

COUNCIL OF THE CITY OF PHILADELPHIA
COMMITTEE ON THE ENVIRONMENT

Via Microsoft Teams
Philadelphia, Pennsylvania
Thursday, October 15, 2020
2:32 p.m.

PRESENT:

COUNCILWOMAN KATHERINE GILMORE RICHARDSON,
CHAIR
COUNCILWOMAN CINDY BASS
COUNCILWOMAN KENDRA BROOKS
COUNCILWOMAN JAMIE GAUTHIER
COUNCILMAN DEREK S. GREEN
COUNCILWOMAN HELEN GYM

RESOLUTION 200431 - Resolution authorizing the
Committee on the Environment to conduct
hearings to investigate challenges and
solutions to street litter and waste disposal
systems in the wake of COVID-19 in the City of
Philadelphia.

- - -

1 10/15/20 - ENVIRONMENT - RES. 200431

2 COUNCILWOMAN RICHARDSON: Good
3 afternoon. I understand the state law
4 currently requires that the following
5 announcement be made at the beginning of
6 every remote public hearing as follows:

7 Due to the current public
8 health emergency, City Council committees
9 are currently meeting remotely. We are
10 using Microsoft Teams to make these
11 remote hearings possible. Instructions
12 for how the public may view and offer
13 public testimony at public hearings of
14 Council committees are included in the
15 public hearing notices that are published
16 in the Daily News, Inquirer, and Legal
17 Intelligencer prior to the hearing, and
18 can also be found on PHLCouncil.com.

19 I now note that the hour has
20 come.

21 Ms. Alford, will you please
22 call the roll to take attendance.
23 Members that are in attendance will
24 please indicate that you are present when
25 your name is called. Also, please say a

1 10/15/20 - ENVIRONMENT - RES. 200431
2 few brief words when responding so that
3 your image will be displayed on screen
4 when you speak.

5 THE CLERK: Councilmember Cindy
6 Bass.

7 COUNCILWOMAN BASS: Good
8 afternoon. Good afternoon, Madam Chair.
9 Looking forward to today's hearing.

10 THE CLERK: Thank you.
11 Councilmember Kendra Brooks.

12 COUNCILWOMAN BROOKS: Good
13 afternoon, Madam Chair, colleagues, and
14 presenters today.

15 THE CLERK: Thank you.
16 Councilmember Jamie Gauthier.

17 COUNCILWOMAN GAUTHIER: Good
18 afternoon, Madam Chair. Good afternoon,
19 colleagues and everyone. Happy to be
20 here today.

21 THE CLERK: Thank you.
22 Councilmember Derek Green.

23 COUNCILMAN GREEN: Good
24 afternoon, Councilmember KGR and Chair.
25 Thank you for bringing together this

1 10/15/20 - ENVIRONMENT - RES. 200431

2 hearing this afternoon. Look forward to
3 the conversation and the deliberations.

4 THE CLERK: Thank you.

5 And Councilmember Katherine
6 Gilmore Richardson.

7 COUNCILWOMAN RICHARDSON: I'm
8 here. Thank you.

9 A quorum of the Committee is
10 present and this hearing is now called to
11 order. This is a public hearing of the
12 Committee on the Environment regarding
13 Resolution No. 200431.

14 Ms. Alford, will you please
15 read the title of the resolution.

16 THE CLERK: Resolution No.
17 200431, authorizing the Committee on the
18 Environment to conduct hearings to
19 investigate challenges and solutions to
20 street litter and waste disposal systems
21 in the wake of COVID-19 in the City of
22 Philadelphia.

23 COUNCILWOMAN RICHARDSON:
24 Before we begin to hear testimony from
25 the witnesses we have for today, everyone

1 10/15/20 - ENVIRONMENT - RES. 200431
2 who has been invited to the meeting to
3 testify should be aware that this public
4 hearing is being recorded. Because the
5 hearing is public, participants and
6 viewers have no reasonable expectation of
7 privacy. By continuing to be in the
8 meeting, you are consenting to being
9 recorded.

10 Additionally, prior to
11 recognizing members for the questions or
12 comments they have for witnesses, I will
13 note for the record at this time that we
14 will use the Chat feature available in
15 Microsoft Teams to allow members to
16 signify that they wish to be recognized.
17 In order to comply with the Sunshine Act,
18 the Chat feature must only be used for
19 this purpose.

20 So thank you all so much for
21 joining us today. I am truly very
22 excited about this conversation.
23 Following the challenges over the summer,
24 the budget constraints we are facing, as
25 well as the impacts we are already seeing

1 10/15/20 - ENVIRONMENT - RES. 200431
2 from climate change, I wanted to convene
3 a conversation around how we continue to
4 prioritize our zero waste goals in the
5 wake of COVID-19.

6 I also want us to think
7 creatively about how we can use
8 sustainable waste management to drive
9 economic growth, business development,
10 and job creation. That's why I've
11 identified two subsections of focus for
12 this hearing - incentivizing a circular
13 economy and managing organics.

14 Witnesses joining us together
15 have a lot of expertise to offer both on
16 what we are currently doing in these
17 areas as well as what other cities have
18 done and how we can learn from their best
19 practices. It is my hope that this will
20 be a positive conversation focused on
21 solutions. Let me repeat. It is my hope
22 that this will be a positive conversation
23 focused on solutions for waste management
24 that will help us create a climate
25 resilience, healthy, and economically

1 10/15/20 - ENVIRONMENT - RES. 200431
2 vibrant city in the wake of COVID-19.

3 And with that, I wanted to
4 pause to recognize any of my colleagues
5 that may have any opening remarks.

6 Seeing none, Ms. Alford, will
7 you please call the first panel or
8 witness we have to testify this afternoon
9 on Resolution No. 200431.

10 THE CLERK: Yes. Commissioner
11 Carlton Williams, Scott McGrath, Kyle
12 Lewis, and Phil Bresee.

13 COUNCILWOMAN RICHARDSON:
14 Excellent.

15 Please state your name for the
16 record and proceed with your testimony.
17 Welcome, Commissioner Williams.

18 COMMISSIONER WILLIAMS: Thank
19 you, Councilperson Gilmore Richardson.

20 Good afternoon, Chairperson
21 Gilmore Richardson and members of the
22 Committee on the Environment. My name is
23 Carlton Williams, Commissioner of the
24 Streets Department. I'm here to offer
25 the following testimony on Resolution

1 10/15/20 - ENVIRONMENT - RES. 200431
2 200431 introduced by Chairperson Gilmore
3 Richardson.

4 I am joined today by Streets
5 Environmental Planning Director for
6 Sanitation Scott McGrath and Streets
7 Recycling Program Director Kyle Lewis.

8 Thank you for this opportunity
9 to join you in discussing the challenges
10 and solutions to street litter and waste
11 disposal in the wake of COVID-19.

12 Like most sanitation
13 departments across the nation, our
14 Sanitation Division has experienced
15 significant impacts related to COVID-19,
16 most notably a 30 percent increase in
17 curbside trash collections. The added
18 tonnage, staffing, and attendance
19 challenges along with incidents of severe
20 weather created the perfect storm for
21 sanitation operations. The increased
22 tonnage contributed to delays in
23 collections.

24 To put the 30 percent average
25 increased tonnage into perspective, a 25

1 10/15/20 - ENVIRONMENT - RES. 200431
2 percent increase in tonnage requires at
3 minimum an additional day's collection
4 each week.

5 To address the challenges, the
6 Department has implemented its plan to
7 add 150 temporary laborers to assist with
8 the unprecedented increase in trash
9 tonnage, which has helped stabilize
10 collections and return operations to a
11 path towards normal collections.

12 The Department has also
13 launched PickupPHL as a new tool for the
14 public to monitor the status of
15 collections. In addition to this tool's
16 use by the public, PickupPHL brings
17 together GPS tracking and route
18 management functions that help the
19 Sanitation Division more efficiently
20 manage its resources. The new tool aids
21 in facilitating route optimization to
22 reduce fuel consumption and emissions.

23 The Sanitation Division also
24 has been coordinating with the
25 Sustainability Office and the Parks and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Recreation Department on initiatives
3 started under the Zero Waste and Litter
4 Cabinet, such as the Commercial Waste
5 Tracking System, the Municipal Building
6 Waste Audit Program, the Community
7 Compost Network, and Urban Composting
8 Permit and Pilot, and supports technical
9 assistance to 10 to 15 businesses
10 citywide to implement food waste
11 reduction strategies. The Department is
12 also working to continue to support
13 subcommittees such as Enforcement and
14 Short Dumping and Waste Reduction.
15 Illegal dumping continues to be
16 a major challenge across the City for
17 which the Department deploys a
18 significant number of resources to
19 address. The Department continues to use
20 monitor cameras in heavily dumped areas
21 and dispatches our short dump crews to
22 capture the mounds of tires, construction
23 debris, and trash dumped on streets and
24 in underutilized or less trafficked
25 areas. We are looking to continue our

1 10/15/20 - ENVIRONMENT - RES. 200431
2 work with the Philadelphia Police
3 Department's Environmental Crimes Unit to
4 address repeat dumping and ask residents
5 to continue to be vigilant.

6 If you see dumping in the act,
7 call 911. After the fact, 311.

8 Beyond these tips, the
9 Sanitation Division has created several
10 new steps to improve operations and gain
11 a better understanding of the waste
12 stream so that we can better utilize our
13 resources to reduce and manage the trash
14 we collect and ways that minimize the
15 need for disposal in landfills or
16 resource recovery facilities.

17 At this point, I will ask our
18 Recycling Director and Environmental
19 Planning Director to provide a more
20 detailed overview of the Sanitation
21 Division's efforts to operationalize the
22 City's zero waste goals.

23 Scott.

24 MR. McGRATH: Yes. Good
25 morning -- I should say good afternoon,

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Councilmembers. My name is Scott
3 McGrath, Environmental Planning Director,
4 Streets Department, Sanitation Division.

5 Over the summer, the Department
6 has been working with its contractors to
7 expand services to its sanitation
8 convenience centers. In addition to
9 accepting the electronics, we've added
10 CFL lights, batteries, fluorescent lights
11 also. We've also been working closely
12 with the Department of Environmental
13 Protection to get our household hazardous
14 waste program re-permitted, which we were
15 successful at doing this. The first
16 event was at 63rd Street back in
17 September, and we have another series of
18 events on October 23rd and 24th up at
19 Street Road and Ashburner in the
20 Northeast section of the City.

21 The Department is also working
22 with Waste Management on the utilization
23 of a provision in our disposal contract
24 to separate and recover food waste from
25 our waste stream. This month, the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Sanitation Division consultant,
3 Midatlantic Waste Consultants, or MSW,
4 began the comprehensive assessment of
5 waste collection and management
6 practices. In November, MSW will be
7 starting a waste composition analysis of
8 our trash, which will involve sampling
9 loads and separating the samples into
10 over 40 categories. MSW will also be
11 conducting a similar analysis of our
12 curbside recycling. This data will
13 assist in helping the Division develop
14 and adjust strategies to manage our waste
15 stream as it's changed as a result of
16 COVID-19 and to minimize the amount of
17 waste that is sent for disposal in
18 landfills or resource recovery
19 facilities.

20 The Department's consultant
21 will be doing an assessment that is
22 wide-ranging and will be including a
23 benchmarking of what other cities are
24 doing, regulation -- the Department's
25 regulations and operational policies,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 field operations, a cost analysis of our
3 operations, operational -- they'll also
4 be conducting an operational and policy
5 analysis and looking at waste management
6 alternatives. This work has already
7 started and will take about six months to
8 complete. The Department will share the
9 results of the study with City Council
10 and staff as we proceed.

11 Our consultant is also here
12 today, who will be presenting some
13 testimony after Kyle Lewis speaks.

14 MS. LEWIS: Good afternoon,
15 City Councilmembers. My name is Kyle
16 Lewis. I'm the Recycling Program
17 Director, and I want to thank you for the
18 opportunity to testify on Resolution No.
19 200431 addressing the challenges and
20 solutions to street litter and waste
21 disposal in the wake of COVID-19. This
22 is in the shadow of the 2018 and 2019
23 repercussions of the China Sword
24 recycling policy, and so with all of this
25 in mind, we share both your environmental

1 10/15/20 - ENVIRONMENT - RES. 200431
2 and your public impact concerns.

3 After negotiating a best value
4 contract for recycling in May of 2019, we
5 returned 100 percent of citywide
6 recycling collected to processing at the
7 Waste Management Materials Recovery
8 Facility, or MRF, with the primary goal
9 of reducing the amount of contamination
10 in the recycling system. Recycling and
11 Waste Management staff regularly visited
12 each sanitation district, receiving
13 feedback and sharing training information
14 with crews and drivers as they embarked
15 on their routes. We also instituted
16 monthly recycling trainings for key
17 staff, and recycling ticketing for
18 violations was suspended, and our focus
19 was on increased staff training and
20 public education.

21 When COVID-19 hit, we were
22 faced with whether to continue, suspend
23 or alter recycling collections since the
24 priority was collecting an extra day or
25 more of trash set out to mitigate odors,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 vermin, insects, litter conditions, and
3 adverse health effects. We continued
4 recycling, but we found that capturing
5 the increased tonnage in all areas of the
6 City each week, combined with bad
7 weather, led to commingling of trash and
8 recycling in areas that were short
9 staffed. New York City and DC
10 experienced similar challenges.
11 Baltimore suspended their recycling
12 altogether in late August through
13 November. Many smaller municipalities
14 estimated by the Solid Waste Association
15 of North America at 50 to 60
16 municipalities, they've cut their
17 recycling programs altogether.

18 In an effort to reduce the
19 amount of waste set out at the curb, the
20 Streets Department has launched a public
21 education campaign entitled Curb Your
22 Waste to provide a roadmap to help
23 residents reduce their waste generation.
24 City Council has received a copy of the
25 one-page document, and that information

1 10/15/20 - ENVIRONMENT - RES. 200431
2 was made into a postcard that was sent
3 out to over 425 City residents over the
4 past couple of weeks. Some of you may
5 have received it.

6 Source reduction is the number
7 one tool in the EPA's waste management
8 hierarchy. Tips like use your garbage
9 disposal or compost to reduce food waste
10 when heated en mass can have a major
11 impact on reducing the waste and volume
12 of trash receptacles that our crews have
13 to manage. Setting out the proper amount
14 and types of materials in the proper
15 containment can go a long way in
16 improving collection times to mitigate
17 excessive overtime burnout and cut down
18 on injuries.

19 We also expanded the operating
20 hours in days of the Department's
21 sanitation convenience centers and
22 participated with OIT's Pitch and Pilot
23 Program, resulting in a pilot with a
24 company that collects textiles and
25 electronics from residential properties

1 10/15/20 - ENVIRONMENT - RES. 200431
2 on call. The Department has received a
3 grant from the Recycling Partnership
4 funded by Closed Loop Partners to
5 investigate a variety of strategies for
6 messaging and delivery to residents to
7 reduce recycling contamination. We're
8 also working on adding electric charging
9 stations at more of our facilities to
10 increase our fleet of electric vehicles,
11 and recently purchased compactor trucks
12 powered by compressed natural gas.

13 The Streets Department
14 continues to pursue clean, efficient fuel
15 alternatives in tests and trials as new
16 climate-adaptive fuel alternatives come
17 to market. Our municipal solid waste
18 efforts are focused on efficiency and
19 waste reduction, while recycling engages
20 to reduce contamination. These efforts
21 combine to make a more environmentally
22 and worker-friendly operation.

23 The solutions to proper waste
24 management are long term and must involve
25 the collected week. We all want clean

1 10/15/20 - ENVIRONMENT - RES. 200431
2 air and water. We thank the residents of
3 Philadelphia for their patience during
4 this time, and we thank you all for the
5 concerns as we progress through and
6 beyond this crisis to a more sustainable
7 city.

8 We appreciate the opportunity
9 to testify today. We have Phil Bresee,
10 our consultant here, and we'll be happy
11 to answer any questions.

12 COUNCILWOMAN RICHARDSON: Phil.

13 MR. BRESEE: Good afternoon,
14 Chairperson Gilmore Richardson and
15 members of the Committee on the
16 Environment. My name is Phil Bresee and
17 I am a Senior Consultant for MSW
18 Consultants, and I do appreciate this
19 opportunity to speak with you today on
20 Resolution 200431.

21 To start, I'd also like to
22 disclose that I was the City of
23 Philadelphia's Recycling Director for
24 four years up until April 2016, and in
25 that role, I did get to meet and interact

1 10/15/20 - ENVIRONMENT - RES. 200431
2 with a number of Committee members and
3 their staffs as well as fellow panelists.
4 And I remain immensely proud of my
5 service in Philadelphia and the
6 relationships that I was able to forge
7 with City leaders, staff, and
8 stakeholders alike. So, again, I really
9 appreciate the opportunity to be here.

10 So as Scott McGrath noted
11 earlier, MSW Consultants has been engaged
12 by the Streets Department to perform a
13 number of projects. These include a
14 waste composition study of both the
15 residential trash and recyclable streams.
16 The data gleaned from this study will
17 help form a better understanding of the
18 makeup of Philadelphia's residential
19 solid waste and how it has changed with
20 COVID-19. We'll also be able to compare
21 this data with the previous study
22 completed in 2017, engage how the trash
23 and recycling streams have changed not
24 just since COVID but also since the
25 recycling market disruptions that took

1 10/15/20 - ENVIRONMENT - RES. 200431
2 root across the U.S. in 2018.

3 Finally, this upcoming study
4 will allow the City to establish
5 baselines, which the City can use to
6 measure the impacts of planned recycling
7 public education initiatives.

8 So more specific to today's
9 discussions, we are also at the beginning
10 stages of a comprehensive evaluation of
11 the Sanitation's operations and programs.
12 MSW Consultants is a national leader in
13 helping cities optimize their municipal
14 solid waste collection programs. Our
15 evaluation process focuses on a very
16 quantitative (inaudible) of an approach
17 to measure operational and financial
18 performance so that operations managers
19 and elected officials can understand and
20 correct any deficiencies in the system.

21 As the issues -- among the
22 issues we'll be examining are the City's
23 routing system, city code, sanitation
24 regulations, and operational policies of
25 the division's organization, fleet

1 10/15/20 - ENVIRONMENT - RES. 200431
2 management, and cost of services. The
3 research and operational reviews will be
4 followed up by analyses of alternatives,
5 some of which may fit within the existing
6 system framework and some that may
7 require different approaches. This
8 effort will include research and
9 benchmarking Philadelphia against other
10 large cities. Indeed, one of the first
11 deliverables will be a comparison of how
12 COVID-19 has impacted the benchmark
13 cities and how they have responded.

14 And it's on that last point I
15 would like to reiterate that
16 Philadelphia's solid waste and recycling
17 system is not alone as it manages under
18 COVID-19. As a consulting firm with
19 public-sector clients across the U.S., we
20 are familiar with those impacts, which of
21 course include increased residential
22 trash volumes, decreased commercial
23 volumes, recycling program suspensions,
24 and increased risk to sanitation workers,
25 who even prior to COVID-19 performed the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 fifth most dangerous occupation,
3 according to the U.S. Bureau of Labor
4 Statistics.

5 So, again, we appreciate this
6 opportunity to work with the Streets
7 Department and the City, and this
8 concludes my testimony, and I'll be happy
9 to answer questions from the Committee
10 when the time arises.

11 Thank you very much.

12 COUNCILWOMAN RICHARDSON: Thank
13 you so much.

14 Thank you all for your
15 testimony, and I just wanted to go back
16 to offer my thanks and kudos to
17 Commissioner Williams, to Mr. McGrath, to
18 Ms. Lewis, who was very busy working hard
19 for the City, we heard that phone
20 ringing. And I wanted to tell you, I do
21 have my postcard. I received it in the
22 mail, Ten Tips on How to Curb Your Waste
23 from the Streets Department. So we're
24 asking all residents and community
25 members to look out for that.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 But I wanted to thank you all
3 so much for the work that you all have
4 been doing. I had the opportunity to
5 visit with a sanitation crew in the
6 Kensington area earlier this summer. It
7 was a very hot day. I was on the entire
8 route for three hours, and I just want to
9 commend you all for how you have been
10 able to rise to the occasion and step up
11 to the challenges that we have faced, not
12 only since 2019 but in the wake of
13 COVID-19, and I don't know that we could
14 have ever imagined where we were in the
15 summer. So I just want to thank you
16 publicly for how you all have stood up to
17 the challenge and really, really helped
18 us to face this issue.

19 I just have a few quick
20 questions that I wanted to get on the
21 record and then I'll recognize other
22 members of the Committee as indicated in
23 the Chat.

24 Now that you are adopting work
25 that was previously led by the Zero Waste

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Cabinet, what resources do you think are
3 necessary in order to ensure that work
4 continues to grow?

5 COMMISSIONER WILLIAMS: Thank
6 you for your kind words, first of all,
7 Councilmember Richardson. Certainly it
8 was a pleasure, and I'm glad you had the
9 opportunity to experience firsthand what
10 our workers go through dealing with waste
11 each and every day. So this resolution
12 is certainly very timely when it comes
13 down to addressing waste, and I think
14 COVID-19 has taught us that it's time to
15 take a new look on how products are
16 generated and how they're disposed of and
17 to make sure that we get the maximum
18 usage out of every product that is
19 created.

20 With that being said, we've
21 adopted much of the zero waste plan in
22 our existing departments. It was already
23 established by -- used in the
24 collaboration of a number of departments,
25 Streets being kind of the anchor of those

1 10/15/20 - ENVIRONMENT - RES. 200431
2 departments, but certainly your Office of
3 Environmental Sustainability, which also
4 sits under OTIS, and Christine Knapp is
5 on the phone with us today, Parks and
6 Recreation that was noted. Kathryn is
7 also on the phone with us today in the
8 hearing with us.

9 So I think the structure of the
10 Zero Waste and Litter Cabinet continues.
11 We used in-house resources to get things
12 done, like the Litter Index across the
13 City of Philadelphia. Certainly we
14 worked closely with other departments,
15 and we will continue to do so. For
16 example, Mr. McGrath mentioned earlier
17 today our vision to try to bring
18 composting citywide here in the City of
19 Philadelphia. It's going to require the
20 coordination between multiple
21 departments, specifically Water
22 Department.

23 So I think we have the
24 structure in place to carry out the
25 foundation. I think the Zero Waste and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Litter Cabinet when it was in its
3 formation laid the foundation for us to
4 actually implement many of the
5 initiatives that were established.

6 COUNCILWOMAN RICHARDSON:
7 Excellent. Thank you so much,
8 Mr. Commissioner.

9 And very quickly before I go to
10 my next question, I just want to
11 recognize the presence of our
12 Councilmember Helen Gym, also a member of
13 the Committee on Environment. Thank you
14 so much, Councilmember Gym, for joining
15 us.

16 I'll now go back to my next
17 question.

18 I'm really excited about the
19 new PickupPHL feature. How will this new
20 tool help you modernize collections, and
21 will there be other features of this tool
22 to help residents with properly setting
23 out trash and recycling?

24 COMMISSIONER WILLIAMS: And I
25 caught just a part of it. I think you

1 10/15/20 - ENVIRONMENT - RES. 200431
2 referred to PickupPHL?

3 COUNCILWOMAN RICHARDSON: Yes,
4 PickupPHL.

5 COMMISSIONER WILLIAMS: Yeah.
6 So we've been working -- it's a platform
7 that we started actually before COVID-19,
8 and COVID-19 actually made it certainly a
9 very usable tool now more than ever, but
10 we want to be able to give the public
11 updated information in realtime without
12 having them have to wonder or guess or
13 call 311. I think -- we had the crisis
14 311 was inundated with over 3,500 phone
15 calls at its peak for missed collections.
16 I think if people had this tool -- and
17 Councilmember Gauthier can certainly
18 attest to it, because that was one of her
19 biggest concerns, is that people didn't
20 know when and when our trash and what
21 type of schedule they were on.

22 But this tool gives them a
23 realtime snapshot of where the trucks are
24 at any given day. So if we're a day
25 behind in certain neighborhoods, the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 challenge for us was, some days we will
3 be up in certain areas, some days we'll
4 be a day behind, some days we'll be three
5 days behind, and people just didn't know.
6 But this tool actually allows you to
7 pinpoint the location, time, and where
8 those trucks are actually working so
9 people have a general understanding on
10 what day they're working on and how long
11 it will take to get them so they can
12 manage their trash collection.

13 That was big for us to be able
14 to launch that. COVID-19 helped us to
15 speed it up. We had hoped to get it up
16 before that, but technology, as you know,
17 technology can sometimes be challenging,
18 especially when you're working across
19 multiple systems. So we're happy that
20 that tool does that for the public.

21 For us, there's some back-end
22 data that it also does. We don't show
23 this publicly. However, you can look at
24 the number of trucks that you deploy, the
25 time that they are dispatched, the time

1 10/15/20 - ENVIRONMENT - RES. 200431
2 that they're on route, how long it takes
3 to get one route completed, how long it
4 takes to go to and from a transfer
5 station, and ultimately how long it takes
6 to end their day. This helps us
7 tremendously in terms of managers. That
8 data is usually given by word of mouth or
9 through manual systems, which means
10 handwritten documents and notes. Now
11 we're eliminating all that, where all of
12 that information is then uploaded into a
13 system and we can track it, and we can
14 monitor over periods of time to make sure
15 that we can do route adjustments and do
16 route optimization in-house.

17 A system like that will
18 probably cost a couple hundred thousands
19 of dollars. I'm sure Phil Bresee and
20 Scott McGrath can tell you that if we
21 brought in an outside consultant to do
22 that, it will cost hundreds of thousands
23 of dollars for us to implement that type
24 of system. However, we were able to do
25 it with in-house staff.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Certainly we want to give a big
3 shout-out to OIT, because they designed
4 and built the system, along with the
5 other platforms, PavePHL and PermitPHL,
6 but it does so much more and helps us
7 manage our department in realtime.

8 Things that we used to have to do
9 manually, we no longer have to do. We
10 can go onto a computer site, go down by
11 truck and look at the routes, look at the
12 timing of the routes, and make sure that
13 the trash is done as efficiently and
14 effectively as possible.

15 COUNCILWOMAN RICHARDSON: That
16 is tremendous, and I think that gives us
17 an opportunity to really operationalize
18 efficiency in City government. So I just
19 want to thank you for that work. I'm
20 really excited about that.

21 I have one last question before
22 I recognize our Vice Chair, Councilmember
23 Bass, for her question, but you
24 mentioned -- in one of your testimony,
25 you mentioned illegal dumping.

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Especially in communities of color, it
3 continues to be a significant problem.
4 In addition to the enforcement
5 provisions, are there any other
6 recommendations you have that Council
7 could take up to reduce short dumping? I
8 mean, I know this is something that my
9 office has received a ton of calls about
10 over the last several months, and I do
11 want to thank you all publicly for always
12 responding to the call. I just truly
13 appreciate the partnership. But what
14 advice or recommendations would you give
15 us around this short dumping issue?
16 Because it has been a significant problem
17 and an uptick in short dumping in our
18 communities.

19 COMMISSIONER WILLIAMS: Thank
20 you, Councilmember Richardson. Yes.
21 Illegal dumping, especially during the
22 COVID-19 epidemic, exacerbated
23 tremendously. We're still challenged
24 with trying to keep up with it today.
25 Unfortunately, it's a learned behavior in

1 10/15/20 - ENVIRONMENT - RES. 200431
2 which some residents actually think it's
3 okay to dump on locations other than in
4 front of their home. And the problem
5 becomes even larger, magnified when it
6 sits for a couple days and we're not able
7 to get to it. That complicates also
8 matters when you have residential short
9 dumping and then you have commercial
10 short dumping, where contractors come
11 into the City and find desolate areas to
12 dump their debris. So between the
13 combination of the two, we have to start
14 beginning to change the culture.

15 The only effective tool that we
16 have right now that I think that is
17 important to implement and actually
18 expand is enforcement using cameras. We
19 need to monitor the locations. Those
20 cameras -- I had a meeting just the other
21 day with the City of Los Angeles who
22 actually called us to say, hey, what are
23 you guys doing about illegal dumping,
24 we're having a major problem. So all the
25 way across Los Angeles, we shared with

1 10/15/20 - ENVIRONMENT - RES. 200431
2 them the technology, and they were amazed
3 that the City of Philadelphia is using
4 cameras that the Police Department is
5 using to address this matter.

6 Now, we would like to obviously
7 expand those to much larger areas and
8 rotate them. Dumpers get smart. They
9 understand that when they're monitored,
10 they can find other locations that are
11 not. And so that's the challenge of
12 keeping up with them. But I'm happy to
13 report that the locations that we placed
14 cameras, we saw a significant reduction
15 in the amount of illegal dumping in those
16 areas.

17 For residents, of course
18 obviously those are -- we try to do that
19 to catch contractors and those who come
20 in with tons and tons of material, but
21 there also is another component of trying
22 to change the behavior of residents who
23 think it's okay to put it on a corner.
24 And if you go down areas like 52nd and
25 Locust, if you go down in areas in North

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Philadelphia, if you go down in areas,
3 it's parts of Germantown under bridges,
4 that's a lot of residential trash that
5 people think that, okay, it's not in
6 front of my door, so I don't have to
7 worry about it, but the environmental
8 impact it's having on the community and
9 the neighborhood, especially people who
10 live in close proximity and businesses,
11 is detrimental to us all.

12 So I think it's very important
13 that we have an educational campaign
14 along with an enforcement campaign to try
15 to change the minds of individuals who
16 don't understand why this behavior should
17 not be tolerated.

18 COUNCILWOMAN RICHARDSON: Thank
19 you. Thank you very, very much.

20 I'd like to recognize our Vice
21 Chair, Councilmember Cindy Bass.

22 COUNCILWOMAN BASS: Well, thank
23 you, Madam Chair. Thank you very much.

24 And good afternoon to everyone.
25 And a special good afternoon to our

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Commissioner Carlton Williams, who we
3 work with very, very closely as a
4 District Councilperson. I think I call
5 the Commissioner every day, probably
6 several times a day as we work to get in
7 front of the mounds and mounds of trash
8 that we have throughout our district.
9 And I know that resources are tight and
10 COVID has really put some strain on your
11 workforce.

12 One of the things that was a
13 little frustrating for me is that while
14 we were thanking everyone who was a first
15 responder and also an essential worker
16 during COVID, it seems like a lot of our
17 sanitation workers were left behind and
18 left out of that conversation and people
19 really didn't want to recognize. It was
20 really just more like, well, when is my
21 trash getting picked up, it's been out
22 here for three days or four days or a
23 week or whatever. And we were really
24 trying to let people know that, listen,
25 COVID has had an effect on the Streets

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Department as well and so we all need to
3 be patient. We all need to just
4 recognize that these are essential
5 workers who deserve respect and who
6 deserve a big shout-out and big thank you
7 as well. So I just, first of all, wanted
8 to say that.

9 I was really excited to hear
10 about the program that you discussed that
11 would allow people to see where the trash
12 collection system is in their community,
13 and I have to say, somehow I missed that.
14 So I thank you for bringing that back to
15 our attention, because that's something I
16 definitely want to spread the word out to
17 my constituents about as a District
18 Councilperson.

19 I also wanted to talk just
20 briefly about just a couple things. The
21 first is around a public awareness
22 campaign around dumping you just
23 mentioned, and I wanted to really
24 encourage that, because I think in a lot
25 of our neighborhoods, dumping has become

1 10/15/20 - ENVIRONMENT - RES. 200431
2 just so commonplace and just so accepted
3 that people don't think twice about
4 walking by a big old pile of trash. They
5 see it, but they don't see it. And so
6 there's something wrong with that, but I
7 think there are things we can do about
8 it.

9 And so I was wondering if you
10 could talk a little bit about what a
11 public awareness campaign would look like
12 around dumping and reporting it and
13 particularly in neighborhoods where
14 there's the sort of like a no snitch
15 culture. If you could talk about that,
16 and if there could be I think a reward
17 system put in place where if you see
18 someone dumping, maybe you might be able
19 to be able to collect a reward if you
20 were able to provide information that
21 would lead to the arrest or fining or
22 whatever of someone who dumped, that when
23 they pay their fine, on the other end of
24 that fine could be the person who
25 reported the information, just to really

1 10/15/20 - ENVIRONMENT - RES. 200431
2 incentivize something like that. So I
3 just wanted you to talk just a little bit
4 about that.

5 COMMISSIONER WILLIAMS: First
6 of all, thank you, Councilmember Bass.
7 It's always a pleasure working with your
8 office to address some of these
9 challenges. I know that they're very
10 near and dear to your heart as well.

11 On the impact of education,
12 what COVID-19 actually did this year,
13 which was a huge, huge impact to why
14 we're seeing so much dumping around, many
15 people weren't allowed to do neighborhood
16 cleanups and corridor cleanups. Those
17 groups and those volunteers play such a
18 huge role in our ability to keep dumping
19 down, and when it stopped, I think what
20 you saw is the impact of the absence of
21 our very, very valued volunteers,
22 especially our block captains, our
23 commercial corridor cleaning programs in
24 your district around Germantown and
25 Cheltenham, all along Germantown Avenue and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Wayne Avenue. All of those things were
3 extremely important, because the
4 residents take ownership and
5 responsibility of the community and work
6 with government and just don't place the
7 whole burden on government to try to keep
8 up with it. Because in reality,
9 Councilmember, and you know this, we
10 don't have enough resources to keep up
11 with short dumping around the City. We
12 rely heavily on volunteer support and
13 participation and community engagement.

14 So I think any type of program
15 that can incentivize residents to partner
16 with the Streets Department to keep areas
17 clean, to beautify neighborhoods, to
18 become block captains, those are the key
19 tools that when things are successful,
20 you go into neighborhoods throughout the
21 City of Philadelphia, when you have a
22 strong network of committed neighbors,
23 individuals, block captains, and
24 businesses, you see less problems with
25 illegal dumping, and if you add in

1 10/15/20 - ENVIRONMENT - RES. 200431
2 cameras to hotspot areas, we certainly
3 can make a dent in this problem.

4 COUNCILWOMAN BASS: Okay. Very
5 good. Very good.

6 Question, can you highlight the
7 resources that are available to
8 constituents? I know there's obviously
9 recycle bins and in some neighborhoods I
10 think there's trash cans. Can you talk
11 about that, like if someone needs trash
12 cans. Do you still do rain barrels? And
13 have you thought about things that might
14 be a little bit out of the box but for
15 residents who are willing to have them
16 installed, like garbage disposals, which
17 I heard one of your folks say take a huge
18 amount of waste out of the system.

19 COMMISSIONER WILLIAMS: Yeah.
20 So a couple of years ago, we actually
21 piloted a garbage disposal program, that
22 businesses would get a very reduced rate
23 to have it installed and to see if it
24 reduced the amount of food waste in the
25 area. We ran a pilot next to a block

1 10/15/20 - ENVIRONMENT - RES. 200431
2 that didn't have disposals, and we did
3 see a significant reduction in the amount
4 of food waste if they installed a garbage
5 disposal system in their home, especially
6 in areas where the residents are
7 economically challenged. We wanted to
8 make it affordable for them to do that,
9 because it actually helps reduce waste,
10 and improved waste obviously was the
11 number one problem that we experienced
12 with the vermin and the flies and all the
13 things that our residents complain about.

14 If we're able to implement a
15 program like that again, that would
16 certainly be -- Scott McGrath actually
17 worked with me on that program some years
18 ago. It's almost a decade ago, but it
19 was certainly an important program. I
20 think -- and Council passed legislation
21 that all new construction obviously would
22 have to require it, but we're talking
23 about our older residential neighborhoods
24 that were not built in a new age that
25 won't have it, that we need to make it

1 10/15/20 - ENVIRONMENT - RES. 200431
2 affordable for them to be able to get it.

3 So I think programs like that
4 were very important. We also piloted two
5 years ago Fill A Can, which in certain
6 areas of the City allow residents to get
7 a trash can and have a uniform trash can
8 put out on their block to reduce the
9 amount of trash and how people set out
10 trash.

11 Many people ask, well, what's
12 the difference between the City and the
13 suburbs? I say, well, there's a couple
14 of things. The regulations are very
15 different. In the suburb areas where
16 they have private collection, they don't
17 allow things to be set out outside of a
18 bin. Everything has to be in a bin, and
19 anything outside of that bin has to be
20 paid for. So when you look at what our
21 regulations are versus what the suburban
22 areas are with private collection, that's
23 a very big difference, how trash is set
24 out, what type of bags they use.

25 I think yesterday the Council

1 10/15/20 - ENVIRONMENT - RES. 200431
2 hearing with Councilmember Parker, you
3 heard one of our sanitation employees
4 testify how people just throw trash out
5 any kind of way. That contributes to the
6 litter problems in the City of
7 Philadelphia. The type of bags they use,
8 containers, lids, all of those things
9 also help greatly reduce litter in our
10 communities and neighborhoods.

11 So I think we need a
12 comprehensive effort to be able to
13 implement many of those things to start
14 attacking our litter problem, from
15 illegal dumping on down to every little
16 piece of litter that we see on our
17 streets.

18 COUNCILWOMAN BASS: Even though
19 we have a budget crunch, I know, are any
20 of these programs likely to come back
21 with providing trash cans and providing
22 garbage disposals in light of the
23 importance of the environment and global
24 warming is -- it's not slowing down.
25 It's speeding up. So are we bringing any

1 10/15/20 - ENVIRONMENT - RES. 200431
2 of these programs back?

3 COMMISSIONER WILLIAMS: So I
4 think the good news is that we were able
5 to utilize grant funding, and Scott
6 McGrath can talk to that, from our state
7 act grant, our 902 grant, and Kyle also
8 can both talk to this. So we didn't use
9 City resources, General Fund resources.
10 We actually used the funds that were
11 generated through our increased recycling
12 through the state, and that allows us to
13 do programs like educational programs for
14 illegal dumping. It allows us to pilot
15 programs like trash cans. We purchased
16 Big Bellies using those grants. I mean,
17 those are the type of important subsidies
18 that we get from the state that allows us
19 to continue.

20 I don't know what the impact of
21 COVID-19 is going to be on those funds.
22 I'm sure like the City of Philadelphia,
23 the state is also challenged, fiscally
24 challenged, and we are hoping that we
25 still get our fair share of what those

1 10/15/20 - ENVIRONMENT - RES. 200431
2 grant dollars, which usually is about
3 \$1.2 to \$1.5 million a year. We still
4 want to use those grant dollars to invest
5 in initiatives like this so that we can
6 control and reduce dumping. We can buy
7 cameras with those funds. We can do so
8 many different things.

9 So I think we're still going to
10 continue it. Hopefully we'll still get
11 the allotment that the City of
12 Philadelphia deserves and to be able to
13 continue its investments.

14 The final thing is, we still
15 want more block captains. We're always
16 going to give bags, brooms, and gloves to
17 our block captains. We're still going to
18 make sure that they're supported. Again,
19 they are the backbone of our system in
20 the City of Philadelphia for outreach to
21 our neighborhoods. So we will make sure
22 somehow, some way we will make sure we
23 fund enough bags, brooms, and gloves to
24 continue our clean block program.

25 COUNCILWOMAN BASS: Very good.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Very good.

3 And last question, can you
4 speak briefly about composting? Several
5 years ago I actually did a hearing on
6 composting and the need for composting
7 throughout the City of Philadelphia, and
8 we had Bennett Compost who came in and
9 brought everyone buckets. And I'm not
10 sure how many people actually took
11 advantage of that, but for many, many
12 moons after that, I was composting, and I
13 only stopped because I lost my bucket and
14 had to get another bucket.

15 So is that something that the
16 City could do? Because the problem with
17 composting through a service like that,
18 which they do a great job, but the
19 problem is is that there is a fee
20 associated with being helpful to the
21 environment, and so everybody cannot
22 afford to pay to compost, and especially
23 in a city like Philadelphia. There are a
24 lot of folks who want to compost and who
25 want to do what's best for the City, best

1 10/15/20 - ENVIRONMENT - RES. 200431
2 for the environment, but being able to do
3 it and it be economically feasible,
4 that's something that's very important.

5 COMMISSIONER WILLIAMS:

6 Absolutely. So I think one of the
7 initiatives of the Zero Waste and Litter
8 Cabinet was to start a pilot program in
9 neighborhoods where people could do
10 backyard composting and composting in
11 local community locations and areas. We
12 wanted a comprehensive program in the
13 City of Philadelphia, "we" being the
14 Streets Department, so we wrote in a
15 provision to our current waste contract
16 with the City of Philadelphia that a
17 portion of the waste could be piloted to
18 actually be transitioned into some
19 organic material that's reusable, and we
20 wanted -- the biggest challenge for us in
21 a citywide program is that if we were to
22 source separate it, it would cost a
23 tremendous amount of resources to set up
24 the infrastructure to do so. That means
25 just like recycling, we would have to

1 10/15/20 - ENVIRONMENT - RES. 200431

2 have specific trucks to be able to do
3 that outside of the existing trucks that
4 we currently have.

5 COUNCILWOMAN BASS: What would
6 that cost be? Give us a ballpark range.

7 COMMISSIONER WILLIAMS: So if
8 we were to do it citywide, it would be
9 millions of dollars. In trucks alone,
10 it's \$250,000 per truck, if you're going
11 to use the existing compactor. I'm just
12 giving you the average what that would
13 be. I don't know if there would be a
14 difference in cost, but I'm sure it will
15 be about \$200,000 per truck. And if you
16 roll that out across the City, that can
17 get very expensive and that's where you
18 get into the millions.

19 There's also programs where we
20 hope that the commercial establishments
21 will build infrastructure in. Several
22 years ago we tried to lure and actually
23 did a grant, just a proposal review, to
24 see if there were interested people in
25 building a composting facility in the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 City of Philadelphia and we got 13
3 interested companies that was willing to
4 do so.

5 So there's certainly the
6 interest for this type of system to be
7 here built in the City of Philadelphia.
8 There's certainly a desire. There's a
9 big challenge with the investment that
10 it's going to take to build a citywide
11 program, but I think we can certainly
12 start small.

13 There's some things that
14 residents can do right now to start
15 composting, just as you said. They can
16 get a bin. They can start collecting
17 food waste in. They can let it by the
18 grade and actually use it as mulch in a
19 garden.

20 I remember a program that we
21 had when we had the recycling program.
22 We used to give grant dollars to schools,
23 Philadelphia green schools, and a school
24 down in South Philadelphia actually took
25 their lunchroom food waste and let it

1 10/15/20 - ENVIRONMENT - RES. 200431
2 compost and took an abandoned, empty lot
3 and built fresh vegetables and gave it
4 back to the students at the school.
5 That's just one example, one example
6 of -- and they were school students that
7 did this. So that's just one example of
8 what we can do together affordably to be
9 able to make changes in the amount of
10 waste that we generate. And that waste
11 didn't go into a landfill. It didn't go
12 to a waste-to-energy facility. It went
13 right back into the environment.

14 I think those are some examples
15 of ways it can be done. We need a plan
16 to be able to implement it.

17 Scott and Phil, I think you
18 guys worked on that, and Kyle, you guys
19 worked on that as well. If you wanted to
20 add very brief comments to that, feel
21 free to do so.

22 MR. McGRATH: Yes. I would add
23 our leaf and yard waste that we collect
24 is composted. We work with Park and Rec.
25 We use their facility in Fairmount Park.

1 10/15/20 - ENVIRONMENT - RES. 200431
2 And Park and Rec, I'm sure they'll talk
3 later about their pilot program they're
4 actually doing with Bennett, which was
5 set up initially to take care of food
6 waste generated at their facilities, but
7 their longer return, they were looking at
8 ways to expand that operation.

9 I would also add the Prisons
10 has a composting facility. They compost
11 a large portion of the food waste that's
12 generated in their cafeterias. It's
13 actually a fairly sophisticated
14 operation. They just got some additional
15 grant money through the Sustainability
16 Office to continue expanding that
17 operation.

18 So there's a lot of small-scale
19 stuff that's happening, but as the
20 Commissioner said, it takes a lot of
21 infrastructure dollars to develop this.
22 We're working with Waste Management.
23 That will also come at a premium. If we
24 can get that off the ground, that will be
25 a good push in the right direction, but

1 10/15/20 - ENVIRONMENT - RES. 200431
2 we'll have to coordinate with the Water
3 Department on this to use their
4 digesters, and it will cost additional
5 money to actually process the material.
6 So either way you go, developing the
7 composting infrastructure is going to
8 take time and significant amount of
9 capital resources to do it.

10 COUNCILWOMAN RICHARDSON: Thank
11 you. Thank you so much.

12 COUNCILWOMAN BASS: Thank you
13 very much.

14 Thank you, Madam Chair.

15 Thank you, Commissioner.

16 COMMISSIONER WILLIAMS: You're
17 welcome.

18 COUNCILWOMAN RICHARDSON: Thank
19 you, Madam Vice Chair, and thank you,
20 Madam Vice Chair, for bringing up
21 composting, because I had questions as
22 well around source reduction, and I
23 wanted to put in a shameless plug for our
24 Composting at Home Program that will be
25 on Wednesday, October 21st from 1:00 to

1 10/15/20 - ENVIRONMENT - RES. 200431
2 2:00 p.m. with the Office of
3 Sustainability and the School District of
4 Philadelphia to teach our constituents
5 how to compost at home.

6 And also, Commissioner, you
7 talked about the importance of our block
8 captains, so I wanted to seize the moment
9 to lift up the program offered by our
10 Council colleague Councilmember Curtis
11 Jones and the 12th Annual Virtual Block
12 Captain Boot Camp. This year they're
13 going virtual as a result of COVID, and
14 that program will be held on Saturday,
15 October 24th from 11:00 a.m. to 1:00 p.m.
16 and it will be streamed live here on
17 Channel 64. So I just wanted to note
18 those two upcoming events for the record.

19 I see in the Chat that my
20 colleague Councilmember Brooks would like
21 to be recognized, and after that, I'll
22 come back with just two more questions
23 and then we'll move on to the next panel.

24 Councilmember Brooks.

25 COUNCILWOMAN BROOKS: Thank you

1 10/15/20 - ENVIRONMENT - RES. 200431
2 so much, Madam Chair. Councilmember Bass
3 actually asked some of the questions that
4 I had, because one of them was about like
5 currently what's happening with
6 residents' trash and recycling now, and I
7 reflected on the time when my grandmother
8 used to separate the garbage from the
9 trash, which we call that composting, but
10 back then, the old folks didn't call it
11 that, and I was wondering where is that
12 now. So you kind of answered some of
13 those questions. And I really just
14 wanted to get on record as well how can
15 people know that that's something that
16 they can still do and is available
17 currently in these days.

18 And I have some questions as
19 well about illegal dumping. So what is
20 the City's current like procedure for
21 disposing of large amounts of trash? I'm
22 talking about not residential trash but
23 more like contractors' trash, for
24 example, and how is that information
25 shared?

1 10/15/20 - ENVIRONMENT - RES. 200431

2 I have an illegal dumping
3 situation, so I went through the trash to
4 figure out where it was coming from, and
5 I traced it back to a realtor that I
6 ended up calling. And I know no one
7 wants to rummage through trash, but it
8 was excessive, like every week as soon as
9 we get paid to get it cleaned up, it was
10 dumped again.

11 So what is the current
12 procedure for contractors' trash and do
13 they have guidelines that they know
14 about?

15 COMMISSIONER WILLIAMS: Yeah.
16 So they're required to have a private
17 hauler, number one, to dispose of their
18 material and have also a recycling plan
19 to take any type of recyclable material
20 that's not permitted in the landfill and
21 have it recycled, like drywall, for
22 example, those things that should be
23 actually recycled and not put into a
24 landfill.

25 There was legislation actually

1 10/15/20 - ENVIRONMENT - RES. 200431
2 being placed on the books, and I'm not
3 sure if it was implemented or we're about
4 to implement it or it's active now and
5 we're in the process of setting it up,
6 but requiring them to list their hauler
7 on their permit, and that is huge because
8 it then makes sure that there is a
9 designated location and a point of
10 contact when we're able to trace a
11 contractor. We can address the
12 contractor's license if they're illegal
13 dumping, and I think that's a big step
14 towards addressing contractors.

15 I think the challenge is is
16 that you have some of the mom and pop
17 contractors who don't get a permit, and
18 those are the ones that you may see doing
19 dumping, because they don't want to pay
20 the \$300, \$400 dumping disposal fee to
21 get a dumpster properly paid. They would
22 rather try to dump it in front of a
23 property like you just said, to have you
24 pay to clean it up, and that's the ones
25 that we have to enforce with the Police

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Department and to have them address, so
3 not only are they getting the proper
4 permits, but they're disposing of their
5 material properly.

6 So I think that's a key step
7 for us to be able to implement and
8 enforce those rules and regulations to
9 catch those type of contractors that do
10 that type of business.

11 COUNCILWOMAN BROOKS: And what
12 kind of enforcement is available
13 currently? So once I found the address
14 and I could trace it back to the realtor
15 whose property it belonged to, what would
16 be the next step? Who do you report it
17 to? Like how do you follow that process
18 out?

19 COMMISSIONER WILLIAMS: One of
20 the things -- one of the very good things
21 that the Zero Waste and Litter Cabinet
22 did was to establish the Environmental
23 Crimes detective in the Police
24 Department. And so they're dedicated to
25 the City of Philadelphia to address

1 10/15/20 - ENVIRONMENT - RES. 200431
2 issues that you just mentioned,
3 Councilmember Brooks. You would give
4 that information to that detective and he
5 would actually start an investigation,
6 just like the police would actually start
7 crime, because it is a crime. Depending
8 on the magnitude, the penalty for it is
9 up to \$5,000 fine, and if it's a vehicle
10 used, you can confiscate the vehicle and
11 whatever equipment that was used in the
12 act of while that dumping occurred.

13 The challenge is evidence.
14 Certainly this is why we are a big
15 proponent of cameras, because if we could
16 catch you on video, we certainly think
17 that that's sufficient to bring in front
18 of a judge, because that detective still
19 has to give it to a prosecutor in the
20 District Attorney's Office, who has to
21 take it in front of a judge to rule
22 whether or not the person was guilty or
23 not. So that can be cumbersome. It
24 certainly can be challenging, but that is
25 the process to start and then we can

1 10/15/20 - ENVIRONMENT - RES. 200431
2 actually start the enforcement process
3 against someone who dumped in our city.

4 COUNCILWOMAN BROOKS: Thank
5 you.

6 Another question is about like
7 have we looked into like being able to
8 pinpoint -- I mean, it sounds like
9 ridiculous -- but the reasons people are
10 dumping?

11 COMMISSIONER WILLIAMS: Not at
12 all. That's not -- I'm sorry. Go ahead.
13 I'm sorry.

14 COUNCILWOMAN BROOKS: Like as a
15 means to help with enforcement. Like
16 have we been able to like why they're
17 doing this, like what are the things we
18 can do to prohibit it, I mean, in
19 addition to enforcement? But like when
20 we start talking about the root causes,
21 like are we doing anything to mitigate
22 any of that?

23 COMMISSIONER WILLIAMS: Right.
24 That's a great question, matter of fact,
25 because behavioral patterns do exist in

1 10/15/20 - ENVIRONMENT - RES. 200431
2 the City of Philadelphia as to what type
3 of dumpsters, who they are, where they
4 come from, and what locations in the City
5 that are most impacted by it.

6 It's no secret or surprise that
7 economically challenged communities are
8 the ones hit the hardest the most where
9 there's a lack of development in
10 locations and there's often a lot of
11 unused vacant property and space, open
12 space, where it's easy for people to come
13 in and dump in those locations.
14 Certainly when people dump in those
15 locations, they come from all over from a
16 geographic perspective.

17 One of the things the Zero
18 Waste and Litter Cabinet did also was
19 establish a behavioral committee to look
20 at the impacts of litter and illegal
21 dumping, and then in the outcomes of that
22 was that in those areas, those distressed
23 areas are more likely to get dumped on by
24 outside contractors than any other place
25 in the City of Philadelphia.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 To be able to track that is
3 something that we've done through the
4 Litter Index, and we want to make sure
5 that we start -- that's where all our
6 cameras went, believe it or not, first.
7 We looked at those areas and those
8 neighborhoods where those are having the
9 biggest challenges and we ultimately went
10 out and put those cameras up, and we saw
11 a huge reduction in illegal dumping. The
12 problem is, they may have skipped over
13 while those cameras only cover -- we had
14 to put ten -- I'm going to use the Logan
15 Triangle off of the Roosevelt Boulevard,
16 for example. I think we put like ten or
17 fifteen cameras up in that location, and
18 when I showed Los Angeles, I was very
19 proud the other day because we did have
20 some bouts of it, but the change that
21 had -- the impact on the community was
22 tremendous, because we used to go there
23 every week and pick up tons and tons of
24 material, and now we may pick up a few
25 bags that are dumped by some residents

1 10/15/20 - ENVIRONMENT - RES. 200431
2 that shouldn't do it, but it's a whole
3 big difference. I think those are
4 studies that we need to continue and we
5 need to monitor and we need to start
6 crafting legislation around making sure
7 that it doesn't happen again.

8 COUNCILWOMAN BROOKS: Yes. And
9 thank you for that, because I don't live
10 far from the Logan Triangle, and now that
11 traffic has been rerouted off the ramp
12 from Cayuga, we go through the Logan
13 Triangle to get on the expressway, and
14 I've been seeing so much dumping, but I
15 do see immediate cleanup. So thank you
16 for the work that you guys are doing
17 around that.

18 I'm going to have one other
19 question around the temporary workers
20 that were hired during COVID-19. So I
21 have a question about like is there a
22 process to maybe potentially extend their
23 work past COVID? And what is their pay
24 scale compared to the permanent workers,
25 and is there any potential for them to

1 10/15/20 - ENVIRONMENT - RES. 200431
2 eventually be hired permanently by the
3 City in your department?

4 COMMISSIONER WILLIAMS: Yes.
5 So the temporary workers were a huge help
6 in getting us out of this crisis, number
7 one, and I want to acknowledge them for
8 the hard work that they've done
9 immediately. We put them right into
10 action, and they made an immediate
11 impact.

12 They come from an existing
13 civil service list. So that's the good
14 news. So that means they're eligible for
15 full-time employment when a position
16 opens up. And normally we get high
17 turnover in the City of Philadelphia and
18 each year we may hire 50 to 10, but we
19 have to go through like 600 names in
20 order to do that. And so many of the
21 people there are likely to get hired for
22 full-time employment.

23 Their salary is currently the
24 same level they get paid as an
25 entry-level worker, which is

1 10/15/20 - ENVIRONMENT - RES. 200431
2 approximately 37,000 a year, I believe.
3 So their hourly rate is equivalent to the
4 hourly -- the annual salary of a
5 full-time employee.

6 So after six months, we do have
7 the capability to try to extend it, the
8 program. Depending on where we are with
9 COVID and if the tonnage levels continue,
10 we'll have to look at our budget. The
11 great thing is, it's being offset by
12 overtime. So the temporary workers is
13 actually reducing the amount of overtime
14 that we spend in the Department, which is
15 a win-win for us, because ultimately it's
16 cost -- it's not prohibitive for us to
17 keep them on and we can keep this type of
18 program going. So it's been nothing but
19 a very positive impact to the City of
20 Philadelphia, certainly helping us get
21 out of the crisis that we was in over the
22 summer.

23 COUNCILWOMAN BROOKS: Yes. And
24 thank you guys so much for the work
25 you've been doing. I've been doing

1 10/15/20 - ENVIRONMENT - RES. 200431
2 several cleanups around the City, and you
3 guys have showed up with supplies, been
4 in there immediately to clean up, and I
5 just want to salute you for that work.
6 The communities that we've been doing the
7 cleanups in really appreciate it, and I
8 just wanted to put on record that I
9 appreciate all the work that the
10 Sanitation Department is doing.

11 I have a few more questions
12 about zero waste. What's the goal --
13 what is the City's goal to get to that
14 zero waste by 2035? And I want to know
15 how it's going so far and what are some
16 of the challenges and opportunities that
17 we see?

18 COMMISSIONER WILLIAMS: Yeah.
19 I'm going to ask Scott and Kyle to also
20 jump in. I'll give a brief overview to
21 tell you we had a plan to be able to get
22 to zero waste by 2035 starting with
23 implementation of a major organics
24 processing program. That consists of
25 about 30 percent of our current waste

1 10/15/20 - ENVIRONMENT - RES. 200431
2 stream, which is a tremendous amount of
3 tonnage. We collect -- well, this year
4 we're projected to collect 700,000 tons
5 this year. So maybe about 100,000 to
6 150,000 may be food waste and composting
7 and yard waste. So in order for us to
8 start on a goal towards zero waste, we
9 have to have a robust composting program
10 and organics program, processing program,
11 to reduce the amount of material that we
12 send to landfills and waste-to-energy
13 facilities.

14 Recycling, as Kyle talked about
15 earlier, was the other component that we
16 continued to run some type of modified
17 recycling program in the midst of the new
18 revised provisions with the Chinese Sword
19 and what's happening in China with the
20 contamination rate. So I think that is
21 another big challenge for us, because
22 they don't accept that material.

23 I think the key is to open up
24 domestic markets here in America that
25 would allow us to now process material

1 10/15/20 - ENVIRONMENT - RES. 200431

2 here as opposed to sending it overseas,
3 which would allow us to actually reduce
4 and create businesses right here in
5 America. Those things are needed for us
6 to create the infrastructure for us to
7 get to zero waste.

8 At the beginning, this circular
9 economy I think Councilmember Richardson
10 talked about, it's how we produce,
11 create, and dispose of not only the
12 products but wrappings and the areas in
13 which these things are created and then
14 distributed. I think we need to start at
15 the top. That is beyond, unfortunately,
16 the Streets Department's control. We can
17 advocate for it, but I think holistically
18 we need to look at how products are
19 created in the first place in order for
20 us to mitigate the use of our natural
21 resources.

22 Phil Bresee worked on that in
23 the beginning. Scott McGrath and Kyle,
24 that's certainly up your areas. If you
25 wanted to add to Councilmember Brooks's

1 10/15/20 - ENVIRONMENT - RES. 200431

2 question, feel free to do so.

3 MR. McGRATH: Yes. The Curb
4 Your Waste campaign is another key
5 component of this, reducing the amount of
6 waste, especially with what we've seen
7 from the impacts of COVID-19, and one of
8 the reasons why we initiated this effort
9 is controlling how much and how people
10 are putting their trash out for
11 collection really affects how we manage
12 our system.

13 The composting and targeting
14 other parts of the waste stream, as I
15 said earlier, will take some significant
16 capital investments, but I think working
17 with other departments, which some of
18 those efforts have already started, and I
19 think we're definitely going to continue
20 working with Park and Rec and the Water
21 Department on some of these initiatives,
22 but it will take a little bit of time to
23 sort of get things launched on some of
24 these efforts, and unfortunately COVID-19
25 has had a significant impact on trying to

1 10/15/20 - ENVIRONMENT - RES. 200431
2 get some of these efforts going and
3 everything.

4 So as we go through the year in
5 the coming year, we're going to keep at
6 it. The work that we've charged MSW
7 Consultants to do is also going to help
8 us. We're going to take a really close
9 look at composition of our waste and see
10 what portions of it we can either target
11 through waste reduction efforts, what
12 portions of it do we need to target with
13 other recovery efforts, and taking also a
14 real close deep dive on looking at the
15 composition of the organics faction of
16 the waste stream, and that will really
17 make a big difference in terms of how
18 Waste Management can process the material
19 and recover that portion of the waste
20 stream. So that's going to be a real
21 key.

22 They actually reached out to me
23 in the middle of our crisis and said,
24 hey, let's get the discussion going again
25 on the organics pilot and everything. So

1 10/15/20 - ENVIRONMENT - RES. 200431
2 they're all in still. I'm trying to help
3 us come up with a solution to this. So
4 it's going to take multiple different
5 types of efforts to get us to the zero
6 waste.

7 Another part of this is the
8 commercial waste stream, which right now
9 is really hard to tackle because the
10 commercial waste collection system has
11 been significantly disrupted by COVID,
12 because so many businesses just aren't
13 operating right now, which is offices
14 aren't open, restaurants aren't fully
15 operating, which is a big reason why
16 we're getting a lot of the trash, because
17 everybody is home. The School District
18 isn't open, so all of that trash is being
19 generated for us to try to manage.

20 So the commercial sector will
21 be another big impact on this. One of
22 the things that was started under the
23 Cabinet was an effort to recognize and
24 reward businesses that have adopted zero
25 waste practices, and that's something

1 10/15/20 - ENVIRONMENT - RES. 200431

2 that we can get back to working with the
3 Sustainability Office.

4 COUNCILWOMAN RICHARDSON: I
5 have a quick point of information
6 regarding the reference to the circular
7 economy model.

8 How are you thinking about how
9 the results of the study you are
10 conducting could be used in partnership
11 with other City departments to really
12 encourage a circular economy model in
13 Philadelphia? And then I'll circle right
14 back to my colleague Councilmember
15 Brooks, but I wanted to bring that up
16 since you mentioned that.

17 COMMISSIONER WILLIAMS: Phil,
18 you worked a lot on that. Can you
19 comment on how we plan on using the data
20 to help us drive this initiative?

21 MR. BRESEE: Sure.

22 The work that we're going to be
23 tasked with doing and that we've already
24 started is really going to be looking at
25 the Department's operations and programs

1 10/15/20 - ENVIRONMENT - RES. 200431
2 and services. I think the portions that
3 will be helpful for this larger circular
4 economy discussion, that's going to be
5 more tied in with the waste
6 characterization of work that we're going
7 to be doing starting in November and then
8 carrying on working with the partnership
9 and things like that into early next
10 year.

11 So if I could, though, for just
12 a quick second just point out or remind
13 that recycling is the ultimate --
14 recycling is acted upon locally but
15 impacted globally, and Commissioner
16 Williams mentioned China's National
17 Sword, which has now been in place for
18 about two and a half years, and the
19 import restrictions that were enacted by
20 that nation, and that's had a ripple
21 effect for programs all across the
22 country. So it's not just Philadelphia
23 that has experienced the negative impacts
24 of National Sword.

25 And I also just want to point

1 10/15/20 - ENVIRONMENT - RES. 200431
2 out that recycling in many ways is very
3 similar to kind of maybe the state of the
4 overall manufacturing economy in the
5 U.S., and so we've lost a lot of domestic
6 recycling processing capacity. We've
7 lost a lot of end market capacity. That
8 all went away as we began to export more
9 materials overseas.

10 So I do think that the positive
11 is that there is a significant amount of
12 investment now that has been restarted in
13 domestic process capacity in the U.S.,
14 and I think that it's still going to take
15 a couple of years for it to all come
16 online, but I do think that that's really
17 going to help, I think, reinvigorate a
18 lot of programs and get a lot of programs
19 around the country back on track as far
20 as reaching higher recovery levels and
21 diversion goals.

22 So I'm not sure if I answered
23 the question, so sorry, Phil. Thank you
24 for the opportunity.

25 MS. LEWIS: I just want to add

1 10/15/20 - ENVIRONMENT - RES. 200431
2 one thing, if I may. Thank you. With
3 regard to the audits that are coming up,
4 we're not only looking at the recycling
5 stream to see what people are putting in
6 that's wrong in the recycling stream and
7 getting them to recycle right, but also
8 looking at the waste stream to see how
9 much of their waste is not only organics
10 but is also recyclable material so that
11 we can then encourage greater
12 participation in the recycling so that we
13 can get more of that recycling material
14 out of the trash can and into the
15 recycling bin.

16 I do think, though, and I do
17 want to say that when we're looking at
18 the overall hierarchy of zero waste and
19 we're looking at source reduction and
20 reuse and recycling and composting and
21 then there is the landfill component and
22 just simple disposal waste to energy, we
23 are really hitting on all of those
24 categories of the hierarchy in order to
25 achieve zero waste.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 When we're looking at messaging
3 zero waste, though, I really think we
4 need to look at that in any city but
5 particularly in the City of Philadelphia
6 where we have 40 percent of our residents
7 are living under the federal poverty
8 level is my understanding, where we have
9 not necessarily a college-educated
10 populus, when we look at the term "zero
11 waste" and you throw that out to the
12 average citizen, it's a term that on its
13 face value is very daunting. To say zero
14 waste means that you've really produced
15 no waste, and that's not -- we know
16 internal to the process that that's not
17 what the term means. But I think we
18 really need to look at messaging that
19 term to the general population, because
20 when you throw out the term "zero waste"
21 to many, it sounds so daunting that
22 people don't necessarily want to try to
23 attempt it at all. So I think we have to
24 look at that when we are messaging to our
25 residents. We have to really look at

1 10/15/20 - ENVIRONMENT - RES. 200431
2 breaking down those particular categories
3 of zero waste that are source reduction,
4 that is recycling, that is composting,
5 breaking down those categories, because
6 when we put it under that big umbrella,
7 it can be very obscure and/or daunting
8 for some.

9 COUNCILWOMAN RICHARDSON:

10 Great. And I'll circle back -- thank you
11 for your response. I want to circle back
12 to Councilmember Brooks so you can finish
13 up your line of questioning so that we
14 can move on to the next panel. I don't
15 see anyone else that wants to be
16 recognized in the Chat feature.

17 COUNCILWOMAN BROOKS: Thank you
18 so much, Madam Chair. That concludes
19 my -- line of questioning sounds so
20 formal. That concludes my questions.
21 Thank you so much.

22 COUNCILWOMAN RICHARDSON: Thank
23 you. Thank you, Councilmember Brooks.

24 And, again, thank you so much,
25 Commissioner Williams, Mr. McGrath, Ms.

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Lewis, and Mr. Bresee. Did I get that
3 right? Thank you so much for your
4 testimony and for your response and for
5 all the work that you continue to do. We
6 look forward to continuing to work with
7 you and supporting the work of your
8 department. So thank you very, very
9 much.

10 We will now move on to Panel 2.
11 Ms. Alford, if you could call Panel 2.

12 THE CLERK: Emily Yates, Ashima
13 Sukhdev, and Alex Danovitch.

14 COUNCILWOMAN RICHARDSON:
15 Excellent. Thank you so much. So,
16 Emily, you can proceed with your
17 testimony.

18 MS. YATES: Great. Good
19 afternoon, Chair Gilmore Richardson and
20 members of the Committee. My name is
21 Emily Yates and I'm the Smart City
22 Director for the City of Philadelphia at
23 the Office of Innovation and Technology.
24 I am extremely happy to be here to
25 testify and share my knowledge around the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 circular economy, the SmartCityPHL
3 Roadmap and programming, and
4 opportunities for scalable solutions as a
5 potential solution to street litter and
6 waste disposal systems in the wake of the
7 COVID-19 pandemic here in Philadelphia.

8 In my position, I am
9 responsible for implementing the
10 SmartCityPHL Roadmap, which was launched
11 in February 2019 with an Executive Order
12 from Mayor Kenney. The Roadmap is
13 intended to serve as an initial guide to
14 spur innovation and collaboration in City
15 government around the application of
16 policies and technologies that make
17 Philadelphia a smart city.

18 I would like to extend a
19 special thank you to Councilman Derek
20 Green for his support and the launch of
21 the SmartCityPHL strategy and his
22 continued participation in the Advisory
23 Committee meetings.

24 As defined in the Roadmap, a
25 smart city is a city that uses integrated

1 10/15/20 - ENVIRONMENT - RES. 200431
2 information and communication technology
3 to support the economic, social, and
4 environmental goals of its community. As
5 we continue to move forward with the
6 implementation of projects and programs,
7 that definition has shifted from a focus
8 on technology and data to more of a focus
9 on a human-centered approach and
10 fostering economic growth and improving
11 the quality of life through the efficient
12 use of both existing and new resources.

13 One of the key areas of focus
14 over the past year has been developing
15 and launching the Pitch and Pilot
16 Program, which provides a clean and
17 transparent process for establishing a
18 pipeline for partnerships. We leveraged
19 the Pitch and Pilot Working Group, which
20 is composed of individuals from both the
21 Advisory Committee and the internal
22 Working Group, to solicit ideas that
23 reflect both the Kenney Administration
24 priorities and community needs and
25 interests. A call for a solution is then

1 10/15/20 - ENVIRONMENT - RES. 200431
2 issued. We review proposals, host a
3 pitch event, and then select a promising
4 idea, and a Smart City team will work to
5 secure a contract with the solution
6 provider and manage and track the
7 implementation of that pilot. We feel
8 that this is an extremely valuable
9 program because it allows us to support
10 our colleagues by providing additional
11 capacity and absorbing some of the risk
12 that comes with piloting innovation and
13 technology.

14 Our first call for solutions is
15 quite applicable to the topic of today's
16 hearing, so I'm going to share a bit
17 about that with you. The Pitch and Pilot
18 Working Group determined that we would
19 issue a call for tech and data-enabled
20 solutions that support the City's Zero
21 Waste by 2035 plan and target. This
22 topic was determined for a variety of
23 reasons, but largely because it addressed
24 the top citizen concern. As we know,
25 litter and waste has consistently been

1 10/15/20 - ENVIRONMENT - RES. 200431
2 identified on the City's annual
3 Philadelphia resident survey, and it
4 addressed a key challenge experienced by
5 the City regarding illegal dumping.

6 The call for solutions was
7 launched on December 16th, 2019 and
8 responses were received by January 16th,
9 2020, and the Working Group selected two
10 solution providers. One is Retrievr,
11 which Kyle mentioned. They collect
12 e-waste and textiles. And Metabolic was
13 the other finalist, both of whom support
14 the transition to a more circular state
15 in cities.

16 I'm going to briefly dive into
17 that specific pilot because it was a
18 project that laid the foundation for
19 growing a circular construction and
20 demolition economy here in Philadelphia.

21 A circular economy, just to
22 make sure everybody is aware of the
23 definition of that, is defined by the
24 Ellen MacArthur Foundation as a framework
25 for an economy that is restorative and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 regenerative by design. So looking
3 beyond the current take, make, and waste
4 extracted industrial model, a circular
5 economy aims to redefine growth, focusing
6 on positive society-wide benefits and is
7 underpinned by digital strategies.

8 Metabolic proposed implementing
9 and adapting an urban mining tool to
10 Philadelphia's construction and
11 demolition waste stream. Urban mining is
12 very simply defined as mining for
13 resources in cities rather than using
14 virgin material, so what do we have
15 already in the City that we can utilize.

16 The urban mining tool helps
17 facilitate a circular approach to
18 construction by evaluating the value and
19 opportunity to reuse materials and
20 elements embedded in existing buildings.
21 These materials include precious metals
22 and minerals, but also elements such as
23 window frames, ceiling tiles, and doors.
24 These can then be mapped against upcoming
25 building needs to help develop the most

1 10/15/20 - ENVIRONMENT - RES. 200431
2 efficient logistical supply chains. This
3 tool provides the city and the community
4 with data-driven insight into the demand
5 and supply of material streams for years
6 to come and how we as a city can ensure
7 high-quality reuse. These insights can
8 then be further used to encourage the
9 construction and demolition sector to
10 reduce waste and minimize demand for new
11 construction materials.

12 From this pilot, we know that
13 there's a greater amount of C&D waste
14 resulting from small-scale project
15 demolition in North Philadelphia than
16 anywhere else in the City, that there are
17 a great number of construction projects
18 and associated demand for construction
19 materials in downtown Philadelphia, and
20 the five highest materials in our waste
21 stream are concrete, limestone, bricks,
22 steel and iron, and wood.

23 We know that construction is
24 critical to the healthy functioning of
25 our economy, but we also know that it is

1 10/15/20 - ENVIRONMENT - RES. 200431
2 one of the biggest consumers of energy
3 and raw materials. It is also one of the
4 contributors to the issues of illegal
5 dumping here in Philadelphia, as we heard
6 in the prior panel.

7 So how do we balance this
8 economic driver with our climate goals?
9 Reducing our reliance on scarce resources
10 increases our economic resilience, and
11 building a circular economy offers a \$4.5
12 trillion economic opportunity in the U.S.
13 alone by avoiding waste, making
14 businesses more efficient, and creating
15 new employment opportunities.

16 In Philadelphia, there are
17 already seeds that have been planted,
18 like the urban mining tool and the
19 composting pilot Ms. Knapp will reference
20 that are low-hanging fruits that we can
21 and should take advantage of to help
22 foster a more circular, equitable, and
23 resilient economy and environment here in
24 Philadelphia.

25 Policies and programs that aim

1 10/15/20 - ENVIRONMENT - RES. 200431
2 to minimize waste and consumption across
3 all sectors while incentivizing
4 innovative solutions for building a
5 circular economy and creating more jobs
6 are critical to Philadelphia reaching
7 both its climate and economic resiliency
8 goals.

9 I'm grateful to Councilmember
10 Gilmore Richardson for convening this
11 hearing to explore new ideas and
12 strategies.

13 Thank you, and I'm happy to
14 answer any questions you might have.

15 COUNCILWOMAN RICHARDSON: Thank
16 you.

17 I'll allow this panel to
18 testify and then we'll do questions at
19 the end of this panel.

20 So we'll recognize Ms. Ashima
21 Sukhdev. Please proceed with your
22 testimony.

23 MS. SUKHDEV: Thank you. Good
24 afternoon, Chair Gilmore Richardson and
25 members of the Committee. My name is

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Ashima Sukhdev and I lead the Government
3 and Cities Program at the Ellen MacArthur
4 Foundation. The Ellen MacArthur
5 Foundation is a non-profit that develops
6 and promotes the idea of a circular
7 economy. We work with and seek to
8 inspire businesses, academia,
9 policymakers, and institutions. I'm here
10 to share my knowledge around the topic of
11 circular economy today.

12 The circular economy, as Emily
13 indicated, seeks to move from a linear
14 take, make, dispose economy to one where
15 we actually eliminate the idea of waste
16 in the long term. It's really a
17 fundamental rethink off the way that we
18 make, use, and manage materials and
19 products and infrastructure in our
20 economy.

21 From a repair cafe that helps
22 you fix your phone to a more durably
23 designed T-shirt, a building that's
24 designed for disassembly or packaging
25 that's made out mushrooms instead of

1 10/15/20 - ENVIRONMENT - RES. 200431

2 plastics, these are all examples of what
3 makes up the circular economy.

4 Over the last decade, the idea
5 has gained significant traction with
6 businesses, cities, and policymakers
7 alike, because it's an opportunity for
8 the economy, for people, and the
9 environment.

10 So what benefits can a circular
11 economy bring to cities specifically?
12 Analysis has been conducted by Accenture
13 that has estimated that transitioning to
14 a circular economy could generate \$4.5
15 trillion worth of additional economic
16 output by 2030.

17 When it comes to jobs, circular
18 economy-related activities such as
19 repairing, upgrading, remanufacturing are
20 all much more labor intensive than the
21 alternative of just throwing things away.
22 For example, refurbishing a thousand tons
23 of electronics can create 13 times more
24 jobs than recycling that same amount of
25 electronics. Recycling a ton of solid

1 10/15/20 - ENVIRONMENT - RES. 200431
2 waste will pay \$100 more in wages than
3 disposing of it in landfills.

4 Analysis conducted has shown
5 that circular economy activity could
6 create 12,000 net new jobs in London by
7 2036 and more than 11,000 jobs in New
8 York City by 2030.

9 The circular economy is also
10 critical in our fight against climate
11 change. So 45 percent of carbon
12 emissions come from how we actually make
13 and use products and how we produce food,
14 which is where the circular economy
15 solutions can come in.

16 Cities around the world so far
17 have started to take notice with cities
18 like New York, Charlotte, Austin,
19 Phoenix, Toronto just being some of the
20 North American cities that are pioneering
21 circular economy initiatives, along with
22 many other global cities around the world
23 that we work with. And, importantly,
24 many of the businesses that we're working
25 with, whether that's the Ikeas, Googles,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Walmarts, Amazons, they are increasingly
3 looking to pilot circular economy
4 projects and initiatives and partner with
5 city government specifically.

6 This is a unique moment for
7 Philadelphia to take on the circular
8 economy and drive forward an innovative,
9 thriving local economy while respecting
10 and regenerating our environment.

11 Thank you very much for the
12 opportunity to share, and I'm happy to
13 answer any questions when the time comes.
14 Thank you.

15 COUNCILWOMAN RICHARDSON: Thank
16 you so much for your testimony.

17 And lastly for this panel, we
18 will hear from Alex Danovitch. Alex,
19 please proceed with your testimony, and
20 then we'll address questions. Thank you.

21 MR. DANOVITCH: Thanks. Good
22 afternoon, Chair Gilmore Richardson and
23 Council. Thanks for the opportunity to
24 speak on our growing waste crisis, a
25 problem that's been exasperated by the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 impacts COVID-19 has had on both our
3 supply chain and the human health of
4 essential workers and City residents.

5 We're experiencing the
6 repercussions of an unjust and broken
7 model of waste that lacks accountability
8 and transparency and is rooted in the
9 belief that waste is inevitable,
10 resulting in historic disproportional
11 investments in disposal over reuse and
12 recycling. As a social entrepreneur with
13 20 years' experience developing zero
14 waste infrastructure, I believe that all
15 waste is preventable, not inevitable.
16 Demonstrating this belief is the mission
17 of Eureka Recycling, a non-profit
18 recycler in Minnesota co-founded in 2001
19 that operates a similar sized facility to
20 what the City of Philadelphia would need
21 for their recycling.

22 By choosing a contract with
23 Eureka, a mission-aligned business that
24 is invested in the success of recycling,
25 not beholden to the profits from waste,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 the cities of Minneapolis and Saint Paul
3 have enjoyed a resilient recycling
4 program that sustains 110 living-wage
5 jobs, has leveraged over \$20 million in
6 private investments, and keeps material
7 local, sorting the recycling collected
8 for its highest and best use.

9 Eureka is just one example of
10 how local self-resilience allows for
11 cities to realize significant social and
12 environmental benefits at a competitive
13 price, even through our current crisis.

14 The move from corporate-driven
15 profit to mission-aligned partners is the
16 key to achieving success. This will only
17 happen if the City transforms their
18 procurement process to attract the needed
19 partners through incentives such as
20 long-term contracts, provisions of
21 buildings or space through public-private
22 partnerships, and the valuing of economic
23 development and environmental benefits of
24 proposals over the short-term gains of
25 lowest cost bidders.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Ultimately we need to move
3 beyond recycling and change the systems
4 that perpetuate waste in the first place
5 through the development of sustainable
6 local supply chains that include
7 refillable and reusable infrastructure.
8 I can imagine a day when new social
9 enterprises enable Philadelphia residents
10 to get items from their favorite
11 restaurants and grocery stores in
12 reusable to-go packaging that's
13 systemically collected from households,
14 hygienically cleaned, and redistributed
15 to retailers and manufacturers, and this
16 is an issue that's been made particularly
17 relevant as we've seen the increase in
18 disposable to-go packaging and limits on
19 voluntary bring-your-own actions due to
20 COVID, as well as the legislative limits
21 created by the state preemption.

22 I've included a link to a
23 recent report by Gaia in the written
24 testimony and I welcome the opportunity
25 to discuss further, and I thank you for

1 10/15/20 - ENVIRONMENT - RES. 200431

2 your time and attention to the issue.

3 COUNCILWOMAN RICHARDSON: Thank
4 you. Thank you so much for your
5 testimony.

6 I will start off with my
7 questions for Emily. The urban mining
8 report offers a lot of recommendations.
9 So have you been able to have
10 conversations between the City and
11 private-sector stakeholders? And if so,
12 what insights did you learn? And if not,
13 is there a plan to host that conversation
14 soon?

15 MS. YATES: Thank you,
16 Councilmember Gilmore Richardson. We
17 have not had conversations yet. We've
18 been doing a bit of the groundwork and
19 trying to identify who the key
20 stakeholders would be and also coordinate
21 with existing efforts that are happening
22 through the Sustainability Office's
23 participation in the Thriving Cities
24 Initiative.

25 COUNCILWOMAN RICHARDSON:

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Excellent. Thank you for that feedback.

3 Also, the report offers some
4 ideas of what the City could do after a
5 few pilot projects, including using our
6 procurement process to create sufficient
7 demand for building reuse. How long do
8 you anticipate that timeline will be, or
9 could this be an area of opportunity to
10 help us jump-start our post-COVID
11 economy?

12 MS. YATES: Thank you for that
13 question as well. I'm not sure about the
14 timeline, to be completely clear. That's
15 something to look into, but I absolutely
16 think that the procurement mechanism that
17 the City possesses and utilizes is a
18 great opportunity for us to have an
19 impact on jump-starting our COVID
20 recovery and it's something that, beyond
21 construction and demolition, should be
22 looked at as how we can incorporate
23 circular principles into our procurement
24 process. But I would love to look into
25 that more, so...

1 10/15/20 - ENVIRONMENT - RES. 200431

2 COUNCILWOMAN RICHARDSON: And
3 could you just please get back to us
4 relative to the timeline? Because that
5 will be most helpful.

6 And my last question, the
7 Commerce Department is also working on a
8 project to diversify the tech industry.
9 So do you see room for a collaboration
10 between those types of projects and the
11 circular economy work, and do you have
12 ideas on how we can start building
13 circular economy priorities into our
14 business development and business
15 attraction efforts here in the City?

16 MS. YATES: So I absolutely see
17 opportunity to align with the efforts
18 that the Commerce Department is having,
19 and I've been connected specifically in
20 the workforce efforts that they're trying
21 to identify. So I have a conversation
22 teed up with Shopa (ph) out of the
23 Workforce office to talk further about
24 that, because there is just a massive
25 amount of opportunity within the circular

1 10/15/20 - ENVIRONMENT - RES. 200431
2 economy space to create jobs, but also to
3 drive innovation, and I think the use of
4 technology -- the circular economy is
5 underpinned by digital strategy, so it's
6 really inherent that we start to explore
7 that as a hub, I guess, here in
8 Philadelphia. I think there's a great
9 amount of opportunity given the academia
10 that we have in this space and the
11 ability to collaborate with the high
12 school programs around career and
13 technical education and really work to
14 create that pipeline of talent, because
15 it starts from design to consumption, and
16 we really need to look at the whole
17 system's approach to it, how do we start
18 to create that pipeline, but also retain
19 and attract the talent, and that's
20 something that through the Smart City
21 strategy, I'm definitely looking into
22 part of our Pitch and Pilot Program.

23 I spoke about one side. If you
24 look at the image in the Smart City
25 strategy, there's a second side that's

1 10/15/20 - ENVIRONMENT - RES. 200431
2 looking at kind of solidifying
3 relationships with key partners, mostly
4 research institutions, but I also see
5 opportunities to collaborate with
6 different companies here in the City to
7 help drive it.

8 COUNCILWOMAN RICHARDSON: Thank
9 you so much for that response, because I
10 really believe that focusing on career
11 and technical education and workforce
12 development will be a way for us to
13 really help our residents as we move
14 through COVID-19. So thank you so much
15 for that, and I'm pleased to hear that
16 you have been speaking with Shopa. I
17 think she's going to be a great partner
18 for us on the workforce development
19 front.

20 I'd like to recognize my
21 colleague Councilmember Derek Green for
22 questions, and then I'll come back for
23 the additional questions I have for our
24 other witnesses.

25 COUNCILMAN GREEN: Following in

1 10/15/20 - ENVIRONMENT - RES. 200431
2 the spirit of my colleague Councilmember
3 Kendra Brooks, I will have a line of
4 inquiry that's quite formal and direct.

5 Just joking.

6 Sorry. I was chairing another
7 committee at the same time, so I was
8 trying to listen to both the commentary
9 from this hearing as well as participate
10 in a Cities of Inclusion initiative I'm
11 doing in reference to making the City of
12 Philadelphia the world's premier city of
13 inclusion for those that have a physical
14 learning difference by 2026.

15 But one of the questions I have
16 for this panel and listening to all the
17 panelists speak and testify, one, to get
18 some perspective on -- and you talked
19 about workforce and opportunities for
20 training for young people who are in our
21 high schools, but I also want to think
22 about entrepreneurship opportunities and
23 how we expose people to this circular
24 economy.

25 When, Emily, as you were

1 10/15/20 - ENVIRONMENT - RES. 200431
2 talking and some of the other panelists
3 were also presenting their testimony, it
4 made me think of a former co-worker,
5 Kevin Brooks, who when I was in the Law
6 Department and I used to represent them
7 called the Office of Housing and
8 Community Development, Kevin was our EEO
9 manager for that department. And because
10 we do a lot of work in housing and
11 development, he actually decided to start
12 his own business, really salvage
13 business, where he would go into
14 demolition projects, especially of older
15 homes or historic properties, and salvage
16 some of the very unique and ornate parts
17 of those homes and then provide them for
18 others, and throughout -- he's been an
19 entrepreneur ever since. He's done
20 things on various cable channels and
21 various pilots, from HGTV and others,
22 providing some of the unique things that
23 he's been able to salvage. But he being
24 an African American man saw this as an
25 opportunity, and it made me think about

1 10/15/20 - ENVIRONMENT - RES. 200431
2 this whole circular economy and how we
3 provide better inclusion and
4 opportunities for entrepreneurs and
5 really expose the potential
6 entrepreneurship opportunities for
7 businesses so we can have more
8 entrepreneurs like a Kevin Brooks
9 Salvage, who has been able to flourish
10 and grow based on this type of circular
11 economy.

12 MS. YATES: Thank you for your
13 question, Councilmember Green. I think
14 that's one of the great things that
15 excites me about this circular economy,
16 is the opportunity for so many different
17 individuals regardless of their
18 background to have a place in the
19 spectrum of what we need to do within the
20 circular economy. And I wanted to
21 mention this as a follow-up to
22 Councilmember Gilmore Richardson's
23 comment. I think one of the great things
24 about a circular economy, it's not only
25 for people who have college degrees and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 kind of the white-collar role. It's also
3 a job -- an opportunity to hire a lot of
4 individuals that are under-skilled, need
5 re-skilling, are hard to employ,
6 unemployed. And so if you think about --
7 if you look along the process of
8 designing, using, and kind of collecting,
9 there's so many different points where we
10 can create jobs. And great examples to
11 point to, there's a, for lack of better
12 example on top of my head, there's a
13 waste recovery process happening in
14 Amsterdam. They have a former
15 waste-to-energy facility, that they
16 realized that that was not the most
17 effective way to utilize these resources
18 was to burn them, so they pivoted to
19 become a way of resource recycling
20 facility where they are collecting waste
21 and employing individuals that are
22 under-skilled or hard to employ and using
23 them to separate out that waste into
24 reusable parts that keeps them at their
25 highest value. And that's just a simple

1 10/15/20 - ENVIRONMENT - RES. 200431

2 way of pivoting a business to create
3 really a lot more job opportunities.

4 But then there's also the space
5 to create these hubs for entrepreneurs.
6 Actually, prior to my role here in
7 Philadelphia, I was in Charlotte, North
8 Carolina where I led the development of
9 their circular Charlotte strategy, and
10 one of the things that we focused on was
11 creating an innovation hub that provided
12 low-cost space to entrepreneurs to allow
13 them more of an effort into the
14 entrepreneurial space to kind of reduce
15 that cost barrier and provide them with
16 access to those resources. And it didn't
17 matter if it was access to avocado peels
18 or coffee grinds to grow mushrooms or
19 concrete. It was a space where we could
20 connect and facilitate that as a city to
21 help really drive the circular economy
22 and that innovation and entrepreneurial
23 space for all people. And part of what
24 motivated me so much in developing that
25 strategy is the city manager said, I want

1 10/15/20 - ENVIRONMENT - RES. 200431
2 somebody who is currently collecting
3 waste for the City of Charlotte, who can
4 potentially be homeless, because the
5 waste manager hired individuals that were
6 homeless to help, and in five years, I
7 want to see him in this space with his
8 own business. And that's the trajectory
9 I want the space to create, and I think
10 we have that capacity here in
11 Philadelphia as well.

12 COUNCILMAN GREEN: That's
13 actually a very good point, because I do
14 know an entrepreneur that I met that is
15 doing e-waste, and he has returning
16 citizens and he has contracts for various
17 commercial office spaces in our city
18 where he collects the e-waste on behalf
19 of the building owner from the tenants,
20 and he's been able to grow his
21 entrepreneurship and his business as well
22 as hire additional returning citizens.

23 COUNCILWOMAN RICHARDSON: Thank
24 you.

25 MR. DANOVITCH: Can I add one

1 10/15/20 - ENVIRONMENT - RES. 200431
2 thing to that question as well? I'm
3 sorry.

4 COUNCILWOMAN RICHARDSON: Yes.
5 Please identify yourself for the record
6 and then please proceed.

7 MR. DANOVITCH: Sure. I'm Alex
8 Danovitch.

9 And I'm actually -- so to speak
10 to the job creation -- I really love what
11 Emily was saying -- as well as I think --
12 I'm working with a non-profit, a new
13 non-profit, in the City of Philadelphia
14 right now called All Together Now
15 Pennsylvania and its founder Judy Wicks,
16 who has a lot of experience connecting
17 sustainability issues, and what we're
18 really trying to do is take this
19 opportunity -- and COVID has really shown
20 it to us -- that supply chains need to be
21 smaller. We're seeing now more direct
22 purchasing from manufacturers to
23 consumers or from farms direct to
24 manufacturers, and I think that that
25 lower supply chain for our basic goods or

1 10/15/20 - ENVIRONMENT - RES. 200431
2 the shorter supply chain creates a
3 tremendous opportunity for circularity
4 and to create these entrepreneurship
5 opportunities in the City as a job
6 creation and job development tool to
7 really make our supply -- look at our
8 local supply chains and make them
9 sustainable and do it in a way that's
10 circular, especially with packaging and
11 the issues that material doesn't have to
12 go that far anymore. It creates a lot of
13 exciting, I think, places we can go.

14 COUNCILWOMAN RICHARDSON: Thank
15 you. Thank you so much for your feedback
16 and for that excellent work.

17 Councilmember Green, did you
18 have any additional questions?

19 COUNCILMAN GREEN: No. I'm
20 fine. Thank you.

21 COUNCILWOMAN RICHARDSON: Okay.
22 Thank you so much.

23 Quickly recognize Green
24 Building United. Are you still on the
25 line, Green Building United? I think

1 10/15/20 - ENVIRONMENT - RES. 200431

2 that was Amy.

3 (No response.)

4 COUNCILWOMAN RICHARDSON: Amy
5 had to go. So we are going to move
6 forward. I have additional questions
7 that I just wanted to get on the record
8 for the MacArthur Foundation around your
9 experience around some of the main
10 barriers that cities are facing when
11 trying to create a local circular economy
12 and what are some of the best practices
13 that you've seen cities looking to
14 incentivize a circular economy. And,
15 lastly, how have you seen cities pivot in
16 the wake of COVID-19 to start to
17 implement some of these programs?

18 And I have additional questions
19 for you, Alex. I'll quickly put them on
20 the record after we're finished with
21 Ashima, and then we'll move on to the
22 next panel, because I want to be
23 respectful of everyone's time. So we'll
24 ask the next panel to please keep your
25 testimony limited so that we can get to

1 10/15/20 - ENVIRONMENT - RES. 200431
2 the rest of the witnesses. We still have
3 about 18 more individuals to go.

4 So Ashima.

5 MS. SUKHDEV: Sure. Thank you
6 very much, Councilmember. So in terms of
7 your question around challenges and best
8 practices, I think some of the challenges
9 are certainly around awareness-building
10 and capacity-building of what is the
11 circular economy and how can my specific
12 city actually adopt this concept. It
13 sounds like Philadelphia is already
14 looking to explore that, which is
15 fantastic.

16 There's also certainly barriers
17 around collaboration. The circular
18 economy is not something that just the
19 City can implement. It will take
20 businesses, small and large. It will
21 take universities. It will take the sort
22 of larger society to take part in. So
23 really making sure that this is a
24 collaborative effort, I think those are
25 some of the challenges that we're seeing

1 10/15/20 - ENVIRONMENT - RES. 200431
2 cities facing.

3 In terms of best practices, I
4 would say that a lot of cities start
5 obviously with their waste
6 characterization study, as we're doing,
7 which is fantastic. I think it's really
8 important to do some kind of landscape
9 analysis of what circular economy
10 activity is already ongoing in your city.
11 You might be surprised that there's a lot
12 of small businesses, entrepreneurs that
13 are kind of catching onto this idea. So
14 understanding who they are, understanding
15 the large corporations that might be
16 working on this as well, and then kind of
17 convening them together, I think that's
18 sort of a great starting point for a lot
19 of the cities we work with.

20 And then another just point of
21 best practice I would say is that this is
22 a very -- in all the cities we work with,
23 this is a cross-departmental issue. It's
24 linked to climate, it's linked to food
25 security, it's linked to resilience, and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 it's linked to workforce development. So
3 making sure there's some kind of
4 cross-city advisory board or group that
5 can work on the circular economy so it's
6 not just a single department that's
7 trying to chip away at it, because it
8 will take a lot of different
9 stakeholders.

10 And then to your second
11 question quickly on how COVID has perhaps
12 impacted some of these efforts, obviously
13 in the short term a lot of cities are
14 facing similar challenges just as
15 Philadelphia is with recycling programs
16 and composting and so on, but a lot of
17 them have very quickly realized that the
18 circular economy is a long-term solution
19 to some of these challenges that they've
20 been facing, so their mayors or deputy
21 mayors have recommitted to the circular
22 economy. They kind of are thinking about
23 it much more in the long term.

24 So I'd say it's certainly
25 something that initially sort of people

1 10/15/20 - ENVIRONMENT - RES. 200431
2 had to put a pause on some of their
3 efforts, but in the longer term, they
4 recognize that they have to take on the
5 circular economy.

6 COUNCILWOMAN RICHARDSON: Thank
7 you. Thank you so much for that
8 feedback.

9 And, Alex, very quickly, I just
10 wanted to ask you, what best practices
11 can we take away from the work that
12 you've done in Minneapolis?

13 MR. DANOVITCH: I think as I
14 was saying in my testimony, I think
15 there's a lot of best practices that can
16 be implemented in terms of the RFP
17 process and your procurement process that
18 could help build these local
19 opportunities for local businesses and
20 more community-accountable businesses to
21 be part of even your recycling program.
22 I think there's some great examples
23 already in the City with composting and
24 Bennett, but the more I think you can
25 move into mission-aligned partners to

1 10/15/20 - ENVIRONMENT - RES. 200431
2 help the City do this work, the more
3 you're not going to be fighting against
4 the fact that oftentimes disposal is more
5 profitable. So that's going to shape the
6 decisions of these contractors. So if
7 you have a contractor that's really
8 invested in the same outcomes in terms of
9 circularity, workforce development, and
10 community accountability, I think that's
11 a really great starting place.

12 COUNCILWOMAN RICHARDSON: Thank
13 you. Thank you so much for your
14 feedback, and I want to thank you, Emily
15 and Ashima, for your testimony and just
16 for all the knowledge you bring to this
17 area. I'm taking copious notes, but I
18 will be reviewing the transcript of the
19 hearing after this hearing. So thank you
20 very, very much.

21 We will now move on to Panel
22 No. 3. Ms. Alford, if you could call
23 Panel No. 3.

24 THE CLERK: Christine Knapp and
25 Tim Bennett.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 COUNCILWOMAN RICHARDSON: Good
3 afternoon.

4 Thank you so much, Ms. Alford.
5 Ms. Knapp, if you could proceed
6 with your testimony.

7 MS. KNAPP: Good afternoon,
8 Chairperson Gilmore Richardson and
9 members of the Committee. I'm Christine
10 Knapp. I'm the Director of
11 Philadelphia's Office of Sustainability.
12 I'm here to offer testimony on Resolution
13 200431 to investigate challenges and
14 solutions to the litter and waste
15 disposal in the wake of COVID-19.

16 I think most of you are
17 familiar with the Office of
18 Sustainability as being responsible for
19 implementing Greenworks, the City's
20 sustainability framework, so I won't talk
21 too much about our office.

22 The office was a key partner in
23 launching the City's Zero Waste and
24 Litter Cabinet several years ago, and
25 zero waste efforts have also now been

1 10/15/20 - ENVIRONMENT - RES. 200431
2 consolidated into our office, providing
3 us with more opportunity to make
4 connections between waste and other
5 sustainability priorities.

6 Since releasing the 2017 Zero
7 Waste and Litter Action Plan and setting
8 the zero waste goals, the City has
9 implemented many strategies to engage
10 stakeholders in minimizing waste across
11 all sectors, including waste from our own
12 municipal operations, from commercial
13 entities, and institutions.

14 The City's zero waste and
15 litter initiatives prioritize preventing
16 waste before it is created. Through
17 programs like the Municipal Building
18 Waste Audit and the Zero Waste
19 Partnership Program, municipal agencies
20 and commercial partners are provided with
21 technical assistance to improve their
22 waste management practices and help us
23 advance towards a lower waste future.

24 One of our primary strategies
25 in minimizing Philadelphia's overall

1 10/15/20 - ENVIRONMENT - RES. 200431
2 waste generation is to pilot and expand
3 innovative strategies to reduce wasted
4 food. Experts say that as much as 40
5 percent of all food is wasted. So at a
6 time when many of our residents are food
7 insecure, we know we have to do better.

8 Wasting food also means that
9 we're wasting the water and energy used
10 to grow, transport, and refrigerate that
11 food, and wasting it also results in
12 methane emissions once it's in a
13 landfill.

14 Over the next several years,
15 the City will be pursuing several
16 projects to tackle food waste. We
17 received a Technical Assistance Grant
18 from the Natural Resources Defense
19 Council, known as NRDC, as part of their
20 Food Matters project, that expansion into
21 the Midatlantic region, and we'll be
22 collaborating with four other regional
23 cities to pilot strategies to tackle food
24 waste.

25 We're also the recipient of a

1 10/15/20 - ENVIRONMENT - RES. 200431
2 grant issued by the United States
3 Department of Agriculture, which will
4 bolster Philadelphia's Parks and
5 Recreation's community composting network
6 to expand composting capacity in
7 neighborhoods and to support a food
8 service business challenge, which will
9 provide technical assistance to
10 businesses to implement food waste
11 reduction strategies.

12 As I referenced earlier, our
13 Greenworks Sustainability Fund has also
14 supported the Department of Prisons in
15 building a composting facility at the
16 Holmesburg Prison, which has not only
17 helped to reduce waste cost, but has also
18 provided training for the inmates in
19 sustainable land use care.

20 This fall Parks and Recreation
21 will launch the first ever Urban
22 Composting Permit Pilot Project, the
23 City-owned pilots that will be operated
24 by a private contractor who will collect
25 compost from rec centers citywide free of

1 10/15/20 - ENVIRONMENT - RES. 200431
2 charge in exchange for rent and
3 utilities. It's the first of its kind in
4 Pennsylvania, and the permit is being
5 developed in partnership with the state
6 DEP, with the intention of lowering the
7 barriers entering to operate a public or
8 private composting facility in the City.
9 These projects will all lay the
10 groundwork for several long-term waste
11 management -- food waste management
12 programs in Philadelphia and will enable
13 the City to tackle food waste using a
14 variety of strategies that will reduce
15 emissions, lower municipal waste costs,
16 and relieve community food insecurity.

17 Other City-led strategies
18 include piloting and expanding circular
19 economy projects. Circular economy
20 strategies eliminate waste through the
21 continual use of resources and create
22 sustainable systems for managing
23 materials locally. It can also be a key
24 part of economic development and job
25 creation. We are currently working with

1 10/15/20 - ENVIRONMENT - RES. 200431
2 the C40 Cities and circle economy as a
3 pilot city for the Thriving Cities
4 Initiative, a multi-year program to plan
5 for and pilot anti-consumption
6 initiatives with stakeholders inside and
7 outside City government and to expand
8 circular economy efforts.

9 As noted earlier, we partnered
10 with the Office of Innovation and
11 Technology on their Pitch and Pilot
12 Program, and through that program, two
13 companies, Metabolic and Retrievr, are
14 now piloting strategies for minimizing
15 waste and promoting circular material
16 management in Philadelphia.

17 In closing, policies and
18 programs that aim to minimize waste
19 across all sectors and incentivize
20 innovative solutions for building a local
21 circular economy are vital for us
22 reaching our zero waste and for reaching
23 our climate goals.

24 I'm grateful to you,
25 Councilmember Gilmore Richardson, for

1 10/15/20 - ENVIRONMENT - RES. 200431
2 convening this hearing to explore these
3 ideas and strategies, and I'd be happy to
4 answer any questions that you might have.

5 COUNCILWOMAN RICHARDSON: Thank
6 you. Thank you, Christine, for your
7 testimony and for all of your work with
8 the Office of Sustainability and just in
9 this arena in general. It's been my
10 pleasure to work with you over the years,
11 even back to the energy benchmarking
12 legislation, the original iteration of
13 that bill. So I just wanted to say thank
14 you so much for your work.

15 I'm going to allow the rest of
16 the panelists for this panel to testify
17 and then we will address questions. We
18 have testimony that has been submitted
19 from Commissioner Kathryn Ott Lovell from
20 the Department of Parks and Recreation.

21 And now I'll recognize
22 Mr. Bennett for your testimony, and then
23 we will move into a quick line of
24 questioning so that we can move to Panel
25 4 and then hear from the individuals who

1 10/15/20 - ENVIRONMENT - RES. 200431
2 would like to give additional comments
3 for this hearing. Thank you so much.

4 Mr. Bennett.

5 MR. BENNETT: Thank you, and
6 good afternoon, Councilmember Gilmore
7 Richardson and all the other
8 Councilmembers present. Thanks for
9 allowing me to testify today on
10 Resolution 200431.

11 Eleven years ago, I started
12 Bennett Compost with \$100 and a desire to
13 make composting simple. Today we collect
14 food waste curbside from over 4,500
15 households throughout Philadelphia,
16 keeping over two million pounds of food
17 waste out of landfills and saving the
18 City over \$65,000 annually in landfill
19 fees alone.

20 We employ 11 full-time and four
21 part-time individuals, who all make a
22 minimum of \$18 an hour, and offer
23 benefits including health, dental, and a
24 matching 401(k) retirement program. We
25 have multiple employees with experience

1 10/15/20 - ENVIRONMENT - RES. 200431
2 going through the criminal justice system
3 that have worked with the Philadelphia
4 Prison composting program at Holmesburg
5 Prison to provide opportunities for
6 returning citizens.

7 Composting is a tool to
8 modernize waste collection, fight climate
9 change, mitigate food injustice, and an
10 economic development strategy. We are
11 beginning a public-private partnership,
12 which Christine Knapp talked about, with
13 the City to convert an old city
14 maintenance facility in Lawncrest to a
15 state-of-the-art urban composting
16 facility. Once this facility is fully
17 operational, it will keep one million
18 pounds of food waste out of landfills,
19 saving the City \$32,000 of landfill fees
20 by reducing harmful methane emissions.
21 It will produce 500 yards of finished
22 compost that can be used by garden and
23 urban farmers to grow healthy foods in
24 areas that don't currently have access to
25 (inaudible) and support ten full-time

1 10/15/20 - ENVIRONMENT - RES. 200431
2 living-wage jobs. More importantly, it
3 sets up a model that can be replicated
4 throughout the City with support from
5 Council in terms of identifying
6 appropriate parcels of land and
7 retrofitting them and creating systems
8 that are open for composting. This model
9 can handle large amounts of the City's
10 residential food waste, create numerous
11 entrepreneurial opportunities for
12 Philadelphia-based businesses, not
13 multi-national corporations, and provide
14 living-wage jobs with benefits.

15 I look forward to your
16 questions, and thank you for allowing me
17 to be here.

18 COUNCILWOMAN RICHARDSON: Thank
19 you so much for your testimony,
20 Mr. Bennett, and for that inspiring
21 story, starting with \$100, right? Thank
22 you so much for your innovation.

23 I quickly wanted to circle back
24 to our Director of the Office of
25 Sustainability. I have two very quick

1 10/15/20 - ENVIRONMENT - RES. 200431
2 questions for you.

3 How can Council better support
4 your office to implement some of those
5 strategies and pilot programs that you
6 mentioned?

7 MS. KNAPP: Well, as they are
8 pilots, I think we do want to test them
9 out and see where we hit barriers and
10 where there's resource needs. So I think
11 through both the USDA and the NRDC
12 projects, we may very well come back to
13 Council in a year from now and say this
14 is what we've learned through these
15 projects, here's where we think there's
16 opportunities. So I would sort of stay
17 tuned on those fronts. And I think
18 Commissioner Williams already sort of
19 talked about some of the challenges for
20 the large-scale sort of implementation in
21 terms of the resources needed there,
22 especially given the budget constraints
23 at the moment.

24 So I think the approaches that
25 we're collectively taking help make

1 10/15/20 - ENVIRONMENT - RES. 200431
2 composting and other strategies possible
3 where they're possible. So the community
4 network I think is a great way to start
5 engaging folks in their own neighborhoods
6 about composts, how it works, what you
7 can do, and sort of socializing the
8 concept will be a stepping stone so that
9 when we're able to do more and bring it
10 to a larger scale, we'll have a baseline
11 of understanding. We saw that happen in
12 DC. They also had a community-scale
13 composting network that we actually went
14 and toured and learned from that we're
15 kind of replicating this on, and we saw a
16 very strong increase in understanding
17 among residents about how to compost
18 after that program was launched. So I
19 think building on success, building on
20 these pilots over time is one of our
21 goals.

22 COUNCILWOMAN RICHARDSON: Thank
23 you so much, and we'll definitely stay
24 tuned and look forward to the feedback
25 and the updates on how we can better

1 10/15/20 - ENVIRONMENT - RES. 200431

2 support the work of your office.

3 What are other ways you think
4 we could work towards helping residents
5 and business owners around composting? I
6 mentioned earlier that we're having a
7 Composting at Home program through a
8 partnership with your office. So what do
9 you think are some other ways that we
10 could work to really help our residents
11 and also business owners to start the
12 process of composting?

13 MS. KNAPP: I know that we've
14 heard from some restaurant and food
15 service industry representatives in the
16 past that they would like some sort of
17 financial incentive to do the right
18 thing, but my responsibility at the time
19 and what I would like to remind folks is
20 we do have the sustainable business tax
21 credit that is available for businesses,
22 and sustainable management of food waste
23 would certainly qualify a business to be
24 able to be eligible to apply for and
25 receive that already existing tax credit.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 So I think primarily what we
3 need to do is promote the sustainable
4 business tax credit, make sure the
5 businesses know that it exists, that they
6 are eligible for it, and how to apply for
7 it, because we usually honestly do not
8 get enough applications. It's capped at
9 75. We don't usually get 75 businesses
10 that apply. So there's plenty of room
11 for more businesses to get in there and
12 take advantage of that. And since we
13 know businesses are always looking at
14 their bottom line, especially at this
15 moment when so many folks are struggling,
16 that is an opportunity for them to -- if
17 they're going to spend any additional
18 dollars to do better, sort of organic
19 waste management is a way for them to
20 offset those costs.

21 COUNCILWOMAN RICHARDSON: Thank
22 you. Thank you very much for that
23 feedback and for all of your work.

24 I wanted to move on to a
25 question that I have for Mr. Bennett.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Mr. Bennett, what changes have
3 you seen in your business in the wake of
4 COVID-19?

5 MR. BENNETT: So we've seen
6 kind of two noticeable changes since
7 COVID-19 started, and the first is that
8 we've seen a fairly substantial reduction
9 in the commercial food waste that we
10 handle, which makes sense, right?
11 Restaurants are shut down. Places that
12 serve food are shut down. Even when
13 they're open, they're doing a lot less
14 business. They have a lot less food
15 waste. They're looking for ways to cut
16 back.

17 What we have seen -- so that
18 has been discouraging, but what has been
19 very encouraging is that while we have
20 seen fairly strong growth over the past
21 few years, once COVID-19 hit and
22 people -- we saw an even bigger increase
23 in people who were interested in home
24 composting. So whether that was
25 composting through the service that we

1 10/15/20 - ENVIRONMENT - RES. 200431
2 offer, whether that was reaching out to
3 us to figure out how to do home
4 composting, if they're able, whether that
5 was looking for community gardens, there
6 just has been a large increase in
7 people's awareness of their food waste
8 and a desire to do something different
9 with it than what they're currently
10 doing.

11 And I think that some of the
12 challenges that COVID-19 presented for
13 trash collection throughout the City were
14 also inspiration for people to start to
15 think differently, because when
16 everything is working well, people don't
17 think about it. When things don't work
18 well is when people start to think that
19 there could be a better way to do
20 something.

21 COUNCILWOMAN RICHARDSON: Okay.
22 That makes a lot of sense based on the
23 current environment we're in,
24 particularly around the restaurants and
25 the commercial businesses. It makes a

1 10/15/20 - ENVIRONMENT - RES. 200431
2 lot of sense. So thank you for verifying
3 that for us.

4 Thank you all so much for your
5 testimony. I'm checking the Chat to
6 ensure that none of my colleagues have
7 questions.

8 Seeing none, we're going to
9 move on to Panel 4. I'm going to ask all
10 the remaining panelists to please keep
11 your remarks short. If you can keep it
12 to two minutes, that will be helpful so
13 we can get to any questions that we may
14 have from here.

15 We have three panelists for
16 Panel 4 and then I'm seeing at least 12
17 individuals who want to give public
18 comment. So we want to get through this
19 as quickly as possible so we can respect
20 your time and get to as many individuals
21 as possible. So thank you so much in
22 advance for your cooperation.

23 Ms. Alford, if you could call
24 Panel No. 4.

25 THE CLERK: Maurice Sampson and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Mike Ewall. Unfortunately, Amy Cornelius
3 had to leave us.

4 COUNCILWOMAN RICHARDSON: Okay.
5 Thank you so much, Ms. Alford, and thank
6 you, Councilmember Green, for being here
7 for the hearing. We truly appreciate all
8 of the work that you have done in this
9 space, and we look forward to continuing
10 to work with you, and I'm so happy that
11 you are a member of this Committee. So
12 thank you so much for being here. We do
13 understand that you must depart for
14 another commitment.

15 We'll now move on to Panel No.
16 4. Maurice Sampson, please identify
17 yourself for the record and proceed with
18 your testimony.

19 Maurice, we can't hear you.
20 Please unmute.

21 Maurice, we cannot hear you.
22 Please unmute.

23 Maurice, we still cannot hear
24 you, so we'll move on to Mr. Ewall and
25 then we'll circle back to you, Maurice,

1 10/15/20 - ENVIRONMENT - RES. 200431

2 to give you an opportunity to check your
3 technology.

4 Mr. Ewall, please state your
5 name and proceed with your testimony.

6 MR. EWALL: Sure. Can you hear
7 me okay?

8 COUNCILWOMAN RICHARDSON: Yes,
9 I can hear you.

10 MR. EWALL: My name is Mike
11 Ewall. I'm with the Energy Justice
12 Network, a national group based in
13 Philadelphia.

14 The City's waste plan currently
15 is called Zero Waste and Litter Plan, but
16 it does not follow the official
17 definition of zero waste or the zero
18 waste hierarchy as outlined by the Zero
19 Waste International Alliance. We would
20 recommend that that happen.

21 The City's current waste plan
22 depends on burning a lot of our waste
23 that we don't otherwise reduce or reuse
24 or recycle, but zero waste is defined to
25 mean zero incineration and minimizing the

1 10/15/20 - ENVIRONMENT - RES. 200431

2 amount of waste to landfills.

3 We studied this, and in
4 Pennsylvania, we found that the
5 incinerators in our region are 80 percent
6 worse for global warming than the
7 landfills and 60 percent worse for other
8 pollutants.

9 Now, in a broader study of
10 incinerators versus landfills, we found
11 they're worse for global warming and
12 emissions of particulate matter, acid
13 gases, toxic chemicals, smog, and
14 nitrogen oxides that trigger asthma
15 attacks.

16 The City's plan also leaves out
17 the most effective and cost-effective way
18 at quickly reducing waste, which is unit
19 pricing or paying per bag or per bin,
20 which over 10,000 communities do, and
21 when they do, they find pretty much
22 immediate reduction on average of 44
23 percent of the waste. About half of that
24 is reduced not just by moving things to
25 recycling bins, but by people reducing

1 10/15/20 - ENVIRONMENT - RES. 200431
2 and reusing so that the City doesn't even
3 have a collection cost. And if we add
4 composting to that, it can get diversion
5 rates up to 70 percent.

6 We must move away from burning
7 our trash. It's an environmental racism
8 problem, a health problem, an asthma and
9 cancer problem, which are huge in
10 Philadelphia, and we need to support the
11 Waste Contracting for Clean Air Act that
12 one of your committees that I'm involved
13 in put together and brought to you to end
14 the City's burning of our trash and
15 recyclables as soon as possible.

16 Thank you very much.

17 COUNCILWOMAN RICHARDSON: Thank
18 you so much for your testimony and also
19 for your work on the subcommittees. Know
20 that we truly appreciate your work, and
21 we are looking through those proposals
22 with a fine-tooth comb, and we just
23 appreciate you and all the work that we
24 will be able to offer from this Committee
25 because of your commitment. So I just

1 10/15/20 - ENVIRONMENT - RES. 200431
2 want you to know from me to you, thank
3 you so very, very much, because we truly
4 appreciate it.

5 I do have a question for you,
6 but we're going to go back to Maurice
7 Sampson to recognize him for testimony.

8 Maurice, please identify
9 yourself for the record and proceed.

10 MR. SAMPSON: Can you hear me
11 now?

12 COUNCILWOMAN RICHARDSON:
13 Excellent. We can hear you now.
14 Excellent.

15 MR. SAMPSON: Very good. Well,
16 good afternoon, Councilmember Gilmore
17 Richardson and the members of the
18 Committee. Thank you for the opportunity
19 to testify today. I am the Eastern
20 Pennsylvania Director for Clean Water
21 Action based here in Philadelphia.

22 COVID-19 has revealed the
23 underlying issues in Philadelphia's
24 ability to properly manage its waste.
25 Those issues are systemic. They're

1 10/15/20 - ENVIRONMENT - RES. 200431
2 compounded by a 75-year history of poorly
3 informed policy decisions, which aren't
4 going to be blamed by blame or
5 replacement of personnel, which I bring
6 up in response to an article I was
7 interviewed in.

8 Under the circumstances, I
9 really want to recognize the Streets
10 Commissioner, Carlton Williams, his
11 staff, and the collection crews, because
12 I think they're doing the best that they
13 can be expected to do given the current
14 solid waste management policy and the
15 resources that are available.

16 Philadelphia's waste management
17 system is broken, and it continues to
18 decline. When I just look, for instance,
19 at the statistics in Mayor Kenney's
20 Annual Five Year Financial and Strategic
21 Plans over the past four years, there's
22 actually been a 7 percent increase in the
23 volume of waste collected, and that the
24 recycling rate actually dropped from 20
25 and a half to 14 percent. And every year

1 10/15/20 - ENVIRONMENT - RES. 200431
2 we're putting out 44,000 to 88,000
3 citations, contacts, and warnings that
4 suggest that there's some issue with our
5 education efforts. Pre-COVID, on-time
6 waste collections have been on average
7 the equivalent of about a day behind,
8 while recycling collections are 96 or
9 better.

10 There are no short-term fixes
11 to the current circumstances. A zero
12 waste goal of 90 percent by 2035 has to
13 achieve an average increase of 4.3
14 percent a year to meet its objective.
15 Since the zero waste goal was set, we're
16 actually decreasing by 2 percent a year.

17 Zero waste is achievable, but
18 it's going to require a commitment by the
19 Administration to fundamental reform of
20 waste management practices based on a
21 comprehensive, sustainable solid waste
22 management plan, with scheduled
23 implementation and commensurate
24 investment.

25 Now, there is good news. In

1 10/15/20 - ENVIRONMENT - RES. 200431
2 cities that have made similar
3 investments, they have actually reduced
4 their operating costs 20 to 40 percent
5 while adding food waste collection. If
6 we fail to take these steps, our costs
7 are going to continue to rise, and we can
8 expect experiences as we are under
9 COVID-19 right now to continue beyond the
10 pandemic as part of a recurring waste
11 management crisis that this city actually
12 has experienced for at least the last 75
13 years.

14 Thank you.

15 COUNCILWOMAN RICHARDSON: Thank
16 you. Thank you so much for your
17 testimony, Maurice, and thank you for all
18 of your work and for being a part of our
19 subcommittees and just for always being
20 someone that we can rely on and count on
21 for your expertise. I've worked with you
22 as a staffer in Council when I clerked
23 the Committee on Environment and now as a
24 member of Philadelphia City Council, and
25 I want you to know that I truly

1 10/15/20 - ENVIRONMENT - RES. 200431
2 appreciate you and all the knowledge that
3 you bring to this space and how you have
4 helped us to move the needle forward in
5 so many ways. So I just wanted to
6 acknowledge that for the record and thank
7 you so very much for your testimony and
8 continued work.

9 I wanted to move back to Mike
10 for a very quick question around what you
11 think we can do here in Philadelphia. So
12 based on your experience with other
13 cities, what best practices do you think
14 Philadelphia can adopt to move our zero
15 waste goals forward?

16 MR. EWALL: Sure. So the first
17 thing would be recognizing that our
18 contracts that we have for trash
19 collection right now have minimum amounts
20 of waste that we're required to generate
21 and give to Covanta and Waste Management
22 for disposal. So one of the first things
23 that we need to do is when the contracts
24 come up for renewal in three years is to
25 not renew them for any of the next

1 10/15/20 - ENVIRONMENT - RES. 200431
2 one-year options -- there are three
3 one-year renewal options -- and to start
4 new contracts that use zero waste
5 principles and have them in mind. So
6 understand that the back end means that
7 we need to not use incinerators, but do
8 certain things to pre-process waste
9 before it goes to a landfill, and
10 incinerator is a way of pre-processing by
11 spreading into the air most of it, but
12 sending ash to a landfill makes it even
13 worse. But there are better practices on
14 the back end that could be done that will
15 make the landfills less of a nuisance, at
16 the same time that we do all the upstream
17 things like I mentioned before, like pay
18 as you throw, also called unit pricing,
19 the composting collection.

20 Deconstruction mandate I would
21 say on the construction/demolition waste
22 side is also a key component, because
23 that's a huge portion of the waste
24 stream. It can create many jobs
25 dismantling buildings instead of taking

1 10/15/20 - ENVIRONMENT - RES. 200431
2 wrecking balls to them.

3 So those are just three of the
4 big building blocks of zero waste. Of
5 course, there are many more, and we're
6 happy to work with your office.

7 COUNCILWOMAN RICHARDSON: Thank
8 you. That was some very concrete
9 recommendations that I think we can
10 really employ, particularly as we look at
11 that next contract process. So thank you
12 very much for those recommendations.

13 Same question to you, Maurice
14 Sampson.

15 MR. SAMPSON: Well, I think
16 that one of the things we need to do as
17 we look around at other cities is to look
18 at what we have already done. You know,
19 from -- we had an Office of Recycling
20 with 23 members of staff that actually
21 had civil service positions written to
22 all of them, and they were literally
23 eliminated in the first ten years of this
24 decade. One of the people on the staff
25 was an economic person on the staff that

1 10/15/20 - ENVIRONMENT - RES. 200431
2 looked at this, and that was Nancy
3 Weissman who was in that role, and one of
4 the things she used to do, buying
5 recyclable is a big deal. She actually
6 trained the Procurement Department to
7 write procurement specs to get -- to
8 increase the buying of recycled content
9 products, and we won awards three years
10 in a row for that program.

11 We held a program at the
12 Convention Center where we brought all of
13 the buyers in from the City and invited
14 people who had products to sell to just
15 show them what they could purchase, and
16 it was huge.

17 Nancy used to do a report every
18 year where she would go out and she would
19 track how many new businesses were coming
20 into the City, and it was the fastest
21 growing sector of business in
22 Philadelphia, were those businesses.

23 The other thing she used to do
24 was, she used to steer business people
25 away from coming to the City, because

1 10/15/20 - ENVIRONMENT - RES. 200431
2 unfortunately when they came, they would
3 always be sent to the Streets Department,
4 which is not an economic development
5 agency. And she would interview them and
6 understand, well, why are you coming
7 here, and the number one thing they would
8 say is because of the City's policy,
9 which in the '90s was early -- really
10 recycling didn't happen any big way until
11 the early 2000's every place else. We
12 actually had what was considered the best
13 planning unit in the country, and when
14 Los Angeles and San Francisco first
15 hired, they actually came to Philly to
16 see how we were doing our planning. All
17 of that has sort of been lost in the way.

18 But we have a lot of things
19 that we have already done, and I think
20 the speaker who said we need to look and
21 see what's going on in the City is
22 important.

23 The other thing that we do not
24 do; in fact, that we actively resist, is
25 partnering with the private sector to

1 10/15/20 - ENVIRONMENT - RES. 200431
2 understand how these things get done.
3 Recycling began -- and I came here from
4 New Jersey, and the first 20 people hired
5 to do this for municipalities in the
6 country was actually New Jersey, and we
7 were trained by industry. It was not the
8 environmentalists. The industries at the
9 time wanted to figure out how they could
10 get recycled materials to go back into
11 products, because at the time, it was the
12 energy crisis was the big thing, and they
13 learned that when you use recycled
14 materials, you need a lot less energy to
15 recover them. So they made a deal with
16 us. They said if we could show them how
17 we could bring out materials that were
18 clean and to their specs, they would buy
19 them. And we were against mandatory in
20 those days. Mandatory came about because
21 it was recognized as a way to deal with
22 waste. We were really about building
23 business and creating industry around the
24 materials that were in the waste stream.
25 You might say we had the right mentality

1 10/15/20 - ENVIRONMENT - RES. 200431
2 in the beginning and we got diverted into
3 looking at it as trash, and we have to
4 turn that around.

5 Right now we basically treat
6 recycling as trash, and I'm not being
7 critical here. The Sanitation
8 Department's job is to get the trash off
9 the streets, and that is their first
10 orientation in everything that they do.
11 Unfortunately, what that means is when
12 there's a crisis, we're just looking to
13 get it off the street and we're going to
14 put the recycling aside in order to get
15 rid of the trash. We need what we had
16 once upon a time, which was a separate
17 office that dealt with just recycling
18 planning. Sanitation did the collection,
19 but the planning was a separate unit. It
20 was even separate of the Streets
21 Department, and it had a more orientation
22 that was similar to the way the Zero
23 Waste Cabinet is set up in that the
24 director worked with all the various
25 agencies, but it was a whole orientation

1 10/15/20 - ENVIRONMENT - RES. 200431
2 that looked at these are commodities.
3 We've got to pull materials out to meet
4 the specifications of the marketplace.

5 That is the answer to the China
6 problem. We have to create materials
7 that industry wants, not just divert
8 materials from the trash. And we need
9 more of a partnership where there is an
10 orientation that looks at recycling as a
11 business function, as a function that's
12 trying to create resources for an
13 industry. We need to actively work on
14 bringing in new markets to the area.

15 In the beginning when I
16 started, we didn't have any markets,
17 China or the United States, and we had to
18 go out and we had to coax all of those in
19 order to make them happen. That's kind
20 of where we are again right now, and
21 we're at sort of a new beginning.

22 I've had a strange sense of
23 deja vu through this whole hearing. The
24 terms are different, the descriptions are
25 different, but we did all of this. We

1 10/15/20 - ENVIRONMENT - RES. 200431
2 did all of this 30 years ago, and we're
3 now doing it again. So we need to not
4 see it as new, and we need to try and dig
5 up and look at some of the things that we
6 have done that work, because they're
7 applicable here.

8 COUNCILWOMAN RICHARDSON: Thank
9 you. Thank you very much for that
10 feedback, Mr. Sampson, and I think --
11 because it's true, we were a leader in
12 this area, and that's what we need to be
13 now. So thank you very much for your
14 feedback.

15 Council Support, we are going
16 to move on to the next panel, so we need
17 to ensure that all of the witnesses that
18 were sent are logged onto the hearing.

19 So thank you all so much for
20 your testimony, Mike and Maurice, and for
21 hanging in there with us.

22 We are moving on to our next
23 panel, so I'll give you all an
24 opportunity to load up the next set of
25 witnesses. Do we need to take a short

1 10/15/20 - ENVIRONMENT - RES. 200431

2 break?

3 COUNCIL SUPPORT: Yes, we do.

4 COUNCILWOMAN RICHARDSON: Okay.

5 So we will take a very short break to
6 load up our next set of witnesses who
7 will all give public comment.

8 Thank you all so much.

9 (Short recess.)

10 COUNCILWOMAN RICHARDSON: I
11 just wanted to thank all the witnesses
12 for their patience and allowing us to get
13 them on to the hearing. We are asking if
14 you could please limit your testimony to
15 two minutes so that we can quickly get
16 through and hear from all of you, but
17 thank you very, very much for your
18 patience.

19 (Pause.)

20 COUNCILWOMAN RICHARDSON: Okay.

21 Thank you so very much for your patience
22 and allowing us to have our witnesses log
23 onto the hearing.

24 I'll ask Ms. Alford if you
25 could call the list of panelists, and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 then I will recognize them one at a time.

3 THE CLERK: Sure. Meenal
4 Raval, Logan Welde, Morgan Berman, Jim
5 Blanchet, Traci Confer, Lynn Robinson,
6 Bridget Powell, Lisa Hastings, Alisa
7 Shargorodsky, Peg Shaw, Erica Burman,
8 Amber Cook, Peter Winslow, and Queen
9 Judith Robinson.

10 COUNCILWOMAN RICHARDSON: Thank
11 you so much, Ms. Alford.

12 I will recognize Meenal Raval.
13 Please state your name for the record and
14 proceed with your testimony.

15 MS. RAVAL: Yes. Hello. My
16 name is Meenal Raval. I'm a resident of
17 East Mount Airy and a volunteer leader
18 with Sierra Club Southeastern PA group.

19 I wanted to comment that our
20 Streets Department has doggedly tried
21 keeping up with curbside collections, and
22 we agree, it's been harder than ever this
23 year. Residential curbside collections
24 are just one part of our waste stream.
25 There is commercial waste, consumption

1 10/15/20 - ENVIRONMENT - RES. 200431
2 and demolition waste, illegal dumping,
3 and street litter, none of which is
4 picked up by the trash trucks and all of
5 which could be handled better.

6 So I think it's time for us to
7 rethink waste. We need to think like
8 nature, like there is no waste, where the
9 waste of one group is eyed as a resource
10 by another group.

11 Humans have been part of this
12 cycle for centuries until we introduced
13 plastics. Plastics and their complex
14 chemicals end up in our waterways or get
15 incinerated. It's bad either way.

16 So to rethink waste in our
17 city, like Maurice Sampson just said, we
18 need to look at planners and educators
19 that think like nature, that think from
20 the zero waste perspective. The work
21 will lead many other City departments,
22 such as the Planning Department, the
23 Commerce Department, the Water
24 Department, and others.

25 We also talked about more local

1 10/15/20 - ENVIRONMENT - RES. 200431
2 jobs where we were zero waste tasks
3 instead of business as usual. We can
4 begin by implementing the long-awaited
5 ban on single-use plastic bags. New York
6 state's bag ban was questioned during the
7 pandemic-induced panic display, but their
8 ban had survived the pandemic, and so
9 should ours.

10 An example of redesign in the
11 zero waste hierarchy is a toothbrush as
12 wielded each day for over 15 years.
13 Although it's a plastic toothbrush, I
14 only need to change the bristles when
15 needed, holding onto the same handle for
16 all these years. That's 99 percent less
17 plastic to throw out. Zero waste means
18 never buying something you'll use just
19 once.

20 I personally would like us to
21 replicate the concept of a free store in
22 each neighborhood. There are so many
23 items thrown out that are perfectly fine
24 and reusable by someone else. For a
25 local example, I look to the Media Free

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Store in Media, Pennsylvania set up by
3 the donated storefront with volunteer
4 labor.

5 Zero waste means never throwing
6 an item that you've outgrown and still
7 functional.

8 Thank you.

9 COUNCILWOMAN RICHARDSON: Thank
10 you so much, Meenal, for your testimony,
11 and I just wanted to thank you for being
12 a part of the subcommittees as a part of
13 the Committee on Environment. Thank you
14 very much for your testimony, for your
15 work, and for your feedback.

16 Logan Welde, please state your
17 name for the record and proceed with your
18 testimony.

19 MR. WELDE: Good afternoon,
20 Councilwoman. Logan Welde, Clean Air
21 Council. I am also a committee member
22 and a block captain. I've been a block
23 captain since 2013.

24 I did provide written testimony
25 with a number of examples of legislation

1 10/15/20 - ENVIRONMENT - RES. 200431
2 that will help with the litter and waste
3 problem, and as you know, I'm also on the
4 subcommittee.

5 I don't know how many
6 Councilmembers are still on, but I want
7 you all to just reimagine, as Meenal just
8 stated, what trash and waste and litter
9 is. It's not just items that need to be
10 picked up and disposed of, but it's a
11 real cost to the soul of the City.
12 Litter adds to crime, depression, and
13 poverty, and our neighborhoods are
14 overburdened by litter and it's crushing
15 their soul.

16 Yes, it is a financial burden.
17 The City spends an estimated 48 million
18 per year on trash and litter. There's
19 even a bigger cost than money. A recent
20 study in JAMA concluded that living in or
21 near trashed and littered neighborhoods
22 can have substantial negative health
23 consequences. According to that report,
24 neighborhoods that were cleaned and
25 greened saw a 63 percent decrease in

1 10/15/20 - ENVIRONMENT - RES. 200431

2 self-reported mental health issues, a 29
3 percent decrease in gun violence, and an
4 increase in property values and an
5 increase in business investment.

6 The average American produces
7 over four pounds of trash per day, and I
8 assume COVID has exacerbated this. The
9 fact is, we've changed the way we've
10 lived, and municipalities have been asked
11 to take on that burden.

12 Neighborhoods get most of the
13 things now delivered to their homes,
14 especially during COVID, and all of those
15 things are individually packaged, and for
16 some reason it's become the City's
17 responsibility to deal with this,
18 unloading that cost from companies like
19 Amazon and Grubhub and other services
20 that bring all these things into our
21 communities.

22 We're also inundating the
23 planet with plastic. It's showing up
24 everywhere and in our bodies. In fact,
25 we now eat as much as a credit card's

1 10/15/20 - ENVIRONMENT - RES. 200431
2 worth of plastic per week.

3 I want everyone to just imagine
4 for a second that throughout
5 Philadelphia, all the fire hydrants are
6 just turned on. It would be crazy to go
7 ask the Water Department to build more
8 pipes or to increase the number of storm
9 drains. What you would do and what would
10 be logical is to simply turn off those
11 fire hydrants. We've got to think the
12 same way about trash and litter this way.
13 We've got to stop these things from
14 coming into our communities. There is no
15 reason why these things need to keep on
16 coming in when so many of them are
17 superfluous.

18 We've got to pass legislation.
19 Councilman Green has a bill that I gave
20 him probably about two years ago to stop
21 circulars and phonebooks from coming into
22 the City, and we'd like to see that
23 introduced.

24 Recycling is done. It's not
25 the answer. The virgin plastic is way

1 10/15/20 - ENVIRONMENT - RES. 200431
2 too cheap. Recycling cannot compete
3 anywhere in this world with that. We
4 shouldn't return to a normal path of
5 collection, as Carlton Williams said. We
6 should change that curb, because that
7 curb is going to keep on going higher.

8 We've got to support the block
9 captain system, as a number of people
10 have pointed out and will speak to later
11 today. The block captains are really the
12 people who know their neighborhoods the
13 best and can communicate the information
14 from the City the most effectively.

15 Unfortunately, too many people
16 who care about this city, like me and
17 others, are becoming disillusioned. It's
18 just too littered, it's too trashed, and
19 there are cleaner places to live, and
20 some of those people are going to start
21 moving.

22 Councilwoman Bass asked about
23 outside-the-box ideas. There are plenty,
24 and none of those include keeping the
25 amount of litter that we have and just

1 10/15/20 - ENVIRONMENT - RES. 200431
2 trying to landfill it all. It really
3 comes down to stopping the amount of
4 trash that's coming into the City.

5 Thanks a lot.

6 COUNCILWOMAN RICHARDSON:

7 Logan, thank you so much for your
8 testimony and for all of your work and
9 for also being a member of our
10 subcommittees. We truly appreciate all
11 the ideas that you bring to the table.
12 So thank you for your work.

13 Morgan Berman, please proceed
14 with your testimony.

15 MS. BERMAN: Thank you.

16 COUNCILWOMAN RICHARDSON:

17 Pardon me. Yes. Morgan, are you there?

18 MS. BERMAN: I'm here.

19 COUNCILWOMAN RICHARDSON: Okay.

20 Please proceed with your testimony.

21 MS. BERMAN: Can you hear me?

22 COUNCILWOMAN RICHARDSON: Yes.

23 MS. BERMAN: Okay. Thank you.

24 My name is Morgan Berman. I'm a resident
25 in South Philadelphia and I am also the

1 10/15/20 - ENVIRONMENT - RES. 200431

2 President of my civic association,
3 Dickinson Square West. I'm on the Board
4 of the Energy Coordinating Agency and
5 Philly Startup Leaders and also the
6 Philadelphia Chapter of AlmaLinks, which
7 is an international entrepreneurship
8 association.

9 I moved back to Philadelphia to
10 eventually earn my Master's in Science
11 and Sustainable Design because of my
12 passion for solving our greatest
13 challenges and opportunities, which are I
14 think climate change and social equity.

15 Seven years ago, I took my
16 passion and experience in marketing and
17 design and I built my Philadelphia-based
18 software company MilkCrate. At MilkCrate
19 we build affordable mobile apps to help
20 civic and non-profit programs engage and
21 communicate with participants and track
22 their impact. In our work I've had the
23 pleasure of partnering with the Free
24 Library, the Committee of Seventy, the
25 Cultural Alliance, Philly Sports

1 10/15/20 - ENVIRONMENT - RES. 200431

2 Collaborative, and many others where
3 we're building apps that guide users to
4 volunteer, give back, learn, vote, visit
5 cultural sites, and more. We've helped
6 dozens of local and national
7 organizations mobilize and track these
8 kind of programs. We're even launching
9 an app for Rapid Recycling, a local
10 startup that picks up waste from
11 residents for a small fee and keeps the
12 items out of landfills.

13 From my work, I've learned a
14 great deal about what it takes to engage
15 a large group of people and point them
16 towards a collective goal, especially a
17 social impact goal like reducing litter.
18 This is why my colleagues and I worked
19 closely over the last two years with City
20 Council and others at the Streets
21 Department to build a plan to launch an
22 app that would engage, motivate, and
23 track residents to pick up trash, with
24 the goal to eventually build a full
25 sustainability spectrum of activities

1 10/15/20 - ENVIRONMENT - RES. 200431
2 users can earn money for completing in
3 their neighborhoods by getting trees
4 planted, signing up for composting,
5 getting out the vote and more.

6 Unfortunately, after months of
7 radio silence and a stalled contract
8 after we were put in the budget for last
9 year, the pandemic hit and with it new
10 excuses to not move forward. As of our
11 last communication with the Streets
12 Department, we were actually asked to
13 provide our services for free. This is
14 certainly not an appropriate request of a
15 small local business with employees to
16 pay.

17 We're ready to get to work and
18 we have full confidence that we can
19 launch an innovative and impactful
20 solution, as we've done numerous times
21 over the last seven years, but it will
22 require Streets Department's leadership
23 to take a leap and try something new that
24 focuses on engaging our residents and
25 utilizing modern technology solutions

1 10/15/20 - ENVIRONMENT - RES. 200431

2 like ours.

3 I hope this other testimony
4 today motivates and inspires you all, the
5 decision-makers here, that it's time to
6 try something new that has been applied
7 in similar context with great results at
8 a much reduced price than what you're
9 currently implementing or what has
10 already had to be cancelled, and that it
11 looks to our residents not as a problem
12 but as a solution to litter and all the
13 other sustainability issues plaguing our
14 city.

15 Thank you.

16 COUNCILWOMAN RICHARDSON:

17 Morgan, thank you so much for all of your
18 work in the Philadelphia community, and I
19 remember meeting you a couple of years
20 ago. So I just want to say thank you,
21 and I hope that your little person is
22 doing well.

23 So we're going to move on to
24 Jim Blanchet. Please proceed with your
25 testimony.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 MR. BLANCHET: Hi, everybody.
3 Yeah. My name is Jim Blanchet. I'm a
4 committee person in Point Breeze. I'm
5 also a clean technology professional, and
6 I'm an advisor to MilkCrate, who you've
7 just heard from Morgan, the CEO of
8 MilkCrate. I'm going to try not to
9 repeat much of what she said.

10 I'm also not going to touch on
11 waste collection, source reduction.
12 Those are things that are not my field.
13 I'm going to talk about technology and
14 engagement.

15 When we talk about litter, we
16 talk a lot about sources, infrastructure,
17 education, and those are valuable
18 discussions, but the program that we were
19 all ready to launch for the City as a
20 pilot looks at it through positive
21 engagement of residents.

22 I think everybody knows that
23 outside the Center City business district
24 where private contractors are paid to
25 clean up litter every day, litter is just

1 10/15/20 - ENVIRONMENT - RES. 200431

2 a fact of life. Morgan mentioned the
3 disenfranchisement. That is a very real
4 thing here.

5 Just to list a couple things
6 we've tried in the past to address street
7 litter: adding public trash cans and
8 trash compactors, marketing campaigns,
9 mailers, postcards, et cetera, handing
10 out recycling bins with lids, the street
11 sweeping pilot, a web platform that lets
12 me see how late my trash collection is.
13 Those things have some -- those solutions
14 have some very important things in
15 common. They're expensive, they're time
16 consuming, or both, and, more
17 importantly, they haven't worked. I
18 don't think we'd be talking about this if
19 they had worked.

20 When we talk about programs and
21 tools that we're using, I think there's a
22 very important question we need to ask,
23 which is who is actually going to sign up
24 to participate. We can spend tons of
25 time and money on solutions that appeal

1 10/15/20 - ENVIRONMENT - RES. 200431
2 to people who have already bought in, the
3 people that are on this phone call, the
4 amazing block captains, the great
5 volunteers, people who pick up litter
6 every single day. But the Litter Index
7 has gone up, not down, meaning we see
8 more, not less, street litter, and that's
9 not because strategies that are being
10 implemented aren't well designed and
11 planned. It's because they are providing
12 more and more resources to the same group
13 of people who have already decided that
14 they care and have already opted in.

15 Everybody else is
16 disenfranchised or, worse, they're
17 apathetic. You don't change that by
18 offering more tools and programs to the
19 same people. You don't change that by
20 doing the same thing over and over again.
21 You have to do something drastically
22 different.

23 So the Streets Commissioner
24 mentioned PickupPHL. I'm going to talk
25 about that real quick since we work in

1 10/15/20 - ENVIRONMENT - RES. 200431
2 tech. Councilmember Bass mentioned that
3 she didn't know about it, and I think
4 that's a great point. First of all, it's
5 not an app. It is very important to
6 distinguish that it is not a mobile app.
7 It's a web platform that I can use on a
8 browser on my phone if I'm comfortable
9 with that. But I missed it too. When he
10 talked about it, I looked it up. We work
11 in tech, Morgan and I, and we missed it.
12 And that's not a problem of marketing or
13 education. That's a problem with the
14 program design. If there's no reason for
15 me to be interested in logging into a
16 platform because I'm already apathetic,
17 I'm not going to go log into that
18 platform.

19 I applaud any efforts to
20 leverage tech to try and solve this
21 issue, because we work in tech, we love
22 tech, but before we go around patting
23 ourselves on the back for building tools
24 and doing things in-house and saving
25 money, I would ask for members of the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Committee to ask yourselves and ask the
3 people who are building this tech for you
4 a couple of very important questions.
5 How many active users are on the tech?
6 Not visits or web traffic. How many
7 active users? What time of day are they
8 using the platform? How does this option
9 change over time? Where are the users of
10 the app or any technology? Are they in
11 the neighborhoods that are most
12 negatively impacted by litter? And what
13 KBIs or measurements are you using to
14 gauge the value of that app, and if you
15 see them turning down, what levers can
16 you pull to make adjustments?

17 If those are questions that you
18 can't answer, that's a very, very serious
19 problem.

20 Living in a pandemic means we
21 have lots more people living at home now,
22 and a lot of those people are out of work
23 now. When the City's budget and
24 resources are constrained by COVID,
25 spending time and effort and money

1 10/15/20 - ENVIRONMENT - RES. 200431
2 building tools and launching programs
3 that are not directly designed to
4 incentivize and engage people who are
5 currently not helping to address this
6 problem is very problematic. Time that
7 we spend doing that, building more tools
8 for the same people, is time that's
9 wasted right now.

10 I would really ask that you
11 think about this as a time to engage
12 local tech companies to help you think
13 differently about this problem. Let us
14 help you crowd source litter prevention
15 and address litter, and we can bring more
16 people into this discussion that have
17 never been there before.

18 Thank you.

19 COUNCILWOMAN RICHARDSON: Thank
20 you, and thank you so much for your
21 testimony and for those concrete
22 questions. We really, really appreciate
23 that feedback.

24 Traci Confer, please identify
25 yourself for the record and proceed with

1 10/15/20 - ENVIRONMENT - RES. 200431
2 your testimony.

3 MS. CONFER: My name is Traci
4 Confer. I'm in Northeast Philadelphia.
5 Thank you for hosting such informative
6 panels.

7 I have four brief points before
8 my testimony. One is that my local
9 sanitation convenience center cannot
10 accept yard waste, as Ashburner could not
11 last time I took a carload. It would be
12 good if Fairmount Park composting site
13 did not charge residents a \$15 minimum
14 fee to drop off.

15 Second point is about
16 PickupPHL. It shows where trucks have
17 been, but it would be much more valuable
18 if it could forecast when recycling would
19 be picked up versus being put in trash
20 trucks so that people know whether or not
21 to put out their recycling.

22 Third, having paper in the
23 recycling bins is a problem.
24 Single-stream recycling reduces the value
25 of paper and cardboard, and when it

1 10/15/20 - ENVIRONMENT - RES. 200431
2 rains, paper gets wet, clogs up the
3 sorting machinery. So in future
4 recycling contracts, it would be better
5 to have paper separate from other
6 collection. It doesn't become waste
7 until it's mixed and contaminated with
8 other things, so if it's kept separate,
9 it's more of a commodity.

10 Fourth, we've got a long-term
11 opportunity to recruit businesses to the
12 former refinery site. So I would
13 encourage everyone to be thinking along
14 those lines.

15 And most of my comments are
16 about burning versus zero waste.

17 Trash incineration is the most
18 polluting way to manage waste or to make
19 energy. It's dirtier than burning coal.
20 It's worse than landfilling directly.
21 When trash is burned, 70 percent of it
22 ends up in the air as air pollution, 30
23 percent becomes toxic ash. That still
24 goes to a landfill. And the six counties
25 around Philadelphia, the five trash

1 10/15/20 - ENVIRONMENT - RES. 200431
2 incinerators around the City are among
3 the top ten air polluters in this region,
4 and the incinerator that Philly uses most
5 in the City of Chester is the largest in
6 the nation, with the fewest pollution
7 controls and is the number one air
8 polluter in the Philly area. So I
9 strongly encourage not renewing a
10 contract for waste that would go to a
11 burner.

12 Thank you for the opportunity.

13 COUNCILWOMAN RICHARDSON: Thank
14 you so much for your testimony and for
15 those four points of feedback. I was
16 taking copious notes. Thank you very
17 much.

18 Lynn Robinson, one of our
19 subcommittee members, please identify
20 yourself for the record and proceed with
21 your testimony.

22 (No response.)

23 COUNCILWOMAN RICHARDSON: Lynn.

24 MS. ROBINSON: Can you hear me?

25 COUNCILWOMAN RICHARDSON: Yes,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 we can hear you now. Please proceed with
3 your testimony.

4 MS. ROBINSON: Okay. My name
5 is Lynn Robinson. I want to thank you,
6 Katherine Gilmore Richardson and the
7 Committee, for taking my comments, which
8 are limited to a small box of waste
9 disposal today.

10 I'm a retired Philadelphia
11 school teacher, Director of Neighbors
12 Against the Gas Plants, and an active
13 member on the Air Quality and Energy
14 advisory subgroups.

15 The Philadelphia Streets
16 Department has a strained relationship
17 with the public, because people don't
18 know or are appalled to know what
19 ultimately has been happening to our
20 trash and recycling. It's evident that
21 the single-stream recycling system isn't
22 working and that we need to establish
23 other methods to reuse materials and
24 compost food waste, but the most
25 appalling thing is to find out that we're

1 10/15/20 - ENVIRONMENT - RES. 200431
2 breathing in a significant percentage of
3 the trash, which is burned downwind in
4 Chester, and this matters more since
5 COVID began, because we're tossing away
6 more throwaway packaging, burning it, and
7 then breathing in carcinogenic plastic
8 and Styrofoam.

9 Last year, City Council allowed
10 the Streets Department to sign up for
11 four to seven more years of trash
12 incineration with Covanta, which is the
13 nation's largest incineration company.
14 Council was petitioned to not do this in
15 a letter that was signed by a wide range
16 of 41 mostly City-based organizations,
17 but also including the three community
18 groups that live next to the incinerators
19 and landfills that we use to dispose of
20 our waste.

21 It's noteworthy that the
22 Teamsters Union in Baltimore has come out
23 in support of closing incinerators,
24 because they know that air pollution
25 hurts their workers and that recycling

1 10/15/20 - ENVIRONMENT - RES. 200431
2 and composting create more jobs that
3 they'd like to organize.

4 On the other side of the coin,
5 there's organizations who favor
6 incineration, but they're funded by
7 Covanta; for example, the Senate for
8 American Progress, which has been
9 receiving \$50,000 to \$100,000 a year, and
10 the Chester Environmental Partnership,
11 which receives \$30,000 in donations a
12 year from Covanta.

13 So in conclusion to all that,
14 we have to move away from burning our
15 trash and recyclables as soon as possible
16 and pass the Waste Contracting for Clean
17 Air Act that we just submitted to you
18 about ten days ago. And when I say we're
19 burning our recyclables, it's because
20 unfortunately sometimes the recyclables
21 are ending up in the trash, especially
22 since COVID began. People have watched
23 their recycling thrown into trash trucks
24 and felt betrayed, and there hasn't been
25 any kind of a plan coming from the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Streets Department that's communicated to
3 the public that this will stop happening
4 unpredictably and forever.

5 So anyway, the other thing is
6 that people still don't know they're
7 contaminating their recycling. The
8 containers, for one thing, don't have any
9 printing on them that lists what's okay
10 and what's not okay to put in. And the
11 Streets Department in general doesn't
12 communicate effectively with the public.
13 So they recently sent out a postcard, and
14 postcards are great, but this one had a
15 title that said Ten Tips to Curb Your
16 Waste. Well, right there they lost most
17 of the people, because it dumped ten
18 paragraphs of tasks on readers. But the
19 most aggravating part of the ten tasks or
20 ten tips was the one about recycling. It
21 was No. 7, which was not a priority, and
22 it was incomplete. It left out which
23 types of plastic to recycle, and it
24 didn't mention that plastic bags are
25 prohibited, with any kind of explanation

1 10/15/20 - ENVIRONMENT - RES. 200431
2 as to why. So lots of people are tossing
3 in plastic bags in their recycling bins,
4 and they don't understand that it clogs
5 up the sorting machines.

6 Also, intuitively people know
7 that when it rains, like Traci said, the
8 paper and cardboard is wet and we really
9 don't trust that it's going to be
10 recycled.

11 But in conclusion, we need to
12 pass the Waste Contracting for Clean Air
13 Act. We need to begin a two-way
14 conversation or communication between the
15 Streets Department and the public. And
16 we need to change our recycling methods.
17 We need more effective systems, as Logan
18 put it, to turn the fire hydrants off
19 and, as Meenal put it, change the brush
20 on the toothbrush handle and not throw
21 away the whole thing.

22 So thanks a lot for listening.

23 COUNCILWOMAN RICHARDSON: Thank
24 you. Thank you so much for your feedback
25 and particularly around the postcard and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Point No. 7. I just made a notation
3 here. So thank you very, very much for
4 your testimony.

5 We will now proceed with
6 testimony from Bridget Powell. Bridget,
7 please identify yourself for the record
8 and proceed with your testimony.

9 MS. POWELL: Good evening. My
10 name is Bridget Powell and I want to
11 thank you, Councilwoman Gilmore
12 Richardson, for continuing to hear about
13 my issues with litter. I've heard plenty
14 of people talk, so I'm going to keep mine
15 short and brief and try and touch on
16 things that I have not heard.

17 I have lived in West
18 Philadelphia for over 40 years near 63rd
19 and Market, and currently I'm a co-block
20 captain. I'm part of a beautification
21 committee, and I'm also a Girl Scout
22 leader for 25 years.

23 The biggest thing I see -- and
24 I would love -- and I like the recycling
25 part, but first we need to get the trash

1 10/15/20 - ENVIRONMENT - RES. 200431
2 off the streets. And no matter how much
3 we try, we clean the trash up, we just
4 had trash picked up at 63rd and Market,
5 the trash will be back there tomorrow.
6 We are trying our best, but I think we
7 need some red cameras, just like we have
8 red cameras for people who run red
9 lights. We need red cameras, because
10 there are obviously contractors and
11 people just dumping in our city.

12 Councilwoman Gauthier has been
13 doing an excellent job in the last two
14 weeks. We've been sending her pictures.
15 She's been helping us get things cleaned
16 up. And she's seen this herself. Within
17 two days at 51st and Wyalusing, the trash
18 is back there.

19 What I would suggest is maybe
20 in each Council district maybe having a
21 dumpster so that people can put stuff in
22 it. I see -- I'm not far from Upper
23 Darby. Every Saturday morning I see
24 people out there cleaning up. I guess
25 these are people who committed low crimes

1 10/15/20 - ENVIRONMENT - RES. 200431
2 that are out here doing community
3 service. If we can do some of those
4 things. And I commend you for having, I
5 guess, PHA, Philadelphia Horticultural
6 Society, now obtaining people and
7 employing them so that they will have
8 opportunities, but also as a park ranger,
9 I used to work in the park and I
10 appreciate all the efforts, but we
11 definitely need some red camera lights
12 out here with some fines. These signs
13 that are underneath the EL that talk
14 about fining people, they put the trash
15 right underneath the signs. So we need
16 to do something different, and I think
17 having a cleaner environment does help
18 someone mentally.

19 Thank you so much.

20 COUNCILWOMAN RICHARDSON: Thank
21 you, Bridget. Thank you so much for your
22 testimony and for all that you do within
23 the West Philadelphia community. Thank
24 you very, very much.

25 We'll now hear from Lisa

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Hastings. Please identify yourself for
3 the record and proceed with your
4 testimony.

5 MS. HASTINGS: Hi. I'm Lisa
6 Hastings. I'm a lifelong environmental
7 scientist and planner and I'm also
8 working with the Air and Energy
9 subcommittee.

10 To be brief, as a former
11 environmental planner, I support moving
12 ahead without further planning,
13 truthfully, moving ahead with known
14 program modifications and new legislation
15 in order to take the action that we need
16 to take without any further delay. New
17 laws also can jump-start vibrant plans,
18 and unlike plans, they authorize action.

19 I support the Waste Contracting
20 for Clean Air bill that was discussed
21 earlier, and I think it needs to be
22 enacted soon so it can both be applied
23 during the next contracting cycle and so
24 that we don't continue to turn our
25 municipal trash into pollution.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 On trash briefly, I support
3 compacting trash cans outside Center
4 City, particularly nearby bus stops, in
5 parks, and along corridors with lots of
6 pedestrian traffic.

7 Can anyone hear me?

8 COUNCILWOMAN RICHARDSON: Yes,
9 we can hear you.

10 MS. HASTINGS: Okay. Because I
11 was getting cross-talk. Okay.

12 We definitely need more
13 compacting trash cans outside of Center
14 City.

15 Also after listening to the
16 testimony on the mission-driven
17 contractors and the problems with
18 recycling, I'm thinking that reuse and
19 recycling might be areas where the City
20 wants to rethink what they're doing,
21 including the easily contaminated
22 single-stream open containers, but we
23 might want to look for using
24 mission-driven contractors instead of
25 large corporate contractors that don't

1 10/15/20 - ENVIRONMENT - RES. 200431
2 give us the flexibility that we need for
3 our waste stream.

4 Thank you.

5 COUNCILWOMAN RICHARDSON: Thank
6 you, Lisa. Thank you so much for your
7 work and for your testimony and for being
8 a member of our Air and Energy
9 subcommittee. We truly appreciate all
10 the feedback that we receive from you.

11 Next we will hear from Alisa
12 Shargorodsky. Please identify yourself
13 for the record and proceed with your
14 testimony.

15 MS. SHARGORODSKY: My name is
16 Alisa Shargorodsky, and thank you,
17 Councilwoman Richardson, for just all of
18 your attention and of all of the people
19 who are here. I really appreciate you
20 acknowledging all of the work that's
21 happening here even on this call, from
22 Carlton to our community members. So I
23 appreciate that. Thank you.

24 I'd like to proceed by stating
25 that I am a consultant. I work locally.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 I'm a zero waste consultant. I've been
3 doing this for about six years here in
4 Philadelphia. I'm actually Philly born
5 and bred. I have two teenagers, and so
6 this topic is very, very close to my
7 heart and I dedicate my whole life to
8 this.

9 One of my contracts right now
10 is Weavers Way food co-op. They are the
11 oldest food co-op in Philadelphia with
12 10,000 member households, and we
13 actually, we do a lot of things to help
14 our members to understand about this
15 movement towards plastic reduction. And
16 something that I want for everybody to
17 acknowledge and something that should be
18 on the record is that we're constantly
19 talking about mitigation and we're not
20 having enough conversations about truly
21 how to get on the ground with reduction.
22 We have giant industries that are selling
23 goods here, and everything, everything in
24 a grocery store, everything that we buy
25 has a package associated with it. So

1 10/15/20 - ENVIRONMENT - RES. 200431
2 when we're talking to residents and
3 telling them that they should be mindful
4 about zero waste, those two things are
5 not congruent with what we're doing at
6 the market level.

7 So what I'm doing with Weavers
8 Way currently is, we are putting models
9 into place, a system into place
10 internally in the co-op to have a
11 take-back, more deposit-like circular on
12 process, where -- so in the past few
13 years, every year Weavers Way generates
14 or sells 400,000 eight-ounce plastic
15 containers. So when we're thinking about
16 this citywide, we're talking about just a
17 local tiny little co-op. Let's think
18 about every store across the City.

19 What's happening is that we
20 have so many just grab-and-go culture,
21 convenience culture. That's what we need
22 to be talking about. So what I am asking
23 is that when we're having discussions
24 about zero waste, we cannot have these
25 discussions separate from Commerce. So

1 10/15/20 - ENVIRONMENT - RES. 200431
2 what I am doing is, I'm actually moving
3 into a new style of service, member-based
4 service, here in Philadelphia which will
5 look to offer the circular option for
6 food service establishments, so that when
7 we're doing takeout and we see these
8 spikes in takeout because of COVID, we
9 need a clear channel to create
10 circularity for containers, for takeout
11 containers right now. Like we need to be
12 having this discussion right now, because
13 there are so many containers being
14 generated, and we could incorporate
15 bringing Commerce into this conversation
16 to have corridors where we are literally
17 having containers, member-based programs
18 where people are putting their takeout
19 food in reusable containers and then
20 using my service, my company ecosystems,
21 to clean these containers to put these
22 things into circulation.

23 So I just want for this to be
24 on the record, that we are here for that
25 and we're hoping that we can expand these

1 10/15/20 - ENVIRONMENT - RES. 200431
2 into all neighborhoods in Philadelphia.

3 Thank you.

4 COUNCILWOMAN RICHARDSON:

5 Alisa, thank you so much for your
6 testimony. I think a lot of what you
7 noted has been -- I read in this report
8 from the MacArthur Foundation. So I just
9 want to thank you so much for your
10 testimony and for your feedback and
11 particularly all your work with Weavers
12 Way, who has truly been a pioneer in the
13 Northwest section of Philadelphia. And I
14 wanted to note for the record that we
15 appreciate the increased store hours that
16 you all have implemented as a result of
17 COVID-19. So thank you very, very much
18 for your work and all that you do here.

19 Peg Shaw, please identify
20 yourself for the record and proceed with
21 your testimony, and thank you so much for
22 being a member of our subcommittees. We
23 appreciate all of your feedback and your
24 work. Peg.

25 MS. SHAW: Good afternoon,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 everyone. Thank you for staying on this
3 call for so long. And so good afternoon,
4 Chairperson Gilmore Richardson and
5 Committee members, and thank you for this
6 hearing. My name is Peg Shaw, and on
7 behalf of Toxic Free Philly, I want to
8 express our support for Resolution
9 200431.

10 Environmental pollution is
11 insidious, as we know. It is often
12 invisible, and its impacts are often
13 delayed and compounded with other
14 exposure to toxins and stress.
15 Environmental pollution causes chronic
16 health disease that significantly erodes
17 quality of life and leads to early
18 mortality.

19 The disproportionate impacts of
20 COVID-19 pandemic on communities of color
21 is, in a large part, due to environmental
22 racism that exposes people to
23 life-threatening pollution and subsequent
24 chronic health conditions. When coupled
25 with the climate crisis, the City must

1 10/15/20 - ENVIRONMENT - RES. 200431
2 now do everything in its power to
3 eliminate environmental pollution with
4 forward-thinking solutions that build a
5 just green economy, and I think this
6 hearing today is a fantastic start.

7 Toxic Free Philly urges the
8 City to stop burning our trash and
9 recycling. According to the PADEP, the
10 greenhouse gas emissions from the six
11 incinerators in the state are 80 percent
12 higher than in 17 landfills, though they
13 collectively handle the same amount of
14 waste.

15 We urge Council to support the
16 Waste Contracting for Clean Air Act, as
17 previously mentioned, to end the City's
18 burning of our trash and recyclables as
19 soon as possible.

20 As others have mentioned today,
21 much of our city's waste is trucked to an
22 incinerator in the City of Chester, where
23 75 percent of the population is African
24 American. The Chester incinerator is the
25 largest in the country and the number one

1 10/15/20 - ENVIRONMENT - RES. 200431
2 air polluter in our region.

3 Between the asthma, strokes,
4 heart attacks, and other diseases caused
5 by incineration, we are literally killing
6 ourselves and our neighbors with our own
7 waste. So we must find a better way, and
8 I hope that these hearings will lead us
9 in that direction.

10 As previously discussed,
11 composting our food and yard waste is one
12 solution with multiple benefits. Climate
13 impact and emissions from landfills can
14 be drastically reduced by removing food
15 and yard waste. This material could be
16 redirected to community composting
17 operations, and I want to thank Bennett
18 Composting for leading the way locally.
19 I take part personally in their services.

20 This will not only save on
21 disposal costs, but the outputs can
22 support our growing urban farming
23 initiative and support the resiliency of
24 our urban forest and native habitats.

25 However, trash and plastics

1 10/15/20 - ENVIRONMENT - RES. 200431
2 must first be removed from food and yard
3 waste streams prior to composting or
4 mulching so we don't end up
5 redistributing micro trash with our
6 compost and mulch. This is currently an
7 issue with the City's yard waste
8 recycling center.

9 In conclusion, composting our
10 food and yard waste is a win-win-win
11 solution. Toxic Free Philly supports the
12 Committee on the Environment to hold
13 hearings to find solutions towards zero
14 waste, and I want to say thank you for
15 your time today.

16 COUNCILWOMAN RICHARDSON: Thank
17 you. Thank you, Peg, for your testimony
18 and, again, for being a part of our
19 subcommittees and also for mentioning the
20 Chester incinerator. I think it's not
21 one of the best kept secrets that my
22 husband is from Chester and is from the
23 biggest family in Chester, and a lot of
24 them suffer with asthma, as do my husband
25 and my children. So thank you very much

1 10/15/20 - ENVIRONMENT - RES. 200431
2 for mentioning the work that we need to
3 do to reduce what's going downstream to
4 Chester in that incinerator and for all
5 of your work. I look forward to
6 continuing to work with you on our
7 subcommittees.

8 MS. SHAW: Thank you.

9 COUNCILWOMAN RICHARDSON: Next
10 we will hear from -- thank you. Thank
11 you very much.

12 Next we will hear from Erica
13 Burman. Please identify yourself for the
14 record and proceed with your testimony.

15 MS. BURMAN: Hi. I'm Erica
16 Burman. I'm a resident of Delaware
17 County and I work in downtown Chester at
18 the Historical Society. My family is
19 from Chester, and I work about a half a
20 mile away from Covanta trash incinerator.

21 I'm currently organizing with
22 Mike Ewall the Energy Justice Network and
23 the Chester residents group that has been
24 fighting the trash incinerator in Chester
25 for nearly 30 years, a city experiencing

1 10/15/20 - ENVIRONMENT - RES. 200431
2 one of the worst cases of environmental
3 racism.

4 I realize that a lot of great
5 comments have already been made, so I
6 just want to make a few extra points.

7 I commend Council for taking up
8 this resolution to examine the challenges
9 and opportunities of Waste Management in
10 Philly. Right now half of Philly's
11 recycling is being burned in Chester and
12 a large amount of the City's trash. Mike
13 earlier covered the statistics on how
14 incineration is much worse than
15 landfilling.

16 Waste spans the intersection of
17 climate change, racism, and health.
18 Perhaps COVID-19 has given us a
19 jump-start to get on top of this issue.
20 The residents of Chester are paying for
21 Philly's and the region's trash problems
22 with their lives. The health impacts
23 from incinerator air pollution is clear.
24 Philly needs to be a partner to Chester
25 and not continue to utilize it as its

1 10/15/20 - ENVIRONMENT - RES. 200431
2 dumping ground and a place for a soccer
3 team bearing the City's name.

4 Philly should divert its waste
5 away from Chester towards better
6 solutions while aggressively educating
7 and implementing zero waste programs.

8 I appreciate the comment that
9 was said earlier around messaging for
10 zero waste so it doesn't seem impossible
11 to those unfamiliar with the term.

12 While Philly figures out how to
13 collect and remove its trash, I --

14 (Background noise.)

15 COUNCILWOMAN RICHARDSON:

16 Excuse me, Erica. Pardon me one moment.
17 Just a quick point of concern.

18 Whoever that is with the noise
19 in the background, if they could go on
20 mute so that we can hear Erica's
21 testimony. Please go on mute if you are
22 not currently testifying. Thank you very
23 much.

24 Erica, please proceed with your
25 testimony.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 MS. BURMAN: Thank you.

3 Philadelphia has one of the highest
4 asthma and cancer rates in the nation and
5 we need to work together and innovate our
6 systems to clean up our air by banning
7 burning it in our backyard.

8 Plastic bans must not be pushed
9 off. We need to stop brushing this
10 problem under the rug. The rug is
11 poisoning us, and we are putting
12 ourselves at higher risk for viruses like
13 COVID-19. It's time we stop continuing
14 the status quo old habits and adapt to
15 new innovative changes.

16 The transition is challenging,
17 but it's not impossible, and I support
18 this resolution and thank this group for
19 committing to examining waste management.

20 There are other places in the
21 world that are doing this, and I am
22 confident that together we can make some
23 changes.

24 Thank you.

25 COUNCILWOMAN RICHARDSON: Thank

1 10/15/20 - ENVIRONMENT - RES. 200431
2 you, Erica. Thank you so much for your
3 testimony and for all of your work in the
4 City of Chester. Thank you very, very
5 much.

6 We will now hear from Amber
7 Cook. Please identify yourself for the
8 record and proceed with your testimony.

9 MS. COOK: Hello. Yes. My
10 name is Amber Cook. I live in North
11 Philadelphia.

12 The trash on my block,
13 Hartville and Ontario, is bad, but in all
14 north of Philadelphia, it's just out of
15 control, and it's attracting rats. Rats
16 are COVID carriers. The thieves -- it
17 attracts thieves, because they come and
18 dig through that trash. They just toss
19 out their needles on top of the trash and
20 into the pile, used needles. And I was
21 really offended when a City Councilmember
22 said that we don't report it because it's
23 a no snitching area. The cops don't come
24 to our area because of trash. So that's
25 a fact. They just don't care.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 So maybe you all can help us by
3 setting up some kind of surveillance.
4 There's 101 cameras around. I just,
5 honest to God, don't know how the police
6 or different people aren't seeing people
7 dumping trash and really doing something
8 about it. I understand that this is near
9 K&A, who's got a serious drug problem.
10 We got a lot of crime, but that doesn't
11 mean that my children have to be -- you
12 know, like, see this and smell this and
13 be part of that.

14 A woman's child just got bit by
15 a rat, because that's how bad it is, and
16 the trash usually takes a day or two ever
17 since COVID. And we just feel like you
18 all just don't care. And then to hear a
19 City Councilmember say that we don't
20 report it because we're a no snitching
21 area, that's the furthest thing from the
22 truth. Furthest thing from the truth,
23 you know. And it's just -- like I say,
24 it's bad on my block, again, Hartville
25 and Ontario, but in North Philadelphia,

1 10/15/20 - ENVIRONMENT - RES. 200431
2 period, it's just bad. I'm pretty sure
3 that people wouldn't even take their kids
4 to Saint Christopher's or to the
5 McDonald's Foundation if they knew what
6 was behind the building, because that's
7 how bad the trash is around here.

8 Thank you.

9 COUNCILWOMAN RICHARDSON:

10 First, I just wanted to thank you, Amber,
11 for your testimony and say that we do
12 care. That's the reason why we are
13 having this hearing. We want to hear
14 directly from you on how we can help to
15 mitigate the issues that you are faced
16 with in that community. And I wanted you
17 to know that earlier this summer, I was
18 in the exact area that you are referring
19 to with a crew of sanitation workers to
20 see firsthand a number of the challenges
21 that they are faced with in that
22 community, and I do understand what you
23 are saying, and I'm going to ask my
24 staff, if you can work with Council
25 Support, if we can follow up with you on

1 10/15/20 - ENVIRONMENT - RES. 200431
2 some of those particular issues and with
3 your District Councilperson so that we
4 can ensure we try to address some of
5 those issues right away.

6 But know that we do care.
7 That's the reason why we are here and
8 listening to this testimony, so that we
9 can review all of this so we can make a
10 difference on behalf of you and all the
11 individuals that we serve in our great
12 city.

13 So thank you for your
14 testimony. I'm going to ask Council
15 Support to please help you get connected
16 to my team so that we can follow up.
17 Thank you very, very much, Amber.

18 MS. COOK: Okay. Thank you.

19 COUNCILWOMAN RICHARDSON: Yes,
20 ma'am. Thank you very, very much.

21 Next we will hear from Peter
22 Winslow. If you can identify yourself
23 for the record and proceed with your
24 testimony. And, Peter, I want to take a
25 point of personal privilege to also thank

1 10/15/20 - ENVIRONMENT - RES. 200431
2 you for being a part of our subcommittees
3 with the Committee on Environment. We
4 appreciate your work.

5 So, Peter, proceed with your
6 testimony.

7 MR. WINSLOW: Thank you very
8 much. Good afternoon, Chairwoman Gilmore
9 Richardson and members of the Committee
10 on the Environment. My name is Peter
11 Winslow. I'm a member -- excuse me. I'm
12 a resident in the West Mount Airy
13 neighborhood of Philadelphia. I'm
14 speaking today on behalf of A Smart
15 Collaboration, and I'm going to make it
16 brief. Thank you for this opportunity to
17 discuss challenges and solutions to
18 street litter and waste disposal systems
19 in the wake of the pandemic.

20 Waste does not exist in nature.
21 Waste is a construct of how human society
22 has organized itself. The concept of
23 waste is based in our economic system,
24 specifically that our economic system
25 ignores the biological, chemical, and

1 10/15/20 - ENVIRONMENT - RES. 200431
2 physical reality that everything is
3 interconnected. So when we produce
4 products and find uses for their
5 by-products, whatever is left over is
6 considered waste. Until waste is
7 eliminated by its technological
8 conversion to a by-product, it will be
9 considered an economic externality, and
10 the cause of externalities are being paid
11 disproportionately by our poor black
12 brothers and sisters through practices of
13 environmental racism.

14 The pandemic has exacerbated
15 the underlying problems associated with
16 sanitation. We're producing more
17 household waste because we're housebound.
18 Collection is impeded by increased
19 illness in our workforce. But if we
20 don't deal with the underlying problems
21 that confronted us before the pandemic,
22 we'll still need to sell them after this
23 pandemic has passed.

24 The pandemic is adversely
25 indisparative and disparately impacting

1 10/15/20 - ENVIRONMENT - RES. 200431
2 poor black neighborhoods. COVID-19 is an
3 airborne disease that gets exacerbated by
4 poor air quality, specifically the
5 presence of particulate matter.

6 Now that the PES Refinery has
7 been closed, the three trash incinerators
8 surrounding Philadelphia located in poor
9 black neighborhoods emit the most
10 particulate matter in our region,
11 contributing to over \$100 million in
12 health costs to our region each year
13 before the pandemic. These costs should
14 not be considered externalities. Instead
15 these costs should be avoided by reusing,
16 recycling or composting.

17 We need City Council to
18 introduce and pass the Waste Contracting
19 for Clean Air Act to ban contract
20 renewals to burn Philly's trash or
21 recycling.

22 Thank you very much.

23 COUNCILWOMAN RICHARDSON: Thank
24 you. Thank you so much, Peter, for your
25 testimony and for your important

1 10/15/20 - ENVIRONMENT - RES. 200431

2 feedback. We appreciate your work.

3 Next we will recognize Queen
4 Judith Robinson. Queen Judith Robinson,
5 please identify yourself and proceed with
6 your testimony.

7 QUEEN ROBINSON: Yes. Good
8 afternoon. Thank you for the opportunity
9 to testify on the Resolution 200431. I
10 am representing Susquehanna Clean Up/Pick
11 Up today, our environmental education
12 group located in the heart of North
13 Philadelphia, where we're working on the
14 issues of environmental justice daily
15 from these issues of litter, clean air,
16 et cetera. And healthy communities are
17 very important to us. It's unfortunate
18 that we have our conditions with
19 (inaudible) and it really affected how
20 our community handles recycling. We had
21 really strongly encouraged our community
22 to recycle, use our sanitation centers,
23 and now that they learned that the
24 recycling is being dumped with the trash,
25 it has really cut down on a lot of

1 10/15/20 - ENVIRONMENT - RES. 200431
2 recycling in our community.

3 So enforcement of the area of
4 short dumping and contractors' trash is
5 very important. I know that laws were
6 passed recently to increase the fines.
7 Okay? So I'm going to talk about the
8 areas of enforcement and increasing those
9 fines.

10 We need more sweep officers.
11 There's several sanitation arms of like
12 PHA, Temple University. I think there
13 needs to be more coordination to get
14 trash off our streets. We definitely
15 need more sweep officers to go into our
16 community such as North Philadelphia and
17 encourage our communities to stop the
18 corner short dumping, bringing trash
19 right outside of their homes as though
20 that makes sense, but when sanitation
21 does pick it up at the corner, then they
22 think it's okay to continue that process
23 right after the sanitation trucks leave
24 and start that process for it to pile up
25 all the way to the next week. That was

1 10/15/20 - ENVIRONMENT - RES. 200431
2 before COVID. Now with COVID, it's worse
3 with more trash being produced as people
4 are at home.

5 I'm going to get off now. My
6 phone sounds like it's about to die.
7 I've been waiting a while. But I just
8 want to find out more about this
9 subcommittee I keep hearing everyone talk
10 about.

11 I know in the urban community,
12 environmental justice is not prominent,
13 but I want to let you know we're up here
14 working diligently in North Central
15 Philadelphia. We did have a contract
16 through PHS for a decade cleaning,
17 greening, and beautifying our community,
18 but after ten years, we have more trash
19 than we did when we started.

20 So I appreciate the opportunity
21 to speak today, and thank you very much.

22 COUNCILWOMAN RICHARDSON: Thank
23 you. Thank you so much, Queen Judith
24 Robinson, and I'll have my team follow up
25 with you to give you a list of all the

1 10/15/20 - ENVIRONMENT - RES. 200431
2 subcommittees that we have to see which
3 ones you are interested in potentially
4 joining. Thank you very, very much for
5 your testimony.

6 We will now move on to our last
7 witness of the day, and I want to thank
8 you very, very much for your patience,
9 and I was very surprised to see your name
10 on the list. We have someone here who
11 has really been the driving force behind
12 the Chester Residents Concerned for
13 Quality Living and their goal to make
14 sure that families in Chester live lives
15 free from polluting industries. So it's
16 my honor to recognize Zulene Mayfield for
17 testimony.

18 Please state your name for the
19 record and proceed with your testimony.

20 MS. MAYFIELD: Yes. My name is
21 Zulene Mayfield. I am from Chester
22 Residents Concerned for Quality Living in
23 Chester, PA. I want to thank you all for
24 letting me give -- speak truth to what is
25 happening as a result of Philadelphia

1 10/15/20 - ENVIRONMENT - RES. 200431

2 sending trash to Chester.

3 My residents, my community, my
4 family, we are suffering. We probably
5 get about the bulk of the trash that goes
6 into the incinerator in the City of
7 Chester, which is the largest in the
8 country, and the majority of that trash
9 comes from the City of Brotherly Love and
10 Sisterly Affection, which irks my soul.

11 So I want members of Council to
12 understand that there are real
13 ramifications for decisions that are made
14 in Philadelphia, and they are impacting
15 my community. We have the highest rates
16 of asthma, highest incidence of low birth
17 weight babies. Cancer is spiking, heart
18 disease, diabetes, and a lot of these
19 things are attributed to the pollutants
20 that come out of the stack at Covanta.

21 So I just want to say that you
22 have to be aware of the decisions that
23 you make and who these -- what
24 communities these decisions impact and
25 what is the impact, because eventually

1 10/15/20 - ENVIRONMENT - RES. 200431
2 although we have the incinerator in the
3 City of Chester, you will get blow-back
4 from the pollution that comes out of that
5 stack back in Philadelphia.

6 So there has to be more
7 inventive ways of dealing with the trash,
8 and it has to be a real concerted effort.
9 It cannot be bottom line money, dollar
10 versus dollars. You have to think about
11 the cumulative impact that it has on my
12 community and your community as well.
13 Philadelphia has always been a sister
14 city to Chester, and I think that we have
15 paid the price for Philadelphia not
16 becoming more inventive, more aware of
17 what they're doing with their garbage and
18 their recyclables. It has to be heard
19 that it is impacting our city.

20 We've appealed many, many times
21 to ask you all to stop and to think about
22 what you're doing and who it impacts.
23 Well, it impacts me. It impacts my
24 family. It impacts our children. Give
25 our children a chance.

1 10/15/20 - ENVIRONMENT - RES. 200431

2 And that is what I wanted to
3 put on the record today. Philadelphia
4 can find a better way of managing their
5 trash. The alternative -- the number one
6 answer should not be, oh, let's send it
7 to the Covanta incinerator in the City of
8 Chester. Why should we bear the burden
9 of people's decisions in Chestnut Hill or
10 in Roxborough, Manayunk? Why should I
11 have to worry about what's in the trash,
12 the trucks that roll through my
13 community, the trains that come through
14 our community and what's being burned and
15 the pollutants that come out as a result
16 of them burning, arsenic, cadmium, lead,
17 particulate matter? All of those things
18 are impacting people's lives in Chester,
19 the health of our community, which is
20 incidentally only about 4.9 miles long
21 with 33,000 people in it.

22 So that is what I wanted to put
23 on the record today. We will work with
24 you. There has to be a better solution.
25 What happens in Chester also happens in

1 10/15/20 - ENVIRONMENT - RES. 200431
2 Philadelphia, because there is no magic
3 shield that keeps the pollutants in
4 Chester.

5 So that is my testimony for
6 today. Whatever I can do that will help
7 you make better decisions, I will be
8 available for it. And that's my
9 testimony.

10 COUNCILWOMAN RICHARDSON: Thank
11 you. Thank you so much for joining this
12 hearing and for your testimony. And,
13 again, I'm going to ask my team to follow
14 up with you so that we can receive
15 additional feedback from you offline.

16 So thank you very much for
17 joining the hearing and for your
18 testimony and all your advocacy work on
19 behalf of the City of Chester.

20 Is there anyone --

21 MS. MAYFIELD: Thank you so
22 very much.

23 COUNCILWOMAN RICHARDSON: Thank
24 you. Thank you.

25 Is there anyone else here to

1 10/15/20 - ENVIRONMENT - RES. 200431

2 testify on the resolution whose name has
3 not yet been called?

4 (No response.)

5 COUNCILWOMAN RICHARDSON:

6 Hearing none, are there any other
7 questions or comments from the members of
8 the Committee?

9 (No response.)

10 COUNCILWOMAN RICHARDSON: All
11 right. Hearing none, I want to thank all
12 the panels and witnesses for their
13 participation today. We truly value your
14 opinions and all the feedback that you
15 shared with us.

16 This concludes the business
17 before the Committee on the Environment
18 today.

19 Thank you all very much for
20 your attendance. Have a great evening.

21 (Committee on the Environment
22 adjourned at 5:48 p.m.)

23 - - -

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE

I HEREBY CERTIFY that the
proceedings, evidence and objections are
contained fully and accurately in the
stenographic notes taken by me upon the
foregoing matter, and that this is a true and
correct transcript of same.

MICHELE L. MURPHY
RPR-Notary Public

(The foregoing certification of this
transcript does not apply to any reproduction
of the same by any means, unless under the
direct control and/or supervision of the
certifying reporter.)

Committee on the Environment
October 15, 2020

Page 1

A	achieving	107:6,18	advocate	aids 9:20	67:25 68:3	155:25	170:18
a.m 54:15	92:16	120:2	68:17	aim 85:25	86:17	156:3	appalling
abandoned	acid 132:12	126:17	Affection	118:18	103:12	186:13	170:25
51:2	acknowledge	207:15	204:10	aims 83:5	119:15	190:12	appeal
ability 39:18	64:7 138:6	Additionally	afford 47:22	air 19:2	allowed	amounts	162:25
97:11	181:17	5:10	affordable	133:11	39:15 171:9	55:21 122:9	appealed
134:24	acknowledged...	address 9:5	42:8 43:2	139:11	allowing	138:19	205:20
able 20:6,20	180:20	10:19 11:4	157:19	151:20	120:9	Amsterdam	applaud
24:10 28:10	act 5:17 11:6	34:5 39:8	affordably	168:22,22	122:16	102:14	164:19
29:13 30:24	45:7 59:12	57:11 58:2	51:8	169:3,7	147:12,22	Amy 107:2,4	applicable
33:6 38:18	133:11	58:13,25	African	170:13	allows 29:6	130:2	81:15 146:7
38:19,20	172:17	90:20	100:24	171:24	45:12,14,18	analyses 22:4	application
42:14 43:2	174:13	119:17	186:23	172:17	81:9 92:10	analysis 13:7	79:15
44:12 45:4	186:16	162:6 166:5	afternoon 2:3	174:12	AlmaLinks	13:11 14:2	applications
46:12 48:2	199:19	166:15	3:8,8,13,18	178:8,20	157:6	14:5 88:12	126:8
49:2 51:9	acted 73:14	196:4	3:18,24 4:2	180:8	alter 15:23	89:4 109:9	applied 160:6
51:16 57:10	action 64:10	addressed	7:8,20	186:16	alternative	anchor 25:25	178:22
58:7 60:7	114:7	81:23 82:4	11:25 14:14	187:2	88:21 206:5	and/or 77:7	apply 125:24
60:16 62:2	134:21	addressing	19:13 35:24	190:23	alternatives	209:24	126:6,10
66:21 94:9	178:15,18	14:19 25:13	35:25 78:19	192:6 199:4	14:6 18:15	Angeles	209:22
100:23	actions 93:19	57:14	86:24 90:22	199:19	18:16 22:4	33:21,25	appreciate
101:9	active 57:4	adds 152:12	113:3,7	200:15	altogether	62:18	19:8,18
104:20	165:5,7	adjourned	120:6	airborne	16:12,17	142:14	20:9 23:5
124:9	170:12	208:22	134:16	199:3	amazed 34:2	announcem...	32:13 66:7
125:24	actively	adjust 13:14	151:19	Airy 148:17	amazing	2:5	66:9 130:7
128:4	142:24	adjustments	184:25	197:12	163:4	annual 54:11	133:20,23
133:24	145:13	30:15	185:3 197:8	Alex 78:13	Amazon	65:4 82:2	134:4 138:2
absence	activities	165:16	200:8	90:18,18	153:19	135:20	156:10
39:20	88:18	Administra...	age 42:24	105:7	Amazons	annually	166:22
absolutely	158:25	80:23	agencies	107:19	90:2	120:18	177:10
48:6 95:15	activity 89:5	136:19	114:19	111:9	Amber 148:8	answer 19:11	180:9,19,23
96:16	109:10	adopt 108:12	144:25	Alford 2:21	193:6,10	23:9 86:14	184:15,23
absorbing	adapt 192:14	138:14	agency 142:5	4:14 7:6	195:10	90:13 119:4	191:8 197:4
81:11	adapting	adopted	157:4	78:11	196:17	145:5	200:2
academia	83:9	25:21 71:24	aggravating	112:22	America	154:25	202:20
87:8 97:9	add 9:7 40:25	adopting	173:19	113:4	16:15 67:24	165:18	approach
Accenture	51:20,22	24:24	aggressively	129:23	68:5	206:6	21:16 80:9
88:12	52:9 68:25	advance	191:6	130:5	American	answered	83:17 97:17
accept 67:22	74:25	114:23	ago 41:20	147:24	89:20	55:12 74:22	approaches
167:10	104:25	129:22	42:18,18	148:11	100:24	anti-consu...	22:7 123:24
accepted 38:2	133:3	advantage	43:5 47:5	align 96:17	153:6 172:8	118:5	appropriate
accepting	added 8:17	47:11 85:21	49:22	alike 20:8	186:24	anticipate	122:6
12:9	12:9	126:12	113:24	88:7	amount	95:8	159:14
access 103:16	adding 18:8	adverse 16:3	120:11	Alisa 148:6	13:16 15:9	anymore	approxima...
103:17	137:5 162:7	adversely	146:2	180:11,16	16:19 17:13	106:12	65:2
121:24	addition 9:15	198:24	154:20	184:5	34:15 41:18	anyway	apps 157:19
accountabil...	12:8 32:4	advice 32:14	157:15	Alliance	41:24 42:3	173:5	158:3
91:7 112:10	60:19	advisor 161:6	160:20	131:19	43:9 48:23	apathetic	April 19:24
accurately	additional	advisory	172:18	157:25	51:9 53:8	163:17	area 24:6
209:5	9:3 52:14	79:22 80:21	agree 148:22	allotment	65:13 67:2	164:16	41:25 95:9
achievable	53:4 81:10	110:4	Agriculture	46:11	67:11 69:5	app 158:9,22	112:17
136:17	88:15 98:23	170:14	116:3	allow 5:15	74:11 84:13	164:5,6	145:14
achieve 75:25	104:22	advocacy	ahead 60:12	21:4 37:11	88:24 96:25	165:10,14	146:12
136:13	106:18	207:18	178:12,13	43:6,17	97:9 132:2	appalled	169:8

Committee on the Environment
October 15, 2020

Page 2

193:23,24	181:25	40:2	backyard	164:2	187:12	63:3 67:21	bodies 153:24
194:21	198:15	average 8:24	48:10 192:7	batteries	Bennett 47:8	70:17 71:15	bolster 116:4
195:18	association	49:12 76:12	bad 16:6	12:10	52:4 111:24	71:21 77:6	books 57:2
201:3	16:14 157:2	132:22	149:15	bear 206:8	112:25	140:4 141:5	Boot 54:12
areas 6:17	157:8	136:6,13	193:13	bearing	119:22	142:10	born 181:4
10:20,25	assume 153:8	153:6	194:15,24	191:3	120:4,5,12	143:12	bottom
16:5,8 29:3	asthma	avocado	195:2,7	beautificati...	122:20	bigger 127:22	126:14
33:11 34:7	132:14	103:17	bag 132:19	175:20	126:25	152:19	205:9
34:16,24,25	133:8 187:3	avoided	150:6	beautify	127:2,5	biggest 28:19	bought 163:2
35:2 40:16	188:24	199:15	bags 43:24	40:17	187:17	48:20 62:9	Boulevard
41:2 42:6	192:4	avoiding	44:7 46:16	beautifying	Berman	85:2 175:23	62:15
43:6,15,22	204:16	85:13	46:23 62:25	202:17	148:4	188:23	bouts 62:20
48:11 61:22	attacking	awards 141:9	150:5	becoming	156:13,15	bill 119:13	box 41:14
61:23 62:7	44:14	aware 5:3	173:24	155:17	156:18,21	154:19	170:8
68:12,24	attacks	82:22	174:3	205:16	156:23,24	178:20	break 147:2
80:13	132:15	204:22	balance 85:7	began 13:4	best 6:18	bin 43:18,18	147:5
121:24	187:4	205:16	ballpark 49:6	74:8 143:3	15:3 47:25	43:19 50:16	breaking
179:19	attempt	awareness	balls 140:2	171:5	47:25 92:8	75:15	77:2,5
201:8	76:23	37:21 38:11	Baltimore	172:22	107:12	132:19	breathing
arena 119:9	attendance	128:7	16:11	beginning 2:5	108:7 109:3	bins 41:9	171:2,7
arises 23:10	2:22,23	awareness-...	171:22	21:9 33:14	109:21	132:25	bred 181:5
arms 201:11	8:18 208:20	108:9	ban 150:5,6,8	68:8,23	111:10,15	162:10	Breeze 161:4
arrest 38:21	attention		199:19	121:11	135:12	167:23	Bressee 7:12
arsenic	37:15 94:2	B	banning	144:2	138:13	174:3	19:9,13,16
206:16	180:18	babies 204:17	192:6	145:15,21	142:12	biological	30:19 68:22
article 135:6	attest 28:18	back 12:16	bans 192:8	behalf 104:18	155:13	197:25	72:21 78:2
ash 139:12	Attorney's	23:15 27:16	barrels 41:12	185:7	176:6	birth 204:16	bricks 84:21
168:23	59:20	37:14 44:20	barrier	196:10	188:21	bit 38:10 39:3	bridges 35:3
Ashburner	attract 92:18	45:2 51:4	103:15	197:14	betrayed	41:14 69:22	Bridget 148:6
12:19	97:19	51:13 54:22	barriers	207:19	172:24	81:16 94:18	175:6,6,10
167:10	attracting	55:10 56:5	107:10	behavior	better 11:11	194:14	177:21
Ashima	193:15	58:14 72:2	108:16	32:25 34:22	11:12 20:17	black 198:11	brief 3:2
78:12 86:20	attraction	72:14 74:19	117:7 123:9	35:16	101:3	199:2,9	51:20 66:20
87:2 107:21	96:15	77:10,11	based 101:10	behavioral	102:11	blame 135:4	167:7
108:4	attracts	96:3 98:22	128:22	60:25 61:19	115:7 123:3	blamed 135:4	175:15
112:15	193:17	119:11	131:12	beholden	124:25	Blanchet	178:10
aside 144:14	attributed	122:23	134:21	91:25	126:18	148:5	197:16
asked 55:3	204:19	123:12	136:20	belief 91:9,16	128:19	160:24	briefly 37:20
153:10	Audit 10:6	127:16	138:12	believe 62:6	136:9	161:2,3	47:4 82:16
155:22	114:18	130:25	197:23	65:2 91:14	139:13	block 39:22	179:2
159:12	audits 75:3	134:6 138:9	baseline	98:10	149:5 168:4	40:18,23	bring 26:17
asking 23:24	August 16:12	139:6,14	124:10	Bellies 45:16	187:7 191:5	41:25 43:8	59:17 72:15
147:13	Austin 89:18	143:10	baselines	belonged	206:4,24	46:15,17,24	88:11
182:22	authorize	157:9 158:4	21:5	58:15	207:7	54:7,11	112:16
assessment	178:18	164:23	basic 105:25	benchmark	beyond 11:8	151:22,22	124:9 135:5
13:4,21	authorizing	176:5,18	basically	22:12	19:6 68:15	155:8,11	138:3
assist 9:7	1:16 4:17	205:5	144:5	benchmark...	83:3 93:3	163:4	143:17
13:13	available	back-end	Bass 1:11 3:6	13:23 22:9	95:20 137:9	193:12	153:20
assistance	5:14 41:7	29:21	3:7 31:23	119:11	bidders 92:25	194:24	156:11
10:9 114:21	55:16 58:12	backbone	35:21,22	benefits 83:6	big 29:13	blocks 140:4	166:15
115:17	125:21	46:19	39:6 41:4	88:10 92:12	31:2 37:6,6	blow-back	bring-your...
116:9	135:15	background	44:18 46:25	92:23	38:4 43:23	205:3	93:19
associated	207:8	101:18	49:5 53:12	120:23	45:16 50:9	board 110:4	bringing 3:25
47:20 84:18	Avenue 39:25	191:14,19	55:2 155:22	122:14	57:13 59:14	157:3	37:14 44:25

Committee on the Environment
October 15, 2020

Page 3

53:20	49:25 83:25	business 6:9	25:2 26:10	160:10	7:23 36:2	110:24	110:14,19
145:14	85:11 86:4	58:10 91:23	27:2 48:8	cancer 133:9	135:10	125:23	113:13
183:15	87:23 95:7	96:14,14	58:21 61:18	192:4	155:5	159:14	123:19
201:18	96:12	100:12,13	71:23	204:17	180:22	CERTIFIC...	128:12
brings 9:16	104:19	103:2 104:8	113:24	cans 41:10,12	Carolina	209:2	157:13
bristles	106:24,25	104:21	144:23	44:21 45:15	103:8	certification	190:8
150:14	114:17	116:8 125:5	cable 100:20	162:7 179:3	carriers	209:21	195:20
broaden	116:15	125:11,20	cadmium	179:13	193:16	CERTIFY	197:17
132:9	118:20	125:23	206:16	capability	carry 26:24	209:3	challenging
broken 91:6	124:19,19	126:4 127:3	cafe 87:21	65:7	carrying 73:8	certifying	29:17 59:24
135:17	140:4	127:14	cafeterias	capacity 74:6	cases 190:2	209:25	192:16
Brooks 1:11	143:22	141:21,24	52:12	74:7,13	catch 34:19	cetera 162:9	chance
3:11,12	158:3	143:23	call 2:22 7:7	81:11	58:9 59:16	200:16	205:25
54:20,24,25	164:23	145:11	11:7 18:2	104:10	catching	CFL 12:10	change 6:2
58:11 59:3	165:3 166:2	150:3 153:5	28:13 32:12	116:6	109:13	chain 91:3	33:14 34:22
60:4,14	166:7 195:6	159:15	36:4 55:9	capacity-b...	categories	105:25	35:15 62:20
63:8 65:23	buildings	161:23	55:10 78:11	108:10	13:10 75:24	106:2	89:11 93:3
72:15 77:12	83:20 92:21	208:16	80:25 81:14	capital 53:9	77:2,5	chains 84:2	121:9
77:17,23	139:25	businesses	81:19 82:6	69:16	caught 27:25	93:6 105:20	150:14
99:3 100:5	built 31:4	10:9 35:10	112:22	capped 126:8	cause 198:10	106:8	155:6
101:8	42:24 50:7	40:24 41:22	129:23	captain 54:12	caused 187:4	Chair 1:10	157:14
Brooks's	51:3 157:17	68:4 71:12	147:25	151:22,23	causes 60:20	3:8,13,18	163:17,19
68:25	bulk 204:5	71:24 85:14	163:3	155:9	185:15	3:24 31:22	165:9
brooms 46:16	burden 40:7	87:8 88:6	180:21	175:20	Cayuga	35:21,23	174:16,19
46:23	152:16	89:24 101:7	185:3	captains	63:12	53:14,19,20	190:17
Brotherly	153:11	108:20	called 2:25	39:22 40:18	ceiling 83:23	55:2 77:18	changed
204:9	206:8	109:12	4:10 33:22	40:23 46:15	center 141:12	78:19 86:24	13:15 20:19
brothers	Bureau 23:3	111:19,20	100:7	46:17 54:8	161:23	90:22	20:23 153:9
198:12	Burman	116:10	105:14	155:11	167:9 179:3	chairing 99:6	changes 51:9
brought	148:7	122:12	131:15	163:4	179:13	Chairperson	127:2,6
30:21 47:9	189:13,15	125:21	139:18	capture	188:8	7:20 8:2	192:15,23
133:13	189:16	126:5,9,11	208:3	10:22	centers 12:8	19:14 113:8	channel
141:12	192:2	126:13	calling 56:6	capturing	17:21	185:4	54:17 183:9
browser	burn 102:18	128:25	calls 28:15	16:4	116:25	Chairwoman	channels
164:8	199:20	141:19,22	32:9	carbon 89:11	200:22	197:8	100:20
brush 174:19	burned	168:11	camera	carcinogenic	Central	challenge	Chapter
brushing	168:21	busy 23:18	177:11	171:7	202:14	10:16 24:17	157:6
192:9	171:3	buy 46:6	cameras	card's 153:25	centuries	29:2 34:11	characteriz...
bucket 47:13	190:11	143:18	10:20 33:18	cardboard	149:12	48:20 50:9	73:6 109:6
47:14	206:14	181:24	33:20 34:4	167:25	CEO 161:7	57:15 59:13	charge 117:2
buckets 47:9	burner	buyers	34:14 41:2	174:8	certain 28:25	67:21 82:4	167:13
budget 5:24	169:11	141:13	46:7 59:15	care 52:5	29:3 43:5	116:8	charged 70:6
44:19 65:10	burning	buying 141:4	62:6,10,13	116:19	139:8	challenged	charging
123:22	131:22	141:8	62:17 176:7	155:16	certainly	32:23 42:7	18:8
159:8	133:6,14	150:18	176:8,9	163:14	25:7,12	45:23,24	Charlotte
165:23	168:16,19	by-product	194:4	193:25	26:2,13	61:7	89:18 103:7
build 49:21	171:6	198:8	Camp 54:12	194:18	28:8,17	challenges	103:9 104:3
50:10	172:14,19	by-products	campaign	195:12	31:2 41:2	1:17 4:19	Chat 5:14,18
111:18	186:8,18	198:5	16:21 35:13	196:6	42:16,19	5:23 8:9,19	24:23 54:19
154:7	192:7		35:14 37:22	career 97:12	50:5,8,11	9:5 14:19	77:16 129:5
157:19	206:16	C	38:11 69:4	98:10	59:14,16,24	16:10 24:11	cheap 155:2
158:21,24	burnout	C&D 84:13	campaigns	carload	61:14 65:20	39:9 62:9	check 131:2
186:4	17:17	C40 118:2	162:8	167:11	68:24 108:9	66:16 108:7	checking
building 10:5	bus 179:4	Cabinet 10:4	cancelled	Carlton 7:11	108:16	108:8,25	129:5

Committee on the Environment
October 15, 2020

Page 4

Cheltenham	122:23	109:2,4,19	105:13	153:16	66:2,7	collaborate	9:10,11,15
39:25	130:25	109:22	106:5	165:23	clear 95:14	97:11 98:5	15:23 27:20
chemical	circular 6:12	110:13	108:12,19	186:17,21	183:9	collaborating	28:15 136:6
197:25	68:8 72:6	115:23	109:10	188:7	190:23	115:22	136:8
chemicals	72:12 73:3	118:2,3	111:23	190:12	CLERK 3:5	collaboration	148:21,23
132:13	79:2 82:14	137:2	112:2 114:8	191:3	3:10,15,21	25:24 79:14	collective
149:14	82:19,21	138:13	115:15	City-based	4:4,16 7:10	96:9 108:17	158:16
Chester	83:4,17	140:17	117:8,13	171:16	78:12	197:15	collectively
169:5 171:4	85:11,22	citizen 76:12	118:3,7	City-led	112:24	collaborative	123:25
172:10	86:5 87:6	81:24	120:18	117:17	129:25	108:24	186:13
186:22,24	87:11,12	citizens	121:13,13	City-owned	148:3	158:2	collects 17:24
188:20,22	88:3,10,14	104:16,22	121:19	116:23	clerked	colleague	104:18
188:23	88:17 89:5	121:6	122:4	citywide	137:22	54:10,20	college
189:4,17,19	89:9,14,21	city 1:2,18	128:13	10:10 15:5	clients 22:19	72:14 98:21	101:25
189:23,24	90:3,7	2:8 4:21	133:2	26:18 48:21	climate 6:2	99:2	college-edu...
190:11,20	95:23 96:11	7:2 10:16	137:11,24	49:8 50:10	6:24 85:8	colleagues	76:9
190:24	96:13,25	12:20 14:9	141:13,20	116:25	86:7 89:10	3:13,19 7:4	color 32:2
191:5 193:4	97:4 99:23	14:15 16:6	141:25	182:16	109:24	81:10 129:6	185:20
203:12,14	101:2,10,15	16:9,24	142:21	civic 157:2,20	118:23	158:18	comb 133:22
203:21,23	101:20,24	17:3 19:7	149:17,21	civil 64:13	121:8	collect 11:14	combination
204:2,7	103:9,21	19:22 20:7	152:11,17	140:21	157:14	38:19 51:23	33:13
205:3,14	106:10	21:4,5,23	154:22	clean 18:14	185:25	67:3,4	combine
206:8,18,25	107:11,14	23:7,19	155:14,16	18:25 40:17	187:12	82:11	18:21
207:4,19	108:11,17	26:13,18	156:4	46:24 57:24	190:17	116:24	combined
Chestnut	109:9 110:5	31:18 33:11	158:19	66:4 80:16	climate-ad...	120:13	16:6
206:9	110:18,21	33:21 34:3	160:14	133:11	18:16	191:13	come 2:20
child 194:14	111:5	40:11,21	161:19,23	134:20	clogs 168:2	collected 15:6	18:16 33:10
children	117:18,19	43:6,12	169:2,5	143:18	174:4	18:25 92:7	34:19 44:20
188:25	118:8,15,21	44:6 45:9	171:9	151:20	close 35:10	93:13	52:23 54:22
194:11	182:11	45:22 46:11	176:11	161:5,25	70:8,14	135:23	61:4,12,15
205:24,25	183:5	46:20 47:7	179:4,14,19	172:16	181:6	collecting	64:12 71:3
China 14:23	circularity	47:16,23,25	182:18	174:12	closed 18:4	15:24 50:16	74:15 84:6
67:19 145:5	106:3 112:9	48:13,16	185:25	176:3	199:7	102:8,20	89:12,15
145:17	183:10	49:16 50:2	186:8,22	178:20	closely 12:11	104:2	98:22
China's	circulants	50:7 58:25	189:25	183:21	26:14 36:3	collection 9:3	123:12
73:16	154:21	60:3 61:2,4	193:4,21	186:16	158:19	13:5 17:16	138:24
Chinese	circulation	61:25 64:3	194:19	192:6	closing	21:14 29:12	171:22
67:18	183:22	64:17 65:19	196:12	199:19	118:17	37:12 43:16	193:17,23
chip 110:7	circumstan...	66:2 72:11	199:17	200:10,15	171:23	43:22 69:11	204:20
choosing	135:8	76:4,5	204:6,9	cleaned 56:9	Club 148:18	71:10 121:8	206:13,15
91:22	136:11	78:21,22	205:3,14,19	93:14	co-block	128:13	comes 25:12
Christine	citations	79:14,17,25	206:7	152:24	175:19	133:3	81:12 88:17
26:4 112:24	136:3	79:25 81:4	207:19	176:15	co-founded	135:11	90:13 156:3
113:9 119:6	cities 6:17	82:5 83:15	city's 11:22	cleaner	91:18	137:5	204:9 205:4
121:12	13:23 21:13	84:3,6,16	21:22 55:20	155:19	co-op 181:10	138:19	comfortable
Christophe...	22:10,13	89:8 90:5	66:13 81:20	177:17	181:11	139:19	164:8
195:4	82:15 83:13	91:4,20	82:2 113:19	cleaning	182:10,17	144:18	coming 56:4
chronic	87:3 88:6	92:17 94:10	113:23	39:23	co-worker	155:5	70:5 75:3
185:15,24	88:11 89:16	95:4,17	114:14	176:24	100:4	161:11	141:19,25
Cindy 1:11	89:17,20,22	96:15 97:20	122:9	202:16	coal 168:19	162:12	142:6
3:5 35:21	92:2,11	97:24 98:6	131:14,21	cleanup	coax 145:18	168:6	154:14,16
circle 72:13	94:23 99:10	99:11,12	132:16	63:15	code 21:23	198:18	154:21
77:10,11	107:10,13	103:20,25	133:14	cleanups	coffee 103:18	collections	156:4
118:2	107:15	104:3,17	142:8	39:16,16	coin 172:4	8:17,23	172:25

Committee on the Environment
October 15, 2020

Page 5

commend 24:9 177:4 190:7	123:18 135:10 163:23	174:14 communities 32:2,18 44:10 61:7 66:6 132:20	183:20 compare 20:20 compared 63:24 comparison 22:11 compete 155:2 competitive 92:12 complain 42:13 complete 14:8 completed 20:22 30:3 completely 95:14 completing 159:2 complex 149:13 complicates 33:7 comply 5:17 component 34:21 67:15 69:5 75:21 139:22 composed 80:20 composition 13:7 20:14 70:9,15 compost 10:7 17:9 47:8 47:22,24 51:2 52:10 54:5 116:25 120:12 121:22 124:17 170:24 188:6 composted 51:24 composting 10:7 26:18 47:4,6,6,12 47:17 48:10 48:10 49:25 50:15 52:10 53:7,21,24	55:9 67:6,9 69:13 75:20 77:4 85:19 110:16 111:23 116:5,6,15 116:22 117:8 120:13 121:4,7,15 122:8 124:2 124:13 125:5,7,12 127:24,25 128:4 133:4 139:19 159:4 167:12 172:2 187:11,16 187:18 188:3,9 199:16 composts 124:6 compounded 135:2 185:13 comprehen... 13:4 21:10 44:12 48:12 136:21 compressed 18:12 computer 31:10 concept 108:12 124:8 150:21 197:22 concern 81:24 191:17 Concerned 203:12,22 concerns 15:2 19:5 28:19 concerted 205:8 concluded 152:20 concludes	23:8 77:18 77:20 208:16 conclusion 172:13 174:11 188:9 concrete 84:21 103:19 140:8 166:21 conditions 16:2 185:24 200:18 conduct 1:16 4:18 conducted 88:12 89:4 conducting 13:11 14:4 72:10 Confer 148:5 166:24 167:3,4 confidence 159:18 confident 192:22 confiscate 59:10 confronted 198:21 congruent 182:5 connect 103:20 connected 96:19 196:15 connecting 105:16 connections 114:4 consenting 5:8 consequenc... 152:23 considered 142:12 198:6,9 199:14 consistently 81:25	consists 66:24 consolidated 114:2 constantly 181:18 constituents 37:17 41:8 54:4 constrained 165:24 constraints 5:24 123:22 construct 197:21 construction 10:22 42:21 82:19 83:10 83:18 84:9 84:11,17,18 84:23 95:21 constructio... 139:21 consultant 13:2,20 14:11 19:10 19:17 30:21 180:25 181:2 Consultants 13:3 19:18 20:11 21:12 70:7 consulting 22:18 consumers 85:2 105:23 consuming 162:16 consumption 9:22 86:2 97:15 148:25 contact 57:10 contacts 136:3 contained 209:5 containers 44:8 173:8 179:22 182:15 183:10,11 183:13,17	183:19,21 containment 17:15 contaminat... 168:7 179:21 contaminat... 173:7 contaminat... 15:9 18:7 18:20 67:20 content 141:8 context 160:7 continual 117:21 continue 6:3 10:12,25 11:5 15:22 26:15 45:19 46:10,13,24 52:16 63:4 65:9 69:19 78:5 80:5 137:7,9 178:24 190:25 201:22 continued 16:3 67:16 79:22 138:8 continues 10:15,19 18:14 25:4 26:10 32:3 135:17 continuing 5:7 78:6 130:9 175:12 189:6 192:13 contract 12:23 15:4 48:15 81:5 91:22 140:11 159:7 169:10 199:19 202:15 contracting 133:11 172:16 174:12
---------------------------------------	----------------------------	--	--	---	---	--	--

Committee on the Environment
October 15, 2020

Page 6

178:19,23	4:3 5:22	116:17	101:22	156:6,16,19	COVID	139:24	crowd 166:14
186:16	6:3,20,22	133:3	106:17	156:22	20:24 36:10	145:6,12	crunch 44:19
199:18	36:18 94:13	152:11,19	108:6	160:16	36:16,25	172:2 183:9	crushing
contractor	96:21	153:18	118:25	166:19	54:13 63:23	created 8:20	152:14
57:11 112:7	174:14	cost-effective	120:6 130:6	169:13,23	65:9 71:11	11:9 25:19	cultural
116:24	183:15	132:17	134:16	169:25	93:20 95:19	68:13,19	157:25
contractor's	conversatio...	costs 117:15	164:2	174:23	105:19	93:21	158:5
57:12	94:10,17	126:20	193:21	175:11	110:11	114:16	culture 33:14
contractors	181:20	137:4,6	194:19	176:12	153:8,14	creates 106:2	38:15
12:6 33:10	conversion	187:21	Councilme...	177:20	165:24	106:12	182:20,21
34:19 57:14	198:8	199:12,13	12:2 14:15	179:8 180:5	171:5	creating	cumbersome
57:17 58:9	convert	199:15	120:8 152:6	180:17	172:22	85:14 86:5	59:23
61:24 112:6	121:13	Council 1:2	Councilper...	184:4	183:8	103:11	cumulative
161:24	Cook 148:8	2:8,14 14:9	7:19 36:4	188:16	193:16	122:7	205:11
176:10	193:7,9,10	16:24 32:6	37:18 196:3	189:9	194:17	143:23	curb 16:19
179:17,24	196:18	42:20 43:25	Councilwo...	191:15	202:2,2	creation 6:10	16:21 23:22
179:25	cooperation	54:10 90:23	1:10,11,11	192:25	COVID-19	105:10	69:3 155:6
contractors'	129:22	115:19	1:12,13 2:2	195:9	1:18 4:21	106:6	155:7
55:23 56:12	coordinate	122:5 123:3	3:7,12,17	196:19	6:5 7:2	117:25	173:15
201:4	53:2 94:20	123:13	4:7,23 7:13	199:23	8:11,15	creatively 6:7	curbside 8:17
contracts	coordinating	137:22,24	19:12 23:12	202:22	13:16 14:21	credit 125:21	13:12
92:20	9:24 157:4	146:15	27:6 28:3	207:10,23	15:21 20:20	125:25	120:14
104:16	coordination	147:3	31:15 35:18	208:5,10	22:12,18,25	126:4	148:21,23
138:18,23	26:20	151:21	35:22 41:4	count 137:20	24:13 25:14	153:25	current 2:7
139:4 168:4	201:13	158:20	44:18 46:25	counties	28:7,8	crew 24:5	48:15 55:20
181:9	copious	171:9,14	49:5 53:10	168:24	29:14 32:22	195:19	56:11 66:25
contributed	112:17	176:20	53:12,18	country	39:12 45:21	crews 10:21	83:3 92:13
8:22	169:16	186:15	54:25 58:11	73:22 74:19	63:20 69:7	15:14 17:12	128:23
contributes	cops 193:23	190:7	60:4,14	142:13	69:24 79:7	135:11	131:21
44:5	copy 16:24	195:24	63:8 65:23	143:6	91:2 98:14	crime 59:7,7	135:13
contributing	Cornelius	196:14	72:4 77:9	186:25	107:16	152:12	136:11
199:11	130:2	199:17	77:17,22	204:8	113:15	194:10	currently 2:4
contributors	corner 34:23	204:11	78:14 86:15	County	127:4,7,21	crimes 11:3	2:9 6:16
85:4	201:18,21	Councilman	90:15 94:3	189:17	128:12	58:23	49:4 55:5
control 46:6	corporate	1:12 3:23	94:25 96:2	couple 17:4	134:22	176:25	55:17 58:13
68:16	179:25	79:19 98:25	98:8 104:23	30:18 33:6	137:9	criminal	64:23 104:2
193:15	corporate-...	104:12	105:4	37:20 41:20	184:17	121:2	117:25
209:24	92:14	106:19	106:14,21	43:13 74:15	185:20	crisis 19:6	121:24
controlling	corporations	154:19	107:4 111:6	160:19	190:18	28:13 64:6	128:9
69:9	109:15	Councilme...	112:12	162:5 165:4	192:13	65:21 70:23	131:14
controls	122:13	3:5,11,16	113:2 119:5	coupled	199:2	90:24 92:13	160:9 166:5
169:7	correct 21:20	3:22,24 4:5	122:18	185:24	crafting 63:6	137:11	175:19
convene 6:2	209:8	25:7 27:12	124:22	course 22:21	crazy 154:6	143:12	182:8 188:6
convenience	corridor	27:14 28:17	126:21	34:17 140:5	create 6:24	144:12	189:21
12:8 17:21	39:16,23	31:22 32:20	128:21	Covanta	68:4,6,11	185:25	191:22
167:9	corridors	35:21 39:6	130:4 131:8	138:21	88:23 89:6	critical 84:24	Curtis 54:10
182:21	179:5	40:9 44:2	133:17	171:12	95:6 97:2	86:6 89:10	cut 16:16
convening	183:16	54:10,20,24	134:12	172:7,12	97:14,18	144:7	17:17
86:10	cost 14:2 22:2	55:2 59:3	137:15	189:20	102:10	cross-city	127:15
109:17	30:18,22	68:9,25	140:7 146:8	204:20	103:2,5	110:4	200:25
119:2	48:22 49:6	72:14 77:12	147:4,10,20	206:7	104:9 106:4	cross-depa...	cycle 149:12
Convention	49:14 53:4	77:23 86:9	148:10	cover 62:13	107:11	109:23	178:23
141:12	65:16 92:25	94:16 98:21	151:9,20	covered	117:21	cross-talk	
conversation	103:15	99:2 101:13	155:22	190:13	122:10	179:11	D

Committee on the Environment
October 15, 2020

Page 7

daily 2:16 200:14	dear 39:10 debris 10:23 33:12 decade 42:18 88:4 140:24 202:16 December 82:7 decided 100:11 163:13 decision-m... 160:5 decisions 112:6 135:3 204:13,22 204:24 206:9 207:7 decline 135:18 Deconstruc... 139:20	Delaware 189:16 delay 178:16 delayed 185:13 delays 8:22 deliberations 4:3 deliverables 22:11 delivered 153:13 delivery 18:6 demand 84:4 84:10,18 95:7 demolition 82:20 83:11 84:9,15 95:21 100:14 149:2 Demonstra... 91:16 dent 41:3 dental 120:23 DEP 117:6 depart 130:13 department 7:24 9:6,12 10:2,11,17 10:19 12:4 12:5,12,21 14:8 16:20 18:2,13 20:12 23:7 23:23 26:22 31:7 34:4 37:2 40:16 48:14 53:3 58:2,24 64:3 65:14 66:10 69:21 78:8 96:7 96:18 100:6 100:9 110:6 116:3,14 119:20 141:6 142:3 144:21 148:20 149:22,23 149:24	154:7 158:21 159:12 170:16 171:10 173:2,11 174:15 Departmen... 11:3 13:20 13:24 17:20 68:16 72:25 144:8 159:22 departments 8:13 25:22 25:24 26:2 26:14,21 69:17 72:11 149:21 Depending 59:7 65:8 depends 131:22 deploy 29:24 deploys 10:17 deposit-like 182:11 depression 152:12 deputy 110:20 Derek 1:12 3:22 79:19 98:21 descriptions 145:24 deserve 37:5 37:6 deserves 46:12 design 83:2 97:15 157:11,17 164:14 designated 57:9 designed 31:3 87:23,24 163:10 166:3 designing 102:8 desire 50:8 120:12	128:8 desolate 33:11 detailed 11:20 detective 58:23 59:4 59:18 determined 81:18,22 detrimental 35:11 develop 13:13 52:21 83:25 developed 117:5 developing 53:6 80:14 91:13 103:24 development 6:9 61:9 92:23 93:5 96:14 98:12 98:18 100:8 100:11 103:8 106:6 110:2 112:9 117:24 121:10 142:4 develops 87:5 diabetes 204:18 Dickinson 157:3 die 202:6 difference 43:12,23 49:14 63:3 70:17 99:14 196:10 different 22:7 43:15 46:8 71:4 98:6 101:16 102:9 110:8 128:8 145:24,25 163:22 177:16 194:6 differently	128:15 166:13 dig 146:4 193:18 digesters 53:4 digital 83:7 97:5 diligently 202:14 direct 99:4 105:21,23 209:24 direction 52:25 187:9 directly 166:3 168:20 195:14 director 8:5,7 11:18,19 12:3 14:17 19:23 78:22 113:10 122:24 134:20 144:24 170:11 dirty 168:19 disassembly 87:24 disclose 19:22 discouraging 127:18 discuss 93:25 197:17 discussed 37:10 178:20 187:10 discussing 8:9 discussion 70:24 73:4 166:16 183:12 discussions 21:9 161:18 182:23,25 disease 185:16 199:3	204:18 diseases 187:4 disenfranc... 163:16 disenfranc... 162:3 disillusioned 155:17 dismantling 139:25 disparately 198:25 dispatched 29:25 dispatches 10:21 display 150:7 displayed 3:3 disposable 93:18 disposal 1:17 4:20 8:11 11:15 12:23 13:17 14:21 17:9 41:21 42:5 57:20 75:22 79:6 91:11 112:4 113:15 138:22 170:9 187:21 197:18 disposals 41:16 42:2 44:22 dispose 56:17 68:11 87:14 171:19 disposed 25:16 152:10 disposing 55:21 58:4 89:3 disproporti... 91:10 disproporti... 185:19 disproporti... 198:11 disrupted 71:11	disruptions 20:25 distinguish 164:6 distressed 61:22 distributed 68:14 district 15:12 36:4,8 37:17 39:24 54:3 59:20 71:17 161:23 176:20 196:3 dive 70:14 82:16 diversify 96:8 diversion 74:21 133:4 divert 145:7 191:4 diverted 144:2 Division 8:14 9:19,23 11:9 12:4 13:2,13 division's 11:21 21:25 document 16:25 documents 30:10 doggedly 148:20 doing 6:16 12:15 13:21 13:24 24:4 33:23 52:4 57:18 60:17 60:21 63:16 65:25,25 66:6,10 72:23 73:7 94:18 99:11 104:15 109:6 127:13 128:10 135:12 142:16 146:3
-----------------------------	--	---	--	--	---	---	--

Committee on the Environment
October 15, 2020

Page 8

160:22	56:21	190:13	117:19,19	110:12	186:10	201:3,8	14:1 15:1
163:20	due 2:7 93:19	191:9	118:2,8,21	111:3	187:13	engage 20:22	16:1 17:1
164:24	185:21	195:17	186:5	113:25	emit 199:9	114:9	18:1 19:1
166:7	dump 10:21	early 73:9	economy-r...	118:8 136:5	employ 102:5	157:20	19:16 20:1
176:13	33:3,12	142:9,11	88:18	164:19	102:22	158:14,22	21:1 22:1
177:2	57:22 61:13	185:17	ecosystems	177:10	120:20	166:4,11	23:1 24:1
179:20	61:14	earn 157:10	183:20	eight-ounce	140:10	engaged	25:1 26:1
181:3 182:5	dumped	159:2	educating	182:14	employee	20:11	27:1,13
182:7 183:2	10:20,23	easily 179:21	191:6	either 53:6	65:5	engagement	28:1 29:1
183:7	38:22 56:10	East 148:17	education	70:10	employees	40:13	30:1 31:1
192:21	60:3 61:23	Eastern	15:20 16:21	149:15	44:3 120:25	161:14,21	32:1 33:1
194:7	62:25	134:19	21:7 39:11	El 177:13	159:15	engages	34:1 35:1
205:17,22	173:17	easy 61:12	97:13 98:11	elected 21:19	employing	18:19	36:1 37:1
dollar 205:9	200:24	eat 153:25	136:5	electric 18:8	102:21	engaging	38:1 39:1
dollars 30:19	Dumpers	economic 6:9	161:17	18:10	177:7	124:5	40:1 41:1
30:23 46:2	34:8	80:3,10	164:13	electronics	employment	159:24	42:1 43:1
46:4 49:9	dumping	85:8,10,12	200:11	12:9 17:25	64:15,22	enjoyed 92:3	44:1,23
50:22 52:21	10:14,15	86:7 88:15	educational	88:23,25	85:15	ensure 25:3	45:1 46:1
126:18	11:4,6	92:22	35:13 45:13	elements	empty 51:2	84:6 129:6	47:1,21
205:10	31:25 32:7	117:24	educators	83:20,22	en 17:10	146:17	48:1,2 49:1
domestic	32:15,17,21	121:10	149:18	Eleven	enable 93:9	196:4	50:1 51:1
67:24 74:5	33:9,10,23	140:25	EEO 100:8	120:11	117:12	entering	51:13 52:1
74:13	34:15 37:22	142:4	effect 36:25	eligible 64:14	enacted	117:7	53:1 54:1
donated	37:25 38:12	197:23,24	73:21	125:24	73:19	enterprises	55:1 56:1
151:3	38:18 39:14	198:9	effective	126:6	178:22	93:9	57:1 58:1
donations	39:18 40:11	economically	33:15	eliminate	encourage	entire 24:7	59:1 60:1
172:11	40:25 44:15	6:25 42:7	102:17	87:15	37:24 72:12	entities	61:1 62:1
door 35:6	45:14 46:6	48:3 61:7	132:17	117:20	75:11 84:8	114:13	63:1 64:1
doors 83:23	55:19 56:2	economy	174:17	186:3	168:13	entitled 16:21	65:1 66:1
downstream	57:13,19,20	6:13 68:9	effectively	eliminated	169:9	entrepreneur	67:1 68:1
189:3	59:12 60:10	72:7,12	31:14	140:23	201:17	91:12	69:1 70:1
downtown	61:21 62:11	73:4 74:4	155:14	198:7	encouraged	100:19	71:1 72:1
84:19	63:14 82:5	79:2 82:20	173:12	eliminating	200:21	104:14	73:1 74:1
189:17	85:5 149:2	82:21,25	effects 16:3	30:11	encouraging	entreprene...	75:1 76:1
downwind	176:11	83:5 84:25	efficiency	Ellen 82:24	127:19	103:14,22	77:1 78:1
171:3	191:2 194:7	85:11,23	18:18 31:18	87:3,4	ended 56:6	122:11	79:1 80:1
dozens 158:6	201:4,18	86:5 87:7	efficient	embarked	ends 168:22	entreprene...	81:1 82:1
drains 154:9	dumpster	87:11,12,14	18:14 80:11	15:14	energy 75:22	101:4,8	83:1 84:1
drastically	57:21	87:20 88:3	84:2 85:14	embedded	85:2 115:9	103:5,12	85:1,23
163:21	176:21	88:8,11,14	efficiently	83:20	119:11	109:12	86:1 87:1
187:14	dumpsters	89:5,9,14	9:19 31:13	emergency	131:11	entreprene...	88:1,9 89:1
drive 6:8	61:3	89:21 90:3	effort 16:18	2:8	143:12,14	99:22 101:6	90:1,10
72:20 90:8	durably	90:8,9	22:8 44:12	Emily 78:12	157:4	104:21	91:1 92:1
97:3 98:7	87:22	95:11 96:11	69:8 71:23	78:16,21	168:19	106:4 157:7	93:1 94:1
103:21		96:13 97:2	103:13	87:12 94:7	170:13	entry-level	95:1 96:1
driver 85:8	E	97:4 99:24	108:24	99:25	178:8 180:8	64:25	97:1 98:1
drivers 15:14	e-waste 82:12	101:2,11,15	165:25	105:11	189:22	environment	99:1 100:1
driving	104:15,18	101:20,24	205:8	112:14	enforce 57:25	1:3,16 2:1	101:1 102:1
203:11	earlier 20:11	103:21	efforts 11:21	emissions	58:8	3:1 4:1,12	103:1 104:1
drop 167:14	24:6 26:16	107:11,14	18:18,20	9:22 89:12	enforcement	4:18 5:1	105:1 106:1
dropped	67:15 69:15	108:11,18	69:18,24	115:12	10:13 32:4	6:1 7:1,22	107:1 108:1
135:24	116:12	109:9 110:5	70:2,11,13	117:15	33:18 35:14	8:1 9:1	109:1 110:1
drug 194:9	118:9 125:6	110:18,22	71:5 94:21	121:20	58:12 60:2	10:1 11:1	111:1 112:1
drywall	178:21	111:5	96:15,17,20	132:12	60:15,19	12:1 13:1	113:1 114:1

Committee on the Environment
October 15, 2020

Page 9

115:1 116:1	12:3,12	25:23 27:5	192:19	17:19	198:9	22:20	208:14
117:1 118:1	14:25 26:3	establishing	example	expanding	extra 15:24	113:17	feel 51:20
119:1 120:1	35:7 58:22	80:17	26:16 51:5	52:16	190:6	families	69:2 81:7
121:1 122:1	80:4 92:12	establishm...	51:5,7	117:18	extracted	203:14	194:17
123:1 124:1	92:23 133:7	49:20 183:6	55:24 56:22	expansion	83:4	family 188:23	fees 120:19
125:1 126:1	172:10	estimated	62:16 88:22	115:20	extremely	189:18	121:19
127:1 128:1	178:6,11	16:14 88:13	92:9 102:12	expect 137:8	40:3 78:24	204:4	fellow 20:3
128:23	185:10,15	152:17	150:10,25	expectation	81:8	205:24	felt 172:24
129:1 130:1	185:21	et 162:9	172:7	5:6	eyed 149:9	fantastic	fewest 169:6
131:1 132:1	186:3 190:2	200:16	examples	expected	F	108:15	field 14:2
133:1 134:1	198:13	Eureka 91:17	51:14 88:2	135:13	face 24:18	109:7 186:6	161:12
135:1 136:1	200:11,14	91:23 92:9	102:10	expensive	76:13	far 63:10	fifteen 62:17
137:1,23	202:12	evaluating	111:22	49:17	faced 15:22	66:15 74:19	fifth 23:2
138:1 139:1	environme...	83:18	151:25	162:15	24:11	89:16	fight 89:10
140:1 141:1	143:8	evaluation	exasperated	experience	195:15,21	106:12	121:8
142:1 143:1	environme...	21:10,15	90:25	25:9 91:13	facilitate	176:22	fighting
144:1 145:1	18:21	evening	excellent 7:14	105:16	83:17	farmers	112:3
146:1 147:1	EPA's 17:7	175:9	27:7 78:15	107:9	103:20	121:23	189:24
148:1 149:1	epidemic	208:20	95:2 106:16	120:25	facilitating	187:22	figure 56:4
150:1 151:1	32:22	event 12:16	134:13,14	138:12	9:21	farms 105:23	128:3 143:9
151:13	equipment	81:3	176:13	157:16	facilities	fastest 141:20	figures
152:1 153:1	59:11	events 12:18	excessive	experienced	11:16 13:19	favor 172:5	191:12
154:1 155:1	equitable	54:18	17:17 56:8	8:14 16:10	18:9 52:6	favorite	Fill 43:5
156:1 157:1	85:22	eventually	exchange	42:11 73:23	67:13	93:10	final 46:14
158:1 159:1	equity 157:14	64:2 157:10	117:2	82:4 137:12	facility 15:8	feasible 48:3	finalist 82:13
160:1 161:1	equivalent	158:24	excited 5:22	experiences	49:25 51:12	feature 5:14	Finally 21:3
162:1 163:1	65:3 136:7	204:25	27:18 31:20	137:8	51:25 52:10	5:18 27:19	financial
164:1 165:1	Erica 148:7	everybody	37:9	experiencing	91:19	77:16	21:17
166:1 167:1	189:12,15	47:21 71:17	excites	91:5 189:25	102:15,20	features	125:17
168:1 169:1	191:16,24	82:22 161:2	101:15	expertise	116:15	27:21	135:20
170:1 171:1	193:2	161:22	exciting	6:15 137:21	117:8	February	152:16
172:1 173:1	Erica's	163:15	106:13	Experts	121:14,16	79:11	find 33:11
174:1 175:1	191:20	181:16	excuse	115:4	121:16	federal 76:7	34:10
176:1 177:1	erodes	everyone's	191:16	explanation	facing 5:24	fee 47:19	132:21
177:17	185:16	107:23	197:11	173:25	107:10	57:20	170:25
178:1 179:1	especially	evidence	excuses	explore 86:11	109:2	158:11	187:7
180:1 181:1	29:18 32:2	59:13 209:4	159:10	97:6 108:14	110:14,20	167:14	188:13
182:1 183:1	32:21 35:9	evident	Executive	119:2	fact 11:7	feedback	198:4 202:8
184:1 185:1	39:22 42:5	170:20	79:11	export 74:8	60:24 112:4	15:13 95:2	206:4
186:1 187:1	47:22 69:6	Ewall 130:2	exist 60:25	expose 99:23	142:24	106:15	fine 38:23,24
188:1,12	100:14	130:24	197:20	101:5	153:9,24	111:8	59:9 106:20
189:1 190:1	106:10	131:4,6,10	existing 22:5	exposes	162:2	112:14	150:23
191:1 192:1	123:22	131:11	25:22 49:3	185:22	193:25	124:24	fine-tooth
193:1 194:1	126:14	138:16	49:11 64:12	exposure	faction 70:15	126:23	133:22
195:1 196:1	153:14	189:22	80:12 83:20	185:14	fail 137:6	146:10,14	finest 177:12
197:1,3,10	158:16	exacerbated	94:21	express 185:8	fair 45:25	151:15	201:6,9
198:1 199:1	172:21	32:22 153:8	125:25	expressway	fairly 52:13	166:23	fining 38:21
200:1 201:1	essential	198:14	exists 126:5	63:13	127:8,20	169:15	177:14
202:1 203:1	36:15 37:4	199:3	expand 12:7	extend 63:22	Fairmount	174:24	finish 77:12
204:1 205:1	91:4	exact 195:18	33:18 34:7	65:7 79:18	51:25	180:10	finished
206:1 207:1	establish 21:4	examine	52:8 115:2	externalities	167:12	184:10,23	107:20
208:1,17,21	58:22 61:19	190:8	116:6 118:7	198:10	fall 116:20	200:2	121:21
environme...	170:22	examining	183:25	199:14	familiar	207:15	fire 154:5,11
8:5 11:3,18	established	21:22	expanded	externality			174:18

Committee on the Environment
October 15, 2020

Page 10

firm 22:18	196:16	80:5 90:8	fruits 85:20	gas 18:12	50:22 59:3	67:8 136:12	197:15
first 7:7	202:24	107:6	frustrating	170:12	59:19 66:20	136:15	201:7 202:5
12:15 22:10	207:13	122:15	36:13	186:10	120:2	158:16,17	207:13
25:6 36:14	follow-up	124:24	fuel 9:22	gases 132:13	129:17	158:24	good 2:2 3:7
37:7,21	101:21	130:9 138:4	18:14,16	gauge 165:14	131:2	203:13	3:8,12,17
39:5 62:6	followed 22:4	138:15	full 158:24	Gauthier	138:21	goals 6:4	3:18,23
68:19 81:14	following 2:4	159:10	159:18	1:12 3:16	146:23	11:22 74:21	7:20 11:24
93:4 116:21	5:23 7:25	189:5	full-time	3:17 28:17	147:7 158:4	80:4 85:8	11:25 14:14
117:3 127:7	98:25	forward-th...	64:15,22	176:12	180:2	86:8 114:8	19:13 35:24
138:16,22	follows 2:6	186:4	65:5 120:20	general 29:9	202:25	118:23	35:25 41:5
140:23	food 10:10	foster 85:22	121:25	45:9 76:19	203:24	124:21	41:5 45:4
142:14	12:24 17:9	fostering	fully 71:14	119:9	205:24	138:15	46:25 47:2
143:4 144:9	41:24 42:4	80:10	121:16	173:11	given 28:24	God 194:5	52:25 58:20
164:4	50:17,25	found 2:18	209:5	generate	30:8 97:9	goes 139:9	64:13 78:18
175:25	52:5,11	16:4 58:13	function	51:10 88:14	123:22	168:24	86:23 90:21
188:2	67:6 89:13	132:4,10	145:11,11	138:20	135:13	204:5	104:13
195:10	109:24	foundation	functional	generated	190:18	going 26:19	113:2,7
firsthand	115:4,5,6,8	26:25 27:3	151:7	25:16 45:11	gives 28:22	45:21 46:9	120:6
25:9 195:20	115:11,16	82:18,24	functioning	52:6,12	31:16	46:16,17	134:15,16
fiscally 45:23	115:20,23	87:4,5	84:24	71:19	giving 49:12	49:10 50:10	136:25
fit 22:5	116:7,10	107:8 184:8	functions	183:14	glad 25:8	53:7 54:13	151:19
five 84:20	117:11,13	195:5	9:18	generates	gleaned	62:14 63:18	167:12
104:6	117:16	founder	fund 45:9	182:13	20:16	65:18 66:15	175:9
135:20	120:14,16	105:15	46:23	generation	global 44:23	66:19 69:19	184:25
168:25	121:9,18	four 19:24	116:13	16:23 115:2	89:22 132:6	70:2,5,7,8	185:3 197:8
fix 87:22	122:10	36:22	fundamental	geographic	132:11	70:20,24	200:7
fixes 136:10	125:14,22	115:22	87:17	61:16	globally	71:4 72:22	goods 105:25
fleet 18:10	127:9,12,14	120:20	136:19	Germantown	73:15	72:24 73:4	181:23
21:25	128:7 137:5	135:21	funded 18:4	35:3 39:24	gloves 46:16	73:6 74:14	Googles
flexibility	170:24	153:7 167:7	172:6	39:25	46:23	74:17 81:16	89:25
180:2	181:10,11	169:15	funding 45:5	getting 36:21	go 17:15	82:16 98:17	government
flies 42:12	183:6,19	171:11	funds 45:10	58:3 64:6	23:15 25:10	107:5 112:3	31:18 40:6
flourish	187:11,14	Fourth	45:21 46:7	71:16 75:7	27:9,16	112:5	40:7 79:15
101:9	188:2,10	168:10	further 84:8	159:3,5	30:4 31:10	119:15	87:2 90:5
fluorescent	foods 121:23	frames 83:23	93:25 96:23	179:11	31:10 34:24	121:2	118:7
12:10	force 203:11	framework	178:12,16	giant 181:22	34:25 35:2	126:17	GPS 9:17
focus 6:11	forecast	22:6 82:24	furthest	Gilmore 1:10	40:20 51:11	129:8,9	grab-and-go
15:18 80:7	167:18	113:20	194:21,22	4:6 7:19,21	51:11 53:6	134:6 135:4	182:20
80:8,13	foregoing	Francisco	future 114:23	8:2 19:14	60:12 62:22	136:18	grade 50:18
focused 6:20	209:7,21	142:14	168:3	78:19 86:10	63:12 64:19	137:7	grandmother
6:23 18:18	forest 187:24	free 51:21		86:24 90:22	70:4 100:13	142:21	55:7
103:10	forever 173:4	69:2 116:25	G	94:16	106:12,13	144:13	grant 18:3
focuses 21:15	forge 20:6	150:21,25	Gaia 93:23	101:22	107:5 108:3	146:15	45:5,7,7
159:24	form 20:17	157:23	gain 11:10	113:8	134:6	155:7,7,20	46:2,4
focusing 83:5	formal 77:20	159:13	gained 88:5	118:25	141:18	160:23	49:23 50:22
98:10	99:4	185:7 186:7	gains 92:24	120:6	143:10	161:8,10,13	52:15
folks 41:17	formation	188:11	garbage 17:8	134:16	145:18	162:23	115:17
47:24 55:10	27:3	203:15	41:16,21	170:6	154:6	163:24	116:2
124:5	former 100:4	fresh 51:3	42:4 44:22	175:11	164:17,22	164:17	grants 45:16
125:19	102:14	front 33:4	55:8 205:17	185:4 197:8	169:10	174:9	grateful 86:9
126:15	168:12	35:6 36:7	garden 50:19	Girl 175:21	191:19,21	175:14	118:24
follow 58:17	178:10	57:22 59:17	121:22	give 28:10	201:15	189:3	great 47:18
131:16	forward 3:9	59:21 98:19	gardens	31:2 32:14	goal 15:8	195:23	60:24 65:11
195:25	4:2 78:6	fronts 123:17	128:5	46:16 49:6	66:12,13	196:14	77:10 78:18

Committee on the Environment
October 15, 2020

Page 11

84:17 95:18	148:18	174:20	health 2:8	147:13,23	73:3 96:5	hold 188:12	120:15
97:8 98:17	149:9,10	186:13	16:3 91:3	185:6 186:6	129:12	holding	181:12
101:14,23	158:15	handled	120:23	195:13	helping 13:13	150:15	housing
102:10	163:12	149:5	133:8	202:9	21:13 65:20	holistically	100:7,10
109:18	189:23	handles	152:22	207:12,17	125:4 166:5	68:17	hub 97:7
111:22	192:18	200:20	153:2	208:6,11	176:15	Holmesburg	103:11
112:11	200:12	handwritten	185:16,24	hearings 1:17	helps 30:6	116:16	hubs 103:5
124:4	groups 39:17	30:10	190:17,22	2:11,13	31:6 42:9	121:4	huge 39:13
158:14	171:18	hanging	199:12	4:18 187:8	83:16 87:21	home 33:4	39:13,18
160:7 163:4	grow 25:4	146:21	206:19	188:13	hey 33:22	42:5 53:24	41:17 57:7
164:4	101:10	happen 63:7	healthy 6:25	heart 39:10	70:24	54:5 71:17	62:11 64:5
173:14	103:18	92:17	84:24	181:7 187:4	HGTV	125:7	133:9
190:4	104:20	124:11	121:23	200:12	100:21	127:23	139:23
196:11	115:10	131:20	200:16	204:17	Hi 161:2	128:3	141:16
208:20	121:23	142:10	hear 4:24	heated 17:10	178:5	165:21	human 91:3
greater 75:11	growing	145:19	37:9 90:18	heavily 10:20	189:15	202:4	197:21
84:13	82:19 90:24	happening	98:15	40:12	hierarchy	homeless	human-cen...
greatest	141:21	52:19 55:5	119:25	held 54:14	17:8 75:18	104:4,6	80:9
157:12	187:22	67:19 94:21	130:19,21	141:11	75:24	homes 100:15	Humans
greatly 44:9	growth 6:9	102:13	130:23	Helen 1:13	131:18	100:17	149:11
green 1:12	80:10 83:5	170:19	131:6,9	27:12	150:11	153:13	hundred
3:22,23	127:20	173:3	134:10,13	Hello 148:15	high 64:16	201:19	30:18
50:23 79:20	Grubhub	180:21	147:16	193:9	97:11 99:21	honest 194:5	hundreds
98:21,25	153:19	182:19	156:21	help 6:24	high-quality	honestly	30:22
101:13	guess 28:12	203:25	169:24	9:18 16:22	84:7	126:7	hurts 171:25
104:12	97:7 176:24	happens	170:2	20:17 27:20	higher 74:20	honor 203:16	husband
106:17,19	177:5	206:25,25	175:12	27:22 44:9	155:7	hope 6:19,21	188:22,24
106:23,25	guide 79:13	happy 3:19	177:25	60:15 64:5	186:12	49:20 160:3	hydrants
130:6	158:3	19:10 23:8	179:7,9	70:7 71:2	192:12	160:21	154:5,11
154:19	guidelines	29:19 34:12	180:11	72:20 74:17	highest 84:20	187:8	174:18
186:5	56:13	78:24 86:13	189:10,12	83:25 85:21	92:8 102:25	hoped 29:15	hygienically
greened	guilty 59:22	90:12 119:3	191:20	95:10 98:7	192:3	Hopefully	93:14
152:25	gun 153:3	130:10	193:6	98:13	204:15,16	46:10	I
greenhouse	guys 33:23	140:6	194:18	103:21	highlight	hoping 45:24	idea 81:4
186:10	51:18,18	hard 23:18	195:13	104:6	41:6	183:25	87:6,15
greening	63:16 65:24	64:8 71:9	196:21	111:18	Hill 206:9	Horticultural	88:4 109:13
202:17	66:3	102:5,22	heard 23:19	112:2	hire 64:18	177:5	ideas 80:22
Greenworks	Gym 1:13	harder	41:17 44:3	114:22	102:3	host 81:2	86:11 95:4
113:19	27:12,14	148:22	85:5 125:14	123:25	104:22	94:13	96:12 119:3
116:13	H	hardest 61:8	161:7	125:10	hired 63:20	hosting 167:5	155:23
grinds 103:18	habitats	harmful	175:13,16	152:2	64:2,21	hot 24:7	156:11
grocery	187:24	121:20	205:18	157:19	104:5	hotspot 41:2	identified
93:11	habits 192:14	Hartville	hearing 2:6	166:12,14	142:15	hour 2:19	6:11 82:2
181:24	half 73:18	193:13	2:15,17 3:9	177:17	143:4	120:22	identify
ground 52:24	132:23	194:24	4:2,10,11	181:13	historic 91:10	hourly 65:3,4	94:19 96:21
181:21	135:25	Hastings	5:4,5 6:12	194:2	100:15	hours 17:20	105:5
191:2	189:19	148:6 178:2	26:8 44:2	195:14	Historical	24:8 184:15	130:16
groundwork	190:10	178:5,6	47:5 81:16	196:15	189:18	housebound	134:8
94:18	handing	179:10	86:11 99:9	207:6	history 135:2	198:17	166:24
117:10	162:9	hauler 56:17	112:19,19	helped 9:9	hit 15:21 61:8	household	169:19
group 80:19	handle 122:9	57:6	119:2 120:3	24:17 29:14	123:9	12:13	175:7 178:2
80:22 81:18	127:10	hazardous	130:7	116:17	127:21	198:17	180:12
82:9 110:4	150:15	12:13	145:23	138:4 158:5	159:9	households	184:19
131:12		head 102:12	146:18	helpful 47:20	hitting 75:23	93:13	

Committee on the Environment
October 15, 2020

Page 12

189:13	205:19	impossible	139:7 169:2	indisparative	27:5 46:5	114:13	investigate
193:7	206:18	191:10	171:18,23	198:25	48:7 69:21	Instructions	1:17 4:19
196:22	impacts 5:25	192:17	186:11	individually	89:21 90:4	2:11	18:5 113:13
200:5	8:15 21:6	improve	199:7	153:15	114:15	integrated	investigation
identifying	22:20 61:20	11:10	include 20:13	individuals	118:6	79:25	59:5
122:5	69:7 73:23	114:21	22:8,21	35:15 40:23	injuries	Intelligencer	investment
ignores	91:2 185:12	improved	83:21 93:6	80:20	17:18	2:17	50:9 74:12
197:25	185:19	42:10	117:18	101:17	injustice	intended	136:24
Ikeas 89:25	190:22	improving	155:24	102:4,21	121:9	79:13	153:5
illegal 10:15	205:22,23	17:16 80:10	included 2:14	104:5 108:3	inmates	intensive	investments
31:25 32:21	205:23,24	in-house	93:22	119:25	116:18	88:20	46:13 69:16
33:23 34:15	impeded	26:11 30:16	including	120:21	innovate	intention	91:11 92:6
40:25 44:15	198:18	30:25	13:22 95:5	129:17,20	192:5	117:6	137:3
45:14 55:19	implement	164:24	114:11	196:11	innovation	interact	invisible
56:2 57:12	10:10 27:4	inaudible	120:23	industrial	78:23 79:14	19:25	185:12
61:20 62:11	30:23 33:17	21:16	171:17	83:4	81:12 97:3	interconne...	invited 5:2
82:5 85:4	42:14 44:13	121:25	179:21	industries	103:11,22	198:3	141:13
149:2	51:16 57:4	200:19	inclusion	143:8	118:10	interest 50:6	involve 13:8
illness 198:19	58:7 107:17	incentive	99:10,13	181:22	122:22	interested	18:24
image 3:3	108:19	125:17	101:3	203:15	innovative	49:24 50:3	involved
97:24	116:10	incentives	incomplete	industry 96:8	86:4 90:8	127:23	133:12
imagine 93:8	123:4	92:19	173:22	125:15	115:3	164:15	irks 204:10
154:3	implement...	incentivize	incorporate	143:7,23	118:20	203:3	iron 84:22
imagined	66:23 80:6	39:2 40:15	95:22	145:7,13	159:19	interests	issue 24:18
24:14	81:7 123:20	107:14	183:14	inevitable	192:15	80:25	32:15 81:19
immediate	136:23	118:19	increase 8:16	91:9,15	Inquirer 2:16	internal	93:16 94:2
63:15 64:10	implemented	166:4	9:2,8 18:10	information	inquiry 99:4	76:16 80:21	109:23
132:22	9:6 57:3	incentivizing	93:17	15:13 16:25	insects 16:2	internally	136:4
immediately	111:16	6:12 86:3	124:16	28:11 30:12	insecure	182:10	164:21
64:9 66:4	114:9	incidence	127:22	38:20,25	115:7	international	188:7
immensely	163:10	204:16	128:6	55:24 59:4	insecurity	131:19	190:19
20:4	184:16	incidentally	135:22	72:5 80:2	117:16	157:7	issued 81:2
impact 15:2	implementi...	206:20	136:13	155:13	inside 118:6	intersection	116:2
17:11 35:8	79:9 83:8	incidents	141:8 153:4	informative	insidious	190:16	issues 21:21
39:11,13,20	113:19	8:19	153:5 154:8	167:5	185:11	interview	21:22 59:2
45:20 62:21	150:4 160:9	incinerated	201:6	informed	insight 84:4	142:5	85:4 105:17
64:11 65:19	191:7	149:15	increased	135:3	insights 84:7	interviewed	106:11
69:25 71:21	import 73:19	incineration	8:21,25	infrastruct...	94:12	135:7	134:23,25
95:19	importance	131:25	15:19 16:5	48:24 49:21	inspiration	introduce	153:2
157:22	44:23 54:7	168:17	22:21,24	52:21 53:7	128:14	199:18	160:13
158:17	important	171:12,13	45:11	68:6 87:19	inspire 87:8	introduced	175:13
187:13	33:17 35:12	172:6 187:5	184:15	91:14 93:7	inspires	8:2 149:12	195:15
204:24,25	40:3 42:19	190:14	198:18	161:16	160:4	154:23	196:2,5
205:11	43:4 45:17	incinerator	increases	inherent 97:6	inspiring	intuitively	200:14,15
impacted	48:4 109:8	139:10	85:10	initial 79:13	122:20	174:6	item 151:6
22:12 61:5	142:22	169:4	increasing	initially 52:5	installed	inundated	items 93:10
73:15	162:14,22	186:22,24	201:8	110:25	41:16,23	28:14	150:23
110:12	164:5 165:4	188:20	increasingly	initiated 69:8	42:4	inundating	152:9
165:12	199:25	189:4,20,24	90:2	initiative	instance	153:22	158:12
impactful	200:17	190:23	Index 26:12	72:20 94:24	135:18	inventive	iteration
159:19	201:5	204:6 205:2	62:4 163:6	99:10 118:4	instituted	205:7,16	119:12
impacting	importantly	206:7	indicate 2:24	187:23	15:15	invest 46:4	
198:25	89:23 122:2	incinerators	indicated	initiatives	institutions	invested	
204:14	162:17	132:5,10	24:22 87:13	10:2 21:7	87:9 98:4	91:24 112:8	
							J
							JAMA

Committee on the Environment
October 15, 2020

Page 13

152:20	1:10 4:5	103:14	known	179:25	leap 159:23	185:17	44:6,9,14
Jamie 1:12	170:6	109:8,13,16	115:19	185:21	learn 6:18	life-threate...	44:16 48:7
3:16	Kathryn 26:6	110:3,22	178:13	190:12	94:12 158:4	185:23	58:21 61:18
January 82:8	119:19	117:3	knows 161:22	large-scale	learned 32:25	lifelong 178:6	61:20 62:4
Jersey 143:4	KBIs 165:13	124:15	kudos 23:16	123:20	123:14	lift 54:9	79:5 81:25
143:6	keep 32:24	127:6	Kyle 7:11 8:7	largely 81:23	124:14	light 44:22	113:14,24
Jim 148:4	39:18 40:7	145:19	14:13,15	larger 33:5	143:13	lights 12:10	114:7,15
160:24	40:10,16	158:8	45:7 51:18	34:7 73:3	158:13	12:10 176:9	131:15
161:3	65:17,17	172:25	66:19 67:14	108:22	200:23	177:11	149:3 152:2
job 6:10	70:5 107:24	173:25	68:23 82:11	124:10	learning	limestone	152:8,12,14
47:18 102:3	121:17	194:3		largest 169:5	99:14	84:21	152:18
103:3	129:10,11	Knapp 26:4	L	171:13	leave 130:3	limit 147:14	154:12
105:10	154:15	85:19	L 209:15	186:25	201:23	limited	155:25
106:5,6	155:7	112:24	labor 23:3	204:7	leaves 132:16	107:25	158:17
117:24	175:14	113:5,7,10	88:20 151:4	lastly 90:17	led 16:7	170:8	160:12
144:8	202:9	121:12	laborers 9:7	107:15	24:25 103:8	limits 93:18	161:15,25
176:13	keeping	123:7	lack 61:9	late 16:12	left 36:17,18	93:20	161:25
jobs 86:5	34:12	125:13	102:11	162:12	173:22	line 77:13,19	162:7 163:5
88:17,24	120:16	knew 195:5	lacks 91:7	launch 29:14	198:5	99:3 106:25	163:6,8
89:6,7 92:5	148:21	know 24:13	laid 27:3	79:20	Legal 2:16	119:23	165:12
97:2 102:10	155:24	28:20 29:5	82:18	116:21	legislation	126:14	166:14,15
122:2,14	keeps 92:6	29:16 32:8	land 116:19	158:21	42:20 56:25	205:9	175:13
139:24	102:24	36:9,24	122:6	159:19	63:6 119:12	linear 87:13	197:18
150:2 172:2	158:11	39:9 40:9	landfill 51:11	161:19	151:25	lines 168:14	200:15
join 8:9	207:3	41:8 44:19	56:20,24	launched	154:18	link 93:22	littered
joined 8:4	Kendra 1:11	45:20 49:13	75:21	9:13 16:20	178:14	linked 109:24	152:21
joining 5:21	3:11 99:3	55:15 56:6	115:13	69:23 79:10	legislative	109:24,25	155:18
6:14 27:14	Kenney	56:13 66:14	120:18	82:7 124:18	93:20	110:2	little 36:13
203:4	79:12 80:23	76:15 81:24	121:19	launching	let's 70:24	Lisa 148:6	38:10 39:3
207:11,17	Kenney's	84:12,23,25	139:9,12	80:15	182:17	177:25	41:14 44:15
joking 99:5	135:19	104:14	156:2	113:23	206:6	178:5 180:6	69:22
Jones 54:11	Kensington	115:7	168:24	158:8 166:2	letter 171:15	list 57:6	160:21
judge 59:18	24:6	125:13	landfilling	law 2:3 100:5	letting 203:24	64:13	182:17
59:21	kept 168:8	126:5,13	168:20	Lawncrest	level 64:24	147:25	live 35:10
Judith 148:9	188:21	133:19	190:15	121:14	76:8 182:6	162:5	54:16 63:9
200:4,4	Kevin 100:5	134:2	landfills	laws 178:17	levels 65:9	202:25	155:19
202:23	100:8 101:8	137:25	11:15 13:18	201:5	74:20	203:10	171:18
Judy 105:15	key 15:16	140:18	67:12 89:3	lay 117:9	leverage	listen 36:24	193:10
jump 66:20	40:18 58:6	152:3,5	120:17	lead 38:21	164:20	99:8	203:14
jump-start	67:23 69:4	155:12	121:18	87:2 149:21	leveraged	listening	lived 153:10
95:10	70:21 80:13	164:3	132:2,7,10	187:8	80:18 92:5	99:16	175:17
178:17	82:4 92:16	167:20	139:15	206:16	levers 165:15	174:22	lives 190:22
190:19	94:19 98:3	170:18,18	158:12	leader 21:12	Lewis 7:12	179:15	203:14
jump-starti...	113:22	171:24	171:19	146:11	8:7 14:13	196:8	206:18
95:19	117:23	173:6 174:6	186:12	148:17	14:14,16	lists 173:9	living 76:7
justice 121:2	139:22	185:11	187:13	175:22	23:18 74:25	literally	152:20
131:11	KGR 3:24	194:5,12,23	landscape	leaders 20:7	78:2	140:22	165:20,21
189:22	kids 195:3	195:17	109:8	157:5	Library	183:16	203:13,22
200:14	killing 187:5	196:6 201:5	large 22:10	leadership	157:24	187:5	living-wage
202:12	kind 25:6,25	202:11,13	52:11 55:21	159:22	license 57:12	litter 1:17	92:4 122:2
	44:5 55:12	knowledge	108:20	leading	lids 44:8	4:20 8:10	122:14
K	58:12 74:3	78:25 87:10	109:15	187:18	162:10	10:3 14:20	load 146:24
K&A 194:9	98:2 102:2	112:16	122:9 128:6	leads 185:17	life 80:11	16:2 26:10	147:6
Katherine	102:8	138:2	158:15	leaf 51:23	162:2 181:7	26:12 27:2	loads 13:9

Committee on the Environment
October 15, 2020

Page 14

90:9 92:7	92:20	142:14	lowering	134:24	164:12	140:13	136:14
92:10 93:6	110:18	lost 47:13	117:6	168:18	marketplace	146:20	145:3
106:8	117:10	74:5,7	lowest 92:25	management	145:4	149:17	meeting 2:9
107:11	168:10	127:13	lunchroom	6:8,23 9:18	markets	maximum	5:2,8 33:20
111:18,19	longer 31:9	142:17	50:25	12:22 13:5	67:24	25:17	160:19
118:20	52:7 111:3	173:16	lure 49:22	14:5 15:7	145:14,16	Mayfield	meetings
149:25	look 4:2	lot 6:15 35:4	Lynn 148:5	15:11 17:7	mass 17:10	203:16,20	79:23
150:25	23:25 25:15	36:16 37:24	169:18,23	18:24 22:2	massive	203:21	member
158:6,9	29:23 31:11	47:24 51:2	170:5	52:22 70:18	96:24	207:21	27:12
159:15	31:11 38:11	52:18,20		114:22	Master's	Mayor 79:12	130:11
166:12	43:20 61:19	61:10 71:16	M	117:11,11	157:10	135:19	137:24
167:8	65:10 68:18	72:18 74:5	ma'am	118:16	matching	mayors	151:21
182:17	70:9 76:4	74:7,18,18	196:20	125:22	120:24	110:20,21	156:9
locally 73:14	76:10,18,24	94:8 100:10	MacArthur	126:19	material	McDonald's	170:13
117:23	76:25 78:6	102:3 103:3	82:24 87:3	135:14,16	34:20 48:19	195:5	180:8
180:25	95:15,24	105:16	87:4 107:8	136:20,22	53:5 56:18	McGrath	181:12
187:18	97:16,24	106:12	184:8	137:11	56:19 58:5	7:11 8:6	184:22
located 199:8	102:7 106:7	109:4,11,18	machinery	138:21	62:24 67:11	11:24 12:3	197:11
200:12	122:15	110:8,13,16	168:3	190:9	67:22,25	20:10 23:17	member-ba...
location 29:7	124:24	111:15	machines	192:19	70:18 75:10	26:16 30:20	183:3,17
57:9 62:17	130:9	127:14	174:5	manager	75:13 83:14	42:16 45:6	members
locations	135:18	128:22	Madam 3:8	100:9	84:5 92:6	51:22 68:23	2:23 5:11
33:3,19	140:10,17	129:2	3:13,18	103:25	106:11	69:3 77:25	5:15 7:21
34:10,13	140:17	131:22	35:23 53:14	104:5	118:15	mean 32:8	19:15 20:2
48:11 61:4	142:20	142:18	53:19,20	managers	187:15	45:16 60:8	23:25 24:22
61:10,13,15	146:5	143:14	55:2 77:18	21:18 30:7	materials	60:18	78:20 86:25
Locust 34:25	149:18	156:5	magic 207:2	manages	15:7 17:14	131:25	113:9
log 147:22	150:25	161:16	magnified	22:17	74:9 83:19	194:11	134:17
164:17	179:23	165:22	33:5	managing	83:21 84:11	meaning	140:20
Logan 62:14	183:5 189:5	174:22	magnitude	6:13 117:22	84:19,20	163:7	164:25
63:10,12	looked 60:7	181:13	59:8	206:4	85:3 87:18	means 30:9	169:19
148:4	62:7 95:22	184:6	mail 23:22	Manayunk	117:23	48:24 60:15	180:22
151:16,20	141:2 145:2	188:23	mailers 162:9	206:10	143:10,14	64:14 76:14	181:14
156:7	164:10	190:4	main 107:9	mandate	143:17,24	76:17 115:8	185:5 197:9
174:17	looking 3:9	194:10	maintenance	139:20	145:3,6,8	139:6	204:11
logged	10:25 14:5	200:25	121:14	mandatory	170:23	144:11	208:7
146:18	52:7 70:14	204:18	major 10:16	143:19,20	matter 34:5	150:17	mental 153:2
logging	72:24 75:4	lots 165:21	17:10 33:24	manual 30:9	60:24	151:5	mentality
164:15	75:8,17,19	174:2 179:5	66:23	manually	103:17	165:20	143:25
logical	76:2 83:2	love 95:24	majority	31:9	132:12	209:23	mentally
154:10	90:3 97:21	105:10	204:8	manufactu...	176:2 199:5	measure 21:6	177:18
logistical	98:2 107:13	164:21	makeup	93:15	199:10	21:17	mention
84:2	108:14	175:24	20:18	105:22,24	206:17	measureme...	101:21
London 89:6	126:13	204:9	making 63:6	manufactu...	209:7	165:13	173:24
long 17:15	127:15	Lovell 119:19	85:13 99:11	74:4	matters 33:8	mechanism	mentioned
18:24 29:10	128:5	low 176:25	108:23	mapped	115:20	95:16	26:16 31:24
30:2,3,5	133:21	204:16	110:3	83:24	171:4	Media 150:25	31:25 37:23
87:16 95:7	144:3,12	low-cost	man 100:24	market 18:17	Maurice	151:2	59:2 72:16
110:23	looks 145:10	103:12	manage 9:20	20:25 74:7	129:25	Meenal 148:3	73:16 82:11
185:3	160:11	low-hanging	11:13 13:14	175:19	130:16,19	148:12,16	123:6 125:6
206:20	161:20	85:20	17:13 29:12	176:4 182:6	130:21,23	151:10	139:17
long-awaited	Loop 18:4	lower 105:25	31:7 69:11	marketing	130:25	152:7	162:2
150:4	Los 33:21,25	114:23	71:19 81:6	157:16	134:6,8	174:19	163:24
long-term	62:18	117:15	87:18	162:8	137:17	meet 19:25	164:2

Committee on the Environment
October 15, 2020

Page 15

186:17,20 mentioning 188:19 189:2 messaging 18:6 76:2 76:18,24 191:9 met 104:14 Metabolic 82:12 83:8 118:13 metals 83:21 methane 115:12 121:20 methods 170:23 174:16 MICHELE 209:15 micro 188:5 Microsoft 1:6 2:10 5:15 Midatlantic 13:3 115:21 middle 70:23 midst 67:17 Mike 130:2 131:10 138:9 146:20 189:22 190:12 mile 189:20 miles 206:20 MilkCrate 157:18,18 161:6,8 million 46:3 92:5 120:16 121:17 152:17 199:11 millions 49:9 49:18 mind 14:25 139:5 mindful 182:3 minds 35:15 mine 175:14 minerals 83:22	minimize 11:14 13:16 84:10 86:2 118:18 minimizing 114:10,25 118:14 131:25 minimum 9:3 120:22 138:19 167:13 mining 83:9 83:11,12,16 85:18 94:7 Minneapolis 92:2 111:12 Minnesota 91:18 minutes 129:12 147:15 missed 28:15 37:13 164:9 164:11 mission 91:16 mission-ali... 91:23 92:15 111:25 mission-dri... 179:16,24 mitigate 15:25 17:16 60:21 68:20 121:9 195:15 mitigation 181:19 mixed 168:7 mobile 157:19 164:6 mobilize 158:7 model 72:7 72:12 83:4 91:7 122:3 122:8 models 182:8 modern 159:25 modernize 27:20 121:8 modificatio...	178:14 modified 67:16 mom 57:16 moment 54:8 90:6 123:23 126:15 191:16 money 52:15 53:5 152:19 159:2 162:25 164:25 165:25 205:9 monitor 9:14 10:20 30:14 33:19 63:5 monitored 34:9 month 12:25 monthly 15:16 months 14:7 32:10 65:6 159:6 moons 47:12 Morgan 148:4 156:13,17 156:24 160:17 161:7 162:2 164:11 morning 11:25 176:23 mortality 185:18 motivate 158:22 motivated 103:24 motivates 160:4 mounds 10:22 36:7 36:7 Mount 148:17 197:12 mouth 30:8 move 54:23 77:14 78:10	80:5 87:13 92:14 93:2 98:13 107:5 107:21 111:25 112:21 119:23,24 126:24 129:9 130:15,24 133:6 138:4 138:9,14 146:16 159:10 160:23 172:14 203:6 moved 157:9 movement 181:15 moving 132:24 146:22 155:21 178:11,13 183:2 MRF 15:8 MSW 13:3,6 13:10 19:17 20:11 21:12 70:6 mulch 50:18 188:6 mulching 188:4 multi-natio... 122:13 multi-year 118:4 multiple 26:20 29:19 71:4 120:25 187:12 municipal 10:5 18:17 21:13 114:12,17 114:19 117:15 178:25 municipalit... 16:13,16 143:5 153:10	MURPHY 209:15 mushrooms 87:25 103:18 mute 191:20 191:21 N name 2:25 7:15,22 12:2 14:15 19:16 78:20 86:25 131:5 131:10 148:13,16 151:17 156:24 161:3 167:3 170:4 175:10 180:15 185:6 191:3 193:10 197:10 203:9,18,20 208:2 names 64:19 Nancy 141:2 141:17 nation 8:13 73:20 169:6 192:4 nation's 171:13 national 21:12 73:16 73:24 131:12 158:6 native 187:24 natural 18:12 68:20 115:18 nature 149:8 149:19 197:20 near 39:10 152:21 175:18 194:8 nearby 179:4 nearly 189:25 necessarily	76:9,22 necessary 25:3 need 11:15 33:19 37:2 37:3 42:25 44:11 47:6 51:15 63:4 63:5,5 68:14,18 70:12 76:4 76:18 91:20 93:2 97:16 101:19 102:4 105:20 126:3 133:10 138:23 139:7 140:16 142:20 143:14 144:15 145:8,13 146:3,4,12 146:16,25 149:7,18 150:14 152:9 154:15 162:22 170:22 174:11,13 174:16,17 175:25 176:7,9 177:11,15 178:15 179:12 180:2 182:21 183:9,11 189:2 192:5 192:9 198:22 199:17 201:10,15 needed 68:5 92:18 123:21 150:15 needle 138:4 needles	193:19,20 needs 41:11 80:24 83:25 123:10 178:21 190:24 201:13 negative 73:23 152:22 negatively 165:12 negotiating 15:3 neighborho... 35:9 39:15 150:22 197:13 neighborho... 28:25 37:25 38:13 40:17 40:20 41:9 42:23 44:10 46:21 48:9 62:8 116:7 124:5 152:13,21 152:24 153:12 155:12 159:3 165:11 184:2 199:2 199:9 neighbors 40:22 170:11 187:6 net 89:6 network 10:7 40:22 116:5 124:4,13 131:12 189:22 never 150:18 151:5 166:17 new 9:13,20 11:10 16:9 18:15 25:15 27:19,19 42:21,24 67:17 80:12 84:10 85:15	86:11 89:6 89:7,18 93:8 105:12 139:4 141:19 143:4,6 145:14,21 146:4 150:5 159:9,23 160:6 178:14,16 183:3 192:15 news 2:16 45:4 64:14 136:25 nitrogen 132:14 noise 191:14 191:18 non-profit 87:5 91:17 105:12,13 157:20 normal 9:11 155:4 normally 64:16 north 16:15 34:25 84:15 89:20 103:7 193:10,14 194:25 200:12 201:16 202:14 Northeast 12:20 167:4 Northwest 184:13 notably 8:16 notation 175:2 note 2:19 5:13 54:17 184:14 noted 20:10 26:6 118:9 184:7 notes 30:10 112:17 169:16 209:6 noteworthy
---	--	---	---	--	--	---	--

Committee on the Environment
October 15, 2020

Page 16

171:21 notice 89:17 noticeable 127:6 notices 2:15 November 13:6 16:13 73:7 NRDC 115:19 123:11 nuisance 139:15 number 10:18 17:6 20:2,13 25:24 29:24 42:11 56:17 64:6 84:17 142:7 151:25 154:8 155:9 169:7 186:25 195:20 206:5 numerous 122:10 159:20	offended 193:21 offer 2:12 6:15 7:24 23:16 113:12 120:22 128:2 133:24 183:5 offered 54:9 offering 163:18 offers 85:11 94:8 95:3 office 9:25 26:2 32:9 39:8 52:16 54:2 59:20 72:3 78:23 96:23 100:7 104:17 113:11,17 113:21,22 114:2 118:10 119:8 122:24 123:4 125:2 125:8 140:6 140:19 144:17 Office's 94:22 officers 201:10,15 offices 71:13 official 131:16 officials 21:19 offline 207:15 offset 65:11 126:20 oftentimes 112:4 oh 206:6 OIT 31:3 OIT's 17:22 okay 33:3 34:23 35:5 41:4 106:21 128:21 130:4 131:7	147:4,20 156:19,23 170:4 173:9 173:10 179:10,11 196:18 201:7,22 old 38:4 55:10 121:13 192:14 older 42:23 100:14 oldest 181:11 on-time 136:5 once 58:13 115:12 121:16 127:21 144:16 150:19 one-page 16:25 one-year 139:2,3 ones 57:18,24 61:8 203:3 ongoing 109:10 online 74:16 Ontario 193:13 194:25 open 61:11 67:23 71:14 71:18 122:8 127:13 179:22 opening 7:5 opens 64:16 operate 117:7 operated 116:23 operates 91:19 operating 17:19 71:13 71:15 137:4 operation 18:22 52:8 52:14,17 operational 13:25 14:3	14:4 21:17 21:24 22:3 121:17 operational... 11:21 31:17 operations 8:21 9:10 11:10 14:2 14:3 21:11 21:18 72:25 114:12 187:17 opinions 208:14 opportunities 66:16 79:4 85:15 98:5 99:19,22 101:4,6 103:3 106:5 111:19 121:5 122:11 123:16 157:13 177:8 190:9 opportunity 8:8 14:18 19:8,19 20:9 23:6 24:4 25:9 31:17 74:24 83:19 85:12 88:7 90:12 90:23 93:24 95:9,18 96:17,25 97:9 100:25 101:16 102:3 105:19 106:3 114:3 126:16 131:2 134:18 146:24 168:11 169:12 197:16 200:8 202:20 opposed 68:2 opted 163:14 optimization	9:21 30:16 optimize 21:13 option 165:8 183:5 options 139:2 139:3 order 4:11 5:17 25:3 64:20 67:7 68:19 75:24 79:11 144:14 145:19 178:15 organic 48:19 126:18 organics 6:13 66:23 67:10 70:15,25 75:9 organization 21:25 organizatio... 158:7 171:16 172:5 organize 172:3 organized 197:22 organizing 189:21 orientation 144:10,21 144:25 145:10 original 119:12 ornate 100:16 OTIS 26:4 Ott 119:19 outcomes 61:21 112:8 outgrown 151:6 outlined 131:18 output 88:16 outputs 187:21 outreach 46:20	outside 30:21 43:17,19 49:3 61:24 118:7 161:23 179:3,13 201:19 outside-the... 155:23 overall 74:4 75:18 114:25 overburde... 152:14 overseas 68:2 74:9 overtime 17:17 65:12 65:13 overview 11:20 66:20 owner 104:19 owners 125:5 125:11 ownership 40:4 oxides 132:14	165:20 185:20 197:19 198:14,21 198:23,24 199:13 pandemic-i... 150:7 panel 7:7 54:23 77:14 78:10,11 85:6 86:17 86:19 90:17 99:16 107:22,24 112:21,23 119:16,24 129:9,16,24 130:15 146:16,23 panelists 20:3 99:17 100:2 119:16 129:10,15 147:25 panels 167:6 208:12 panic 150:7 paper 167:22 167:25 168:2,5 174:8 paragraphs 173:18 parcels 122:6 Pardon 156:17 191:16 park 51:24 51:25 52:2 69:20 167:12 177:8,9 PADEP 186:9 paid 43:20 56:9 57:21 64:24 161:24 198:10 205:15 pandemic 79:7 137:10 150:8 159:9	115:19 117:24 137:10,18 148:24 149:11 151:12,12 173:19 175:20,25 185:21 187:19 188:18 194:13 197:2 part-time 120:21 participants 5:5 157:21 participate 99:9 162:24 participated 17:22 participation 40:13 75:12 79:22 94:23 208:13 particular 77:2 196:2 particularly 38:13 76:5 93:16 128:24 140:10 174:25 179:4 184:11 particulate 132:12 199:5,10 206:17 partner 40:15 90:4 98:17 113:22 190:24 partnered 118:9 partnering 142:25 157:23 partners 18:4 92:15,19 98:3 111:25 114:20 partnership
--	--	--	--	--	--	---	--

Committee on the Environment
October 15, 2020

Page 17

18:3 32:13	188:17	128:7 206:9	150:20	118:16	199:20	piloting	136:22
72:10 73:8	penalty 59:8	206:18	187:19	120:15	PHL Counc...	81:12	158:21
114:19	Pennsylvania	percent 8:16	personnel	121:3	2:18	117:18	172:25
117:5	1:6 105:15	8:24 9:2	135:5	131:13	Phoenix	118:14	planet 153:23
121:11	117:4 132:4	15:5 66:25	perspective	133:10	89:19	pilots 100:21	planned 21:6
125:8 145:9	134:20	76:6 89:11	8:25 61:16	134:21	phone 23:19	116:23	163:11
172:10	151:2	115:5 132:5	99:18	137:24	26:5,7	123:8	planner
partnerships	people 28:16	132:7,23	149:20	138:11,14	28:14 87:22	124:20	178:7,11
80:18 92:22	28:19 29:5	133:5	PES 199:6	141:22	163:3 164:8	pinpoint 29:7	planners
parts 35:3	29:9 35:5,9	135:22,25	Peter 148:8	154:5	202:6	60:8	149:18
69:14	36:18,24	136:12,14	196:21,24	156:25	phonebooks	pioneer	planning 8:5
100:16	37:11 38:3	136:16	197:5,10	157:6,9	154:21	184:12	11:19 12:3
102:24	39:15 43:9	137:4	199:24	160:18	PHS 202:16	pioneering	142:13,16
pass 154:18	43:11 44:4	150:16	petitioned	167:4	physical	89:20	144:18,19
172:16	47:10 48:9	152:25	171:14	168:25	99:13 198:2	pipeline	149:22
174:12	49:24 55:15	153:3	ph 96:22	170:10,15	pick 62:23,24	80:18 97:14	178:12
199:18	60:9 61:12	168:21,23	PHA 177:5	175:18	158:23	97:18	plans 135:21
passed 42:20	61:14 64:21	186:11,23	201:12	177:5,23	163:5	pipes 154:8	178:17,18
198:23	69:9 75:5	percentage	Phil 7:12	181:4,11	201:21	pitch 17:22	planted 85:17
201:6	76:22 88:8	171:2	19:9,12,16	183:4 184:2	picked 36:21	80:15,19	159:4
passion	99:20,23	perfect 8:20	30:19 51:17	184:13	149:4	81:3,17	Plants 170:12
157:12,16	101:25	perfectly	68:22 72:17	192:3	152:10	97:22	plastic 150:5
path 9:11	103:23	150:23	74:23	193:11,14	167:19	118:11	150:13,17
155:4	110:25	perform	Philadelphia	194:25	176:4	pivot 107:15	153:23
patience 19:3	127:22,23	20:12	1:2,6,18	197:13	picks 158:10	pivoted	154:2,25
147:12,18	128:14,16	performance	4:22 11:2	199:8	PickupPHL	102:18	171:7
147:21	128:18	21:18	19:3 20:5	200:13	9:13,16	pivoting	173:23,24
203:8	132:25	performed	22:9 26:13	201:16	27:19 28:2	103:2	174:3
patient 37:3	140:24	22:25	26:19 34:3	202:15	28:4 163:24	place 26:24	181:15
patterns	141:14,24	period 195:2	35:2 40:21	203:25	167:16	38:17 40:6	182:14
60:25	143:4 155:9	periods 30:14	44:7 45:22	204:14	pictures	61:24 68:19	192:8
patting	155:12,15	permanent	46:12,20	205:5,13,15	176:14	73:17 93:4	plastics 88:2
164:22	155:20	63:24	47:7,23	206:3 207:2	piece 44:16	101:18	149:13,13
Paul 92:2	158:15	permanently	48:13,16	Philadelphi...	pile 38:4	112:11	187:25
pause 7:4	163:2,3,5	64:2	50:2,7,23	19:23 20:18	193:20	142:11	platform
111:2	163:13,19	permit 10:8	50:24 54:4	22:16 83:10	201:24	182:9,9	28:6 162:11
147:19	165:3,21,22	57:7,17	58:25 61:2	113:11	pilot 10:8	191:2	164:7,16,18
PavePHL	166:4,8,16	116:22	61:25 64:17	114:25	17:22,23	placed 34:13	165:8
31:5	167:20	117:4	65:20 72:13	116:4	41:25 45:14	57:2	platforms
pay 38:23	170:17	PermitPHL	73:22 76:5	134:23	48:8 52:3	places 106:13	31:5
47:22 57:19	172:22	31:5	78:22 79:7	135:16	70:25 80:15	127:11	play 39:17
57:24 63:23	173:6,17	permits 58:4	79:17 82:3	Philadelphi...	80:19 81:7	155:19	please 2:21
89:2 139:17	174:2,6	permitted	82:20 84:15	122:12	81:17 82:17	192:20	2:24,25
159:16	175:14	56:20	84:19 85:5	157:17	84:12 85:19	plaguing	4:14 7:7,15
paying	176:8,11,21	perpetuate	85:16,24	Philly 142:15	90:3 95:5	160:13	86:21 90:19
132:19	176:24,25	93:4	86:6 90:7	157:5,25	97:22 115:2	plan 9:6	96:3 105:5
190:20	177:6,14	person 38:24	91:20 93:9	169:4,8	115:23	25:21 51:15	105:6
peak 28:15	180:18	59:22	97:8 99:12	181:4 185:7	116:22	56:18 66:21	107:24
pedestrian	183:18	140:25	103:7	186:7	118:3,5,11	72:19 81:21	129:10
179:6	185:22	160:21	104:11	188:11	123:5	94:13 114:7	130:16,20
peels 103:17	194:6,6	161:4	105:13	190:10,24	161:20	118:4	130:22
Peg 148:7	195:3 202:3	personal	108:13	191:4,12	162:11	131:14,15	131:4 134:8
184:19,24	206:21	196:25	110:15	Philly's	piloted 41:21	131:21	147:14
185:6	people's	personally	117:12	190:10,21	43:4 48:17	132:16	148:13

Committee on the Environment
October 15, 2020

Page 18

156:13,20	142:8	133:15	premium	173:21	160:24	143:11	157:20
160:24	policymakers	172:15	52:23	Prison	166:25	198:4	158:8
166:24	87:9 88:6	186:19	presence	116:16	169:20	professional	162:20
169:19	pollutants	post-COVID	27:11 199:5	121:4,5	170:2 175:5	161:5	163:18
170:2 175:7	132:8	95:10	present 1:9	Prisons 52:9	175:8 178:3	profit 92:15	166:2
178:2	204:19	postcard 17:2	2:24 4:10	116:14	180:13,24	profitable	183:17
180:12	206:15	23:21	120:8	privacy 5:7	184:20	112:5	191:7
184:19	207:3	173:13	presented	private 43:16	189:14	profits 91:25	progress 19:5
189:13	polluter	174:25	128:12	43:22 56:16	191:24	program 8:7	172:8
191:21,24	169:8 187:2	postcards	presenters	92:6 116:24	193:8	10:6 12:14	prohibit
193:7	polluters	162:9	3:14	117:8	196:23	14:16 17:23	60:18
196:15	169:3	173:14	presenting	142:25	197:5 200:5	22:23 37:10	prohibited
200:5	polluting	potential	14:12 100:3	161:24	203:19	40:14 41:21	173:25
203:18	168:18	63:25 79:5	President	private-sec...	proceedings	42:15,17,19	prohibitive
pleased 98:15	203:15	101:5	157:2	94:11	209:4	46:24 48:8	65:16
pleasure 25:8	pollution	potentially	pretty 132:21	privilege	process 21:15	48:12,21	project 82:18
39:7 119:10	168:22	63:22 104:4	195:2	196:25	53:5 57:5	50:11,20,21	84:14 96:8
157:23	169:6	203:3	preventable	probably	58:17 59:25	52:3 53:24	115:20
plenty 126:10	171:24	pounds	91:15	30:18 36:5	60:2 63:22	54:9,14	116:22
155:23	178:25	120:16	preventing	154:20	67:25 70:18	65:8,18	projected
175:13	185:10,15	121:18	114:15	204:4	74:13 76:16	66:24 67:9	67:4
plug 53:23	185:23	153:7	prevention	problem 32:3	80:17 92:18	67:10,10,17	projects
point 11:17	186:3	poverty 76:7	166:14	32:16 33:4	95:6,24	80:16 81:9	20:13 80:6
22:14 57:9	190:23	152:13	previous	33:24 41:3	102:7,13	87:3 92:4	84:17 90:4
72:5 73:12	205:4	Powell 148:6	20:21	42:11 44:14	111:17,17	97:22	95:5 96:10
73:25	poor 198:11	175:6,9,10	previously	47:16,19	125:12	111:21	100:14
102:11	199:2,4,8	power 186:2	24:25	62:12 90:25	140:11	114:19	115:16
104:13	poorly 135:2	powered	186:17	133:8,8,9	182:12	118:4,12,12	117:9,19
109:18,20	pop 57:16	18:12	187:10	145:6 152:3	201:22,24	120:24	123:12,15
158:15	population	practice	price 92:13	160:11	processing	121:4	prominent
161:4 164:4	76:19	109:21	160:8	164:12,13	15:6 66:24	124:18	202:12
167:15	186:23	practices	205:15	165:19	67:10 74:6	125:7	promising
175:2	populus	6:19 13:6	pricing	166:6,13	procurement	141:10,11	81:3
191:17	76:10	71:25	132:19	167:23	92:18 95:6	161:18	promote
196:25	portion 48:17	107:12	139:18	192:10	95:16,23	164:14	126:3
pointed	52:11 70:19	108:8 109:3	primarily	194:9	111:17	178:14	promotes
155:10	139:23	111:10,15	126:2	problematic	141:6,7	programmi...	87:6
points 102:9	portions	114:22	primary 15:8	166:6	produce	79:3	promoting
167:7	70:10,12	136:20	114:24	problems	68:10 89:13	programs	118:15
169:15	73:2	138:13	principles	40:24 44:6	121:21	16:17 21:11	proper 17:13
190:6	position	139:13	95:23 139:5	179:17	198:3	21:14 39:23	17:14 18:23
poisoning	64:15 79:8	198:12	printing	190:21	produced	43:3 44:20	58:3
192:11	positions	Pre-COVID	173:9	198:15,20	76:14 202:3	45:2,13,13	properly
police 11:2	140:21	136:5	prior 2:17	procedure	produces	45:15 49:19	27:22 57:21
34:4 57:25	positive 6:20	pre-process	5:10 22:25	55:20 56:12	153:6	72:25 73:21	58:5 134:24
58:23 59:6	6:22 65:19	139:8	85:6 103:6	proceed 7:16	producing	74:18,18	properties
194:5	74:10 83:6	pre-process...	188:3	14:10 78:16	198:16	80:6 85:25	17:25
policies 13:25	161:20	139:10	priorities	86:21 90:19	product	97:12	100:15
21:24 79:16	possesses	precious	80:24 96:13	105:6 113:5	25:18	107:17	property
85:25	95:17	83:21	114:5	130:17	products	110:15	57:23 58:15
118:17	possible 2:11	preemption	prioritize 6:4	131:5 134:9	25:15 68:12	114:17	61:11 153:4
policy 14:4	31:14 124:2	93:21	114:15	148:14	68:18 87:19	117:12	proponent
14:24 135:3	124:3	premier	priority	151:17	89:13 141:9	118:18	59:15
135:14	129:19,21	99:12	15:24	156:13,20	141:14	123:5	proposal

Committee on the Environment
October 15, 2020

Page 19

49:23	147:7 162:7	qualify	119:23	70:22	155:11	111:4	119:20
proposals	170:17	125:23	122:25	reaching	156:2	119:21	Recreation's
81:2 92:24	173:3,12	quality 80:11	138:10	74:20 86:6	166:10,22	134:7 135:9	116:5
133:21	174:15	170:13	163:25	118:22,22	166:22	148:2,12	recruit
proposed	209:16	185:17	191:17	128:2	174:8	200:3	168:11
83:8	public-priv...	199:4	quickly 27:9	read 4:15	180:19	203:16	recurring
prosecutor	92:21	203:13,22	106:23	184:7	193:21	recognized	137:10
59:19	121:11	quantitative	107:19	readers	194:7	5:16 54:21	recyclable
Protection	public-sector	21:16	110:11,17	173:18	200:19,21	77:16	20:15 56:19
12:13	22:19	Queen 148:8	111:9	ready 159:17	200:25	143:21	75:10 141:5
proud 20:4	publicly	200:3,4,7	122:23	161:19	203:11	recognizing	recyclables
62:19	24:16 29:23	202:23	129:19	real 70:14,20	realtime	5:11 138:17	133:15
provide	32:11	question	132:18	152:11	28:11,23	recommend	172:15,19
11:19 16:22	published	27:10,17	147:15	162:3	31:7	131:20	172:20
38:20	2:15	31:21,23	quite 81:15	163:25	realtor 56:5	recommen...	186:18
100:17	pull 145:3	41:6 47:3	99:4	204:12	58:14	32:6,14	205:18
101:3	165:16	60:6,24	quo 192:14	205:8	reason 71:15	94:8 140:9	recycle 41:9
103:15	purchase	63:19,21	quorum 4:9	reality 40:8	153:16	140:12	75:7 131:24
116:9 121:5	141:15	69:2 74:23		198:2	154:15	recommitted	173:23
122:13	purchased	95:13 96:6	R	realize 92:11	164:14	110:21	200:22
151:24	18:11 45:15	101:13	racism 133:7	190:4	195:12	record 5:13	recycled
159:13	purchasing	105:2 108:7	185:22	realized	196:7	7:16 24:21	56:21,23
provided	105:22	110:11	190:3,17	102:16	reasonable	54:18 55:14	141:8
103:11	purpose 5:19	126:25	198:13	110:17	5:6	66:8 105:5	143:10,13
114:20	pursue 18:14	134:5	radio 159:7	really 20:8	reasons 60:9	107:7,20	174:10
116:18	pursuing	138:10	rain 41:12	24:17,17	69:8 81:23	130:17	recycler
provider 81:6	115:15	140:13	rains 168:2	27:18 31:17	rec 51:24	134:9 138:6	91:18
providers	push 52:25	162:22	174:7	31:20 36:10	52:2 69:20	148:13	recycling 8:7
82:10	pushed 192:8	questioned	ramifications	36:19,20,23	116:25	151:17	11:18 13:12
provides	put 8:24	150:6	204:13	37:9,23	receive	166:25	14:16,24
80:16 84:3	34:23 36:10	questioning	ramp 63:11	38:25 55:13	125:25	169:20	15:4,6,10
providing	38:17 43:8	77:13,19	ran 41:25	66:7 69:11	180:10	175:7 178:3	15:10,16,17
44:21,21	53:23 56:23	119:24	range 49:6	70:8,16	207:14	180:13	15:23 16:4
81:10	62:10,14,16	questions	171:15	71:9 72:11	received	181:18	16:8,11,17
100:22	64:9 66:8	5:11 19:11	ranger 177:8	72:24 74:16	16:24 17:5	183:24	18:3,7,19
114:2	77:6 107:19	23:9 24:20	Rapid 158:9	75:23 76:3	18:2 23:21	184:14,20	19:23 20:23
163:11	111:2	53:21 54:22	rat 194:15	76:14,18,25	32:9 82:8	189:14	20:25 21:6
provision	133:13	55:3,13,18	rate 41:22	87:16 97:6	115:17	193:8	22:16,23
12:23 48:15	144:14	66:11 77:20	65:3 67:20	97:13,16	receives	196:23	27:23 45:11
provisions	159:8	86:14,18	135:24	98:10,13	172:11	203:19	48:25 50:21
32:5 67:18	167:19,21	90:13,20	rates 133:5	100:12	receiving	206:3,23	55:6 56:18
92:20	173:10	94:7 98:22	192:4	101:5 103:3	15:12 172:9	recorded 5:4	67:14,17
proximity	174:18,19	98:23 99:15	204:15	103:21	receptacles	5:9	73:13,14
35:10	176:21	106:18	rats 193:15	105:10,18	17:12	recover	74:2,6 75:4
public 2:6,7	177:14	107:6,18	193:15	105:19	recess 147:9	12:24 70:19	75:6,12,13
2:12,13,13	183:21	119:4,17	Raval 148:4	106:7	recipient	143:15	75:15,20
2:15 4:11	206:3,22	122:16	148:12,15	108:23	115:25	recovery	77:4 88:24
5:3,5 9:14	putting 69:10	123:2 129:7	148:16	109:7 112:7	recognize 7:4	11:16 13:18	88:25 91:12
9:16 15:2	75:5 136:2	129:13	raw 85:3	112:11	24:21 27:11	15:7 70:13	91:17,21,24
15:20 16:20	182:8	165:4,17	re-permitted	125:10	31:22 35:20	74:20 95:20	92:3,7 93:3
21:7 28:10	183:18	166:22	12:14	135:9	36:19 37:4	102:13	102:19
29:20 37:21	192:11	208:7	re-skilling	140:10	71:23 86:20	Recreation	110:15
38:11 117:7		quick 24:19	102:5	142:9	98:20	10:2 26:6	111:21
129:17	Q	72:5 73:12	reached	143:22	106:23	116:20	132:25

Committee on the Environment
October 15, 2020

Page 20

136:8	187:14	199:10,12	187:14	56:16	96:1 97:1	204:1 205:1	4:13,15,16
140:19	reduces	region's	renew 138:25	138:20	98:1 99:1	206:1 207:1	7:9,25
142:10	167:24	190:21	renewal	requires 2:4	100:1 101:1	208:1	14:18 19:20
143:3 144:6	reducing	regional	138:24	9:2	102:1 103:1	research 22:3	25:11
144:14,17	15:9 17:11	115:22	139:3	requiring	104:1 105:1	22:8 98:4	113:12
145:10	65:13 69:5	regularly	renewals	57:6	106:1 107:1	resident 82:3	120:10
154:24	85:9 121:20	15:11	199:20	rerouted	108:1 109:1	148:16	185:8 190:8
155:2 158:9	132:18,25	regulation	renewing	63:11	110:1 111:1	156:24	192:18
162:10	158:17	13:24	169:9	RES 2:1 3:1	112:1 113:1	189:16	200:9 208:2
167:18,21	reduction	regulations	rent 117:2	4:1 5:1 6:1	114:1 115:1	197:12	resource
167:23,24	10:11,14	13:25 21:24	repair 87:21	7:1 8:1 9:1	116:1 117:1	residential	11:16 13:18
168:4	17:6 18:19	43:14,21	repairing	10:1 11:1	118:1 119:1	17:25 20:15	102:19
170:20,21	34:14 42:3	58:8	88:19	12:1 13:1	120:1 121:1	20:18 22:21	123:10
171:25	53:22 62:11	reimagine	repeat 6:21	14:1 15:1	122:1 123:1	33:8 35:4	149:9
172:23	70:11 75:19	152:7	11:4 161:9	16:1 17:1	124:1 125:1	42:23 55:22	resources
173:7,20	77:3 116:11	reinvigorate	repercussio...	18:1 19:1	126:1 127:1	122:10	9:20 10:18
174:3,16	127:8	74:17	14:23 91:6	20:1 21:1	128:1 129:1	148:23	11:13 25:2
175:24	132:22	reiterate	replacement	22:1 23:1	130:1 131:1	residents	26:11 36:9
179:18,19	161:11	22:15	135:5	24:1 25:1	132:1 133:1	11:4 16:23	40:10 41:7
186:9 188:8	181:15,21	related 8:15	replicate	26:1 27:1	134:1 135:1	17:3 18:6	45:9,9
190:11	reference	relationship	150:21	28:1 29:1	136:1 137:1	19:2 23:24	48:23 53:9
199:16,21	72:6 85:19	170:16	replicated	30:1 31:1	138:1 139:1	27:22 33:2	68:21 80:12
200:20,24	99:11	relationships	122:3	32:1 33:1	140:1 141:1	34:17,22	83:13 85:9
201:2	referenced	20:6 98:3	replicating	34:1 35:1	142:1 143:1	40:4,15	102:17
red 176:7,8,8	116:12	relative 96:4	124:15	36:1 37:1	144:1 145:1	41:15 42:6	103:16
176:9	referred 28:2	releasing	report 34:13	38:1 39:1	146:1 147:1	42:13 43:6	115:18
177:11	referring	114:6	58:16 93:23	40:1 41:1	148:1 149:1	50:14 62:25	117:21
redefine 83:5	195:18	relevant	94:8 95:3	42:1 43:1	150:1 151:1	76:6,25	123:21
redesign	refillable	93:17	141:17	44:1 45:1	152:1 153:1	91:4 93:9	135:15
150:10	93:7	reliance 85:9	152:23	46:1 47:1	154:1 155:1	98:13 115:6	145:12
redirected	refinery	relieve	184:7	48:1 49:1	156:1 157:1	124:17	163:12
187:16	168:12	117:16	193:22	50:1 51:1	158:1 159:1	125:4,10	165:24
redistributed	199:6	rely 40:12	194:20	52:1 53:1	160:1 161:1	158:11,23	respect 37:5
93:14	reflect 80:23	137:20	reported	54:1 55:1	162:1 163:1	159:24	129:19
redistributi...	reflected 55:7	remain 20:4	38:25	56:1 57:1	164:1 165:1	160:11	respectful
188:5	reform	remaining	reporter	58:1 59:1	166:1 167:1	161:21	107:23
reduce 9:22	136:19	129:10	209:25	60:1 61:1	168:1 169:1	167:13	respecting
11:13 16:18	refrigerate	remanufact...	reporting	62:1 63:1	170:1 171:1	182:2	90:9
16:23 17:9	115:10	88:19	38:12	64:1 65:1	172:1 173:1	189:23	responded
18:7,20	refurbishing	remarks 7:5	represent	66:1 67:1	174:1 175:1	190:20	22:13
32:7 42:9	88:22	129:11	100:6	68:1 69:1	176:1 177:1	203:12,22	responder
43:8 44:9	regard 75:3	remember	representat...	70:1 71:1	178:1 179:1	204:3	36:15
46:6 67:11	regarding	50:20	125:15	72:1 73:1	180:1 181:1	residents'	responding
68:3 84:10	4:12 72:6	160:19	representing	74:1 75:1	182:1 183:1	55:6	3:2 32:12
103:14	82:5	remind 73:12	200:10	76:1 77:1	184:1 185:1	resilience	response
115:3	regardless	125:19	reproduction	78:1 79:1	186:1 187:1	6:25 85:10	77:11 78:4
116:17	101:17	remote 2:6	209:22	80:1 81:1	188:1 189:1	109:25	98:9 107:3
117:14	regenerating	2:11	request	82:1 83:1	190:1 191:1	resiliency	135:6
131:23	90:10	remotely 2:9	159:14	84:1 85:1	192:1 193:1	86:7 187:23	169:22
189:3	regenerative	remove	require 22:7	86:1 87:1	194:1 195:1	resilient	208:4,9
reduced	83:2	191:13	26:19 42:22	88:1 89:1	196:1 197:1	85:23 92:3	responses
41:22,24	region 115:21	removed	136:18	90:1 91:1	198:1 199:1	resist 142:24	82:8
132:24	132:5 169:3	188:2	159:22	92:1 93:1	200:1 201:1	resolution	responsibili...
137:3 160:8	187:2	removing	required	94:1 95:1	202:1 203:1	1:16,16	40:5 125:18

Committee on the Environment
October 15, 2020

Page 21

153:17 responsible 79:9 113:18 rest 108:2 119:15 restarted 74:12 restaurant 125:14 restaurants 71:14 93:11 127:11 128:24 restorative 82:25 restrictions 73:19 result 13:15 54:13 184:16 203:25 206:15 resulting 17:23 84:14 91:10 results 14:9 72:9 115:11 160:7 retailers 93:15 retain 97:18 rethink 87:17 149:7,16 179:20 retired 170:10 retirement 120:24 Retrievr 82:10 118:13 retrofitting 122:7 return 9:10 52:7 155:4 returned 15:5 returning 104:15,22 121:6 reusable 48:19 93:7 93:12 102:24	150:24 183:19 reuse 75:20 83:19 84:7 91:11 95:7 131:23 170:23 179:18 reusing 133:2 199:15 revealed 134:22 review 49:23 81:2 196:9 reviewing 112:18 reviews 22:3 revised 67:18 reward 38:16 38:19 71:24 RFP 111:16 Richardson 1:10 2:2 4:6,7,23 7:13,19,21 8:3 19:12 19:14 23:12 25:7 27:6 28:3 31:15 32:20 35:18 53:10,18 68:9 72:4 77:9,22 78:14,19 86:10,15,24 90:15,22 94:3,16,25 96:2 98:8 104:23 105:4 106:14,21 107:4 111:6 112:12 113:2,8 118:25 119:5 120:7 122:18 124:22 126:21 128:21 130:4 131:8 133:17 134:12,17 137:15	140:7 146:8 147:4,10,20 148:10 151:9 156:6 156:16,19 156:22 160:16 166:19 169:13,23 169:25 170:6 174:23 175:12 177:20 179:8 180:5 180:17 184:4 185:4 188:16 189:9 191:15 192:25 195:9 196:19 197:9 199:23 202:22 207:10,23 208:5,10 Richardson's 101:22 rid 144:15 ridiculous 60:9 right 33:16 50:14 51:13 52:25 60:23 64:9 68:4 71:8,13 72:13 75:7 78:3 105:14 122:21 125:17 127:10 137:9 138:19 143:25 144:5 145:20 166:9 173:16 177:15 181:9 183:11,12 190:10	196:5 201:19,23 208:11 ringing 23:20 ripple 73:20 rise 24:10 137:7 risk 22:24 81:11 192:12 Road 12:19 roadmap 16:22 79:3 79:10,12,24 Robinson 148:5,9 169:18,24 170:4,5 200:4,4,7 202:24 robust 67:9 role 19:25 39:18 102:2 103:6 141:3 roll 2:22 49:16 206:12 room 96:9 126:10 Roosevelt 62:15 root 21:2 60:20 rooted 91:8 rotate 34:8 route 9:17,21 24:8 30:2,3 30:15,16 routes 15:15 31:11,12 routing 21:23 row 141:10 Roxborough 206:10 RPR-Notary 209:16 rug 192:10 192:10 rule 59:21 rules 58:8 rummage 56:7 run 67:16 176:8	S S 1:12 Saint 92:2 195:4 salary 64:23 65:4 salute 66:5 salvage 100:12,15 100:23 101:9 samples 13:9 sampling 13:8 Sampson 129:25 130:16 134:7,10,15 140:14,15 146:10 149:17 San 142:14 sanitation 8:6 8:12,14,21 9:19,23 11:9,20 12:4,7 13:2 15:12 17:21 21:23 22:24 24:5 36:17 44:3 66:10 144:7,18 167:9 195:19 198:16 200:22 201:11,20 201:23 Sanitation's 21:11 Saturday 54:14 176:23 save 187:20 saving 120:17 121:19 164:24 saw 34:14 39:20 62:10 100:24 124:11,15 127:22 152:25 saying 105:11	111:14 195:23 scalable 79:4 scale 63:24 124:10 scarce 85:9 schedule 28:21 scheduled 136:22 school 50:23 51:4,6 54:3 71:17 97:12 170:11 schools 50:22 50:23 99:21 Science 157:10 scientist 178:7 Scott 7:11 8:6 11:23 12:2 20:10 30:20 42:16 45:5 51:17 66:19 68:23 Scout 175:21 screen 3:3 second 73:12 97:25 110:10 154:4 167:15 secret 61:6 secrets 188:21 section 12:20 184:13 sector 71:20 84:9 141:21 142:25 sectors 86:3 114:11 118:19 secure 81:5 security 109:25 see 11:6 37:11 38:5 38:5,17 40:24 41:23 42:3 44:16 49:24 54:19 57:18 63:15	66:17 70:9 75:5,8 77:15 96:9 96:16 98:4 104:7 123:9 142:16,21 146:4 154:22 162:12 163:7 165:15 175:23 176:22,23 183:7 194:12 195:20 203:2,9 seeds 85:17 seeing 5:25 7:6 39:14 63:14 105:21 108:25 129:8,16 194:6 seek 87:7 seeks 87:13 seen 69:6 93:17 107:13,15 127:3,5,8 127:17,20 176:16 seize 54:8 select 81:3 selected 82:9 self-reported 153:2 self-resilien... 92:10 sell 141:14 198:22 selling 181:22 sells 182:14 Senate 172:7 send 67:12 206:6 sending 68:2 139:12 176:14 204:2 Senior 19:17 sense 127:10 128:22	129:2 145:22 201:20 sent 13:17 17:2 142:3 146:18 173:13 separate 12:24 48:22 55:8 102:23 144:16,19 144:20 168:5,8 182:25 separating 13:9 September 12:17 series 12:17 serious 165:18 194:9 serve 79:13 127:12 196:11 service 20:5 47:17 64:13 116:8 125:15 127:25 140:21 177:3 183:3 183:4,6,20 services 12:7 22:2 73:2 153:19 159:13 187:19 set 15:25 16:19 43:9 43:17,23 48:23 52:5 136:15 144:23 146:24 147:6 151:2 sets 122:3 setting 17:13 27:22 57:5 114:7 194:3 seven 157:15 159:21 171:11 Seventy
---	--	---	---	--	---	---	--

Committee on the Environment
October 15, 2020

Page 22

157:24 severe 8:19 shadow 14:22 shameless 53:23 shape 112:5 share 14:8,25 45:25 78:25 81:16 87:10 90:12 shared 33:25 55:25 208:15 Shargorods... 148:7 180:12,15 180:16 sharing 15:13 Shaw 148:7 184:19,25 185:6 189:8 shield 207:3 shifted 80:7 Shopa 96:22 98:16 short 10:14 10:21 16:8 32:7,15,17 33:8,10 40:11 110:13 129:11 146:25 147:5,9 175:15 201:4,18 short-term 92:24 136:10 shorter 106:2 shout-out 31:3 37:6 show 29:22 141:15 143:16 showed 62:18 66:3 showing 153:23 shown 89:4 105:19 shows 167:16 shut 127:11 127:12	side 97:23,25 139:22 172:4 Sierra 148:18 sign 162:23 171:10 signed 171:15 significant 8:15 10:18 32:3,16 34:14 42:3 53:8 69:15 69:25 74:11 88:5 92:11 171:2 significantly 71:11 185:16 signify 5:16 signing 159:4 signs 177:12 177:15 silence 159:7 similar 13:11 16:10 74:3 91:19 110:14 137:2 144:22 160:7 simple 75:22 102:25 120:13 simply 83:12 154:10 single 110:6 163:6 single-stream 167:24 170:21 179:22 single-use 150:5 sister 205:13 Sisterly 204:10 sisters 198:12 site 31:10 167:12 168:12 sites 158:5 sits 26:4 33:6 situation 56:3 six 14:7 65:6	168:24 181:3 186:10 sized 91:19 skipped 62:12 slowing 44:24 small 50:12 108:20 109:12 158:11 159:15 170:8 small-scale 52:18 84:14 smaller 16:13 105:21 smart 34:8 78:21 79:17 79:25 81:4 97:20,24 197:14 SmartCity... 79:2,10,21 smell 194:12 smog 132:13 snapshot 28:23 snitch 38:14 snitching 193:23 194:20 soccer 191:2 social 80:3 91:12 92:11 93:8 157:14 158:17 socializing 124:7 society 108:22 177:6 189:18 197:21 society-wide 83:6 software 157:18 solicit 80:22 solid 16:14 18:17 20:19 21:14 22:16 88:25 135:14	136:21 solidifying 98:2 solution 71:3 79:5 80:25 81:5 82:10 110:18 159:20 160:12 187:12 188:11 206:24 solutions 1:17 4:19 6:21,23 8:10 14:20 18:23 79:4 81:14,20 82:6 86:4 89:15 113:14 118:20 159:25 162:13,25 186:4 188:13 191:6 197:17 solve 164:20 solving 157:12 somebody 104:2 soon 56:8 94:14 133:15 172:15 178:22 186:19 sophisticated 52:13 sorry 60:12 60:13 74:23 99:6 105:3 sort 38:14 69:23 108:21 109:18 110:25 123:16,18 123:20 124:7 125:16 126:18	142:17 145:21 sorting 92:7 168:3 174:5 soul 152:11 152:15 204:10 sounds 60:8 76:21 77:19 108:13 202:6 source 17:6 48:22 53:22 75:19 77:3 161:11 166:14 sources 161:16 South 50:24 156:25 Southeastern 148:18 space 61:11 61:12 92:21 97:2,10 103:4,12,14 103:19,23 104:7,9 130:9 138:3 spaces 104:17 spans 190:16 speak 3:4 19:19 47:4 90:24 99:17 105:9 155:10 202:21 203:24 speaker 142:20 speaking 98:16 197:14 speaks 14:13 special 35:25 79:19 specific 21:8 49:2 82:17 108:11 specifically 26:21 88:11 90:5 96:19 197:24	199:4 specifications 145:4 specs 141:7 143:18 spectrum 101:19 158:25 speed 29:15 speeding 44:25 spend 65:14 126:17 162:24 166:7 spending 165:25 spends 152:17 spikes 183:8 spiking 204:17 spirit 99:2 spoke 97:23 Sports 157:25 spread 37:16 spreading 139:11 spur 79:14 Square 157:3 stabilize 9:9 stack 204:20 205:5 staff 14:10 15:11,17,19 20:7 30:25 135:11 140:20,24 140:25 195:24 staffed 16:9 staffer 137:22 staffing 8:18 staffs 20:3 stages 21:10 stakeholders 20:8 94:11 94:20 110:9 114:10 118:6 stalled 159:7 start 19:21	33:13 44:13 48:8 50:12 50:14,16 59:5,6,25 60:2,20 62:5 63:5 67:8 68:14 94:6 96:12 97:6,17 100:11 107:16 109:4 124:4 125:11 128:14,18 139:3 155:20 186:6 201:24 started 10:3 14:7 28:7 69:18 71:22 72:24 89:17 120:11 127:7 145:16 202:19 starting 13:7 66:22 73:7 109:18 112:11 122:21 starts 97:15 startup 157:5 158:10 state 2:3 7:15 45:6,12,18 45:23 74:3 82:14 93:21 117:5 131:4 148:13 151:16 186:11 203:18 state's 150:6 state-of-the... 121:15 stated 152:8 States 116:2 145:17 stating 180:24 station 30:5 stations 18:9 statistics 23:4	135:19 190:13 status 9:14 192:14 stay 123:16 124:23 staying 185:2 steel 84:22 steer 141:24 stenographic 209:6 step 24:10 57:13 58:6 58:16 stepping 124:8 steps 11:10 137:6 stone 124:8 stood 24:16 stop 154:13 154:20 173:3 186:8 192:9,13 201:17 205:21 stopped 39:19 47:13 stopping 156:3 stops 179:4 store 150:21 151:2 181:24 182:18 184:15 storefront 151:3 stores 93:11 storm 8:20 154:8 story 122:21 strain 36:10 strained 170:16 strange 145:22 Strategic 135:20 strategies 10:11 13:14 18:5 83:7 86:12 114:9 114:24
---	---	---	---	--	---	---	--

Committee on the Environment
October 15, 2020

Page 23

115:3,23	174:15	45:17	186:15	114:5	T-shirt 87:23	201:7 202:9	34:2 78:23
116:11	176:2	substantial	187:22,23	116:13	table 156:11	talked 54:7	80:2,8
117:14,17	201:14	127:8	192:17	119:8	tackle 71:9	67:14 68:10	81:13 97:4
117:20	stress 185:14	152:22	195:25	122:25	115:16,23	99:18	118:11
118:14	strokes 187:3	suburb 43:15	196:15	158:25	117:13	121:12	131:3
119:3 123:5	strong 40:22	suburban	supported	160:13	take 2:22	123:19	159:25
124:2 163:9	124:16	43:21	46:18	sustainable	14:7 25:15	149:25	161:5,13
strategy	127:20	suburbs	116:14	6:8 19:6	29:11 32:7	164:10	165:10
79:21 97:5	strongly	43:13	supporting	93:5 106:9	40:4 41:17	talking 42:22	teed 96:22
97:21,25	169:9	success 91:24	78:7	116:19	50:10 52:5	55:22 60:20	teenagers
103:9,25	200:21	92:16	supports 10:8	117:22	53:8 56:19	100:2	181:5
121:10	structure	124:19	sure 25:17	125:20,22	59:21 69:15	162:18	tell 23:20
stream 11:12	26:9,24	successful	30:14,19	126:3	69:22 70:8	181:19	30:20 66:21
12:25 13:15	struggling	12:15 40:19	31:12 45:22	136:21	71:4 74:14	182:2,16,22	telling 182:3
67:2 69:14	126:15	suffer 188:24	46:18,21,22	157:11	83:3 85:21	target 70:10	Temple
70:16,20	students 51:4	suffering	47:10 49:14	sustains 92:4	87:14 89:17	70:12 81:21	201:12
71:8 75:5,6	51:6	204:4	52:2 57:3,8	sweep 201:10	90:7 105:18	targeting	temporary
75:8 83:11	studied 132:3	sufficient	62:4 63:6	201:15	108:19,21	69:13	9:7 63:19
84:21	studies 63:4	59:17 95:6	72:21 74:22	sweeping	108:21,22	tasked 72:23	64:5 65:12
139:24	study 14:9	suggest 136:4	82:22 95:13	162:11	110:8 111:4	tasks 150:2	ten 23:22
143:24	20:14,16,21	176:19	105:7 108:5	Sword 14:23	111:11	173:18,19	62:14,16
148:24	21:3 72:9	Sukhdev	108:23	67:18 73:17	126:12	taught 25:14	121:25
180:3	109:6 132:9	78:13 86:21	110:3 126:4	73:24	137:6	tax 125:20,25	140:23
streamed	152:20	86:23 87:2	131:6	system 10:5	146:25	126:4	169:3
54:16	stuff 52:19	108:5	138:16	15:10 21:20	147:5	teach 54:4	172:18
streams	176:21	summer 5:23	148:3 195:2	21:23 22:6	153:11	teacher	173:15,17
20:15,23	style 183:3	12:5 24:6	203:14	22:17 30:13	159:23	170:11	173:19,20
84:5 188:3	Styrofoam	24:15 65:22	surprise 61:6	30:17,24	178:15,16	team 81:4	202:18
street 1:17	171:8	195:17	surprised	31:4 37:12	187:19	191:3	tenants
4:20 8:10	subcommit...	Sunshine	109:11	38:17 41:18	195:3	196:16	104:19
12:16,19	152:4	5:17	203:9	42:5 46:19	196:24	202:24	term 18:24
14:20 79:5	169:19	superfluous	surrounding	50:6 69:12	take-back	207:13	76:10,12,17
144:13	178:9 180:9	154:17	199:8	71:10 121:2	182:11	Teams 1:6	76:19,20
149:3 162:6	202:9	supervision	surveillance	135:17	taken 209:6	2:10 5:15	87:16
162:10	subcommit...	209:24	194:3	155:9	takeout 183:7	Teamsters	110:13,23
163:8	10:13	supplies 66:3	survey 82:3	170:21	183:8,10,18	171:22	111:3
197:18	133:19	supply 84:2,5	survived	182:9	takes 30:2,4,5	tech 81:19	191:11
streets 7:24	137:19	91:3 93:6	150:8	197:23,24	52:20	96:8 164:2	terms 30:7
8:4,6 10:23	151:12	105:20,25	suspend	system's	158:14	164:11,20	70:17 108:6
12:4 16:20	156:10	106:2,7,8	15:22	97:17	194:16	164:21,22	109:3
18:13 20:12	184:22	support	suspended	systemic	talent 97:14	165:3,5	111:16
23:6,23	188:19	10:12 40:12	15:18 16:11	134:25	97:19	166:12	112:8 122:5
25:25 36:25	189:7 197:2	79:20 80:3	suspensions	systemically	talk 37:19	technical	123:21
40:16 44:17	203:2	81:9,20	22:23	93:13	38:10,15	10:8 97:13	145:24
48:14 68:16	subgroups	82:13 116:7	Susquehanna	systems 1:18	39:3 41:10	98:11	test 123:8
135:9 142:3	170:14	121:25	200:10	4:20 29:19	45:6,8 52:2	114:21	testify 5:3 7:8
144:9,20	submitted	122:4 123:3	sustainability	30:9 79:6	96:23	115:17	14:18 19:9
148:20	119:18	125:2	9:25 26:3	93:3 117:22	113:20	116:9	44:4 78:25
158:20	172:17	133:10	52:15 54:3	122:7	161:13,15	technological	86:18 99:17
159:11,22	subsections	146:15	72:3 94:22	174:17	161:16	198:7	119:16
163:23	6:11	147:3 155:8	105:17	192:6	162:20	technologies	120:9
170:15	subsequent	171:23	113:11,18	197:18	163:24	79:16	134:19
171:10	185:23	178:11,19	113:20	T	175:14	technology	200:9 208:2
173:2,11	subsidies	179:2 185:8			177:13	29:16,17	testifying

Committee on the Environment
October 15, 2020

Page 24

191:22 testimony 2:13 4:24 7:16,25 14:13 23:8 23:15 31:24 78:4,17 86:22 90:16 90:19 93:24 94:5 100:3 107:25 111:14 112:15 113:6,12 119:7,18,22 122:19 129:5 130:18 131:5 133:18 134:7 137:17 138:7 146:20 147:14 148:14 151:10,14 151:18,24 156:8,14,20 160:3,25 166:21 167:2,8 169:14,21 170:3 175:4 175:6,8 177:22 178:4 179:16 180:7,14 184:6,10,21 188:17 189:14 191:21,25 193:3,8 195:11 196:8,14,24 197:6 199:25 200:6 203:5 203:17,19 207:5,9,12 207:18 tests 18:15 textiles 17:24	82:12 thank 3:10 3:15,21,25 4:4,8 5:20 7:18 8:8 14:17 19:2 19:4 23:11 23:12,14 24:2,15 25:5 27:7 27:13 31:19 32:11,19 35:18,19,22 35:23 37:6 37:14 39:6 53:10,11,12 53:14,15,18 53:19 54:25 60:4 63:9 63:15 65:24 74:23 75:2 77:10,17,21 77:22,23,24 78:3,8,15 79:19 86:13 86:15,23 90:11,14,15 90:20 93:25 94:3,4,15 95:2,12 98:8,14 101:12 104:23 106:14,15 106:20,22 108:5 111:6 111:7 112:12,13 112:14,19 113:4 119:5 119:6,13 120:3,5 122:16,18 122:21 124:22 126:21,22 129:2,4,21 130:5,5,12 133:16,17 134:2,18 137:14,15 137:16,17 138:6 140:7 140:11	146:8,9,13 146:19 147:8,11,17 147:21 148:10 151:8,9,11 151:13 156:7,12,15 156:23 160:15,17 160:20 166:18,19 166:20 167:5 169:12,13 169:16 170:5 174:23,24 175:3,11 177:19,20 177:21,23 180:4,5,6 180:16,23 184:3,5,9 184:17,21 185:2,5 187:17 188:14,16 188:17,25 189:8,10,10 191:22 192:2,18,24 192:25 193:2,4 195:8,10 196:13,17 196:18,20 196:25 197:7,16 199:22,23 199:24 200:8 202:21,22 202:23 203:4,7,23 207:10,11 207:16,21 207:23,24 208:11,19 thanking 36:14 thanks 23:16 90:21,23 120:8 156:5	174:22 they'd 172:3 thieves 193:16,17 thing 46:14 65:11 75:2 105:2 125:18 138:17 141:23 142:7,23 143:12 162:4 163:20 170:25 173:5,8 174:21 175:23 194:21,22 things 26:11 31:8 36:12 37:20 38:7 40:2,19 41:13 42:13 43:14,17 44:8,13 46:8 50:13 56:22 58:20 58:20 60:17 61:17 68:5 68:13 69:23 71:22 73:9 88:21 100:20,22 101:14,23 103:10 128:17 132:24 138:22 139:8,17 140:16 141:4 142:18 143:2 146:5 153:13,15 153:20 154:13,15 161:12 162:5,13,14 164:24 168:8 175:16 176:15 177:4	181:13 182:4 183:22 204:19 206:17 think 6:6 25:2,13 26:9,23,25 27:25 28:13 28:16 31:16 33:2,16 34:23 35:5 35:12 36:4 37:24 38:3 38:7,16 39:19 40:14 41:10 42:20 43:3,25 44:11 45:4 46:9 48:6 50:11 51:14 51:17 57:13 57:15 58:6 59:16 62:16 63:3 67:20 67:23 68:9 68:14,17 69:16,19 73:2 74:10 74:14,16,17 75:16 76:3 76:17,23 95:16 97:3 97:8 98:17 99:21 100:4 100:25 101:13,23 102:6 104:9 105:11,24 106:13,25 108:8,24 109:7,17 111:13,14 111:22,24 112:10 113:16 123:8,10,15 123:17,24 124:4,19 125:3,9 126:2 128:11,15 128:17,18 135:12	138:11,13 140:9,15 142:19 146:10 149:6,7,19 149:19 154:11 157:14 161:22 162:18,21 164:3 166:11,12 176:6 177:16 178:21 182:17 184:6 186:5 188:20 201:12,22 205:10,14 205:21 thinking 72:8 110:22 168:13 179:18 182:15 Third 167:22 thought 41:13 thousand 88:22 thousands 30:18,22 three 24:8 29:4 36:22 129:15 138:24 139:2 140:3 141:9 171:17 199:7 thriving 90:9 94:23 118:3 throw 44:4 76:11,20 139:18 150:17 174:20 throwaway 171:6 throwing 88:21 151:5 thrown 150:23	172:23 Thursday 1:7 ticketing 15:17 tied 73:5 tight 36:9 tiles 83:23 Tim 112:25 time 5:13 19:4 23:10 25:14 29:7 29:25,25 30:14 53:8 55:7 69:22 90:13 94:2 99:7 107:23 115:6 124:20 125:18 129:20 139:16 143:9,11 144:16 148:2 149:6 160:5 162:15,25 165:7,9,25 166:6,8,11 167:11 188:15 192:13 timeline 95:8 95:14 96:4 timely 25:12 times 17:16 36:6 88:23 159:20 205:20 timing 31:12 tiny 182:17 tips 11:8 17:8 23:22 173:15,20 tires 10:22 title 4:15 173:15 to-go 93:12 93:18 today 3:14,20 4:25 5:21 8:4 14:12 19:9,19 26:5,7,17 32:24 87:11	120:9,13 134:19 155:11 160:4 170:9 186:6,20 188:15 197:14 200:11 202:21 206:3,23 207:6 208:13,18 today's 3:9 21:8 81:15 tolerated 35:17 tomorrow 176:5 ton 32:9 88:25 tonnage 8:18 8:22,25 9:2 9:9 16:5 65:9 67:3 tons 34:20,20 62:23,23 67:4 88:22 162:24 tool 9:13,20 17:7 27:20 27:21 28:9 28:16,22 29:6,20 33:15 83:9 83:16 84:3 85:18 106:6 121:7 tool's 9:15 tools 40:19 162:21 163:18 164:23 166:2,7 toothbrush 150:11,13 174:20 top 68:15 81:24 102:12 169:3 190:19 193:19 topic 81:15 81:22 87:10
---	--	---	---	---	--	---	---

Committee on the Environment
October 15, 2020

Page 25

Toronto 89:19	transitioning 88:13	187:25	32:12 130:7	129:12	11:11 20:17	updates 124:25	45:5 83:15
toss 193:18	transparency 91:8	188:5	133:20	147:15	29:9 76:8	upgrading 88:19	102:17
tossing 171:5	transparent 80:17	189:20,24	134:3	154:20	109:14,14	utilizes 95:17	190:25
174:2	transport 115:10	190:12,21	137:25	158:19	124:11,16	utilizing 159:25	
touch 161:10	trash 8:17	191:13	156:10	176:13,17	underutilized 10:24		
175:15		193:12,18	180:9	181:5 182:4	unemployed 102:6	Upper 176:22	
toured 124:14		193:19,24	181:20	194:16	unfamiliar 191:11	upstream 139:16	V
toxic 132:13	9:8 10:23	194:7,16	184:12	two-way 174:13	unfortunate 200:17	uptick 32:17	vacant 61:11
168:23	11:13 13:8	195:7 199:7	208:13	type 28:21	unfortunat... 32:25 68:15	urban 10:7	valuable 81:8
185:7 186:7	15:25 16:7	199:20	trust 174:9	30:23 40:14	116:21	83:9,11,16	161:17
188:11	17:12 20:15	200:24	truth 194:22	43:24 44:7	121:15,23	85:18 94:7	167:17
toxins 185:14	20:22 22:22	201:4,14,18	194:22	45:17 50:6	187:22,24	116:21	value 15:3
trace 57:10	27:23 28:20	202:3,18	203:24	56:19 58:9	202:11	121:15,23	76:13 83:18
58:14	29:12 31:13	204:2,5,8	truthfully 178:13	58:10 61:2	urge 186:15	187:22,24	102:25
traced 56:5	35:4 36:7	205:7 206:5	try 26:17	65:17 67:16	urges 186:7	142:2	165:14
Traci 148:5	36:21 37:11	206:11	34:18 35:14	101:10	usable 28:9	144:11	167:24
166:24	38:4 41:10	trashed 152:21	40:7 57:22	types 17:14	usage 25:18	155:15	208:13
167:3 174:7	41:11 43:7	155:18	65:7 71:19	71:5 96:10	USDA 123:11	159:6	valued 39:21
track 30:13	43:7,9,10	treat 144:5	76:22 146:4	173:23	use 5:14 6:7	172:20	values 153:4
62:2 74:19	43:23 44:4	trees 159:3	159:23	U	9:16 10:19	uniform 43:7	valuing 92:22
81:6 141:19	44:21 45:15	tremendous 31:16 48:23	160:6 161:8	U.S 21:2	17:8 21:5	Union 171:22	variety 18:5
157:21	55:6,9,21	62:22 67:2	164:20	22:19 23:3	43:24 44:7	unique 90:6	81:22
158:7,23	55:22,23	106:3	175:15	74:5,13	45:8 46:4	100:16,22	117:14
tracking 9:17	56:3,7,12	tremendou... 30:7 32:23	176:3 196:4	85:12	49:11 50:18	unit 11:3	various
10:5	69:10 71:16	trials 18:15	trying 32:24	ultimate 73:13	51:25 53:3	132:18	100:20,21
traction 88:5	71:18 75:14	Triangle 62:15 63:10	34:21 36:24	ultimately 30:5 62:9	62:14 68:20	139:18	104:16
traffic 63:11	128:13	63:13	69:25 71:2	65:15 93:2	80:12 87:18	142:13	144:24
165:6 179:6	133:7,14	tried 49:22	94:19 96:20	170:19	89:13 92:8	144:19	vegetables
trafficked 10:24	144:3,6,8	148:20	99:8 105:18	umbrella 77:6	97:3 116:19	United 106:24,25	51:3
trained 141:6	144:15	162:6	107:11	under-skilled 102:4,22	117:21	116:2	vehicle 59:9
143:7	145:8 149:4	trigger 132:14	145:12	underlying 134:23	139:4,7	145:17	59:10
training 15:13,19	152:8,18	trillion 85:12	156:2 176:6	underneath 177:13,15	143:13	universities 108:21	vehicles
99:20	153:7	88:15	tuned 123:17	underpinned 83:7 97:5	150:18	University 201:12	18:10
116:18	154:12	truck 31:11	124:24	understand 2:3 21:19	164:7	unjust 91:6	verifying
trainings 15:16	156:4	49:10,15	154:10	34:9 35:16	171:19	unloading 153:18	129:2
trains 206:13	158:23	trucked 186:21	174:18	130:13	200:22	unmute 130:20,22	vermin 16:2
trajectory 104:8	162:7,8,12	trucks 18:11	178:24	139:6 142:6	unprecede... 9:8	users 158:3	42:12
transcript 112:18	167:19	28:23 29:8	turned 154:6	143:2 174:4	169:4 198:4	159:2 165:5	versus 43:21
209:8,22	168:17,21	29:24 49:2	turning 165:15	181:14	uses 79:25	165:7,9	132:10
transfer 30:4	168:25	49:3,9	64:17	194:8	169:4 198:4	171:19	167:19
transforms 92:17	171:3,11	149:4	turnover 64:17	195:22	usual 150:3	200:22	168:16
transition 82:14	172:15,21	167:16,20	twice 38:3	204:12	usually 30:8	159:2 165:5	205:10
192:16	172:23	172:23	two 6:11	understand...	46:2 126:7	165:7,9	vibrant 7:2
transitioned 48:18	175:25	172:23	33:13 43:4		126:9	169:4 198:4	178:17
	176:3,4,5	201:23	54:18,22		194:16	used 150:3	Vice 31:22
	176:17	206:12	73:18 82:9		utilities 117:3	Up/Pick 200:10	35:20 53:19
	177:14	true 146:11	118:12		utilization 12:22	upcoming 21:3 54:18	53:20
	178:25	209:7	120:16		utilize 11:12	83:24	video 59:16
	179:2,3,13	truly 5:21	122:25			updated 28:11	view 2:12
	186:8,18		127:6				viewers 5:6
							vigilant 11:5
							violations 15:18

Committee on the Environment
October 15, 2020

Page 26

violence	62:4 64:7	206:2,22	91:9,14,15	161:11	144:22	123:25	164:7 165:6
153:3	66:5,14	wants 56:7	91:25 93:4	167:10	149:15	124:9,14	Wednesday
virgin 83:14	73:25 74:25	77:15 145:7	102:13,20	168:6,16,18	153:9	125:6	53:25
154:25	75:17 76:22	179:20	102:23	169:10	154:12,12	128:23	week 9:4 16:6
virtual 54:11	77:11 99:21	warming	104:3,5	170:8,24	154:25	129:8 134:6	18:25 36:23
54:13	103:25	44:24 132:6	109:5	171:20	168:18	136:2,15	56:8 62:23
viruses	104:7,9	132:11	113:14,23	172:16	181:10	138:20	154:2
192:12	107:22	warnings	113:25	173:16	182:8,13	140:5	201:25
vision 26:17	112:14	136:3	114:4,7,8	174:12	184:12	144:12,13	weeks 17:4
visit 24:5	123:8	waste 1:17	114:10,11	178:19	187:7,18	145:21	176:14
158:4	129:17,18	4:20 6:4,8	114:14,16	180:3 181:2	201:25	146:2	weight
visited 15:11	134:2 135:9	6:23 8:10	114:18,18	182:4,24	206:4	153:22	204:17
visits 165:6	137:25	10:3,4,6,10	114:22,23	186:14,16	Wayne 40:2	158:3,8	Weissman
vital 118:21	152:6 154:3	10:14 11:11	115:2,16,24	186:21	ways 11:14	159:17	141:3
volume 17:11	160:20	11:22 12:14	116:10,17	187:7,11,15	51:15 52:8	160:23	welcome 7:17
135:23	170:5	12:22,24,25	117:10,11	188:3,7,10	74:2 125:3	162:21	53:17 93:24
volumes	175:10	13:3,5,7,14	117:13,15	188:14	125:9	170:25	Welde 148:4
22:22,23	179:23	13:17 14:5	117:20	190:9,16	127:15	171:5	151:16,19
voluntary	181:16	14:20 15:7	118:15,18	191:4,7,10	138:5 205:7	172:18	151:20
93:19	183:23	15:11 16:14	118:22	192:19	we'll 19:10	181:18,19	went 51:12
volunteer	184:9 185:7	16:19,22,23	120:14,17	197:18,20	20:20 21:22	182:2,5,15	56:3 62:6,9
40:12	187:17	17:7,9,11	121:8,18	197:21,23	29:3,4	182:16,23	74:8 124:13
148:17	188:14	18:17,19,23	122:10	198:6,6,17	46:10 53:2	183:7,25	weren't 39:15
151:3 158:4	190:6	20:14,19	125:22	199:18	54:23 65:10	194:20	West 157:3
volunteers	195:13	21:14 22:16	126:19	waste-to-en...	86:18,20	198:16,17	175:17
39:17,21	196:24	23:22 24:25	127:9,15	51:12 67:12	90:20	200:13	177:23
163:5	202:8,13	25:10,13,21	128:7	102:15	107:21,23	202:13	197:12
vote 158:4	203:7,23	26:10,25	131:14,15	wasted 115:3	115:21	we've 12:9,11	wet 168:2
159:5	204:11,21	41:18,24	131:17,18	115:5 166:9	124:10,23	25:20 28:6	174:8
vu 145:23	208:11	42:4,9,10	131:19,21	wasting	130:15,24	62:3 66:6	white-collar
	wanted 6:2	48:7,15,17	131:22,24	115:8,9,11	130:25	69:6 70:6	102:2
W	7:3 23:15	50:17,25	132:2,18,23	watched	177:25	72:23 74:5	Wicks 105:15
wages 89:2	23:20 24:2	51:10,10,23	133:11	172:22	198:22	74:6 93:17	wide 171:15
waiting 202:7	24:20 37:7	52:6,11,22	134:24	water 19:2	we're 18:7	94:17	wide-ranging
wake 1:18	37:19,23	58:21 61:18	135:14,16	26:21 53:2	23:23 28:24	123:14	13:22
4:21 6:5	39:3 42:7	66:12,14,22	135:23	69:20 115:9	29:19 30:11	125:13	wielded
7:2 8:11	48:12,20	66:25 67:6	136:6,12,15	134:20	32:23 33:6	127:5,8	150:12
14:21 24:12	51:19 53:23	67:7,8 68:7	136:17,20	149:23	33:24 39:14	145:3 153:9	Williams
79:6 107:16	54:8,17	69:4,6,14	136:21	154:7	42:14,22	153:9	7:11,17,18
113:15	55:14 66:8	70:9,11,16	137:5,10	waterways	46:9,15,17	154:11,13	7:23 23:17
127:3	68:25 72:15	70:18,19	138:15,20	149:14	52:22 57:3	154:18	25:5 27:24
197:19	101:20	71:6,8,10	138:21	way 17:15	57:5,10	155:8 158:5	28:5 32:19
walking 38:4	107:7	71:25 73:5	139:4,8,21	33:25 44:5	67:4 69:19	159:20	36:2 39:5
Walmarts	111:10	75:8,9,18	139:23	46:22 53:6	70:5,8	162:6	41:19 45:3
90:2	119:13	75:22,25	140:4	87:17 98:12	71:16 72:22	168:10	48:5 49:7
want 6:6	122:23	76:3,11,14	143:22,24	102:17,19	73:6 75:4	176:14	53:16 56:15
14:17 18:25	126:24	76:15,20	144:23	103:2 106:9	75:17,19	205:20	58:19 60:11
24:8,15	138:5,9	77:3 79:6	148:24,25	124:4	76:2 89:24	weather 8:20	60:23 64:4
27:10 28:10	143:9	81:21,25	149:2,7,8,9	126:19	91:5 105:17	16:7	66:18 72:17
31:2,19	147:11	83:3,11	149:16,20	128:19	105:21	Weavers	73:16 77:25
32:11 36:19	148:19	84:10,13,20	150:2,11,17	132:17	107:20	181:10	123:18
37:16 46:4	151:11	85:13 86:2	151:5 152:2	139:10	108:25	182:7,13	135:10
46:15 47:24	184:14	87:15 89:2	152:8	142:10,17	109:6 115:9	184:11	155:5
47:25 57:19	195:10,16	90:24 91:7	158:10	143:21	115:25	web 162:11	willing 41:15

Committee on the Environment
October 15, 2020

Page 27

50:3	126:23	198:19	X	171:11	1.5 46:3	97:1 98:1	205:1 206:1
win-win	128:17	working	Y	175:18,22	1:00 53:25	99:1 100:1	207:1 208:1
65:15	130:8,10	10:12 12:6	yard 51:23	181:3	54:15	101:1 102:1	100 15:5 89:2
win-win-win	133:19,20	12:11,21	67:7 167:10	182:13	10 10:9 64:18	103:1 104:1	120:12
188:10	133:23	18:8 23:18	187:11,15	189:25	10,000	105:1 106:1	122:21
window	137:18	28:6 29:8	188:2,7,10	202:18	132:20	107:1 108:1	199:11
83:23	138:8 140:6	29:10,18	yards 121:21	years' 91:13	181:12	109:1 110:1	100,000 67:5
Winslow	145:13	39:7 52:22	Yates 78:12	yesterday	10/15/20 2:1	111:1 112:1	172:9
148:8	146:6	69:16,20	78:18,21	43:25	3:1 4:1 5:1	113:1 114:1	101 194:4
196:22	149:20	72:2 73:8	94:15 95:12	York 16:9	6:1 7:1 8:1	115:1 116:1	11 120:20
197:7,11	151:15	80:19,22	96:16	89:8,18	9:1 10:1	117:1 118:1	11,000 89:7
wish 5:16	156:8,12	81:18 82:9	101:12	150:5	11:1 12:1	119:1 120:1	11:00 54:15
witness 7:8	157:22	89:24 96:7	Yeah 28:5	young 99:20	13:1 14:1	121:1 122:1	110 92:4
203:7	158:13	105:12	41:19 56:15	Z	15:1 16:1	123:1 124:1	12 129:16
witnesses	159:17	109:16	66:18 161:3	zero 6:4 10:3	17:1 18:1	125:1 126:1	12,000 89:6
4:25 5:12	160:18	117:25	year 39:12	11:22 24:25	19:1 20:1	127:1 128:1	12th 54:11
6:14 98:24	163:25	128:16	46:3 54:12	25:21 26:10	21:1 22:1	129:1 130:1	13 50:2 88:23
108:2	164:10,21	170:22	64:18 65:2	26:25 48:7	23:1 24:1	131:1 132:1	14 135:25
146:17,25	165:22	178:8	67:3,5 70:4	58:21 61:17	25:1 26:1	133:1 134:1	15 1:7 10:9
147:6,11,22	177:9 180:7	200:13	70:5 73:10	66:12,14,22	27:1 28:1	135:1 136:1	150:12
208:12	180:20,25	202:14	80:14	67:8 68:7	29:1 30:1	137:1 138:1	167:13
woman's	184:11,18	works 124:6	123:13	71:5,24	31:1 32:1	139:1 140:1	150 9:7
194:14	184:24	world 89:16	135:20,25	75:18,25	33:1 34:1	141:1 142:1	150,000 67:6
won 141:9	189:2,5,6	89:22 155:3	136:14,16	76:3,10,13	35:1 36:1	143:1 144:1	16th 82:7,8
wonder 28:12	189:17,19	192:21	141:18	76:20 77:3	37:1 38:1	145:1 146:1	17 186:12
wondering	192:5 193:3	world's 99:12	148:23	81:20 91:13	39:1 40:1	147:1 148:1	18 108:3
38:9 55:11	195:24	worry 35:7	152:18	113:23,25	41:1 42:1	149:1 150:1	120:22
wood 84:22	197:4 200:2	206:11	159:9 171:9	114:6,8,14	43:1 44:1	151:1 152:1	2
word 30:8	206:23	worse 132:6	172:9,12	114:18	45:1 46:1	153:1 154:1	2 78:10,11
37:16	207:18	132:7,11	182:13	118:22	47:1 48:1	155:1 156:1	136:16
words 3:2	worked 26:14	139:13	199:12	131:15,17	49:1 50:1	157:1 158:1	2:00 54:2
25:6	42:17 51:18	163:16	years 19:24	131:17,18	51:1 52:1	159:1 160:1	2:32 1:7
work 11:2	51:19 68:22	168:20	41:20 42:17	131:24,25	53:1 54:1	161:1 162:1	20 91:13 92:5
14:6 23:6	72:18 121:3	190:14	43:5 47:5	136:11,15	55:1 56:1	163:1 164:1	135:24
24:3,24	137:21	202:2	49:22 73:18	136:17	57:1 58:1	165:1 166:1	137:4 143:4
25:3 31:19	144:24	worst 190:2	74:15 84:5	138:14	59:1 60:1	167:1 168:1	200,000
36:3,6 40:5	158:18	worth 88:15	104:6	139:4 140:4	61:1 62:1	169:1 170:1	49:15
51:24 63:16	162:17,19	154:2	113:24	144:22	63:1 64:1	171:1 172:1	2000's 142:11
63:23 64:8	worker 36:15	wouldn't	115:14	149:20	65:1 66:1	173:1 174:1	2001 91:18
65:24 66:5	64:25	195:3	119:10	150:2,11,17	67:1 68:1	175:1 176:1	200431 1:16
66:9 70:6	worker-frie...	wrappings	120:11	151:5	69:1 70:1	177:1 178:1	2:1 3:1 4:1
72:22 73:6	18:22	68:12	127:21	168:16	71:1 72:1	179:1 180:1	4:13,17 5:1
78:5,6,7	workers	wrecking	135:21	181:2 182:4	73:1 74:1	181:1 182:1	6:1 7:1,9
81:4 87:7	22:24 25:10	140:2	137:13	182:24	75:1 76:1	183:1 184:1	8:1,2 9:1
89:23 96:11	36:17 37:5	write 141:7	138:24	188:13	77:1 78:1	185:1 186:1	10:1 11:1
97:13	63:19,24	written 93:23	140:23	191:7,10	79:1 80:1	187:1 188:1	12:1 13:1
100:10	64:5 65:12	140:21	141:9 146:2	Zulene	81:1 82:1	189:1 190:1	14:1,19
106:16	91:4 171:25	151:24	150:12,16	203:16,21	83:1 84:1	191:1 192:1	15:1 16:1
109:19,22	195:19	wrong 38:6	154:20	0	85:1 86:1	193:1 194:1	17:1 18:1
110:5	workforce	75:6	157:15	1	87:1 88:1	195:1 196:1	19:1,20
111:11	36:11 96:20	wrote 48:14	158:19	1.2 46:3	89:1 90:1	197:1 198:1	20:1 21:1
112:2 119:7	96:23 98:11	Wyalusing	159:21		91:1 92:1	199:1 200:1	22:1 23:1
119:10,14	98:18 99:19	176:17	160:19		93:1 94:1	201:1 202:1	24:1 25:1
125:2,4,10	110:2 112:9				95:1 96:1	203:1 204:1	

Committee on the Environment
October 15, 2020

Page 28

26:1 27:1	131:1 132:1	66:22 81:21	5				
28:1 29:1	133:1 134:1	136:12	5,000 59:9				
30:1 31:1	135:1 136:1	2036 89:7	5:48 208:22				
32:1 33:1	137:1 138:1	21st 53:25	50 16:15				
34:1 35:1	139:1 140:1	23 140:20	64:18				
36:1 37:1	141:1 142:1	23rd 12:18	50,000 172:9				
38:1 39:1	143:1 144:1	24th 12:18	500 121:21				
40:1 41:1	145:1 146:1	54:15	51st 176:17				
42:1 43:1	147:1 148:1	25 8:25	52nd 34:24				
44:1 45:1	149:1 150:1	175:22					
46:1 47:1	151:1 152:1	250,000	6				
48:1 49:1	153:1 154:1	49:10	60 16:15				
50:1 51:1	155:1 156:1	29 153:2	132:7				
52:1 53:1	157:1 158:1		600 64:19				
54:1 55:1	159:1 160:1	3	63 152:25				
56:1 57:1	161:1 162:1	3 112:22,23	63rd 12:16				
58:1 59:1	163:1 164:1	3,500 28:14	175:18				
60:1 61:1	165:1 166:1	30 8:16,24	176:4				
62:1 63:1	167:1 168:1	66:25 146:2	64 54:17				
64:1 65:1	169:1 170:1	168:22	65,000				
66:1 67:1	171:1 172:1	189:25	120:18				
68:1 69:1	173:1 174:1	30,000					
70:1 71:1	175:1 176:1	172:11	7				
72:1 73:1	177:1 178:1	300 57:20	7 135:22				
74:1 75:1	179:1 180:1	311 11:7	173:21				
76:1 77:1	181:1 182:1	28:13,14	175:2				
78:1 79:1	183:1 184:1	32,000	70 133:5				
80:1 81:1	185:1,9	121:19	168:21				
82:1 83:1	186:1 187:1	33,000	700,000 67:4				
84:1 85:1	188:1 189:1	206:21	75 126:9,9				
86:1 87:1	190:1 191:1	37,000 65:2	137:12				
88:1 89:1	192:1 193:1		186:23				
90:1 91:1	194:1 195:1	4	75-year 135:2				
92:1 93:1	196:1 197:1	4 119:25					
94:1 95:1	198:1 199:1	129:9,16,24	8				
96:1 97:1	200:1,9	130:16	80 132:5				
98:1 99:1	201:1 202:1	4,500 120:14	186:11				
100:1 101:1	203:1 204:1	4.3 136:13	88,000 136:2				
102:1 103:1	205:1 206:1	4.5 85:11					
104:1 105:1	207:1 208:1	88:14	9				
106:1 107:1	2013 151:23	4.9 206:20	90 136:12				
108:1 109:1	2016 19:24	40 13:10 76:6	902 45:7				
110:1 111:1	2017 20:22	115:4 137:4	90s 142:9				
112:1 113:1	114:6	175:18	911 11:7				
113:13	2018 14:22	400 57:20	96 136:8				
114:1 115:1	21:2	400,000	99 150:16				
116:1 117:1	2019 14:22	182:14					
118:1 119:1	15:4 24:12	401(k) 120:24					
120:1,10	79:11 82:7	41 171:16					
121:1 122:1	2020 1:7 82:9	425 17:3					
123:1 124:1	2026 99:14	44 132:22					
125:1 126:1	2030 88:16	44,000 136:2					
127:1 128:1	89:8	45 89:11					
129:1 130:1	2035 66:14	48 152:17					