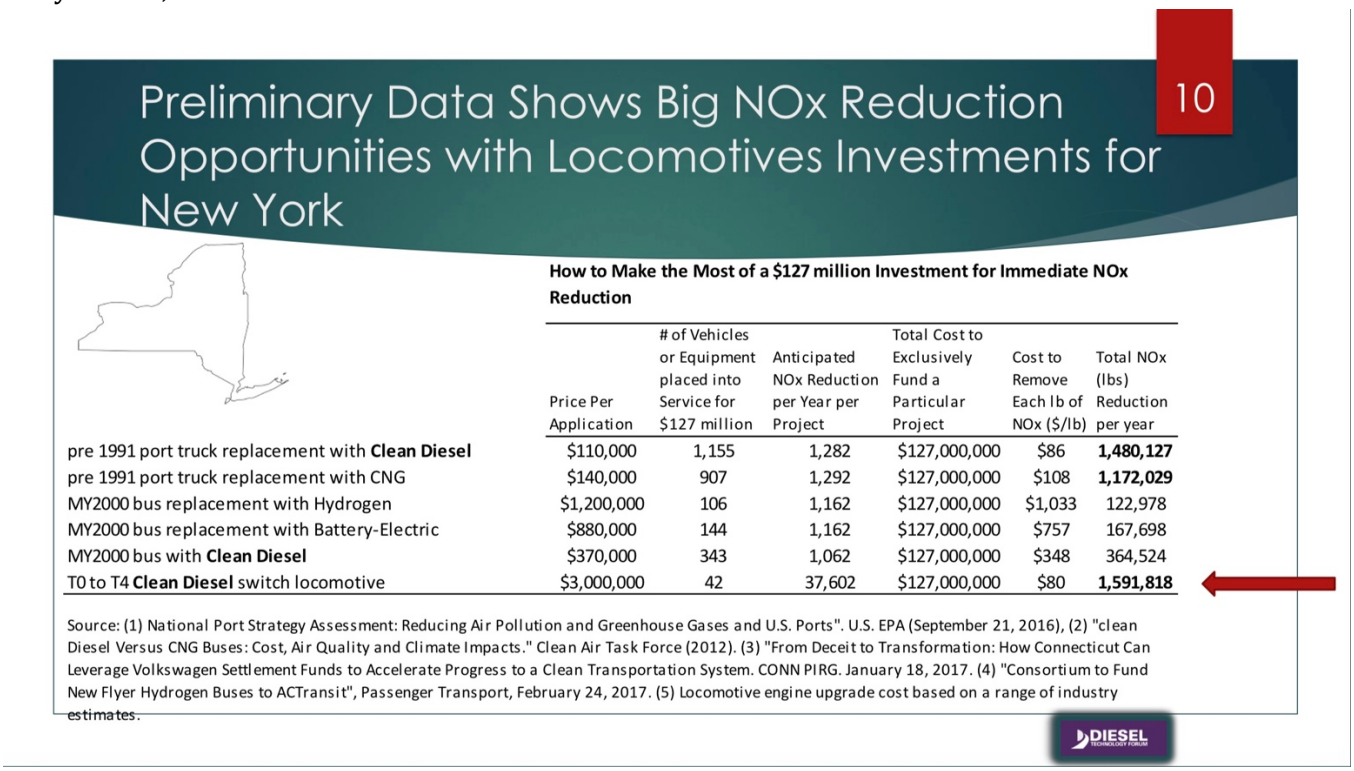
Thank you for this opportunity for Civics United for Environmental Solutions to support the Zero Waste implementation work of Chair Sandi Nurse and the Sanitation Committee, and comment on the State of Recycling in NYC.

First we want to express our thanks for your work, and ask you to continue to make Zero Waste your goal. Communities of NYC that live with waste processing and transport bear health, environmental, and quality of life burdens that can be reduced because of the work you are doing. So please keep it up.

We would like to express our concerns about plastic items in the city's waste stream that seem like they should be recyclable, but instead foul the stream of truly recyclable items and public participation, and increase the tonnage going to landfills and burners, and taxpayer cost. We supported this committee's Zero Waste bills, with some amendments, and the Bottle and EPR legislation introduced by Assemblyman Steve Englebright. We hope to see focused implementation and studies that lead to implementation so community burdens and cost are reduced.

Finally, we need to point out that so far none of this legislation touches the majority of landfilled waste tonnage, which is Construction and Demolition Debris, also called C&D. C&D also was excluded from the new Commercial Waste Zone law. Since this hearing is being billed as being about the "State of Recycling in NYC," and C&D is such a big part of the overall burden, we ask that recycling C&D be included in your deliberations. Other world cities, including London, already have plans for reducing and recycling construction and demolition material, including gypsum wallboard. As you know, gypsum emits toxic hydrogen sulfide gas when it decomposes in landfills. Although no landfill that takes C&D is located in NYC, the city is a major exporter of C&D to landfills in other jurisdictions, including Environmental Justice Communities. Environmental Justice Communities in NYC, including in Queens, where our organization is based, are adversely impacted by C&D processing facilities. The NYS Department of Environmental Conservation considers C&D processing facilities with three walls and a roof "fully enclosed." When now Attorney General Letitia James was NYC Council Sanitation Committee Chair she held a hearing on Int 1170, where testimony was given by civic organizations, residents, and unions about the adverse impacts C&D facilities have on community air quality and on workers. C&D transfer facilities are all served by trucks that bring the C&D to transfer stations, and then truck it directly to landfills or across the region to waste-by-rail transfer stations. Waste-by-rail transfer stations are a growth industry that has enjoyed foreign investment in the NYC area (Maquerie), including in Environmental Justice Communities. There is a new Suffolk County facility at the US Department of Transportation Surface Transportation Board that is seeking a track extension to haul C&D and burner ash by rail. NYS DEC does not consider impacts beyond the immediate site of these transfer stations. NYS environmental law says that trucks have to haul this material under covers, but trains don't. Crushed C&D is hauled from Suffolk County in open rail cars that email waste blowoff, leachate, and odors in NYC neighborhoods. The polluting rail cars are hauled by high-polluting 1970's locomotives that adversely impact community air quality and exacerbate Climate Change.

The time has come for NYC, like other world cities, to address how to reduce and recycle more C&D tonnage, and to reduce its health and environmental impacts on NYC residents. The technology exists to do this today (see examples below). Please include C&D recycling in your deliberations. Thank you. Mary Arnold, Board Member



10

Preliminary Data Shows Big NOx Reduction Opportunities with Locomotives Investments for New York

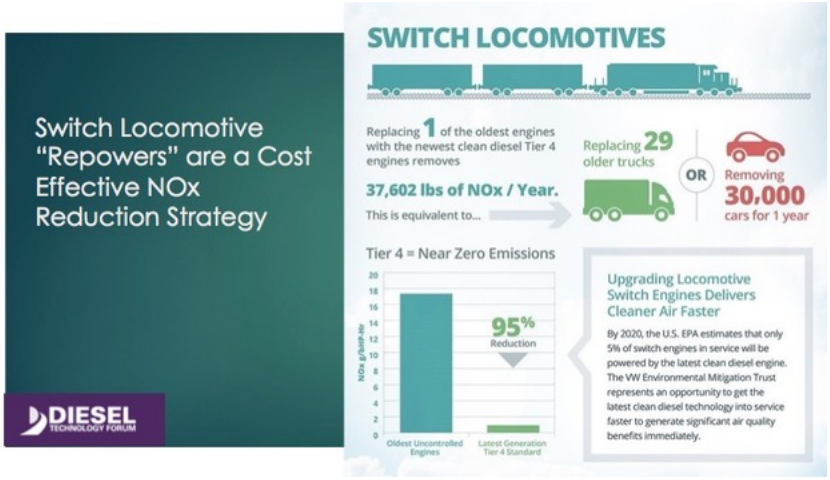
How to Make the Most of a $127 million Investment for Immediate NOx Reduction

	Price Per Application	# of Vehicles or Equipment placed into Service for $127 million	Anticipated NOx Reduction per Year per Project	Total Cost to Exclusively Fund a Particular Project	Cost to Remove Each lb of NOx ($/lb)	Total NOx (lbs) Reduction per year
pre 1991 port truck replacement with **Clean Diesel**	$110,000	1,155	1,282	$127,000,000	$86	**1,480,127**
pre 1991 port truck replacement with CNG	$140,000	907	1,292	$127,000,000	$108	**1,172,029**
MY2000 bus replacement with Hydrogen	$1,200,000	106	1,162	$127,000,000	$1,033	122,978
MY2000 bus replacement with Battery-Electric	$880,000	144	1,162	$127,000,000	$757	167,698
MY2000 bus with **Clean Diesel**	$370,000	343	1,062	$127,000,000	$348	364,524
T0 to T4 **Clean Diesel** switch locomotive	$3,000,000	42	37,602	$127,000,000	$80	**1,591,818**

Source: (1) National Port Strategy Assessment: Reducing Air Pollution and Greenhouse Gases and U.S. Ports". U.S. EPA (September 21, 2016), (2) "clean Diesel Versus CNG Buses: Cost, Air Quality and Climate Impacts." Clean Air Task Force (2012). (3) "From Deceit to Transformation: How Connecticut Can Leverage Volkswagen Settlement Funds to Accelerate Progress to a Clean Transportation System. CONN PIRG. January 18, 2017. (4) "Consortium to Fund New Flyer Hydrogen Buses to ACTransit", Passenger Transport, February 24, 2017. (5) Locomotive engine upgrade cost based on a range of industry estimates.

DIESEL TECHNOLOGY FORUM

Slide courtesy of Diesel Technology Forum



Slide courtesy of the Diesel Technology Forum

40% less fuel + measurable reductions in ghg, local air pollution

October 1, 2019 / Brooklyn news / Williamsburg

Trash dump express: New fuel-efficient locomotive rolls out in Williamsburg

× Enlarge this image

Photo by Trey Pentecost

Waste Management showed off their recently-launched Green Locomotives at their Varick Avenue yards in Williamsburg on Sept. 26.

BY KEVIN DUGGAN

Waste honchos at a trash hauling business showed off a new "green" locomotive at a Williamsburg industrial yard on Sept. 26, which will help keep Kings County clean in more ways than one, according to an executive at the garbage company.

"It's a much cleaner burning locomotive, much more fuel efficient," said Jim Van Woert, director of diversion strategies at Waste Management.

Brooklyn news / Williamsburg, October 1, 2019

- 19.4 tons nitrogen oxide (NO_x), a 99 percent reduction annually;
- 0.48 tons particulate matter ($PM_{2.5}$), a 99 percent reduction annually; and
- 26,000 gallons of diesel saved, a 40 percent reduction annually.

US EPA "New York City Locomotive Repowers" October 2019

LIBERTY COCA-COLA BEVERAGES
Testimony to the New York City Council
Committee on Sanitation and Solid Waste Management
September 20th, 2022

Liberty Coca-Cola Beverages thanks Chairwoman Sandy Nurse and other members of New York City Council's Committee on Sanitation and Solid Waste Management for the opportunity to submit testimony today.

As the exclusive bottling and distribution company for Coca-Cola products in metro New York City, New Jersey and metro Philadelphia with almost 90 million cases of product delivered to local partners annually, we share your desire for a more environmentally sustainable world. Supporting a circular economy is a priority for us across our entire service area.

We're proud to employ over 3,000 associates in the region and work with our many union partners, including Teamsters Local 812 in New York – all sharing our vision to create a more sustainable future.

Globally, Coca-Cola has made major commitments to environmental sustainability through the World Without Waste initiative. This includes a global commitment to reduce total carbon emissions by at least 25% by 2030. Coca-Cola is also committed to making 100% of all product packaging recyclable by 2025 and using at least 50% recycled material in all packaging by 2030.

Liberty Coca-Cola is proud to be a partner in this effort by thinking globally and acting locally. In 2022, we plan to recycle 19 million pounds of plastic, aluminum and glass so they can be turned back into recyclable containers. Last summer, we were the first bottler in the United States to recycle deposit PET, recyclable material, back into the Coke supply chain. We are one of three bottlers to convert to 100 percent recycled plastic in some of our core bottles.

You'll notice that 20oz Coca-Cola products in New York City have large labels noting that they are made from 100% recycled bottles, along with encouragement for consumers to "Recycle Me Again" and additional information about the "Bottle Bill". We are proud to have led the way on this initiative in our backyard.

Last month at Liberty's Elmsford, NY production facility, we unveiled our KeelClip™ paperboard packaging system which will replace the plastic ring holders on can multipacks – the first of its kind in the United States. It is estimated that this new system will remove 75,000 pounds of packaging per year from the supply chain for approximately 3.1 million cases of product that is delivered in New York and surrounding areas.

The Elmsford plant also has a sustainable compacter that significantly reduces Liberty's carbon footprint and processes large volumes of full plastic and aluminum containers for recycling. We are also pursing the latest technology that will allow us to combine heat and power through carbon capture, producing an emissions savings equal to removing 600 cards off the road.

Liberty Coca-Cola is a committed partner to environmental sustainability and economic development in New York. Please also consider us as a partner in your local communities, where we strive to make positive impacts by supporting local organizations and causes.

Thank you for the opportunity to testify.

Mayra Linares-Garcia
Liberty Coca-Cola Beverages
MayraLinares@LibertyCoke.com

LIBERTY
Coca-Cola
BEVERAGES
LOCALLY OWNED AND OPERATED

472 2nd Avenue
29th Street Pier
Brooklyn, NY 11232
www.simsmunicipal.com

September 20, 2022

NYC City Council
Sanitation Committee

Re: Oversight Hearing on NYC Recycling

Good Afternoon Chair Nurse and Members of the Committee:

My name is Tom Outerbridge and I am President of Sims Municipal Recycling (or SMR).

SMR manages 100% of the metal, glass and plastic (or MGP), and about half the paper set out for recycling by NYC residents and collected by the Department of Sanitation. To serve DSNY, we have receiving facilities in Queens and the Bronx, a processing facility in Jersey City, and our main plant in Sunset Park Brooklyn, which is the largest facility of its kind in the US and employs more than 100 people. (In all, we process 280-300,000 tons/year of MGP delivered by DSNY. We market the sorted materials almost exclusively to domestic mills, smelters and plastic reclaimers.)

This hearing is about improving recycling, but I want to recognize what NYC has already accomplished. With long term commitments and investment by both City and private sector, NYC actually has substantial, sophisticated processing infrastructure, at least for the residential stream. That includes our facilities as well as the Pratt Paper Mill on Staten Island. The upcoming composition study will provide better data, but based on the last study, the average capture rate is somewhere above 50%. In other words, more than 50% of what we want in the recycling bin is getting there. This ranges from very high capture of milk jugs (HDPE Natural) at 65% to just 15% capture for aluminum foil.

The flip side is that close to 50% of recyclables still go into trash, which is around a half million tons per year (roughly 50% of which is MGP and 50% paper). This costs the City money, since it costs more to send waste to landfill than deliver MGP to us, and the cost differential between waste export and paper recycling is even greater. Not to mention the environmental benefits from increased recycling. Financially, the greatest loss in value comes from all the metals, plastic containers and paper being sent to landfill.

So my first issue is public participation. There is no silver bullet, but we need more New Yorkers to do the right thing more often. I am no social media expert, but I know people can be persuaded to do more difficult, less convenient, and often less productive things than to recycle properly. We can't ignore the inherent challenges in NYC, in apartments with limited space or NYCHA housing with very limited infrastructure. It's not just putting recyclables in the bin, it's also not putting things in the bin that don't belong. We see more and more paper in the MGP. This isn't good for us as we have a very hard time processing and recovering it, and the City loses money every time someone puts paper in the MGP rather than the paper

bin. We see a lot of textiles. There are many recycling options for textiles, from City-sponsored drop-offs to Goodwill stores. If it comes to us it ends up in a landfill. And we cannot recycle flexible packaging. Flexible packaging consumes processing capacity at our plants and increases recycling costs. Lastly, while not large in volume, the most hazardous contaminant we see is rechargeable batteries.

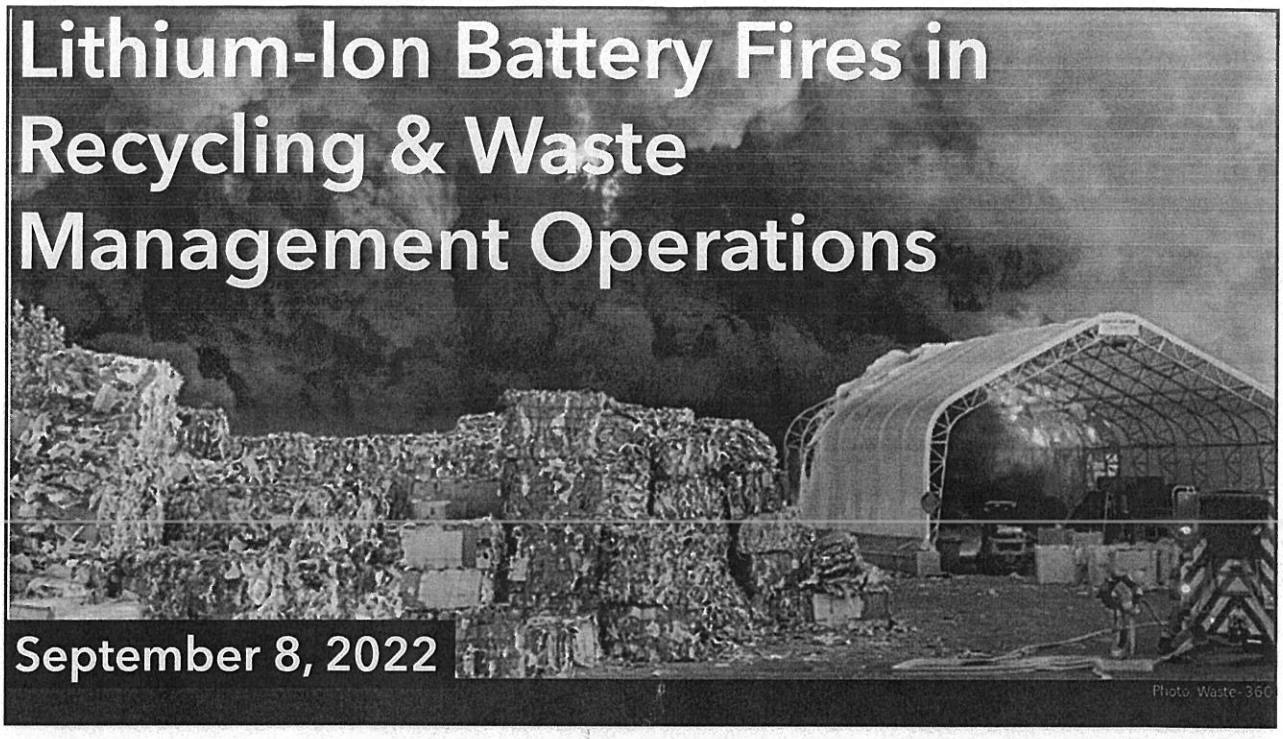
That brings me to my second issue, which is Lithium Ion Batteries. You have probably seen news stories of fires caused by bike and other rechargeable batteries. I attach to my testimony additional facts and figures, but there are literally hundreds of fires a year caused by batteries at our plants, in collection trucks, at other waste and recycling facilities, and even in apartment buildings. I raise this issue to the Sanitation Committee, but there are other committees where this may be relevant, such as Fire & Emergency Management, Consumer & Worker Protection, Environmental Protection, and Public Safety. There will be more injuries and destruction of property before we solve this problem. LI battery usage is projected to increase 300% by 2025, and bike battery fires in NYC are on track to double in 2022. But we aren't helpless. Washington DC just passed a fairly aggressive law for rechargeable batteries. California just passed two laws. We are working with public and private entities across the state to draft the elements of a strong bill, which can be enacted at the City or State level. I personally think the City can act much faster than the State, and this issue requires fast action. We do need State cooperation because of a 2010 law that preempts local jurisdictions from passing their own battery laws. I hope you will work with your colleagues in Albany to remove that preemption, and proceed here in NYC.

The third issue I will bring up is Extended Producer Responsibility (EPR) for Packaging. This is State-level legislation, but last year the Council issued a resolution in support, which means a lot. We expect similar legislation to come up this year, and I hope you will be engaged and supportive. For those not familiar with it, two key attributes an EPR law are: a) it incentivizes producers to eliminate or reduce packaging, and where that isn't possible, to make sure it is recyclable; and b) it would reimburse NYC for much or all of its recycling program costs (I believe DSNY's estimate last year was in excess of $100 million per year). Maine and Oregon passed packaging EPR laws a couple years ago, and last year California and Colorado did the same. It's time for NYS to do this.

I will stop there. Thank you for your time. I know there are other topics to discuss, and we are always happy to work with the Council, especially in those areas where your actions can have a very meaningful impact. I hope you will consider us a partner and resource as you move forward.

Tom Outerbridge
President, SMR
tom.outerbridge@simsmm.com

Lithium-Ion Battery Fires in Recycling & Waste Management Operations



1

THE SITUATION

From greeting cards to e-bikes, more and more consumer products contain batteries. Several types of batteries, notably Lithium-Ion, catch fire if crushed or punctured. Due to improper disposal, battery-caused fires are now commonplace in collection trucks and at recycling and waste management facilities across the US.

Currently, only 12 to 15% of rechargeable batteries are properly managed in the United States. LI battery use is expected to grow 3X by 2025.

Sources: Product Stewardship Institute, The Verge

2

A GROWING INDUSTRY EPIDEMIC

EACH YEAR...

~1,800 Major Fires at US Recycling Facilities
(many thousands of smaller unreported fires)

$1.2B in Damages to US Operators

317 Reported Injuries/Fatalities in the US

Sources: Waste-360, The Verge

3

CRITICAL PROBLEMS

Worker Safety

Recycling and Waste Management Employees are at increased risk of injury and death when handling materials that may be ignited by lithium-ion batteries

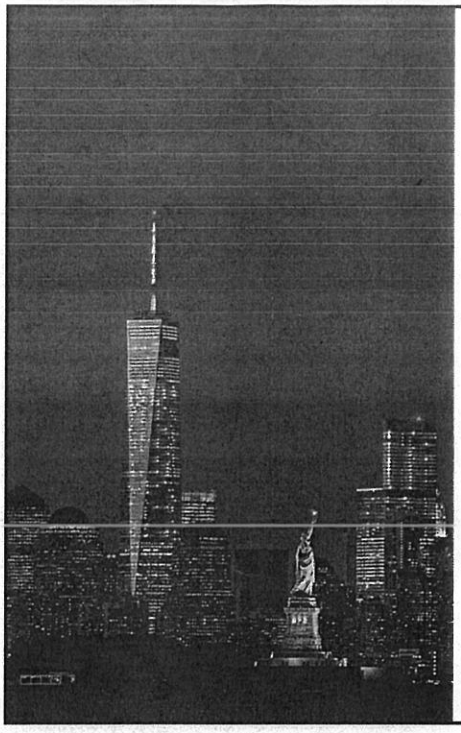
MRF Damage

Recycling facilities require significant capital investment to restore normal operations, if ever

Service Disruption

Communities can be without recycling infrastructure for extended periods of time, with major cost and environmental impacts

4



SNAPSHOT: NEW YORK + NEW JERSEY

Daily FDNY Response to Battery Fires
(rechargeable battery fires up 211% in last year)

>100 Fires at SMR's Brooklyn Facility (2021)

Major fire damage in 2022 to multiple NJ MRFs and Waste Management Facilities, and a worker fatality

E-Bike Battery Fires Increasing 2X in 2022

Sources: Politico, DSNY, Gothamist

5

EPR LEGISLATION

8 US States (MN, IA, NY, VT, ME, NJ, MD, FL) plus DC have enacted Extended Producer Responsibility (EPR) laws to address batteries. However, none of these laws provide a financial incentive for consumers to dispose of or recycle batteries properly, instead relying solely on voluntary collection and recycling programs.

More aggressive action is needed to address the persistent and growing threat and proliferation of battery-caused fires. Until battery producers design a battery that does not combust when damaged, we need EPR legislation that creates convenient access along with robust public education AND provides a financial "bounty" in order to remove batteries at scale from solid waste and recyclable streams.

6

NYS EPR LAW

NYS passed an EPR law for rechargeable batteries in 2010. However, the NYS Law:

- Does not cover vehicle (i.e., bike and scooter) batteries
- Does not cover embedded batteries or battery-containing products
- Contains no convenience standards or performance metrics
- Provides no incentive for consumers to dispose of batteries properly
- Specifically preempts NYC from passing more comprehensive and effective battery legislaton

7

THE NEW YORK SOLUTION

New York State must:

1. Modify the 2010 battery law to remove preemption language and allow NYC to pass its own comprehensive battery law

- OR -

2. Update/replace the existing NYS law to cover the full array of batteries and add missing elements (e.g., performance targets, enforcement, battery "bounty", etc.)

8

IN THE NEWS

- **VICE -** www.vice.com/en/article/xgdvpk/lithium-battery-fires-are-threatening-recycling-as-we-know-it
- **POLITICO -** www.politico.com/news/2022/02/21/fire-batteries-new-york-recycling-efforts-00008600
- **THE VERGE -** www.theverge.com/2020/2/28/21156477/recycling-plants-fire-batteries-rechargeable-smartphone-lithium-ion
- **WASTE-360 -** https://www.waste360.com/business/li-ion-battery-fires-unfairly-cost-waste-recycling-and-scrap-operators-over-12-billion
- **NY POST -** https://nypost.com/2022/08/07/mayor-adams-must-act-on-e-bikes-before-nyc-sees-a-mass-casualty-fire/

9

THANK YOU

Please contact Tom Outerbridge (tom.outerbridge@simsmm.com) to continue the conversation

10

Good afternoon. Thank you to Chair Nurse and the City Council for hosting this hearing. Our city's waste crisis is already at a critical point and the issue grows more urgent by the day. I want to take the opportunity to applaud Chair Nurse and her colleagues for fighting for practical, community-sensitive solutions to this overwhelming issue, and to express the hope that this Council will succeed in passing comprehensive legislation that boldly moves forward in addressing the massive problems we face, including both the already much-discussed area of organics as well as that of plastic, which brings us together here today.

Plastic, that incredible, flexible, durable, exciting material, has turned into a blight on our planet and species. Microplastics have been discovered in the blood of living humans. Residual chemicals have infected our waterways. Burned plastics are poisoning the air. Yet, many still casually treat plastic as disposable, as if when it's thrown away it magically vanishes into nothing.

At our organization, Sure We Can, we know that couldn't be further from the truth. We serve canners, or the folks who collect and redeem bottles and cans to earn income, and we know firsthand the volume and impact of plastic waste, because our community has spent the past four decades since the enactment of New York State's Bottle Bill picking up the plastic bottles that others thoughtlessly discard. We know the effort it takes to meaningfully collect and process this material, and as a community of a thousand informal recyclers, we know that it takes a village to get the job done.

Many of the schemes and systems proposed in institutional or policy-development contexts to deal with the plastic waste crisis ring hollow and come off as short-sighted; they let plastic producers off the hook, avoiding strong accountability systems like concrete reduction targets. They undermine systems like the Bottle Bill, that encourage average people to participate, by centralizing logistics and even oversight in organizational structures that empower and enrich the very producers who have created this monstrous situation in the first place. This rose-colored approach is not

sufficient, and at best merely kicks the can–or bottle, as it were–down the road, into the gutter, and out into the ocean to join the tons of plastic floating there. At worst, it is counterproductive and simply serves to reward those who are destroying our world.

It's worth repeating–it takes a village. Any solution to the waste crisis that will be truly effective in the long term must include and empower communities, and especially those communities that have borne the burdens of profit-driven madness and indiscriminate waste and pollution for decades. A system like the Bottle Bill works because it's incredibly effective at producing positive environmental outcomes–70% litter reduction, hundreds of thousands of tons of waste diverted, at no cost to the taxpayer–and positive environmental justice outcomes–our center alone distributes around $700,000 annually to informal recyclers, most from highly marginalized demographics, while contributing to the betterment of neighborhoods plagued by plastic, air, and water pollution. We have so much to gain, and to save, by focusing on inclusion, empowerment, and effectiveness over profit and convenience. Everyone can pitch in–we can expand our existing Bottle Bill, and use its model to address other types of plastic waste. The village is here, and ready to work. It has been for decades–and we can't afford to wait another moment.

Thank you for your time.

Sure We Can

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Onyx Walker

Address: [redacted] Hoch Creek Blvd

I represent: Youth Advocacy Board

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 51 Res. No. _____

☐ in favor ☐ in opposition

Date: Sept. 20th, 2022

(PLEASE PRINT)

Name: Solomon Blecher

Address: [redacted] East 8th Street

I represent: Tree NGE

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Jessica Tisch

Address: _____

I represent: DSNY Commissioner

Address: _____

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Date: _____

(PLEASE PRINT)

Name: GREGORY Anderson

Address: _____

I represent: DSNY Deputy Commissioner

Address: _____

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Appearance Card

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☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Bridget Anderson

Address: _____

I represent: DSNY Deputy Commissioner

Address: _____

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Appearance Card

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Date: _____

(PLEASE PRINT)

Name: Lacey Tauber

Address: _____

I represent: Brooklyn Borough President Reynoso

Address: _____

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Date: _____

(PLEASE PRINT)

Name: ERIC GOLDSTEIN

Address: _____

I represent: Natural Resources Defense Council

Address: 40 West 20 St NY NY 10011

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Appearance Card

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☑ in favor ☐ in opposition

Date: 9-20-22

(PLEASE PRINT)

Name: JUSTIN TaWOOD

Address: W. 30th St. NY 10001

I represent: BNYCPI Borough President Reynoso

Address: "

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THE CITY OF NEW YORK

Appearance Card

9/20/22

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: OLIVER WRIGHT

Address: DIAMOND ST BROOKLYN 11222

I represent: BROOKLYN SOLID WASTE ADVISORY BOARD

Address: BOROUGH HALL / JORALEMON ST

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Appearance Card

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☐ in favor ☐ in opposition

Date: 9/20/22

(PLEASE PRINT)

Name: TOM OUTERBRIDGE

Address: SUNSET PARK BROOKLYN

I represent: SMR

Address: 422 2nd Ave, BK, NY

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THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☐ in opposition

Date: 9/20/22

(PLEASE PRINT)

Name: Miguel MARTINEZ

Address: Kearney AVE. BX NY

I represent: _____

Address: _____

Please complete this card and return to the Sergeant-at-Arms