CITY COUNCIL CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON RECOVERY AND RESILIENCY

Jointly with

COMMITTEE ON ENVIRONMENTAL PROTECTION

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December 14, 2015 Start: 10:12 a.m. Recess: 3:38 p.m.

HELD AT: Council Chambers - City Hall

B E F O R E: Mark Treyger Chairperson

> Costa G. Constantinides Chairperson

COUNCIL MEMBERS:

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## A P P E A R A N C E S (CONTINUED)

Daniel Zarrilli Director of Office of Recovery and Resiliency

Nilda Mesa Director of Office of Sustainability

Eric Goldstein

Ya-Ting Liu New York League of Conservation Voters

Laurie Schoeman Enterprise Community Partners

Michael Menser Science and Resiliency Institute at Jamaica Bay

Anthony Thomas NYC Central Labor Council

Daisy Chung ALIGN

Brigid Flaherty ALIGN

Christopher Erikson Local 3

Allison Ziogas Local 3

Josh Nachowitz

Downtown Alliance

A P P E A R A N C E S (CONTINUED)

Gigi Li Chair of Community Board Three Manhattan

Catherine McVay Hughes Manhattan Community Board One

Ahmed Tigani Gale Brewer's Office

Marcy Benstock Clean Air Campaign

Marc Matsil Trust for Public Land

Allison Tupper Sierra Club NYC

Cecil Corbin Mark WE ACT for Environmental Justice

Jacqueline Espinal El Puente

Ling Tsou United for Action

Lisa DiCaprio Professor at NYU

Elizabeth Malone Brooklyn Long Term Recovery Group

## A P P E A R A N C E S (CONTINUED)

Jessica Roth Catskill Mountain Keeper

Mark Dunlea People's Climate Movement NY

Alice Slater People's Climate Movement NY

Catherine Skopic People's Climate Movement NY

Annie Wilson New York Environmental Law Project

Anna Palaoi [sp?]

Kim Fraczek Sane Energy Project

Patrick Robbins Sane Energy Project

Clare Donohue Sane Energy Project

Sheila Guist Rights Activist

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 6
2	CHAIRPERSON TREYGER: Good morning and
3	welcome to this joint Oversight Hearing on the OneNYC
4	Plan. I am Mark Treyger, Chair of the Committee on
5	Recovery and Resiliency. I want to thank my
6	distinguished colleague and Co-chair, Costa
7	Constantinides who is Chair of the Committee on
8	Environmental Protection for both his leadership and
9	advocacy which have made this hearing possible. The
10	Committee on Recovery and Resiliency will also be
11	giving a first hearing to Resolution 909 of 2015
12	sponsored by Council Member Margaret Chin, which
13	calls on HUD to approve New York City's application
14	for national disaster resiliency competition funding,
15	seeking additional resources of funding to support
16	our resiliency plans was one of the items called for
17	in the OneNYC Plan, and I hope that this is only the
18	beginning of efforts, our efforts in that area.
19	Today we'll be discussing the portions of the OneNYC
20	Plan covering resiliency and sustainability. At a
21	hearing in October, the Committee on Recovery and
22	Resiliency discussed the city's current coastal
23	defense plans in depth, but the resiliency portion of
24	OneNYC covers many additional areas, not just the
25	physical resiliency, such as resiliency planning,
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 7
2	which I hope will be discussed in more detail today.
3	I was pleased to see OneNYC embrace some ideas that
4	originated with this council, such as studying the
5	recovery of houses of worship and charitable
6	organizations, and I was similarly pleased to see
7	issues such as social vulnerability and heat risk
8	being addressed, but it has been eight months since
9	the plan came out. What I'm hoping what we'll hear
10	today is not just a summary of what is contained
11	within it, but updates and concrete proposals on how
12	to meet the plan's goals. In terms of resiliency I
13	will be interested to hear exactly how the city hopes
14	to meet its goal of eliminating disaster-related
15	long-term displacements in the future. Are we making
16	plans to retain the knowledge and capacity we have
17	gained through the creation of the Build it Back
18	Program, or are we merely hoping the city's buildings
19	will be so resilient that it won't be needed? So
20	often the resiliency planning experts that we meet
21	are from the Gulf Coast states like Louisiana or
22	Texas and some from the Netherlands, and I understand
23	why considering the history of storms in those areas,
24	but what are we doing to ensure that the next
25	generation of experts and planners are also from New
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 1 8 2 York? Similarly, what steps have been taken to 3 increase the rate of volunteerism among New Yorkers 4 to the stated goal of 25 percent by 2020, and aside from the seeking additional Home Energy Assistance 5 Program, HEAP funding from the state, what concrete 6 steps has the Administration proposed to protect 7 8 vulnerable persons from extreme heat? By way of comparison in 2014 there were 248 traffic deaths in 9 this city and a tremendous amount of time, effort and 10 11 thought was rightfully gone in to trying to save 12 those lives. Meanwhile, the OneNYC Plan reports that 13 extreme heat kills over 100 New Yorkers annually with hundreds more hospitalized. Have we dedicated even 14 15 half the amount of effort that went into preventing 16 traffic deaths into preventing heat-related deaths, 17 especially when you consider the potential future 18 dangers of climate change we should be no less 19 dedicated to protecting people from heat than we are 20 in any other area of resiliency? I also just want to 21 just note that one area of focus that I'm personally 2.2 very interested in is certainly the community 23 engagement piece of OneNYC, how we have a plan that capitalizes on local planning and local stakeholders 24 and to hear them and to make sure this is a plan 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 1 9 that's bottom up and not top down. Secondly, how do 2 3 we invest in human capital in our children and in our 4 school system to make sure that they are equipped with the knowledge, the skills and with the correct 5 school infrastructure to help us address the 6 7 challenges of today and tomorrow? So, those are some 8 areas of focus as well. I want to thank everyone here for joining us today, my colleagues, the advocates 9 who have dedicated so much time and effort to helping 10 11 our city make good choices and the members of the 12 Administration who will be testifying, Director of 13 the Office of Recovery and Resiliency, Dan Zarrilli, and Director of the Office of Sustainability, Nilda 14 15 Mesa, and I think that my Co-chair has an opening 16 statement as well. 17 CHAIRPERSON CONSTANTINIDES: Thank you, Chair Treyger, and I want to thank you for your

18 Chair Treyger, and I want to thank you for your 19 leadership and advocacy, not only to get this hearing 20 happening, but from the minute you were elected, you 21 made resiliency a core principle of who you are and 22 what you work for, so thank you for your advocacy. 23 You know, good morning and welcome. I am Council 24 Member Costa Constantinides and I share the 25 Evacuation Protec--Chair of the Committee on

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 10 1 Environmental Protection. Today, the Committee will 2 3 hold jointly to this hearing on Oversight on OneNYC, 4 New York City's blueprint for change, long-term 5 planning and sustainability in the next century. This weekend, 190 nations made a promise to attempt 6 7 to keep temperature increases below two degrees 8 Celsius for the balance of the century in order to 9 address climate change. The first time ever every major nation agreed to do its part to work on climate 10 11 change. This is huge, but making a promise is not the 12 same as keeping a promise. We have a duty of 13 stewardship of our planet and to keep that promise. On Earth Day, Mayor de Blasio released OneNYC which 14 15 made a promise to New Yorkers with overarching 16 unifying themes of growing--of growth, equity, 17 sustainability and resilience. The Mayor made it 18 clear that ours is a city constantly working to stay 19 ahead of climate change curve, and we do this by 20 addressing growth and income inequality at the same 21 time that we address sustainability. However, first 2.2 and foremost, to address climate change, our energy 23 use has to be wise and efficient. We must dramatically increase the use of renewable energy. 24 New York City has already taken a number of 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 11 1 aggressive steps to advance these goals and keep the 2 3 promise. New York City passed Local Law 66 of 2014, 4 which requires the city to reduce citywide greenhouse gas emissions by 80 percent by 2050. Buildings 5 through the use of heating fuel, natural gas, 6 7 electricity, steam, and biofuel are responsible for 8 over 70 percent of citywide emissions. Given this 9 and the fact that the vast majority of existing buildings are to remain well beyond 2050, the city's 10 11 stock of one million buildings represents the greatest potential source of citywide greenhouse gas 12 13 emission reductions. It is therefore necessary for 14 the city to reduce emissions from the building 15 sector. Renewable energy can be utilized to reduce 16 emissions from buildings by increasing reliance on renewable energy, technologies onsite within 17 18 buildings to supplant the current role of fossil 19 fuels in heating, cooling, hot water, and cooking. 20 Intro 609 unanimously passed just last week by the 21 City Council, require the city to use a screening tool whenever for constructs or retrofits to city 2.2 23 owned building, and if the tool determines that geothermal system may be cost effective taking quick 24 count of not only the cost of installation, but also 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 12 1 the savings on utility bills and the social costs of 2 3 carbon, such as the benefits of reduced greenhouse 4 gas emissions, then geothermal must be installed and solar must also be considered for the specific 5 project at that time, and I'm very pleased to hear 6 this morning that we were taking huge steps on 7 8 OneNYC, having one a third of our city building stock already retrofitted. So, it's great news to hear 9 that. However, the council's other legislative 10 11 measures that can be introduced that may help us to a sustainable future, Intro 478 that's a required 12 13 installation of solar, photovoltaic systems in all city buildings not just schools, Intro 844 which 14 15 requires solar parking canopies on all public parking 16 lots and electric vehicle charging stations for 50 17 percent of those parking spots, and other 18 benchmarking goals as part of to set forth for local 19 law 66. The committee is also interested in hearing 20 introduced legislation that would address methane 21 leaks and mitigation as an impact on the New York 2.2 City urban forest, and introduce legislation that'll 23 improve green roofs and set standards for permeable sidewalks. Six years ago the Council enacted green 24 building laws effecting buildings over 50,000 square 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 13 1 That legislation has a potential to be 2 feet. 3 strengthened to celebrate retrofits of large 4 buildings. The Chair and the Environmental Protection Committee are currently working with the 5 Mayor, the Mayor's Office of Sustainability and the 6 technical working group to improve the efficiency of 7 8 operations of large buildings. We also remain 9 committed to working with the private sector, whether through in incentivization [sic] or through mandates. 10 11 We know that we have to move forward when it comes to 12 large buildings and buildings throughout New York 13 City. this is the challenge that's presented to us, 14 but the city and this council and the Mayor's Office 15 has never shrunk from a challenge before, and I look 16 forward to working with them to getting this task 17 done of having buildings both private and public be 18 part of this process. OneNYC's vision on 19 sustainability outlines six goals, reduce waste from 20 landfills to zero by 2030. The city will clean up 21 contaminated land to address disproportionately high exposure in low income communities and convert land 2.2 23 to safe and beneficial use. The city will have the best air quality among all large cities by 2030. 24 The city will mitigate neighborhood flooding and other 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 14 1 high quality water services. The city's greenhouse 2 3 gas emissions will be 80 percent or lower by 2050, in 4 2005 [sic], and the city will assure that all New Yorkers will benefit from useful, accessible and 5 6 beautiful open spaces. These measures, when 7 undertaken, will make New York City a national 8 sustainable leader in a city that keeps its promise 9 to future generations to reduce greenhouse gas emissions to protect our earth. I look forward to 10 11 hearing the testimony from Office of Resiliency and 12 Dan Zarrilli in Recovery and also Nilda Mesa from the 13 Mayor's Office of Sustainability. Thank you for your 14 partnership both and thank you for your great work, 15 and I look forward from hearing from all of you 16 today, and if there's something that you really like 17 here's how you express that in the City Council. We 18 don't do applause. It's kind of counterproductive, stops us from working. This is going to be a long 19 20 hearing, but that's what it should be. We're here 21 today to talk about a very serious subject, so we are 2.2 looking forward to hearing all of your testimonies 23 today and moving our city forward to the greener sustainable future, and again, thank you Chair 24 25 Treyger.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 15
2	CHAIRPERSON TREYGER: Thank you, Chair,
3	for your leadership and constant advocacy. Also,
4	we've just been joined by the Minority Leader,
5	Council Member Steve Matteo, and I believe that's it
6	for now, and with that we'll hear now from the
7	Administration, again, Director of Office of Recovery
8	and Resiliency, Dan Zarrilli, and Office of
9	Sustainability, Nilda Mesa. I'd just like to swear
10	you both in. Do you affirm to tell the truth, the
11	whole truth and nothing but the truth in your
12	testimony before this committees and to respond
13	honestly to Council Member questions? Please, you
14	may begin. Thank you.
15	NILDA MESA: Good morning, Chairpersons
16	Constantinides and Treyger and members of the
17	Committees on Environmental Protection and Recovery
18	and Resiliency. My name is Nilda Mesa and I'm the
19	Director of the New York City Mayor's Office of
20	Sustainability and the Project Director for OneNYC.
21	Thank you for the opportunity to testify today about
22	Vision Three of One New York, the Plan for a Strong
23	and Just City. As you know, OneNYC is the city's
24	long term integrated plan for growth, equity,
25	sustainability, and resiliency. It built upon the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 16 1 path-breaking work done by the Bloomberg 2 3 Administration and PlaNYC. Under Local Law 17 of 4 2008, the City of New York is required to create a long term sustainability plan every four years with 5 progress reports annually. We will release a 6 7 comprehensive progress report on Earth Day next year. 8 I'm here today to give you an overview of sustainability portion of OneNYC since its release. 9 This hearing could not be more timely. Over the 10 11 weekend, a comprehensive climate agreement was 12 reached in Paris, truly a historic turning point that 13 sets a path towards limiting carbon emissions to two degrees centigrade or 3.6 degrees Fahrenheit above 14 15 pre-industrial era temperatures, with a stretch goal of 1.5 degrees, the level at which the most serious 16 17 impacts from climate change are anticipated to be 18 averted. The agreement calls for transparency as 19 well as five-year check-ins at which new targets may 20 be established to keep us as a nation on the path to 21 meeting our goals. There were several factors this 2.2 round of negotiations that contributed towards a 23 successful push to an agreement. One of the primary factors was the heightened role of cities and other 24 subnational governments in the run up to Paris. 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 17 1 Cities came together as never before, not waiting for 2 3 national governments, but rather leading the way 4 showing how this can be done. As we in this room all know, cities are where the rubber meets the road. 5 For all the targets that may be set by national 6 7 governments, cities are where the impacts of climate 8 change are felt and where the day to day decisions 9 are made that effect the course of our climate. We joined our fellow cities and subnational governments 10 11 on a series of collective actions that commit us to 12 regular reporting and transparency, including as part 13 of the Compact of Mayors and the Under Two MOU. With these subnational frameworks in place, cities are now 14 15 able to their goals and methodologies consistent with each other, and these provide as well a valuable 16 17 series of networks within which NYC may exchange best 18 practices and engage in collective action with cities 19 all over the world. As evidence of how our approach 20 is viewed internationally, I'm proud to announce that 21 the One City, 80 by 50 Buildings Plan and the Buildings Technical Working Group One, the C40 2.2 23 Climate Leadership Groups Building Energy Efficiency Award in Paris at the annual C40 awards. 24 Thank you to Council for your participation in the Buildings 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 18 1 Technical Working Group, and we think that you are in 2 part sharing that with us. On April 22<sup>nd</sup>, 2015 Mayor 3 de Blasio released OneNYC. At the time, he said, 4 "The very process of addressing our environmental 5 challenges is part of how we address our economic 6 challenges. The process of addressing the 7 8 sustainability needs of our city is how we also 9 battle inequality." OneNYC launched 200 initiatives spanning areas such as workforce development, 10 11 premature mortality, healthcare and transportation 12 access, as well as the areas mandated by charter, 13 including energy, transportation, solid waste, parks, and resiliency. OneNYC also carries forward the 200 14 15 or so existing PlaNYC initiatives. Since we released OneNYC, the initiatives were funded in the budget 16 17 process and an extensive internal performance 18 management tracking system has been established to 19 track progress of our implementation. Today I'm 20 pleased to update you on the progress the city has 21 made towards the environmental sustainability goals we outlined last spring. OneNYC was developed with 2.2 23 input from the Mayor's Sustainability Advisory Board, and we are grateful for the input and support of 24 Council Member Richards as Co-chair of the Advisory 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 19 1 Board as well as Council Member Treyger, as Chair of 2 3 Recovery and Resiliency Committee. While we feel the absence of Council Member Richards since he has 4 moved on to Chair the Committee on Zoning and 5 Franchises, we are delighted to have such a strong 6 7 partner on the Advisory Board in Chairman Constantinides. We look forward to working with him 8 9 in the years ahead in greening our city and value our work together to date. On a side note we also extend 10 11 our congratulations to Council Member Richards on the birth of his son and wish him and his wife and family 12 13 health and happiness in the years to come. In addition, I'd like to acknowledge the valuable 14 15 insights and ideas provided by the Council borough 16 delegations and the Speaker's Office as well as other elected officials as we developed OneNYC. There were 17 18 many times along the way when you made us aware of 19 issues that led us to a deeper understanding of the 20 challenges in your districts and the initiatives that 21 we should consider. OneNYC is stronger as a result, and we look forward to continuing our collaborative 2.2 23 efforts. When the Mayor announced the bold target last year that New York City would reduce greenhouse 24 gas emission 80 percent by 2050 the world took note. 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 20 1 When we released OneNYC on Earth Day, the world took 2 3 note. We have a special responsibility here in New York when it comes climate and environment. As so 4 5 many times the question is posed, "What is New York City doing?" With the release of OneNYC we reset the 6 7 bar and OneNYC has become the new model for 8 sustainability plans, as I have been told over and 9 over again by my colleagues in other cities and, well, the consultants they are hiring to do their own 10 11 versions. With OneNYC we became the first major city 12 to integrate environmental sustainability with 13 economic and social sustainability. This model complements the one adopted by the UN this fall with 14 15 its sustainable development goals. When we began 16 pulling it together, we noted that 10 years from now 17 New York City will be celebrating its 400<sup>th</sup> anniversary as a city. We ask ourselves, what does 18 19 the city need to thrive in the next century, not what 20 can we do as a city government, but rather what does the city need? This made all the difference. 21 We looked at the underlying foundations, at trends over 2.2 23 the last few years. We saw that population growth is rising fastest in the boroughs outside Manhattan and 24 so are jobs. That has a host of implications for 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 21 1 everything from access to jobs to air quality to 2 3 housing and schools. One key fact that we saw was 4 that while New York City has more jobs than it has ever had, 42.1 percent of our population lives either 5 in or near poverty. Incorporating equity into OneNYC 6 7 is a critical piece of what we are doing and infuses 8 the plan in many ways. For example, as we looked at 9 patterns of air pollutants and asthma hospitalizations, we saw that some of the worst 10 11 asthma corridors are in the poorest neighborhoods. 12 If we improve air quality that means children don't 13 miss school, parents don't miss work, and their parents stay out of the hospital more. That puts 14 15 everyone on a better path to share in the economy of 16 this city and strengthens quality of life for all. 17 The environment and the future are all 18 interconnected. With the release of OneNYC, the Mayor pledged to reduce greenhouse gas emissions 80 19 20 percent by 2050 over a 2005 baseline with an interim 21 target of reducing greenhouse gas emissions 40 2.2 percent by 2030. The city has made great progress to 23 fulfilling this commitment in the past six months, and we anticipate making even more progress in the 24 25 next year. This morning, the Mayor announced that of

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 22
2	the nearly 3,000 public buildings with any
3	significant energy use, almost one-third already have
4	retrofits in place or underway. Those buildings
5	represent 50 percent of greenhouse gas emissions from
6	city municipal buildings, and we've made huge strides
7	with solar installations too. The city has installed
8	nearly four megawatts of solar on its buildings in
9	the last year alone, bringing the total to nearly
10	five megawatts. The city recently released a request
11	for proposals for 15 megawatts more of solar on
12	public buildings that includes 66 schools across the
13	five boroughs, Bellevue Hospital, Hostos Community
14	College, the Bronx Hall of Justice, the Queens
15	Museum, and the Abe Stark Ice Ring among others.
16	Emissions from buildings make up 71 percent of New
17	York City's greenhouse gas emissions. Given this
18	large share, our teams started working on reducing
19	greenhouse gas emissions from buildings with the
20	release of One City Built to Last during Climate Week
21	2014. The projects initiated or completed in city-
22	owned buildings since the release of One City are
23	projected to reduce greenhouse gas emissions by more
24	than 90,000 metric tons and avoid nearly 40 million
25	dollars in the city's annual energy costs. The city
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 23 1 has upheld its commitment to make public buildings 2 3 models of sustainability by initiating or completing 4 retrofits in 770 buildings or more than a quarter of all city-owned buildings greater than 10,000 square 5 feet. Earlier this year, we launched the Buildings 6 7 Technical Working Group with 50 expert stakeholders. 8 It includes building owners, architects, engineers, 9 labor and the key sectors from the building industry. The organizations represented include REBNY, the Real 10 11 Estate Board of New York, Urban Green, Align, BOMA 12 [sic], and key city agencies. The Technical Working 13 Group is taking a comprehensive analytical approach 14 in formulating recommendations for the city to adopt 15 next year. It is relying on data collected for the 16 last five years from our benchmarking laws and 17 breaking down patterns of energy use and best 18 practices by building age, size and type. This is 19 why C40 gave us the award. Nothing else like this 20 exists in the world. What we developed out of this 21 group will serve as a model worldwide and lay out a 2.2 game plan for us that will have benefitted from a 360 23 input citywide. The mayor has said that we look at voluntary approaches, but that we will institute 24 25 mandates if that is what it will take to meet our 80

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 24 1 Our approach is informed by the 2 by 50 goals. 3 incredible success of the clean heat initiative; 99.5 4 percent of all number six fuel oil burning boilers have switched to cleaner fuels, either natural gas or 5 number two for the most part. What is left of the 6 7 number four boilers we are addressing so that they 8 will be converted before the 2030 deadline? The way 9 we got there with this program is that we conducted extensive outreach to building owners in advance of 10 11 the deadline for conversion providing building owners 12 with the resources and information they needed to 13 meet the deadline. We are more interested in performance than in fining building owners so that 14 15 they have the resources to make the conversions and run their buildings. In September of this year, the 16 17 city launched the NYC Retrofit Accelerator, a one-18 stop resource that provides one on one assistance to 19 private building owners and operators to help them 20 undertake energy and water efficiency upgrades. The 21 program is anticipated to reduce citywide greenhouse 2.2 gas emissions by rough one million metric tons per 23 year by 2025 by accelerating retrofits in up to 1,000 properties per year by 2025, the equivalent of almost 24 200,000 passenger vehicles taken off the roads while 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 2.5 1 saving New Yorkers an estimated 350 million dollars a 2 3 year in utility costs and generating over 400 local 4 construction-related jobs. With respect to solar, we have seen private solar installations in New York 5 City more than double since the end of 2013 from less 6 7 than 25 megawatts to more than 54 megawatts today 8 across 3,500 installations. The response to our 9 community solar pilot in Brooklyn's Community Board Six was well beyond what we expected. Private solar 10 11 installations are growing enormously in all five 12 boroughs, with one and a half megawatts installed in 13 Manhattan and nearly 10 megawatts in the Bronx and 14 Brooklyn each, nearly 14 in Queens, and more than 19 15 megawatts in Staten Island. This includes nearly 16 3,000 installations on residential properties and over 600 installations on nonresidential properties. 17 18 Separately, there was another nearly 18 megawatts of 19 private solar installations scheduled to be 20 installed. The city is also leading by example by 21 installing solar on our own buildings. As of December 1<sup>st</sup>, 4.8 megawatts of solar has been 2.2 23 installed on city-owned property across 34 installations and 2.8 installed across 17 public 24 schools. Separately, there is another 18 megawatts 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 26
2	of private solar installation scheduled to be
3	installed. Other solar sites include City Hall and
4	major facilities like the Port Richmond Wastewater
5	Treatment Plant. To further encourage solar
6	adoption, the city will dramatically reduce wait
7	times to receive a permit to install solar for most
8	types of solar projects. Professional self-
9	certification for simple solar projects will be ready
10	on January 1 <sup>st</sup> , 2016. Self-certification will
11	simplify the process for low-risk solar operations so
12	that DOB, Department of Building, resources are
13	efficiently allocated to more complex projects. New
14	York City can't achieve 80 by 50 by only reducing
15	greenhouse gas emissions however from the city's
16	building stock. We will not reach our goals that
17	way, and we can't put this effort all on the backs of
18	building owners. With the launch of OneNYC we added
19	the missing sectors, transportation, energy supply,
20	and waste. Earlier this monthon transportation.
21	Earlier this month, the Administration released NYC
22	Clean Fleet, our roadmap to achieve a 50 percent
23	reduction in greenhouse gas emissions from municipal
24	fleet operations below 2005 levels by 2025 and an 80
25	percent reduction by 2030. With Clean Fleet, NYC
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 27 1 will have the largest municipal electric fleet in the 2 3 US and possibly the world, 2,000 vehicles. The 4 transportation sector accounts for nearly one-quarter of citywide greenhouse gas emissions and the city 5 owned and operated vehicle account for approximately 6 7 four percent of citywide transportation emissions or 8 13 percent of the city government's emissions. NYC 9 Clean Fleet enables the city to one, buy more electric vehicle, and two, expand the use of anti-10 11 idling, hybrid and stop/start technologies in medium 12 and heavy-duty vehicles. This will help reduce 13 emissions and gasoline while trucks are rest. These technologies can reduce a vehicle's fuel consumption 14 15 by up to 33 percent and total fleet emissions by five percent. The city will also be looking at phasing 16 17 out traditional diesel fuel in city vehicles by 2035. 18 These diesel alternatives are estimated to reduce 19 emissions by 34 percent. On December 1, DOT, 20 Department of Transportation, launched the newest 21 select bus service route connecting the Bronx, 2.2 Flushing and Jamaica. This corridor currently serves 23 42,000 customers daily from the Bronx and Queens and covers 13.9 miles with Main Street in Queens being 24 the highest ridership section. The Q44SBS marks the 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 28 1 ninth SBS route in the city. The launch of the Q44 2 3 SBS route is the latest step towards the Mayor's 4 commitment to reach 20 routes citywide, providing reliable and sustainable transit options as well as 5 better connections to retail and job centers. 6 Ιn 7 September, DOT installed the one-thousandth mile in 8 the city's bicycle network. DOT is building 50 miles 9 of bicycle network every year, including at least five miles of protected bike lanes. In 2015, DOT is 10 11 on pace to install more than 12 miles of protected 12 bike lanes, the most ever in a single year. With 13 respect to energy supply, this summer the 14 Administration released a request for information or 15 an RFI to run our operations on 100 percent renewable 16 electricity. New York City spends between 600 and 650 17 million dollars on municipal-related operations and uses between four and five terawatt hours of 18 19 electricity a year. It is about 10 percent of the 20 city's electricity demand. The associated greenhouse 21 gas emissions are about 1.3 million metric tons of 2.2 CO2 equivalent. The RFI is the city's first step to 23 engaging all entities involved in or supporting the renewable energy sector to deliver reliable and cost 24 25 effective goals. Right now, we only have about two

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 29 1 percent of the city's electric supply powered by 2 3 renewables. This number needs to go up and we are 4 sending the clear signal that we want to spur the market into action. We are also participating in the 5 state's REV [sic] proceedings. By our calculations 6 New York City's greenhouse gas emissions make up 7 about 40 percent of statewide emission and we want to 8 9 do our part to ensure we all meet 80 by 50. We are also working on projects that are smaller in scale. I 10 11 was pleased to work with the Council on the passage of Intro 609 which will be signed by the Mayor in the 12 13 coming weeks. We look forward to clearing the way for more geothermal systems in New York City at less 14 15 cost and planning time for building owners and to 16 finding ways to use this strategy even more often in 17 our own municipal buildings where we can. We are 18 also actively working on a micro-grid initiative and 19 other distributed energy strategies including solar 20 as described above. With respect to waste, the city 21 has made great progress on our goal of sending zero 2.2 waste to landfill by 2030. We're expanding the 23 organics program by adding 53,000 households in Brooklyn, Queens and two routes for high-rises in 24 25 Manhattan. There are now 41 districts served by

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 30
2	curbside collection or drop-offs, including 734
3	schools and 225 community composting sites. DSNY is
4	collecting recycling as well from close to 500 NYCHA
5	buildings and has trained more than 70,000 residents
6	at NYCHA facilities. We are on track to have
7	recycling at all NYCHA facilities by the end of 2016.
8	With respect to parks and natural resources, through
9	the community parks initiative, the city is
10	strengthening the network of parks and public space
11	in under-resourced high poverty and growing
12	neighborhoods. In October, the Mayor and
13	Commissioner Silver announced that capital funding
14	for community parks initiative would be doubled,
15	enabling complete community-driven renovations of
16	approximately 30 additional neighborhood parks over
17	the next four fiscal years, reaching a total of over
18	60 parks through this initiative. The city will
19	break ground on 35 parks through this initiative.
20	The city will break ground on 35 parks in the first
21	phase of CPI parks in fall 2016. Additionally, New
22	York City Parks announced in September that targeted
23	physical improvements in 60 of the city's parks and
24	playgrounds were complete. In FY16, New York City
25	Parks will complete an additional 25 targeted

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 31 1 improvement projects. These parks were selected 2 3 because they had higher than average concentrations 4 of poverty. And last but not least, earlier this month Mayor's de Blasio and Bloomberg planted the 5 one-millionth seventh--sorry--1,017,634<sup>th</sup> tree. On 6 7 air quality we've made strides towards having the cleanest air quality of any big city in the US. Some 8 9 of these highlights include enhanced enforcement of the updated DEP Air Pollution Code through increased 10 11 and more flexible deployment and implementation of a registration fee waiver for mobile food trucks and 12 refrigeration trucks using clean technologies for 13 14 auxiliary power units. As you know, the Mayor and 15 Council collaborated successfully to pass Intro 712, 16 a new requirement that DOHMH, the Department of 17 Health and Mental Health, conduct a community air 18 quality survey on an annual basis. The law gives 19 DOHMH discretion as to exactly where and when 20 pollutants are measured at street-level monitoring sites but requires the research to identify patterns 21 of pollutants by geographic area, by source and by 2.2 23 season, and to produce maps of these findings. With respect to water, one of the major goals of OneNYC is 24 reducing the risk of flooding in the most affected 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 32 1 communities. DEP is developing an action plan to 2 3 resolve long-standing flooding conditions that affect 4 over 400,000 city residents in southeast Queens. The area has more 311 flooding and confirmed sewer back-5 up complaints than any other area of the city, and in 6 7 certain neighborhoods experiences recurring flooding 8 conditions. The plan includes construction of almost 9 10 miles of new or reconstructed sewers as well as five miles of water main replacement. The one and a 10 11 half billion dollars of capital construction in the 12 10-year plan to address southeast Queens flooding 13 includes building out the storm sewer system 14 throughout southeast Queens at an accelerated pace, 15 and utilizing green infrastructure and innovative 16 sewer construction to bring relief to the worst 17 affected areas faster. For faster relief to areas 18 with repeat flooding, DEP will also build sewer 19 extensions at a rate of about six per year, at a cost 20 of about 20 to 30 million dollars annually. Mayor's 21 Office of Sustainability and DEP are developing in addition an interim floatable and settleable [sic] 2.2 23 trash and debris reduction campaign. This includes a public education campaign. A multi-agency taskforce 24 has also been working on meeting the goal of OneNYC 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 33 1 to install 500 new or repaired fountains across the 2 3 city over the next 10 years. DEP has allocated five 4 million dollars towards that effort, and we expect to 5 be one-fifth of the way to the OneNYC goal after the With respect to brown fields, the city 6 first year. 7 has made progress on cleaning up contaminated land through the Office of Environmental Remediation. 8 The 9 adopted FY16 budget included funding Brownfield Jumpstart, which will provide higher levels of city 10 11 funding for environmental investigations and clean-OER also launched the Financial Assistance 12 up. 13 Search Tool, an online Brownfield financial incentive 14 locator, and the pro-bono environmental assistance 15 program in conjunction with the NYC Brownfield Partnership to assist community developers, faith-16 17 based developers and small and mid-sized developers 18 to clean up and redevelop brownfield sites. As I 19 mentioned earlier in my testimony, the full OneNYC 20 annual update will be out on Earth Day 2016. The 21 update will provide detailed progress on all the 2.2 initiatives and the metrics, and as you can see, we 23 are well on our way. Thank you again for this opportunity to testify before both of your committees 24 and I look forward to working together to reach our 25

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 goals. I will now turn this over to my colleague Dan
 Zarrilli to provide an update on Vision Four: Our
 Resilient City.

Thanks, Nilda. Good 5 DANIEL ZARRILLI: morning. My name's Daniel Zarrilli. I'm the Director 6 7 of the Mayor's Office of Recovery and Resiliency. I 8 want to thank Chairpersons Treyger and Constantinides 9 as well as all the members of the Environmental Protection Committee and the Recovery and Resiliency 10 11 Committee for this opportunity to speak about Vision 12 Four, OneNYC, which is the City's comprehensive 13 resiliency program, preparing our neighborhoods, our economy, public services to withstand and emerge 14 15 stronger from the impacts of climate change and other 21<sup>st</sup> Century threats. The importance of this program 16 17 was underscored in a global way with this weekend's 18 Paris Climate Acord [sic] which beyond that which 19 Nilda mentioned also committed nearly 200 nations to 20 an additional and new global goal to strengthen 21 resiliency and reduce our vulnerability to the 2.2 impacts of climate change. This Paris agreement is 23 indeed timely and necessary. By the 2050's according to just the middle range projections of the New York 24 City Panel on Climate Change, average New York City 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 35
2	temperatures are projected to increase between four
3	degrees and 5.7 degrees Fahrenheit. Annual
4	precipitation is projected to increase between four
5	and 11 percent, and sea levels are projected to rise
6	between 11 and 21 inches on top of a foot of sea
7	level rise that we've already witnessed since 1900,
8	and extreme events like flooding are becoming more
9	frequent and intense. Hurricane Sandy highlighted
10	the reality of all of these risks tragically killing
11	44 New Yorkers, causing nearly 19 billion dollars in
12	damages and lost economic activity. Many
13	neighborhoods were devastated, over 88,000 buildings
14	were flooded. Over 23,000 businesses impacted, and
15	over two million residents were without power for
16	weeks, and gas shortages persisted for over a month.
17	In response, the city proposed a 20 billion dollar
18	resiliency program to address not only the risks of
19	another Sandy, but to broaden our approach to the
20	risk of climate change and other threats more
21	broadly. In April of this year, Mayor de Blasio
22	released the ground-breaking OneNYC which expanded
23	this multilayered resiliency program and accelerated
24	its implementation. In October of this year I was
25	here before the Committee on Recovery and Resiliency
I	

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 36 1 to provide an extensive overview of the de Blasio 2 3 Administration's actions and accomplishments with 4 respect to our resiliency plan. Today I'll more briefly describe the city's multilayered resiliency 5 vision of OneNYC comprised of neighborhoods, 6 7 buildings, infrastructure, and coastal defense with a 8 few key highlights of our accomplishments. With 9 OneNYC, our neighborhoods, the places where we live, work and play are the first layer of our resiliency 10 11 efforts. Our goal is to make every single New Yorker 12 safer by strengthening the social and economic 13 resiliency of their communities. How are we doing In partnership with the City Council we are 14 this? 15 working with houses of worship and community-based 16 organizations to build their capacity for emergency 17 and resiliency planning. We're launching new efforts 18 to evaluate and mitigate climate health impacts. We've improved risk communication and emergency 19 20 preparedness by updating our evacuation maps, 21 releasing a new comprehensive hazard mitigation plan 2.2 and expanding neighborhood-based programs, and we're 23 investing to make emergency shelter sites accessible to New Yorkers with disabilities. Furthermore, we're 24 25 focused on small business recovery and resiliency.

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 37 1 To date, we've helped more than 800 Sandy-effected 2 3 businesses with loans and grants and expect to 4 implement innovative resiliency technologies in 5 thousands of small business locations. We've also created nearly 2,000 jobs and hired over 900 6 7 residents from Sandy-impacted areas, continuing our 8 commitment to ensure that New Yorkers have 9 opportunities to participate in the recover process in their neighborhoods. Our second layer is working 10 11 to upgrade the city's buildings to withstand climate 12 change impacts. Sandy showed us that structures 13 built to the latest code perform well in storms and better protect their inhabitants. We've learned from 14 15 this and have already upgraded the city's building codes, including 16 new local laws to account for 16 17 vulnerabilities related to extreme weather and 18 climate change. We're also fighting to protect the 19 affordability of flood insurance. We're working to 20 correct errors in FEMA's flood maps, advocating for measure to make FEMA's national flood insurance 21 2.2 program work better in dense urban environments, and 23 informing New Yorkers about flood risks and flood insurance changes. The third layer of the city's 24 multilayered strategy is adapting the city's 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 38 1 infrastructure and supply chains to climate impacts. 2 3 We are directly investing billions of dollars into 4 the city's infrastructure and we are collaborating with our many regional infrastructure partners to 5 ensure that their investments align with the city's 6 7 vision for resiliency and affordability. Finally, 8 the fourth layer of our OneNYC Resiliency Program is 9 strengthening our coastal defenses against sea level rise, wave action and storm surge. When Sandy struck 10 11 our coastal defenses were nearly non-existent. In 12 response to the devastation the city released and 13 began implementing its first-ever comprehensive coastal protection plan. Using this as a foundation, 14 15 OneNYC aims to further reduce the city's coastal vulnerabilities. We believe there's no silver bullet 16 17 solution to these risks and that a tailored local 18 approach is best. Communities also need to play a 19 vital role in the development of these projects, and 20 the de Blasio Administration is committed to working 21 with communities, whether in Red Hook, Staten Island, 2.2 Breezy Point, Coney Island, the Rockaways and Jamaica 23 Bay, lower Manhattan, the Lower East Side and Hunt's Point, or across the city to implement this vision. 24 25 Since my last testimony we have hit several new

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 39 1 critical milestones on this program. Work at Coney 2 3 Island Hospital and across the HCC portfolio is 4 proceeding and design for the new Coney Island facility is starting soon. we've completed our first 5 phase of pre-design and community engagement in both 6 7 the lower East side and in Hunt's Point and are 8 aggressively advancing the implementation of the 9 city's rebuild by design projects in partnership with both communities. We've launched the design process 10 11 for an integrated flood protection system in Red 12 Hook, and we'll be in the community often as that 13 project develops. The city just recently broke ground on a 22 million dollars Blue Belt [sic] 14 15 Project in Staten Island to reduce local flooding, 16 and we came to agreement with LIPA [sic] and PSENG to 17 undertake a storm hardening collaborative process to 18 bring resiliency to the electric grid in the 19 Rockaways similar to a successful model that assisted 20 a one billion dollar investment in Con-Ed's electric 21 grid across the rest of the city. Before I conclude, 2.2 I'd like to also thank our partners in the City 23 Council, including Council Members Chin, Treyger, Eugene, Gentile, Johnson, Richards, and Rose for 24 supporting and introducing the city's application to 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 40
2	HUD's National Disaster Resilience Competition. I
3	also want to thank Manhattan Borough President Gale
4	Brewer, State Senator Squadron, our entire federal
5	delegation, and many important local and citywide
6	stakeholders such as the Downtown Alliance, the Trust
7	Republic Land, both Community Boards One and Three
8	for their support of this application. Our NDRC
9	application offers a compelling resiliency vision, a
10	focus on neighborhood affordability and connectivity
11	through integrated water management for the Lower
12	Manhattan and Two Bridges neighborhoods, which remain
13	vulnerable to flooding, sea level rise and other
14	threats. These communities are home to vulnerable
15	populations, economic activity of national importance
16	and critical transportation and utility
17	infrastructure which we are committed to protecting.
18	The de Blasio Administration has shown our commitment
19	to these communities and all across the city, and we
20	put over 100 million dollars on the table toward this
21	application and have already launched a public
22	planning and design process to move this project
23	forward. In an impressive display of collaboration,
24	the City Council, local business organizations and
25	community residents and stakeholders have come
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 41 1 together to call on HUD to continue its close 2 3 partnership with the city and fund this 500 million 4 dollar game-changing application, which will help ensure that Sandy funds stay in our region. Now is 5 the time to call on our friends in Washington, D.C. 6 7 to ensure we win this competition and we thank you 8 for your support and for this resolution. Thank you 9 again for this opportunity to testify before both committees, and I look forward to working with you to 10 11 adapt the city to the risks of climate change and other 21<sup>st</sup> century threats. Your partnership is 12 13 critical to building a stronger more resilient New 14 We'd be happy to take your questions at this York. 15 time. Thank you. 16 CHAIRPERSON TREYGER: Thank you to the 17 Administration. I just want to note we've also been 18 joined by Council Members Brad Lander, Council Member 19 Donovan Richards. We got a nice shout out to the 20 addition of your new family members. 21 Congratulations, Council Member Richards. And 2.2 Council Member Margaret Chin, who I think has a few 23 words for us about her very important Resolution 909.

24 Council Member Chin?

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 42
2	COUNCIL MEMBER CHIN: Thank you, Chair.
3	Good morning. I'm Council Member Margaret Chin, and
4	I represent District One, which includes Lower
5	Manhattan's neighborhoods such as the Sea Port [sic],
6	the Historic Battery and two bridges. I want to
7	thank the Chair of the Committee on Recovery and
8	Resiliency, Council Member Mark Treyger, and the
9	Chair of the Committee on Environmental Protection,
10	Council Member Constantinides, for hearing Reso 909.
11	This resolution urges the United States Department of
12	Housing and Urban Development to support New York
13	City's application for the National Disaster
14	Resiliency Competition, which could potentially award
15	the city with up to 500 million dollars. The federal
16	dollars from this competition has a potential to not
17	only fortify but revitalize a large part of Lower
18	Manhattan from the Lower East Side to Battery Park
19	City. Whenever I speak of resiliency, I can't help
20	but remember feeling powerless during Sandy as the
21	water rose over the barriers and flooded into homes
22	and businesses in my district. After it passed, my
23	office and I did what we can delivering supplies and
24	ensuring that the most vulnerable members of our
25	community, such as the elderly were accounted for and
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 43
2	taken care of. I will never forget seeing the unlit
3	street and ruined storefronts in the aftermath of the
4	storm. I know my fellow colleagues here and I share
5	the same goal, be ready for these type of natural
6	disasters, which are expected to happen more often as
7	our sea levels continue to rise. It's not a matter
8	of if, but when. While city has identified many ways
9	to protect our 520 miles of coastline, the project
10	underway will cost nearly 3.7 billion dollars. The
11	city is still trying to find ways to fund half of
12	these projects. The NDRC is not only a large source
13	of potential funding, it can help attract new
14	investment to cover the cost of these projects.
15	Furthermore, the federal funds for protect and
16	connect will reaffirm the city's commitment and
17	strengthen our momentum to increase investment in
18	resiliency for the City of New York. Once again, I
19	want to thank the Chairs Treyger and Constantinides
20	for this Oversight Hearing and for hearing Reso 909.
21	I look forward to hearing everyone's question and
22	comments, and I hope you will join us to ensure that
23	New York City is prepared to weather any storms and
24	face the impact of climate change. Thank you.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 44
2	CHAIRPERSON TREYGER: Thank you, Council
3	Member Chin. We've also been joined by Council
4	Member Rosie Mendez, and I just want to just say to
5	Council Member Chin we thank you and also I believe
6	Borough President of Manhattan Brewer and others for
7	raising an issue that I think is very legitimate,
8	that the federal government sets these very ambitious
9	goals, and historically they have not provided the
10	resources to help cities and states meet these goals,
11	and I think that's exactly what I think her
12	resolution speaks to. So, I'm very proud to be a co-
13	sponsor of your bill, Council Member. So, just I
14	thank the Administration for your testimony, and
15	hopefully we'll have a very, as you can see by the
16	good attendance here, we have a lot of interest and
17	questions coming up. But just to begin that saying
18	that one of the criticism of PlaNYC, which was the
19	former plan before OneNYC, was that it was very top
20	down. There really was not in my view and the view
21	of many others that not a grassroots approach to
22	resiliency, sustainability planning. I recall that
23	Administration'sI call that the era of Power Points
24	and where people were just being told information
25	rather than being solicited for information and
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 4.5 1 having that data on the ground shape our city's 2 3 blueprints for resiliency sustainability. I just, 4 and I want to say as far as Brooklyn delegation we did meet with Director Mesa. We appreciate that, but 5 can you weight out specifically what are the 6 7 Administration's plans to make sure that we don't 8 repeat the mistakes of the past and we do get input 9 from local communities? I just want to note that the Community Board that overlaps my district, Community 10 11 Board 13 in Coney Island and Brighton Beach, actually 12 formed a Resiliency Committee just to focus on this issue since we were one of the hardest hit 13 communities by Super Storm Sandy. So, what are the 14 15 Administration's plans to make sure that there is an aggressive, sustained grassroots approach to these 16 17 very important policy goals? 18 NILDA MESA: Thank you. It's an excellent question. Just by way of background, when 19 20 we were developing OneNYC, we did it with over 70 21 city agencies. It was very much an integrated plan 2.2 and cross-cutting with all of the agencies. So it's 23 far from being top down, you know, internally. The

25 agencies really own what we've put in OneNYC since

benefit of that sort of an approach is that the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 46 1 they helped develop it and they're shaping. So, much 2 3 of what's going on now is really at the, in part, at 4 the agency level. There are also meetings that have 5 been occurring and they tend to be more geared towards the specific topics that are coming up. I 6 7 don't have the calendar in front of me of what's, you know, what's coming up, but a lot of it's being 8 9 handled by another office within the Administration, but within the agencies they're doing extensive 10 11 outreach. I know that, for example, DSNY is doing a 12 lot of community, you know, outreach as it's rolling 13 out its various roots, for example, for organics collection, and that's--that tends to be how we've 14 15 been doing it. And we did a lot of outreach, as you 16 know, before we announced the plan and the ideas that 17 that would continue, but it's much more specific 18 these days. 19 Yeah, let me add a few DANIEL ZARRILLI: 20 specifics to that as well. As we've been 21 implementing programs, in particular the two rebuild 2.2 by design programs that were awarded by HUD. On the 23 Lower East Side and in Hunts Point, we were facing

the decisions on how to invest hundreds of millions

of dollars. We wanted to do that in a way that did

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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 47 1 2 not come across as top down. We wanted to engage 3 communities in that process, and we wanted to find 4 ways to do new engagement practices to really bring those local voices to bear, because really we're all 5 breaking new ground in how we adapt our city to 6 7 climate change, and we want to make sure we're 8 bringing all the voices to bear on that. We spent 9 probably what might have seemed like an extra-long period of time, but spent nearly a year on the Lower 10 11 East Side doing a consensus building community 12 engagement process. Community Boards Three and Six 13 came together on a joint taskforce. There was a lot 14 of public engagement, and we've gotten to the point 15 now where we've just launched into environmental 16 review and we're about to start a final design 17 process, but it's been informed by this year-long 18 building process with the community. It was really 19 important for us that it not be top down, that we 20 bring those voices out from the community because the 21 projects are better. in Hunts Point even more 2.2 recently, just Friday, we concluded what I think is a 23 very successful process in a neighborhood that had some historic tensions, if you will, between the city 24 and the residents and the businesses and the 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 48 1 stakeholders in there, and we built trust through an 2 3 engaged process to really decide how the dollars that 4 we had in that neighborhood were going to be spent, 5 and we did it by bringing all the right voices to the table, hearing their recommendations and making sure 6 7 we were going to be able to move forward together. 8 That is, I think, the hallmark and maybe two great 9 recent examples of the changes that we've been making and how we're adapting ourselves to doing projects 10 11 and adapting our city to the risk of climate change 12 by bringing those voices together, and it's been 13 incredibly important both in the development as you heard of OneNYC as a plan, but also in how we're 14 15 implementing that plan, and we're looking to doing 16 that--sorry--in ways all over the city as we're 17 launching a process in Red Hook, and we'll be in that 18 community often over the next several months and 19 longer as we develop that project. We're going to be 20 doing it there, and we're going to be doing it 21 everywhere we have projects, and I think it's really 2.2 important. 23 I just want to add one point NILDA MESA:

of clarification. So, our Community Affairs Unit is reaching out and meeting with Community Boards on 1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 49 2 OneNYC sort of overall. We can get you the schedule 3 if you'd like.

4 CHAIRPERSON TREYGER: I certainly would appreciate that schedule. I just think it's--I think 5 it's good that agencies are having discussions, you 6 7 know, within agencies and they're having interagency 8 discussions. I think that should be happening, but I just want to make a note that I read there was a New 9 York Time piece about some of the flaws with regards 10 11 to what happened in New Orleans from Hurricane Katrina. I think I referenced this at our last 12 13 hearing, Dan, about physical resiliency was that ultimately they felt there was not enough local input 14 15 on resiliency planning and sustainability planning, 16 you know, from residents in New Orleans. So, I don't 17 want to just repeat -- I don't want to repeat the 18 mistakes, of course, of the last Administration or even of other cities that we need to make sure that 19 20 we have an aggressive community engagement component 21 to OneNYC. This is supposed to be the opposite of 2.2 what we saw in the past, and you know, the 23 Administration when it wants to get the word out it knows how to. I think they had a very aggressive 24 25 outreach with regards to universal pre-k. that was

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 50
2	seen everywhere, train stations, Community Boards,
3	everywhere you went you saw a poster or flyer, which
4	was great and very much needed, but this is also very
5	equally, I think as mentioned in your testimony, a
6	very important issue. This is the challenge of our
7	time, and I think that we do need to somehow have a
8	concrete community engagement piece here, and again,
9	not just agencies talking to each other, but actually
10	having direct resident engagement and stakeholders,
11	and also appealing to our academia in our city that
12	are very much well equipped and trained.
13	NILDA MESA: If I may
14	CHAIRPERSON TREYGER: [interposing] Yes.
15	NILDA MESA: If I may, you know, add to
16	that, it's the same folks who did UPK who are doing
17	our outreach on OneNYC. Those are the folks who are
18	going to bewho are setting up a schedule and have
19	already begun the process of meeting with the
20	Community Boards and getting the word out. So, it's
21	the exact same people. So, if you like that
22	approach, you know, that's a good sign, I guess.
23	CHAIRPERSON TREYGER: And is there a
24	budget number for the outreach plan?
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1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 51
2 NILDA MESA: I don't have it, but we can
3 get it for you.
4 CHAIRPERSON TREYGER: Yeah, I would--

5 NILDA MESA: [interposing] and with respect to the agencies, you know, I don't need to 6 7 give the impression that the agencies are only merely 8 talking to each other. They are also heavily engaged 9 with the communities where their programs are being implemented and being initiated, and it's, you know, 10 11 agencies from DOT to, you know, DSNY to, you know, whoever all of them out there, OER, Enrollment 12 13 Remediation, certainly. And we do engage quite a bit 14 with the academic community and in part through the--15 we did in the development of OneNYC through the Sustainability Advisory Board, but we have a number 16 17 of other venues as well, and you know, they're not 18 shy either about contacting, which we really 19 appreciate.

20 CHAIRPERSON TREYGER: And I'll just give 21 you one micro-example of where local input, I think, 22 makes an impact with regardless for resiliency 23 planning for example. So, I've been to a number of 24 briefings and presentations to your credit, Dan, 25 about the flooding, for example, in my end of

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 52
2	Brooklyn, Coney Island Creek, for example, and that
3	is correct that we got flooded from all ends. But
4	just to tell you, the local community residents
5	actually could pinpoint the exact entry point of that
6	flooding. They would say by West $33^{ m rd}$ Street by the
7	Creek there was a breach in a lot of water came in.
8	So, they can actually pinpoint where because they
9	were there. They saw it. So, I think local input is
10	absolutely critical in shaping our resiliency and
11	sustainability plans. Just to move a couple more
12	questions, I'll turn it over to my Co-chair as well.
13	OneNYC says the city will release a 2025 action plan
14	laying out specific steps to reduce emissions from
15	the power, transportation, solid waste sectors. When
16	will this 2025 action plan be released, and can you
17	provide any details about it at this point?
18	NILDA MESA: We're in the process of
19	developing it. as you know, the situation with, you
20	knowthere's so much fluidity and so much movement
21	over the last few months and we're anticipating more,
22	and what we're doing is we're participating in all of
23	these other processes, whether it's at the federal

24 level or with the state through the rep proceedings, 25 and we are doing our part as well by issuing, you

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 53
2	know, the RFI, for example, so that we can kind of
3	galvanize the market that's out there. But in the
4	next year is when we are planning to release a
5	strategy and then a more detailed action plan.
6	CHAIRPERSON TREYGER: I think it's
7	important that we bolster the plan with goals,
8	targets, benchmarks, because
9	NILDA MESA: [interposing] Yes.
10	CHAIRPERSON TREYGER: otherwiseand
11	that's what the Administration did with regards to
12	Build it Back, for example.
13	NILDA MESA: Yes.
14	CHAIRPERSON TREYGER: Before it was just
15	at some point we'll build things back.
16	NILDA MESA: Yes.
17	CHAIRPERSON TREYGER: But then Amy
18	Peterson to her credit came in and put specific
19	targets and benchmarks with regards to check
20	reimbursements and homes getting rebuilt. I think
21	here we need to move from the abstract to the detail.
22	NILDA MESA: Which is what we're doing in
23	this next year.
24	CHAIRPERSON TREYGER: And that's for
25	next

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 54
2	NILDA MESA: [interposing] So there's
3	yeah, there's a lot ofa lot of what happens with
4	the energy supply sectors is dependent on what the
5	feds and the state is doing, and so we are working
6	closely with them, but it's within the next year. A
7	lot of the fluidity, a lot of the change in that
8	should become much more clear by the early part of
9	the year. We don't want to come out with something
10	that's going to be out of date instantly. So, it's
11	important for us to get that developed, but it's a
12	high priority, because you know, as I was saying, we
13	don't want to put everything on the backs of the
14	building owners on this. It's a big challenge
15	because we only havelike I said, it's about two
16	percent or so of renewables that are going into the
17	grid right now. So, we're doing what we can to spur
18	that, to get that number to go up.
19	CHAIRPERSON TREYGER: And which leads me
20	to my next question, what specifically is the
21	Administration planning if it does not get voluntary
22	cooperation from building owners and what is the time
23	table for deciding our next steps?
24	NILDA MESA: As I mentioned, the building
25	technical working groups has been meetings, about 50

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 55 1 2 stakeholders broadly representative of many, many 3 parts of the city, you know, building community, and 4 they're working fast and furiously to come up with recommendations. We expect to get those 5 recommendations at the end of January, and then at 6 7 that point we will be taking those recommendations, 8 and the recommendations are being developed based on 9 the data that we've already been collecting over the last five years with respect to buildings, the types 10 11 of buildings, their ages, how they perform, their 12 uses and so forth. And so what we're expecting to 13 have is a set of very targeted and specific and 14 effective recommendations that then we can figure out 15 how to time them, and you know, look at the bud--16 we're also looking at the budget implications and so 17 forth. We expect to have those from the buildings 18 technical working group by the end of January, and it's been a very lively and detailed and extensive 19 20 process, but very productive. 21 CHAIRPERSON TREYGER: And do you know, do 2.2 you have data, whether Director Mesa or Director 23 Zarrilli on what is the percentage of the carbon emissions or the carbon footprint that comes from 24

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 56
2	privately owned buildings compared to city owned
3	facilities? Is there a data on that?
4	NILDA MESA: I think the city is at about
5	10 percent, but I'll get you the exact number. On
6	electricity we're certainly at 10 percent citywide,
7	so and I think it's pretty similar on greenhouse gas
8	emissions, but I'll get you the exact number.
9	CHAIRPERSON TREYGER: But is fair to say
10	that carbon emission from the privately owned
11	buildings are responsible for the biggest
12	contributions to carbon emissions in New York City.
13	NILDA MESA: I mean, just by the numbers,
14	you know, it's 71 percent overall citywide of
15	greenhouse gas emissions come from building, and that
16	also is affected by things like the power supply,
17	since that's what's coming into, you know, the
18	buildings as well. So, you know, just by the numbers
19	that's true.
20	CHAIRPERSON TREYGER: And I've also
21	learned that when it comes to energy efficiency
22	standards, there's similarforgive me for drawing
23	analogies, it's the teacher in me, but they're
24	similar to like cable packages. There's the
25	standard. There's the silver. There's the gold.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 57
2	There's the platinum package. So, is it fair to say
3	that there are different standards of energy
4	efficiency standards? It's LEED standards, and then
5	there's international standards. What is the gold
6	standard or the platinum standard of energy
7	efficiency that you're aware of?
8	NILDA MESA: So, it's so much more
9	complicated. So, LEED does not actually address
10	energy directly. LEED is a comprehensive system that
11	looks at everything from the content of recycled
12	materials that are going into a building to the level
13	of lighting. It doesn't particularlyit can look at
14	things like water reclamation. It doesn't
15	specifically address energy. There isso one of the
16	things that the city's been requiring buildings to
17	do, over 50,000 square feet. We would like to see
18	that number drop, but is to benchmark their energy
19	and water use. And so, buildings are over 50,000
20	square feet are required to provide that data through
21	EPA's portfolio manager, which then can assign a sort
22	of a score to it, but there's not like a sort of set
23	package like that. Buildings are also required to do
24	energy audits and to implement a number of those, and
25	this is private as well as city, to implement those

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 58 1 numbers of recommendations, and the -- so it's going to 2 3 be different, you know, by building and by age and by 4 use. So one of the things that, you know, we struggle with for example is on the use part of it, 5 okay? We have many data centers for example, 6 7 throughout a number of buildings. We would not 8 necessarily want to see those data centers go away, 9 because they are also a big part of the economic, you know, vitality of this city, and so one of the things 10 11 that, you know, we have to address are things like, 12 you know, within the various usages, you know, the 13 type of building that you've got, what are the best 14 strategies to use, and that's what we're doing 15 through the Building Technical Working Group. We 16 have something like 19 or so building typologies. I 17 don't know if that's the number that we're going to 18 stick with by the end of January, but it's looking at 19 that kind of targeted approach so that we don't do 20 something like say, "Oh, great, you've got this very 21 low energy use intensity. It's because you're a 2.2 warehouse, you know, rather than because you've got 23 this, you know, other intensive economic activity going on." 24

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 59
2	CHAIRPERSON TREYGER: But what energy
3	standard are we aiming towards, and is that standard
4	good enough and high enough and respected by those
5	that are pushing for serious action
6	NILDA MESA: [interposing] Well, we did
7	receive an international award from C40 for building
8	energy efficiency. So, and it was a third party jury
9	and we were selected amongst every major city in the
10	world.
11	CHAIRPERSON TREYGER: Right.
12	NILDA MESA: So, I think, you know, they
13	respect our approach, which is an approach that
14	includes the major stakeholders, blood we also don't
15	want to be coming out with something that is
16	impossible to achieve, you know? And so what we are
17	aiming to do is look at what are the third order of
18	consequences, for example. If we come out with
19	something, is it actually achievable? Is it actually
20	implementable? Is it going to, you know, kill the
21	budget for private owners as well as, you know, the
22	city, and that's exactly the work of the technical
23	working group.
24	CHAIRPERSON TREYGER: No, I mean, I'm very
25	sensitive to hearing that because obviously the

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 60 2 government has a history of mandates and not really 3 providing resources to meet mandates, and I'm very 4 sensitive to that, but I think it's important that we 5 set a standard--

NILDA MESA: [interposing] Yes. 6 7 CHAIRPERSON TREYGER: that is--that will truly make an impact and is not just simply there for 8 9 cosmetic reasons, and I also think that if the government is very serious--federal, state, all 10 11 levels of government, if they're very serious about 12 this, then we need to step up with resources to help 13 us meet these needs, and they should not just be on the backs of one person. We need to also be very 14 mindful and realistic about where our carbon 15 footprint is coming from and what we're doing to 16 17 tackle this. The government uses public tax dollars 18 to leverage its push for affordability of housing, 19 for example. Are we in a position to use public tax 20 dollars to leverage our push for sustainability and 21 energy efficiency? Can you speak to that?

NILDA MESA: Yeah, and that's exactly what we're going towards. So we have an overall, you know, you sort of start from, you know, the 30,000 foot level. So you have the overall 85/50 goal, the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 61 1 interim of 40 by 30, but then below that what we have 2 3 to do is come up with the concrete measures and the 4 concrete targets and goals as well as the funding and the support whether it be training, you know, or 5 removing some of the obstacles from soft cost like 6 7 we're trying to do with the retrofit accelerator. 8 So, and to do that you really have to get pretty 9 granular with things. And so it's the type of thing where you go, okay, you know, you can't just sort of 10 11 take this blunt instrument across and expect to get 12 to 80 by 50, which is why we've developed these, you 13 know, sort of building typologies in this, you know, more targeted strategy. And so, you know, what we 14 15 will be looking at in the next year is something 16 that's very targeted and much more specific, along 17 with a pathway to get there. 18 CHAIRPERSON TREYGER: The last point I'll make, I'll turn it over to my Co-chair, is that one

19 make, I'll turn it over to my Co-chair, is that one 20 area that I think OneNYC does not focus really enough 21 on in my opinion, really build on, is how do we make 22 sure that our children who are all working towards 23 making sure they have a safe, secure bright future, 24 how are they going to be enlisted to address, help us 25 address the challenges of today and tomorrow? IN the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 62 1 sense where how are we using our school system to 2 3 invest monies to build up career technical education 4 programs? And you and I have discussed this, how can we invest in our schools today to come up with 5 resiliency curriculums and to come up with 6 7 sustainability curriculums and to help equip them with the skills, the knowledge base to help us come 8 9 up with the answers to the challenges of today and tomorrow? To me, this should not just be a pay day 10 11 for consultants from all over the world to come into 12 New York City and say we have answers for you. We 13 could tap into the human talent and resources we have right here at home. We have the best kids I'd argue. 14 15 We have the best, you know, city, and what are your 16 plans to enlist our public school system, to enlist 17 our schools and to invest public dollars to equip them with 21<sup>st</sup> century career technical education 18 programs geared towards areas of sustainability and 19 resiliency to help get us the answers today and 20 21 tomorrow? Can you speak to this? 2.2 NILDA MESA: So, we have farther to go on 23 this than I would like, but as an initial sort of, you know, starting, we are going to be announcing or 24 we're going to be launching Zero Waste Schools 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 63
2	Initiative. We also have solar panels that are going
3	on many, many of our schools, and so for all of those
4	schools that have those kinds of initiatives and
5	programs that are being put into place, the ideas
6	that they would also have a curriculum that would go
7	with them so that they could learn, you know, right
8	at, you know, the location of their schools about the
9	importance of this, but my understanding is that the
10	Mayor has directed the Department of Education to
11	develop something on this, but we can get you more
12	information.
13	CHAIRPERSON TREYGER: Yeah, and I would
14	just add that it's not just about placing solar
15	panels on schools.
16	NILDA MESA: Right.
17	CHAIRPERSON TREYGER: I want to equip our
18	students with the knowledge to build the solar panels
19	and to make them and to getbecause many of the
20	impacted communities from Sandy, for example, also
21	were not vulnerable just to storms, but also
22	vulnerable in terms of their economics, and so how do
23	we make this a goal of also transforming lives and
24	building up their skills to get good paying jobs and
25	turning this into a situation where we're actually
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 64
2	building up human capacity, and again, I want our
3	kids to be equipped with the knowledge base and the
4	skills and qualifications to really turn a win/win in
5	terms of our city sustainability plans, but as also
6	addressing our economic inequities that we see all
7	too often across New York City. I'll turn it over to
8	my Co-Chair for questions.
9	CHAIRPERSON CONSTANTINIDES: Thank you,
10	Chair Treyger. It's great to see you both again.
11	So, I havejust kind of circling back. So, the
12	Technical Working Group is one that we're looking
13	forward to seeing those answers in the early next
14	you're saying early next year, January you'll have
15	the recommendations back and then soon after we'll be
16	able to sort of
17	NILDA MESA: [interposing] Exactly.
18	CHAIRPERSON CONSTANTINIDES: start parsing
19	through those and to developing next steps, because I
20	know throughout my district, I think districts
21	throughout New York City we're seeing a building
22	boom. So we currently have a million buildings in
23	New York City, but if you walk through Astoria or
24	probably any city district you see buildings going up
25	every day, and they're under the impression with LEED

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 65
2	that they're as energy efficient as they can be.
3	They don't even realize that the energy efficiency's
4	not part of it. They think that they'reyou know,
5	LEED, we're right where we need to be
6	environmentally, and really what we need is a LEED on
7	steroids in the energy sector.
8	NILDA MESA: Yeah, pretty much. So, I
9	mean, LEED doesI don't want to give the wrong
10	impression. LEED does have an energy component, but
11	that's not really a central focus. One thing that I
12	should note as well is that the energy code is up for
13	revision, and so that will be coming out next year.
14	That will be much more aggressive than past energy
15	codes, and there's alsoand there's another one
16	that's due to come up, you know, sort of two years
17	from then. And so part of what we're trying to do is
18	time, you know, what we're doing with the release of,
19	you know, the new energy codes which are on sort of a
20	state timeline and to make sure that we integrate,
21	you know, all the technical information we're getting
22	with the technical information that the Energy Code
23	Taskforce and Department of Buildings and you know,
24	the state and so forth are developing as well so that
25	we can infuse, you know, so we can make sure that we

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 66 1 get the best approaches within the next rounds of 2 3 energy code. 4 CHAIRPERSON CONSTANTINIDES: I'm glad to hear that. Looking forward to working with you on 5 that as well. So, as far as the clean heat, we 6 7 talked about how 99.5 percent of all buildings now have sort of cycled, sort of gotten rid of six oil. 8 9 What is that remaining 0.4 percent represent as far as number of buildings that are left? 10 11 NILDA MESA: I believe it's only a few hundred. 12 13 CHAIRPERSON CONSTANTINIDES: A few 14 hundred. 15 NILDA MESA: It's not very many. 16 CHAIRPERSON CONSTANTINIDES: And those 17 buildings will be coming into--NILDA MESA: [interposing] So, they're 18 19 rolling out--20 CHAIRPERSON CONSTANTINIDES: [interposing] 21 compliance soon? NILDA MESA: Yeah. So, they're--so now 2.2 23 that program is going--has gone into the retrofit accelerator. So, the retrofit accelerator is taking 24 a similar approach on reaching out to building 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 67 1 owners, and so one of the things that we're doing 2 3 with that is reaching out to the building owners that--this is only a few, you know, who still have 4 the number six fuel, but also number four fuel, which 5 is the next, you know, kind of level, and providing 6 7 them with technical assistance and, you know, support so that they cannot just transfer, not just convert 8 from those but also think of energy retrofits and 9 plan for energy retrofits in a more expanded way. 10 11 CHAIRPERSON CONSTANTINIDES: So, the 12 Administration's open to sort of possibly 13 accelerating the number four fuel phase out as well, 14 and--15 NILDA MESA: [interposing] Yeah, absolutely. 16 17 CHAIRPERSON CONSTANTINIDES: And that we 18 can utilize the retrofit accelerator as well to try to start moving buildings out of four and into more 19 20 renewable fuel. 21 NILDA MESA: Yeah, exactly, and what we saw was that the vast majority of buildings that were 2.2 23 transferring from number six went straight to either number two or natural gas if the infrastructure was 24 25 in place for them to be able to convert to natural

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 68
2	gas or dual fuel. So, number four, there aren't even
3	all that many buildings, you know, left and we think
4	it's a very doable goal to have them convert as well.
5	CHAIRPERSON CONSTANTINIDES: Yeah, I mean,
6	I've heard so many stories about the differentwhen
7	it comes to biofuel about the warranties. So, I know
8	moving that forward and getting that done is
9	important. As well, just to go quickly back when it
10	comes to the technical working group, as you said
11	before, mandates are something that we can think
12	about as well, not, you know, carrot on a stick,
13	finding financial incentives and incentivizing in the
14	private sector and moving them forward, but also we
15	have to mandates are on the table as well?
16	NILDA MESA: What the Mayor said is that
17	we are looking at this, you knowI mean, we're
18	looking at this in a comprehensive way. So, we're
19	going to look first towards, you know, incentivizing
20	and so forth, but at the end of the day we have to
21	meet our 80 by 50 goals, and so you know, whatever
22	it's going to take to get there ultimately is what,
23	you know, we're going to wind up doing. We're in a
24	little bit ofnot quite, but a little of the
25	position of sort of the early days of the space

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 69 1 program, if you will, where we've got something--2 3 we've got this wonderful goal that we're committed to 4 meet, but we still have to develop the technology and the resources and the infrastructure in order to get 5 there. we're on our way and through things like the 6 updates to the energy codes and the Building 7 8 Technical Working Group, then we can provide even 9 more of the technical background and support, and you know, the strategy that we're going to need to have 10 11 in place in order to reach it, but it's not the kind 12 of thing where, you know, I'd say in, you know, 1961 13 President Kennedy said we're going to put a man on the moon by 1969. It wasn't like 1963 they had 14 15 everything in place to do it, you know? It's just--16 it's taken a while to have buildings develop in this 17 certain, in a way that they have here in New York 18 City, and it's just going to, you know, be a bit to 19 put the systems in place and to get the technical 20 information we need to, you know, turn this around. 21 CHAIRPERSON CONSTANTINIDES: No, I 2.2 completely hear that. You know, as we--you hear 23 about different technologies being utilized like geothermal, you hear about Saint Patrick's Cathedral 24 25 and the Queens Botanical Garden and you hear about

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 70
2	Passive [sic] House and you hear about the new, you
3	know, Haddock [sic] Building coming online in Queens.
4	You hear about all the great stuff that's solar, but
5	we need to make it more ubiquitous. So, it'swe
6	can't just name these technologies on our hands and
7	talk about these great examples, because so many that
8	we can't name them any longer. So, it comes to
9	solar, what elseI see that this new self-
10	certification will start January 1 <sup>st</sup> ?
11	NILDA MESA: Yes, that's right.
12	CHAIRPERSON CONSTANTINIDES: And about how
13	many buildings do yousimple installations, what
14	does that sort of entail for simple installation?
15	NILDA MESA: It's mostly one and two
16	family buildings and it's of a certain pitch on the
17	roof, you know? So it's buildings that are, you
18	know, really pretty standard. The Buildings
19	Department is already very comfortable, you know,
20	with what's needed in order to make, you know, solar
21	panels go on effectively and they have the confidence
22	that the building professionals can self-certify, and
23	then that frees up DOB resources then to go into more
24	complicated things.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 71
2	CHAIRPERSON CONSTANTINIDES: And how do
3	wehow are we going to do the outreach to one and
4	two-family homeowners and sort of that sector and
5	sort of let them know this is an option, that
6	there'sthat we've sort of simplified things, that
7	we're making it easier for them to go green? Because
8	one of the big challenges for small homeowners is
9	that, you know, they want to go green and then
10	they'll run into different challenges, and they'll be
11	like, "Why did I even start?" So how do we sort of
12	give them that piece of mind saying, "Hey, we're
13	makingwe're streamlining this, we're making it
14	easier starting in January."
15	NILDA MESA: I mean, we're doing
16	everything we can, you know, sort of to get the word
17	out on that, and I think Department of Buildings is a
18	big partner in that as well, but their applications
19	forso, you know, applications for solar panels have
20	just shot the roof. I think they're up like 1,000
21	percent, you know, in the last couple of years,
22	something like that. So
23	CHAIRPERSON CONSTANTINIDES: [interposing]
24	Something you could also
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 72
2	NILDA MESA: [interposing] Somebody's
3	getting the word, you know?
4	CHAIRPERSON CONSTANTINIDES: Okay, I
5	definitely look forward to partnering with that and
6	reaching out to Community Boards locally and letting
7	them know.
8	NILDA MESA: That would be great.
9	CHAIRPERSON CONSTANTINIDES: Because I
10	know that my community has many one, two, three-
11	family homes that would probably make the most sense.
12	As far as thewhat is the city doing to increase its
13	share of wind power in the city's power mix?
14	NILDA MESA: We've beenso, okay. Wind
15	in the cityokay, let me so I'm going to put on
16	like my teacher hat for a minute just like Council
17	Member Treyger. So, right now wind can either be
18	onshore or offshore. Onshore wind tends to come, it
19	would be from like say Upstate. The transmission
20	lines aren't really set up to carry whatever is, you
21	know, the onshore wind all the way downstate at this
22	point and for a whole host of complicated reasons,
23	but in offshore right now does not exist off of, you
24	know, near enough to New York City. The first
25	offshore facility is being built in Rhode Island off

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 73 1 of Block Island, and that's expected to be operating 2 3 by next September. We're working intensively with 4 the federal government as well as our partners in the 5 state as well as, you know, others to try to figure out what else can we be doing, and part of the reason 6 7 that we issued the RFI on renewables for the electric supply for the city municipal operations is because 8 9 we wanted to send a clear signal that the city was ready to buy, you know, renewables from whatever 10 11 source. You got the right price and so forth, you 12 know, in the coming years because what we want to do 13 is achieve, you know, the 100 percent renewable goal without breaking, you know, the citizen's budget, of 14 15 course, but you know, that is exactly, you know, what we want to do. So wind right now, and I should say 16 17 wind within the city on buildings we don't--we're not 18 that windy of a city. It's not like Chicago, you We just don't have enough to be able to--with 19 know? the technology that's available now to be able to 20 21 generate enough power from wind to make a huge 2.2 difference on the most of the buildings that are in 23 the city. So, our best shot at this are, you know, working to see if we can get some offshore wind or 24 25 additional onshore from Upstate into the City.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 74
2	CHAIRPERSON CONSTANTINIDES: And also,
3	hydropower, I know there was a local law a few years
4	ago there was going to be a report either through
5	rivers. It's these water supply infrastructure.
6	Will that have a role in creating power and reducing
7	our city's emissions as well?
8	NILDA MESA: Yeah, hydro is also an
9	important strategy, and you know, again, with the
10	issuance of the RFI that's certainly one that has
11	come up to, you know, been brought to our attention,
12	and it's receiving a lot of attention, you know,
13	throughout the northeast in Massachusetts as well as
14	here as people are looking for cleaner sources of
15	energy.
16	CHAIRPERSON CONSTANTINIDES: And we
17	definitely are positioned here in New York City with
18	our water tunnels and we're a city surrounded by
19	water. We have an opportunity there
20	NILDA MESA: [interposing] Yeah.
21	CHAIRPERSON CONSTANTINIDES: to sort of
22	capitalize on that.
23	NILDA MESA: It's moreI mean, right now
24	hydro would be coming from, again, you know, sort of
25	some Upstate, some projects that are built, some that

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 75
2	are not that are just conceptual, and then there's
3	also hydropower that's generated by Quebec [sic].
4	Right now, one of the big obstacles is just the
5	delivery system. It's just the transmission and
6	distribution lines are not adequate to take, you
7	know, allor they just haven't been built yet, and
8	so it's something that is very much part of the
9	proceedings going on with the state, and it's
10	something that needs to be addressed.
11	CHAIRPERSON CONSTANTINIDES: I have two
12	questions left, and I'll turn it over to my
13	colleagues. I may come back for a second round.
14	We'll see how things progress. But, the FAD, which I
15	know it's mentioned in Plan OneNYC, was issued by the
16	EPA. It's up for renewal in less than two years in
17	2017. Can you update us on the FAD watershed
18	programs, and do you expect the city to receive a FAD
19	renewal in 2017 and void the expensive water
20	filtration infrastructure that we'd have to build if
21	it wasn't renewed?
22	NILDA MESA: So, DEP will be issuing a
23	report. We expect it to be March of 2016 that is
24	reviewing the FAD and the whole watershed protection
25	system that's in place, and then it'll be a year

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 76
2	after that that we would expect the EPA to issue, you
3	know, the renewal of the FAD. Right now, everything
4	seems to be on course. We continue to acquire, you
5	know, easements and so forth Upstate to continue to
6	protect our watershed, and so everything so far, you
7	know, knock wood, everything seems to be on track
8	there.
9	CHAIRPERSON CONSTANTINIDES: That's great
10	to hear. I mean, you know, we have the greatest
11	water in the world, and
12	NILDA MESA: [interposing] Yeah, we do.
13	CHAIRPERSON CONSTANTINIDES: People are
14	coming here when they eat the bagels and the pizza,
15	they wonder why it's so great. It's our water.
16	NILDA MESA: It's true.
17	CHAIRPERSON CONSTANTINIDES: And then
18	actually, I'll put onI was never a public school
19	teacher, but I'll put on my teacher's hat for a
20	minute, butwell, fake teacher's hat. My mother
21	wasmy sister's a teacher, so I'll borrow hers. But
22	as far as teaching sustainability in the schools and
23	developing that curriculum, you know, we have a
24	resolution, the City Council Reso 375 which will
25	require aask the state to add K through 12 climate
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 77
2	change education to make sure that it's not part of
3	just one science lesson, but it's part of, you know,
4	political science and economics and a larger part of
5	the science, because itclimate change touches
6	everything we do, and I guess that's something we can
7	work together on and something you were supportive of
8	already.
9	NILDA MESA: Yeah, absolutely. I mean,
10	and you know, to the extent that, you know, all of
11	these can serve as lessons as well to improve
12	literacy and, you know, STEM curriculum all the
13	better.
14	CHAIRPERSON CONSTANTINIDES: Yeah, I mean,
15	it'sour children are the ones who are going to have
16	to, you know, deal with this. You know, you heard
17	President Obama say this over and over, we're the
18	first generation to feel the effects and the last
19	generation that can do anything about it.
20	NILDA MESA: Yeah, it's true. I mean, I'll
21	often look at this stuff and say, you know, we're
22	really at a critical crossroads right now where we've
23	got, you know, sort of thewe're at a point that we
24	have not been in in the past, you know, with the
25	
	signing of the Paris Agreement, that's a very big

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 78 1 turning point, but in addition the technology now is 2 3 so much more advanced than it was even, you know, say 4 five years ago, even three years ago. The pace of change, the gains in efficiency in, you know, the 5 strategies that are coming forth on buildings are 6 tremendous. And so, we're getting--it's a very 7 8 exciting time to be in this field, and it's very important that we keep moving forward on all of these 9 things, and at the same time, that we don't sort of 10 11 lock ourselves into technology that is existing today 12 so that, you know, without being open to what's going 13 to be coming, you know, say three years from now, but 14 we're really at a crossroads now in this field. Ι 15 think it's very important to keep moving forward. 16 CHAIRPERSON CONSTANTINIDES: I'm looking 17 forward to moving forward with you, and with that 18 I'll turn it over to one of my colleagues who--and my 19 colleague Brad Lander has some questions. 20 COUNCIL MEMBER LANDER: Thank you, Mr. 21 Chair, in absentia to our other Chair, and I really appreciate your being here and the hard work you're 2.2 23 doing, and I want to say I personally appreciate both of you coming out to the Park Slope Town Hall we had 24 back in the summer to focus on OneNYC. I thought it 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 79 1 was a really great conversation, and you know, I 2 3 share Chair Treyger's belief that the more we do to 4 engage New Yorkers in these questions, the better off 5 we're going to be. so, I want to say thank you for doing that, and I really think the things, you know, 6 7 the tone you have that, you know, what happened over 8 the weekend in Paris like what's happening here are just absolutely essential not only because they are, 9 you know, good goals, but because they mobilize our 10 11 ability to set and take even more ambitious action, 12 which we know is absolutely necessary. This is not a 13 choice between those two things. Both are true. This is ambitious action and much more is needed and 14 15 we have to find a way to use it to push ourselves even harder. You know, and that's the vein I think 16 17 that those of us that believe we really should just 18 start doing building retrofits in a mandatory way sooner than later, that's what motivates us, and I'll 19 20 tell you, my main information on this topic comes 21 from you, right? The pathways to deep carbon 2.2 reductions report that came from the City in December 23 2013 is just, it's very clear on this topic, right? New York City could achieve 80 by 50, but it would be 24 exceptionally difficult, theoretically feasible, but 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 80 1 will require change at an unprecedented and 2 3 technologically untested scale regardless of the 4 economics. Market barriers would need to be overcome 5 at every step of the way. Buildings reductions are, you know, as you say, buildings emissions are 75 6 7 percent and existing privately owned buildings are 8 the biggest part of that by far. You know, I think 9 it's well known that Mayor Bloomberg in his time was open to doing mandatory retrofits rather than 10 11 benchmarking and backed off in the face of pressure. 12 I guess my question really is, what evidence is there 13 that it could possibly be achieved through a 14 voluntary approach? I mean, I appreciate them. And 15 let me say, I appreciate the Mayor's indication that 16 if and when it can't be achieved through a voluntary 17 approach, then we'll move to a mandatory approach, 18 but I just don't see any reason to believe that it 19 possibly--I mean, it's a big ambitious goal that's 20 not small. It's going to take extraordinary action 21 to mobilize. It is economically rational for people 2.2 to do and yet we know that by itself won't get us 23 there. So, can you help me feel more optimistic, more confidence, give me any reason to believe that 24

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 81 1 we actually could get it done through voluntary 2 3 approaches? 4 NILDA MESA: I don't think I'm saying 5 that we absolutely could get it done. COUNCIL MEMBER LANDER: Even maybe. I 6 7 don't have any evidence --NILDA MESA: [interposing] But here's 8 9 what--10 COUNCIL MEMBER LANDER: [interposing] that 11 we might. 12 NILDA MESA: we're looking at. Yeah. COUNCIL MEMBER LANDER: So, I don't 13 14 understand why we're pretending that we might get 15 there. It's urgent. We passed a law in 2009. We had 16 that report in--17 NILDA MESA: [interposing] No, no, but we're looking--18 19 COUNCIL MEMBER LANDER: [interposing] 2013. Now it's 2015. 20 NILDA MESA: The question is how do you 21 deem--2.2 23 COUNCIL MEMBER LANDER: [interposing] We go to get going. 24 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 82
2	NILDA MESA: So the question is how do
3	you do it in a way where you're not wasting money, in
4	a way where you're using the best technology that's
5	available. You're not bankrupting building owners
6	and tenants, you know, who then are going to have to
7	be paying for this stuff ultimately. So you have to
8	do it really smartly.
9	COUNCIL MEMBER LANDER: Yes.
10	NILDA MESA: One of the reasons, and
11	that's what we're focusing on is like how do we do
12	this in a way that, you know, preI mean, rents are
13	high enough as they are, you know, for folks, and you
14	know, how do we do this in a way that it makes sense
15	and we don't just like blindly throw money at things
16	that don't work. But on the voluntary side of it, we
17	do haveyou know, we have achieved tremendous
18	success with clean heat, and so that's the kind of
19	program where it's like, what we want to provide is
20	the training. We want to provide, you know, the
21	resources so that things can be done effectively
22	rather than going and sort of finding, you know, the
23	building owners and playing "gotcha," you know?
24	COUNCIL MEMBER LANDER: But clean heat
25	wasn't voluntary.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 83
2	NILDA MESA: No, ultimately it wasn't, but
3	there was a run-up to it, right? There was a long
4	enough run-up to it so that building owners knew how
5	to get it done.
6	COUNCIL MEMBER LANDER: But that piece of
7	itif what you're coming here saying is we have to
8	take the time to get it right. I'm not asking
9	questions about
10	NILDA MESA: [interposing] Yeah.
11	COUNCIL MEMBER LANDER: do we need the
12	technical work group. I'm not asking questions about
13	do we need the time to set benchmarks. I'm not
14	asking the question, you know, do we need to figure
15	out how to better align incentives so that the
16	savings actually flow back in the appropriate way.
17	Those are hard and we don't have the answers today.
18	So, I'm not saying how come tomorrow you don't have
19	the answers to all those questions. So, if your
20	point is we have to develop those answers, then
21	you're right, and even though
22	NILDA MESA: [interposing] That's what
23	we're doing.
24	
25	

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 84
2	COUNCIL MEMBER LANDER: the need is
3	urgent, that doesn't mean tomorrow we have the
4	answers to those questions.
5	NILDA MESA: Right.
6	COUNCIL MEMBER LANDER: So, on all of
7	that, I am persuaded that we, you knowbut I don't
8	none of that persuades me that there's any reason to
9	be even the least bit optimistic that voluntary
10	approaches will get us there if we know we need
11	mandatory approaches, rather than have a period of
12	time. This is my concern, every one of the things
13	you outlined has to happen. So, I agree it has to
14	happen. It's going to take time, but I don't want to
15	take all the time to do that and then set up
16	benchmarks that we say if it's achieved in a
17	voluntary way by this amount of time if we don't have
18	any reason to believe the benchmarks are going to get
19	us there.
20	NILDA MESA: Yeah.
21	COUNCIL MEMBER LANDER: And then we're
22	going to wait that amount of time
23	NILDA MESA: Of course.
24	
25	

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 85
2	COUNCIL MEMBER LANDER: and then decide
3	the benchmarks aren't getting us there, and then set
4	the mandatory. We're going to lose another
5	NILDA MESA: [interposing] Of course.
6	COUNCIL MEMBER LANDER: I don't know. How
7	muchlet me ask that question, how much time do you
8	think we'llso, let's imagine the process. We do
9	the things you just said, and we set out benchmarks
10	for seeing whether voluntary approaches are working.
11	How long a time do you think we're going to give to
12	that to see, once we solve the Technical Working
13	Group issues, how long are we going to take to see if
14	voluntary approaches are working to achieve the
15	reductions we
16	NILDA MESA: [interposing] I mean, part
17	of whatpart of the charge of the Technical Working
18	Group, and part of our charge is going to be, you
19	know, where are we, you know, on this stuff, and what
20	are the steps that we need to be taking now in order
21	to, you know, to reach that. I don't have the
22	answers for you today on that. That's all being
23	considered.
24	COUNCIL MEMBER LANDER: Is it conceivable
25	that the Technical Working Group could conclude that

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 86
2	a mandatory approach, we should do a mandatory
3	approach from the beginning rather than have a period
4	of time while we're trying a voluntary one?
5	NILDA MESA: Absolutely.
6	COUNCIL MEMBER LANDER: Because that's
7	my
8	NILDA MESA: [interposing] That's conceiv-
9	_
10	COUNCIL MEMBER LANDER: [interposing] That
11	is my concern. My concern, the Technical Working
12	Group work has to happen, but if we set up a we're
13	going to try a voluntary approach, obviously that
14	means some amount of time to seeing howwe go to
15	figure, still got to figure out all those questions
16	you just said.
17	NILDA MESA: But it's, yeah, I mean, it's
18	reallyyou know, it's sort of ait's a strategy
19	issue, right? What's the bestyou know, what's
20	what are all the tools that we have in our tool box?
21	COUNCIL MEMBER LANDER: Yes.
22	NILDA MESA: You know, in order to reach
23	this very ambitious and critical goal that we have to
24	make, right?
25	COUNCIL MEMBER LANDER: Yes.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 87
2	NILDA MESA: And so, you know, so part of
3	whatpart of the, you know, the joy and the
4	difficulty of doing this is really figuring out what
5	are the best tools for what segment, for what type of
6	building for what type of building system, you know,
7	like that, and so
8	COUNCIL MEMBER LANDER: [interposing]
9	Absolutely. So, and again, and I don't want toit's
10	easy for us in a hearing to ask a question and you
11	know the work of doing that is really hard, that deep
12	reduction report
13	NILDA MESA: [interposing] You'll see.
14	COUNCIL MEMBER LANDER: also goes into
15	each element. So, not only don't I mean to
16	trivialize it. the hard, deep and time consuming
17	work of figuring all of that out, I really respect
18	and it has to be done, and I don't mean to be saying,
19	you know, solve those problems tomorrow, but Iand I
20	don't think that saying it'll bewe should make it
21	mandatory means we don't have to do all that work. If
22	we chose a mandatory approach, we would also have to
23	do all of that work anyway.
24	NILDA MESA: Right.
25	
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 88
2	COUNCIL MEMBER LANDER: So I'mI got you
3	on that, but I hope you hear me. What I'm nervous
4	about is that by saying we're going to give voluntary
5	a try, in addition to doing all those things, we're
6	going to set up a period of time of I don't know how
7	much it's going to be, one, two, three years where
8	we're seeing if voluntary works. Now, if there was
9	any reason to believe it would, maybe that would be
10	worth it, but I don't see any reason to believe it
11	would
12	NILDA MESA: [interposing] But sometimes
13	COUNCIL MEMBER LANDER: [interposing] at
14	the end of that we're going to say now it's
15	mandatory. We're going to have to come back to the
16	Working Group or back to us and make it mandatory.
17	So, thatanyway, I
18	NILDA MESA: [interposing] But wesee a
19	part of our tool kit is the market, okay? And so
20	part of our tool kit is incentivizing the market, and
21	so that has to be in our, you know, strategic set of
22	options, and so what are the things that we can do to
23	set up? And you can call it voluntary or not, but
24	it's a very powerful force, particularly in this
25	city. So we don't want to squelch something that

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 89 1 2 could just come up. I mean, part of the reason that 3 the technology has advanced as much as it has in the 4 last, you know, 10 years, five years, two years is because the market has risen to that --5 COUNCIL MEMBER LANDER: [interposing] 6 7 First--8 NILDA MESA: [interposing] and so that 9 gives us--COUNCIL MEMBER LANDER: [interposing] I 10 11 guarantee you the market will accelerate faster --12 NILDA MESA: [interposing] Yeah. 13 COUNCIL MEMBER LANDER: if we require it than if we make it voluntary. So no one is saying--14 15 I mean, a mandatory approach is also a better market-16 generating approach. 17 NILDA MESA: Potentially, yeah. So, it's-18 -and we're not ruling it out. I don't want to give 19 you the impression that we're saying no, because 20 we're not. 21 COUNCIL MEMBER LANDER: You're not giving 2.2 me the impression you're saying no, but you are 23 giving me the impression that there's no--you haven't done one thing to persuade me voluntary approaches 24 will get us there. so, I just feel like this time--25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 90
2	I'll conclude this line of questioning, but Iyou
3	know, I think you hear not just my urgency, but my
4	skepticism thatI feel that the voluntary part of
5	this is just a charade. If we don't think it's
6	goingand it doesn't solve. It is market-based.
7	Look, what's going to be mandated? How many years
8	payback? Which technologies?
9	NILDA MESA: Right.
10	COUNCIL MEMBER LANDER: All those
11	questions absolutely have to be answered. I don't
12	have the answers to them. They're going to take time
13	to develop. So, but if they're going to take time to
14	develop I'd rather get started. So,
15	NILDA MESA: [interposing] That's what
16	we're doing, yeah, with the Technical Working.
17	That's exactly what we're doing is, you know, what's
18	the toolkit, what's the, you know, because we don't
19	have time to waste. You know, where it's like the
20	city's alreadywe don't have time for this.
21	COUNCIL MEMBER LANDER: All I just want
22	toI really would let it go, but it's not exactly
23	what we're doing, because if we were saying we're
24	going to mandate it, then the Technical Working
25	Group's work would look a little bit different.
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 91 1 NILDA MESA: We haven't come out with the 2 3 work yet of the Technical Working Group. So, what 4 you see at the end of January, you'll have to see the 5 work product at that point. COUNCIL MEMBER LANDER: Okay. 6 7 NILDA MESA: But their work has not concluded and it's tough, you know. There's 50 8 9 stakeholders. It's a 360--COUNCIL MEMBER LANDER: [interposing] 10 11 Hard, and their task is enormously difficult. 12 NILDA MESA: It's crazy, it is, you know--13 COUNCIL MEMBER LANDER: [interposing] If it weren't absolutely urgent--14 15 NILDA MESA: [interposing] putting a man 16 on the moon. COUNCIL MEMBER LANDER: for the survival 17 18 of the plant, we would give them the weekend off, but 19 you know, here we are. So, alright, and I appreciate 20 that we're not, no one's taking the weekend off. We 21 had a weekend of great progress in Paris and here we 2.2 are Monday morning working--23 NILDA MESA: [interposing] That's right. COUNCIL MEMBER LANDER: together to figure 24 out what we're going to do next, and I really 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 92 1 appreciate the work that you're putting in and this 2 3 committee's putting in. So, alright, thank you very 4 much. 5 NILDA MESA: Thank you. Thank you. COUNCIL MEMBER LANDER: Thank you, Mr. 6 Chair. 7 8 CHAIRPERSON TREYGER: Thank you, Council 9 Member Lander, and next Council Member Richards. COUNCIL MEMBER RICHARDS: 10 Thank you so 11 much, Chairs, and Nilda, thank you so much for your 12 leadership, and it was an honor to co-chair OneNYC 13 with you and obviously I've moved on, but I haven't 14 moved far. Since last time you saw me I've had a 15 newborn. 16 NILDA MESA: Yes, congratulations. COUNCIL MEMBER RICHARDS: Which has been 17 18 very interesting, because it--you know, just spending 19 a day in my household now can actually solve this 20 issue. Yes, because my wife now mandates that I take 21 the garbage out every night, not the next morning, 2.2 every night, and I can assure you--23 NILDA MESA: [interposing] Wise woman. COUNCIL MEMBER RICHARDS: she did not 24 25 mandate--

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 93
2	COUNCIL MEMBER LANDER: That doesn't sound
3	like you're contributing to Zero Waste NYC.
4	COUNCIL MEMBER RICHARDS: I agree,
5	especially with the Pampers, well organic Pampers are
6	working out well. But that gets me into the mandate
7	conversation. I know even as a co-chair it was
8	something that I was saying that the only way we
9	would technically reduce 71 percent of those carbon
10	emissions coming from buildings is on a mandatory
11	basis, and point of information, many people may not
12	know this, but France now mandates solar panels and
13	green roofs on all their new construction. I wonder
14	if New York City's thinking about that a little bit.
15	You know, and we should move in that aggressive
16	fashion because we don't technically havewe don't
17	have the time to waste. For that newborn I just had,
18	he's going to grow up in a world that is a much
19	different that we're moving towards without mandatory
20	retrofits. So, I do want to commend the
21	Administration and commend you for all the hard work
22	that you put in, but we have a long way to go. I
23	don't want to keep beating the dead horse, but we're
24	not going to
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 94
2	NILDA MESA: [interposing] And we
3	appreciate
4	COUNCIL MEMBER RICHARDS: get theredrum,
5	sorry. No horse, sorry. Wrong language in this
6	chamber. We're not going to get there voluntarily.
7	Clean heat is a prime example of that. How many
8	buildings are still left burning number six oil
9	today?
10	NILDA MESA: It's a few hundred. It's
11	COUNCIL MEMBER RICHARDS: [interposing]
12	Still [sic] bad.
13	NILDA MESA: 99 point slot [sic].
14	COUNCIL MEMBER RICHARDS: So, when was
15	New York City's deadline to phase out number six oil?
16	When was that
17	NILDA MESA: [interposing] It was over the
18	summer, but it's a higher rate of compliance than
19	just about any other law that we're aware of.
20	COUNCIL MEMBER RICHARDS: Right.
21	Understandable, but we got there legislatively, and
22	the only reason we're closer to zeroing out that
23	number is because we had mandates. So
24	NILDA MESA: So, and also the clean heat
25	program which was extensive, you know, in

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 95 1 aggressively reaching out to building owners and 2 3 showing them the path to do it. COUNCIL MEMBER RICHARDS: Agreed. 4 But was 5 there--but was there a law that was passed that said 6 you had to phase out--7 NILDA MESA: [interposing] Yeah, absolutely. 8 9 COUNCIL MEMBER RICHARDS: number six? NILDA MESA: It was a big incentive. 10 11 COUNCIL MEMBER RICHARDS: Exactly. 12 NILDA MESA: Right. And there was a 13 website that showed where all those puffs of black smoke were coming from. So, you know, we had a mutli-14 15 pronged approach. 16 COUNCIL MEMBER RICHARDS: Agreed. 17 NILDA MESA: And one of those would not 18 have done it all by itself. 19 COUNCIL MEMBER RICHARDS: Agreed, agreed. 20 So, my question is, and then I guess it's the same 21 question that Council Member Lander alluded to, are 2.2 there any thoughts around a mandatory with or some 23 sort of retrofit program, incentive program, that could push and would push our private--the worst 24 emitters into retrofitting their buildings? 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 96
2	NILDA MESA: Yes, there are plenty of
3	thoughts and they're all being considered right now
4	through this working group that's coming out with
5	recommendations at the end of January, and it's just
6	the work hasn't been completed yet, you know? But
7	yeah, sure, there are thoughts of it.
8	COUNCIL MEMBER RICHARDS: Okay. Alrighty,
9	so we will do that. I have some other questions.
10	So, there was someand we obviously took some very
11	ambitious, set some ambitious goals and in particular
12	in the plan. So there were a few things that stick
13	out, and I just wanted to see where we're at on them.
14	So, I know we mentioned sort of lights out in
15	particular in OneNYC. Where are we at with that?
16	Any new thoughts on how we can turn off lights in the
17	middle of the night that we're not using here?
18	NILDA MESA: So, we areyou know, as we
19	said in OneNYC, we're supportive of this goal for
20	many reasons. One is energy efficiency, but also
21	another one has to with the number of migratory birds
22	that wind up crashing into buildings because they get
23	confused with, you know, the lights being on, and
24	this being one of the major points along the way of
25	the migratory, you know, pathway for birds on the

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 97
2	East Coast. It's a serious thing. So, we'veso,
3	right now we've had several internal meetings with
4	the relevant agencies and what we're trying to do is
5	figure out, and we'll be back to the Council, you
6	know, with our best, you know, assessment of this,
7	but figuring out like how do we actually implement
8	something like this, you know? So, you can'tit
9	doesn't necessarily work to have this goal without a
10	way of, you know, being able to enforce it, and so
11	what's what we are developing now internally, you
12	know, because you can't just like stand
13	COUNCIL MEMBER RICHARDS: [interposing]
14	So, the enforcement
15	NILDA MESA: [interposing] Yeah, you can't
16	like just stand on the sidewalk and look up and know
17	if somebody's actually in the building or not. So,
18	it's those kinds of issues right now that we're
19	trying to work through, but we're definitely
20	supportive.
21	COUNCIL MEMBER RICHARDS: So we're going
22	to see a compromise somewhere on
23	NILDA MESA: [interposing] Oh, yeah.
24	COUNCIL MEMBER RICHARDS: Some movement
25	on it.
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 98
 NILDA MESA: I sure hope so. That's what
 we're working towards.

4 COUNCIL MEMBER RICHARDS: We also spoke 5 of electrical vehicle infrastructure. So, obviously I know there's certain companies who would love for 6 their fleet to go totally electric, and obviously 7 8 there's not enough infrastructure in place even if 9 they wanted to. Has there been any thoughts? I know we had some legislation to expand EV infrastructure 10 11 across the city to allow that for that particular 12 Are we anywhere with that since we last-reason.

13 NILDA MESA: [interposing] Yeah, so I'm 14 happy to report that on Friday that it was announced 15 that our own Department of Transportation got a 16 massive grant from the State as well as the Feds to 17 develop a workplace electric vehicle program, and so 18 they will be flushing that out, but it was just 19 Friday that, you know, we got this wonderful news. 20 COUNCIL MEMBER RICHARDS: Right. 21 NILDA MESA: That we got this grant. So, 2.2 that should really help. 23 COUNCIL MEMBER RICHARDS: So we'll be putting planning into place--24

25

NILDA MESA: [interposing] Yep, exactly.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 99
2	COUNCIL MEMBER RICHARDS: to ensure we can
3	move forward. Office of Solar Energyso Department
4	of Buildings even if theyI don't believe that they
5	have the capacity to actually work out. So there are
6	a lot of people, and we hear it in our local
7	communities, who are interested in solar energy, and
8	it's sort ofthe Department of Buildings has a lot
9	going on. Has there been any thought to supporting
10	an Office of Solar Energy and a solar ombudsman
11	person coming into the Department of Buildings,
12	because we often get a lot of questions, I'm sure my
13	colleagues do as well, from constituents who are
14	interested in installing solar, but sort of hit this
15	brick wall when they go to Department of Buildings or
16	just have questions in particular and can't really
17	get them answered. So, has there been any thought,
18	especially as we expand solar infrastructure across
19	the city?
20	NILDA MESA: Yeah, I think part of the
21	reason that DOB has moved towards self-certification
22	is to try to get rid of, you know, some of those
23	barriers, except forespecially for, you know, the
24	smaller buildings owners. Right now, there iswe
25	have like a consortium that's CUNY, or office, EDC,

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 100
2	and then we work with Department of Buildings, you
3	know, on this. I'm going to take this back and see
4	what, you know, folks think about it, because we have
5	also heard, you know, these kinds of observations
6	that it's difficult and it shouldn't be quite as
7	difficult as it is.
8	COUNCIL MEMBER RICHARDS: Yeah, and I
9	understand CUNY has their program, and I don't want
10	to take away from what they're doing, but there needs
11	to be someone internally dealing with this issue and
12	constituents, you know, want to get information.
13	NILDA MESA: Yeah.
14	COUNCIL MEMBER RICHARDS: Or if, you know,
15	in particular they're installing and they're having
16	problems with thewith like a PSEG or a Con-Edison
17	Utility Company as well, so there needs to be more
18	coordination along. Okay, I'm going to wrap up. So,
19	DEP obviously got a sizable amount of money and I'm
20	grateful to Mayor de Blasio and to the Administration
21	for their commitment to resolving the Southeast
22	Queens water issue. So, I know they've been working
23	on a comprehensive plan. Any timeline you're aware
24	of when that plan will be ready?
25	

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 101 1 NILDA MESA: I believe it's sometime next 2 3 year, but let me get back to you exactly on that. 4 COUNCIL MEMBER RICHARDS: Okay. 5 Alrighty. So my constituents are anxious, because--NILDA MESA: [interposing] Yeah, sure. 6 7 COUNCIL MEMBER RICHARDS: once we've made all these great announcements they are really looking 8 9 for these issues, too. NILDA MESA: And they've waited long--10 11 COUNCIL MEMBER RICHARDS: And I understand they're not going to be resolved 12 13 overnight, but they're--14 NILDA MESA: [interposing] No, they've 15 waited long enough. 16 COUNCIL MEMBER RICHARDS: Yes, exactly. 17 And Dan, just the last question for you on Auvergne 18 [sic] in particular, and I know we're going to--19 having a meeting I believe this week or next week in 20 particular on coastal communities and protection. 21 So, obviously the bigger conversation is for the Army 2.2 Corps, but where are we at in terms of, you know, 23 minors or city relief that can be put into play? DANIEL ZARRILLI: Sure. So, we are 24 25 continuing to push on you're--the aside or on the

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 102
2	Army Corps. We're continuing to push that we
3	actually get to a tentatively selected plan for the
4	Rockaway reformulation, Jamaica Bay work, making sure
5	that we spin off the beach investments, which are
6	critically important while we're also solving the
7	more system wide Jamaica Bay issues that the Army
8	Corps is pursuing. But more specifically, the city's
9	working very collaboratively with your office, with
10	the communities in Edgemere and others across the
11	Rockaway peninsula, and one, so what we're coming in
12	to brief you on later in the week is our raised
13	shoreline study where we have specific funds to
14	invest to reduce coastal risk, particularly against
15	sea level rise in very vulnerable communities that
16	are seeing an increased incidence of tidal flooding.
17	So we're heading forward. I think we went over the
18	last year. We told you we'd be making some decisions
19	on that before the end of this year. We're coming
20	into the committee later this week to talk through
21	those specific recommendations of where we're
22	heading, and then we'll be able to move forward next
23	year into actual implementation.
24	COUNCIL MEMBER RICHARDS: In Move New York
25	Plan, along the lines of transportation, has the
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 103
 Administration taken a stance or thought of adopting
 the Move New York Plan?

4 DANIEL ZARRILLI: We'll get back to you. 5 COUNCIL MEMBER RICHARDS: Alrighty. I want to thank you, and it was honor working with you, 6 7 and look forward to continuing to work with you, and 8 congratulations on the progress. I don't want to 9 undermine or say that there's not been progress. We're very appreciative of the progress that this 10 11 Administration has taken and the goals that you have set and are looking to achieve and we don't want to 12 13 undermine that, but we also know that we have to get 14 even more serious for Donovan Richards the III, D3 we 15 call him, for his future. So, thank you. 16 NILDA MESA: Thank you. 17 DANIEL ZARRILLI: Great and 18 congratulations. 19 NILDA MESA: And, you know, again, really 20 appreciate all your collaboration and support as 21 we've been developing this. It's been absolutely critical. 2.2

COUNCIL MEMBER RICHARDS: Thank you.
 CHAIRPERSON TREYGER: Thank you. Just, I
 heard something in your testimony, Director Mesa,

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 104 1 that when Council Member Lander was asking about the 2 3 issue of whether or not mandates are a part of the 4 mix, and you mention this is being work--this is 5 being discussed with this Working Group. I'm just, very quickly, curious and then I'll turn it over to 6 7 Council Member Chin. In these discussions are there also internal discussion about who in fact will be 8 9 doing this work with regards to installing energy efficient technology, and I'm also still very unclear 10 11 if there is a universally set agreed to standards 12 about what--and I see you saying there's not, and 13 that concerns me. Coming again from the teaching world, the standards are a big hot topic, and I think 14 15 that if there's no agreement on the gold standard of 16 energy efficiency that's the problem, but secondly I 17 just wanted to say that for the record is that we 18 have a workforce that has worked very hard and gone 19 through intense training to get license and 20 credential to do this work, and that is a part of the 21 organized labor movement here in New York and across 2.2 the country. And if they are not at the table, and 23 if they are not doing this work, we've invested so much capital to help equip them and train them with 24 skills and qualifications, how could they not be a 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 105 1 2 part of the mix? I just wanted to hear your thoughts 3 on that and what's--NILDA MESA: [interposing] They are part 4 of the mix. They're in our Technical Working Group. 5 CHAIRPERSON TREYGER: Right, but--6 7 NILDA MESA: [interposing] We have a number of representatives from labor how are there. 8 9 And so it's--we agree. It's critical. CHAIRPERSON TREYGER: Well, I just want 10 to state for the record, if we're going to be 11 12 leveraging public tax paying dollars with regards to 13 incentivizing these types of program, it's not just being at the table, they should be really doing this 14 15 work as well. 16 NILDA MESA: Yeah. 17 CHAIRPERSON TREYGER: Because, you know, 18 quite frankly, tax payers pay a lot of money to invest in human capital, in expense [sic] of human 19 20 capacity, and these are people who are trained and 21 skilled and credentialed and have qualifications to 2.2 do this work, and if they are left out, then quite 23 frankly we've lost. And secondly, I think that we're, as you mentioned, we're trying to deal with 24 sustainability and economic inequality at the same 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 106 1 I think there should be a win/win for both 2 time. 3 the environment and for labor at the same time. With 4 that, I'll turn it over to Council Member Chin. 5 COUNCIL MEMBER CHIN: Thank you, Chair. I just have a quick question. I think I asked about 6 7 this in the last resiliency hearing, the issue of 8 individual, all of us, you know, how we can really 9 participate and get involved in this whole building of a more resilient city, and part of it is like now 10 11 we're going to be passing a lot of laws, and so how 12 do we monitor and to make sure that people are 13 complying with the law? Like for example, recently 14 we just passed the Local Law 92 which prohibit 15 businesses from having their doors open while they're 16 operating air condition, and some of these business 17 they still do that. They keep their doors wide open, 18 and if they get a summon or a ticket, just the cost 19 of doing business. So, how did the city, you know, 20 see really how to go about making sure that the laws 21 that we passed people are complying? And also, how 2.2 to involve every New Yorker? Like, if this one 23 company or one businesses keeping their doors open, their customer needs to know that that's not good, 24 25 and they have to complain to them. So, how do we see

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 107
2 really getting individual involved in this whole One
3 New York process?

4 With respect to the doors NILDA MESA: open air conditioning bill, which we were really 5 delighted to have come about this summer, it's a 6 7 Department of Consumer Affairs that's going to be in 8 charge of doing the enforcement on that, and it's a 9 fairly--they tell us. It's a fairly straight forward thing for them to be able to go and see, you know, if 10 11 the doors are opened or not, and part of what they're 12 doing is an outreach campaign. It's pretty dormant 13 right now because no one's really using that air 14 conditioning, but they started even over the summer 15 with putting clings in the windows of businesses and so forth, and I would anticipate that they would be 16 17 doing even more of that. They're very committed to 18 enforcement of that. We also have a--one of the 19 sections of my office is GreeNYC, and you may have 20 seen our mascot, Birdie, the African Grey Parrot, 21 there we go, around--you know, in the subway and on 2.2 sides of buses, and you may have heard some at coffee 23 mugs and grocery bags and so forth. So, one of the things that we do is for example, over the summer we 24 had a very extensive campaign called BYO, BYO coffee 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 108 1 2 mug, grocery bag, water bottle, you know, reusable 3 water bottles, because one of the things that we found was that in the research that we do is that by 4 5 in large the reason most--the reason New Yorkers don't bring things like this around with them is 6 7 because they forget, and so this sounds pretty 8 straightforward, but low and behold the data upheld 9 that, and so what we did was we used that and crafted this, you know, very extensive and successful 10 11 outreach campaign. We launched another one last week 12 for weatherization of our buildings. It's geared 13 mostly towards one and two family homes and, you 14 know, places where residents can actually take out 15 the caulking gun, can you know seal up their windows, 16 can turn down the thermostat, you know, whatever it 17 is. And we have on our website we have, you know, 18 suggested, you know, strategies for doing that. So, 19 you should start seeing Birdie our mascot wrapped up 20 in like a hat and a scarf with a caulking gun 21 throughout the city and particularly in those zip 2.2 codes. So, we have a floatables campaign that's 23 going to be starting, I believe it's in the spring that we're doing DEP and DSNY to make New Yorkers 24 25 aware that if they, you know, throw down trash it

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 109
2 winds up in our combined sewer system and then winds
3 up in the Hudson River. So that's actually a pretty
4 active part of what we do.

5 COUNCIL MEMBER CHIN: Yeah, I think I'm getting a briefing this week on it, but I think it's 6 7 really important to involve all the Council Members, 8 Community Boards, that it really needs to be a 9 citywide campaign for us all to work together, because each one of us can do so much to really help, 10 11 you know, turn off the light, turn off the water 12 while you're brushing your teeth. So we need to 13 really kind of have that kind of urgency that all of us need to get involved, and I look forward to 14 15 working with you on this. Thank you.

16 CHAIRPERSON CONSTANTINIDES: Mark, I'm 17 jumping back in here for a second round. So, on 18 solar, you know, we're seeing a great start for city 19 owned buildings and schools in particular. So 20 there's--we're close to 1,200, 1,300 school 21 buildings. What sort of benchmarks are we looking 2.2 for to sort of see how we ramp up moving forward to 23 sort of capture as many city owned buildings and schools as possible? See announcement this morning, 24 25 a third of the buildings have already been

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 110 2 retrofitted. How do we look at solar to go from that 3 where we are now to the 100 megawatts?

4 NILDA MESA: I mean, I think we're on our 5 way on that. The--you know, we have an internal sort of competition that's run by Department of City and 6 7 Administration Services that gives grants to agencies 8 that propose energy retrofit projects for, you know, 9 various buildings and so forth, and so we've--and we have several rounds a year on that. And so that is, 10 11 you know, one way to incentivize the agencies, 12 because it's Department of City Administrative 13 Services that pays the bill on it, and the agency has its capital budget which is separate of course from, 14 15 you know, the energy bill. So we have an issue of 16 sort of split incentives. So we're trying to address 17 that. On solar, I think we've got a pretty 18 aggressive program now to roll out to as many schools 19 There are some places where solar doesn't as we can. 20 necessarily make sense because there may be shadows 21 falling on the building or trees overhanging and so 2.2 forth, and so in that kind of an instance, you 23 wouldn't really want to spend the money on solar, and there would probably be, you know, other kinds of 24 approaches that you could take that would make more 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 111 1 sense given the amount of funding that's available. 2 3 But my understanding is that right now something like 4 half of all school buildings are either being assessed or having solar put on them, and you know, 5 sort of just marching through the buildings as we go. 6 CHAIRPERSON CONSTANTINIDES: 7 So we're grabbing as much low lying fruit--8 9 NILDA MESA: [interposing] Absolutely. CHAIRPERSON CONSTANTINIDES: Because I 10 11 mean, I know there are schools that just don't make a 12 lot a sense. I can think of a number in my district, 13 but I can think of some that have a large roof and 14 have opportunities, knows already where--half of them 15 are already being assessed or being--16 NILDA MESA: [interposing] Yes. 17 CHAIRPERSON CONSTANTINIDES: It's being 18 placed on schools. 19 NILDA MESA: Yeah. 20 CHAIRPERSON CONSTANTINIDES: And that, 21 there's money in the budget for that just to move those forward. Once we find that it makes sense for 2.2 23 solar, we can go ahead--there'll be money there to go ahead and implement. 24 NILDA MESA: 25 Yeah.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 112
2	CHAIRPERSON CONSTANTINIDES: Great. And
3	as far as EV, I think Donovan touched on that, but as
4	far as public infrastructure, even on city streets as
5	far as setting up a pilot program possibly to set up
6	paryou know, spaces on public streets, that would
7	beis that something that I think we could work
8	through and get to, not only in parking garages, but
9	just right there on city streets setting up charging
10	stations and providing opportunities for people to
11	come and charge their cars beyond.
12	NILDA MESA: Yeah, we're begilike,
13	internally we're beginning to have those
14	conversations, and we're at the stage where we're
15	coming up with all of the problems and the obstacles
16	to doing that. So, we would welcome your input and,
17	you know, observations, you know, along those lines,
18	because it is something that we're talking about
19	internally, and we're thinkand you know, the more
20	we look into it the more we go, "Oh, wait, we got to
21	take care of this. We got to take care of that,
22	too." But, you know, the workplace, the program that
23	we just got, you know, the grant for that I think
24	will go a long way towards incentivizing workplaces,
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 113
 but, you know, that doesn't necessarily include
 streets at this point.

4 CHAIRPERSON CONSTANTINIDES: I know, 5 because I mean, in Queens, and I'm sure in many boroughs I mean, parking's at a premium, but we need 6 7 to start carving out those spots. We need to start 8 finding places to put on central business drags, 9 bringing that incentivized--figuring out a way to get those charges out there and whether that's--however 10 11 we carve it up, to getting them out there and at 12 least trying it and saying, you know, this is a 13 charge. This is a spot; only freebie charging, and then so people feel more comfortable buying those 14 15 types of cars if they don't own a home and don't have, you know--if you live in an apartment and you 16 17 want to still buy an EV car, it's like what are the 18 challenges; how do I charge it? 19 NILDA MESA: Sure. 20 CHAIRPERSON CONSTANTINIDES: So making it 21 We're definitely looking forward to working easier. 2.2 with you on as well. 23 NILDA MESA: Yeah, I would welcome that. CHAIRPERSON CONSTANTINIDES: Thank you. 24

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 114
2	CHAIRPERSON TREYGER: I think Council
3	Member Lander had a follow-up question.
4	COUNCIL MEMBER LANDER: Thank you very
5	much. Not exactly a follow-up, but a different line
6	of questioning that I couldn'tbut thank you. I want
7	to just drill down a little more on the energy supply
8	RFI and the goal of the moving the city itself to 100
9	percent renewable electricity and power, clean power,
10	purchasing. Now, I hadn't seen before the stat that
11	only two percent of our current supply is purchased
12	from renewable. So, to get from two percent to 100
13	percent requires going through a lot of percents
14	[sic] along the way.
15	NILDA MESA: You got it.
16	COUNCIL MEMBER LANDER: So, just walk me
17	through timeline a little more on that. I mean, I
18	know the RFI was out. I don't know if you have
19	responses back. Just, howwhat are the next steps
20	in developing and starting to implement that plan?
21	NILDA MESA: Yeah, so we received about 43
22	responses to the RFI. We were delighted at how many
23	we received, and we're stillwe're reviewing that
24	we've since had others come to us because this field
25	is moving so rapidly. So, we've since had in fact
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 115 1 other, you know, information come to us that's like, 2 3 you know, updated from the responses that we 4 received. You're right. It's a lot of percentages 5 to move to. You know, what we are hoping to do is in a way, you know, by issuing the RFI and then, you 6 7 know, hopefully ultimately coming out with an RFP is 8 to be sort of the magnet for all of the filings to 9 line up because we're such a big part of the city's electricity demand that -- and we aren't going 10 11 anywhere. We're a big, steady, stable customer, and 12 so it's the kind of thing that we have heard people 13 say, you know, this is what we need in order to start, you know, making the investments in order to 14 15 start planning ahead for, you know, putting more, 16 getting more renewables into the New York City grid. 17 It's not something that's going to happen instantly, 18 obviously, by a long shot, which is why we're also 19 looking at other, you know, strategies like micro 20 grids and solar, you know, and so forth, but we-- I 21 mean, I don't think we're going to be able to get--I 2.2 don't think the state is going to be able to reach 80 23 by 50. I don't think the city's going to be able to reach 80 by 50 without more renewables coming into 24 25 the grid, and it's, you know, a very complicated

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 116
2	legislatively and financially, you know, and so
3	forth, but you know, participating in the REV [sic]
4	process, participating with the Federal Government as
5	well as other states in the region, you know, we're
6	all kind of going in the same direction on this, and
7	that's exactly what it's going to take, but it's
8	going to beit's going to be a while before the
9	whole city gets there. We don't have easy access to,
10	you know, steady, stable renewables. You know, and
11	part of itokay, to get really geeky on you, but you
12	know, part of the challenge is also that you have to
13	haverenewables provide intermittent energy. So, at
14	some points, you know, the wind stops blowing, the
15	sun doesn't shine all the time, and so you also have
16	to have a stable underlying base, you know, for
17	energy in order for the city to keep having reliable
18	energy and affordable energy. Affordability is also
19	one big piece of this. When we file our comments
20	with the Public Service Commission on any number of
21	proceedings, we, you know I mean, generally our
22	mantra is pretty much like it has to be reliable. We
23	have to havewe have to maintain the reliability of
24	the grid. In New York City is also has to beyou
25	know, we need to bring in more renewables into the
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 117
2	grid and it has to be affordable, and we're always,
3	you know, mindful of that, and that, you know, for
4	example when it comes to, you know, as we're looking
5	at the 42.1 percent of, you know, city residents who
6	are living in poverty we cannot ignore that their
7	electricity has to also be affordable, and you know,
8	the same for the city government. So, it's going to
9	take a lot, but the good thing is that everybody's
10	pretty much, you know, when it comes to, you know,
11	sort of us, you know, our partners in the region as
12	well as the Federal Government, everyone's really
13	pretty well aligned towards us. There's not really
14	any dispute at all on, you know, the fact that this
15	is where we need to go. It's more a matter of how in
16	the world are we going to get there, but we need to.
17	COUNCIL MEMBER LANDER: And so just what
18	is the next step, an RFP? Is their next step a plan?
19	Like, what's the next thing we should look to see to
20	take the RFI information and move it into the
21	marketplace and eventually, you know, start
22	purchasing it and keep growing our purchases?
23	NILDA MESA: Yeah, I mean, ultimately
24	we'll come out, you know. At this point, what we're
25	thinking is that we'll come out with an RFP at some

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 118
2	point, you know, in the near-ish [sic] future, but
3	we're waiting to see the results of a couple of
4	different proceedings, like the state's rep
5	proceedings and so forth, and so it wouldn't make a
6	difference if we issued an RFP today because
7	everything's going to be changing.
8	COUNCIL MEMBER LANDER: When's the REV
9	NILDA MESA: [interposing] It's projected
10	to be the early
11	COUNCIL MEMBER LANDER: [interposing]
12	process?
13	NILDA MESA: part of next year, but you
14	know, it's a little bit uncertain, you know? So even
15	if we were to issue an RFP today it would be kind of
16	meaningless, you know?
17	COUNCIL MEMBER LANDER: But you envision
18	essentially a sort of rolling RFP where people are
19	able to propose to sell us renewables, clean power,
20	and we can
21	NILDA MESA: [interposing] I don't know
22	about rolling, but it'sbut something so that we
23	canand of the responses that we've received on, you
24	know, the 43 responses that we received, there wasn't
25	one that took care of 100 percent

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 119
2	COUNCIL MEMBER LANDER: [interposing] No,
3	no.
4	NILDA MESA: of the, you know, of what we
5	were looking for, which also told us a lot, you know?
6	That it's justtechnically it's just not there right
7	now, but there were a lot of really good strategies
8	and really good proposals or, you know, I should say
9	information, you know, that came our way, which gave
10	us the notion that this in fact is achievable if we
11	if all ofif everything sort of lines up right,
12	particand the next year is really going to be very
13	crucial for this.
14	COUNCIL MEMBER LANDER: Now, one idea I
15	know people have proposed and if it's in an RFI
16	response maybe you can't share, but I know people are
17	pushing to look at an offshore wind farm off the
18	Rockaways. Is that something the city's looking at?
19	NILDA MESA: Well, the Federal Government
20	isso they're beginning the process. It's the
21	Federal Government that gives, that hands out the
22	leases for the offshore wind energy areas. They are
23	beginning the process of looking at sort of the next
24	round of that including off of the southern portion
25	of Long Island. They don't yet have that area mapped.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 120
2	They don't have the environmental impacts assessed.
3	So they're really at the early stages of that, and
4	what they're saying is that it'll be probably a
5	couple of years before they're ready to come out with
6	an auction for those leases, and so that'syou know,
7	right now we're a littlewe're working with them.
8	They know of our keen interest in, you know,
9	purchasing 100 percent renewables, and that in fact
10	is something that has enabled them to focus more
11	intensively on, you know, offshore wind in the
12	coming, you know, year or so.
13	COUNCIL MEMBER LANDER: So, I mean, Mr.
14	Chair, let me just add, this may be something that we
15	want to have the Council, if this is a Federal
16	Government decision, perhaps we could communicate our
17	desire to the Federal Government.
18	NILDA MESA: That would be great.
19	COUNCIL MEMBER LANDER: Let it move
20	forward faster rather than slower. Following up on
21	Chair Constantinides' question about charging
22	vehicles, you know, because Paris has been so much on
23	our mind, both in the Climate Summit and of course
24	the attacks, before that, you know, they have that
25	Auto Lieb [sic] system. It's like city bike for

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 121
2	plug-in electric cars, which strikes me as a great
3	way not only to reduce our carbon footprint from
4	cars, but also to get our charging infrastructure
5	built out. They franchised it and the private sector
6	build out the charging infrastructure. Are weany
7	thoughts about that as a piece of what we might do in
8	order to build out a charging infrastructure?
9	NILDA MESA: It's a I mean, it's a great
10	idea, and you're right, the charging infrastructure
11	is sort of the big, you know, obstacle right now,
12	sort of out on the streets, but you know, like I
13	said, we're in the early stages of this, but it's
14	something that we're keenly interested in
15	COUNCIL MEMBER LANDER: [interposing] In
16	my district
17	NILDA MESA: [interposing] pursuing.
18	COUNCIL MEMBER LANDER: what people want
19	is to see whether they could turn the city bike
20	stations into some kind of like community generated
21	power by people just sitting there
22	NILDA MESA: [interposing] That's
23	interesting.
24	COUNCIL MEMBER LANDER: and riding the
25	bikes.

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 122 1 2 NILDA MESA: It doesn't generate that much 3 power. 4 COUNCIL MEMBER LANDER: No, no. 5 NILDA MESA: It's like enough to charge an IPhone [sic]. 6 7 COUNCIL MEMBER LANDER: Okay, yeah, I have Zero Waste questions, but maybe I'll save those 8 for a sanitation hearing where we can focus a little 9 more on the Zero Waste NYC pieces of the plan. 10 So, 11 thank you very much. 12 CHAIRPERSON TREYGER: Thank you, Council 13 Member Lander. And just, I mentioned this before, but I really think it's worth repeating and worth 14 15 stressing, and I really think that it has to get into 16 the fabric of our city's agenda. We're hearing all 17 this nice talk about renewables, energy efficiency, 18 sort of a green renaissance revolution, but I am very much still concerned that we're not tapping into our 19 20 local communities to be a part of this and to build 21 this and to be a part of the planning of this. Some of the commu--again, I mentioned this before. 2.2 If we 23 don't have residents from Coney Island or Canarsie or Sheepshead Bay or Rockaways or Red Hook or parts of 24 Lower Manhattan or the Bronx, if they're not a part 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 123 1 of the planning and the making and the building of 2 3 these resiliency plans, then this is not in my 4 opinion a win, I really need to see and hear a firm 5 commitment and a plan, not just a vision but a plan, because when we set goals without benchmarks, it's 6 7 sort of like MapQuest without the map. It's just a 8 quest, and I really want to see how are we tapping 9 into and building up the human capacity in communities that have historically been underserved, 10 11 in my opinion ineffectively represented, and where we 12 have basically exacerbated economic conditions for the most vulnerable families. 13 Because if we're pushing towards this green revolution which I hear 14 15 more and more that we're doing, this should not just be a payday for international consultants or 16 17 consultants from other parts of the country, we 18 should be tapping into human capacity here, building up capacity here at home, and so I really want to 19 20 again emphasize that we need to make sure that we are 21 working with our labor force, we are working with our 2.2 school system, we're making sure that our schools and 23 their curriculums are aligned not just to some random tests, but to the needs and challenges of the  $21^{\text{st}}$ 24 century, and that's where I think OneNYC needs to 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 124
2	really get better on. Come up with firm, definitive
3	benchmarks and goals and a firm concrete plan to tap
4	into and build up the capacity at the local level,
5	particularly in communities that have been
6	historically underserved and under-represented in my
7	opinion, and I just want to hear again your thoughts
8	on that and can we expect to see a plan to
9	specifically address this very serious concern.
10	DANIEL ZARRILLI: Thanks for those
11	comments. I think there's a couple different ways I
12	think we should be thinking about and responding to
13	this. One is in the planning of OneNYC itself, and I
14	know that I think I described the activity that we
15	undertook to bring thousands of voices into the
16	process through engagement sessions, through polling,
17	through surveys and a number of different ways to
18	bring that voice in, and we've been then living that
19	in the implementation of the plan in a lot of
20	different ways. The taskforce that we're launching
21	is bringing community-based organizations, houses of
22	worship more directly into the planning process and
23	implementation of projects as we move forward. Many
24	of the coastal planning projects that I mentioned on
25	the Lower East Side in Hunts Point, all across the
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 125 1 city we are bringing people into that conversation 2 3 around how we're building consensus and developing 4 projects in a much more direct way. Around workforce development there are ways that in particularly in 5 the post-Sandy world that residents who were hardest 6 7 hit from the storm or have new opportunities to 8 participate in the recovery of their communities, of 9 the 2,000 jobs that have been created so far in the 20 billion dollar resiliency program, over 900 of 10 11 those are going towards residents that come--that 12 live in Sandy-effected neighborhoods. So, there's 13 many different ways that we can bring people into this process and make sure that it is locally driven, 14 15 it is community driven, and that we're bringing the 16 best to bear from both yes, experts from all walks of 17 life and global perspective and expertise but also 18 the local knowledge of what needs to happen in our 19 communities to make that marriage effective and make 20 sure we're moving projects forward. Nilda mentioned also some of the things we're doing and looking into 21 2.2 on schools. So, there's a whole range of things that 23 we're doing to make sure that there are voices from local communities into this process. It's not top 24 down, and I think we're demonstrating that in the 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 126 1 implementation of the programs we have now. And then 2 3 the last point is--and you're talking about metrics 4 and indicators, and we did publish this, the goals that we laid out, the indicators, the targets. 5 We've set targets for ourselves on where we want to get to 6 7 and what it's taking us to get there. Every year 8 we're required, of course, to report on the progress 9 of those of the entire OneNYC program, including our metrics and indicators. We're going to continue 10 11 doing that, and we're laying out the plans throughout 12 our entire OneNYC program in order to make sure that 13 we're hitting those targets. So, I think it's comprehensive the way that we are both tracking 14 15 ourselves, holding ourselves accountable all across 16 the program, but also how we're bringing local 17 community voices, not only into the planning, but 18 into the doing, and I think that's the most powerful way that we can make this successful. 19 20 CHAIRPERSON TREYGER: I hear what you're 21 saying, and I appreciate, you know, words. I just 2.2 want to emphasize that I am still concerned that 23 we're outsourcing on the implementation of these initiatives. 24 T - -

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 127
2	DANIEL ZARRILLI: [interposing] But it's
3	not just words, with all due respect.
4	CHAIRPERSON TREYGER: Right.
5	DANIEL ZARRILLI: It is hiring local
6	residents to participate in the recovery. It is
7	making sure that we are working with organizations
8	that know their communities the best in the
9	implementation. Where we do need to look, you know,
10	for global and national expertise, we do that, but we
11	make sure that it is tailored and brought to bear
12	with local community voices so that we arewe
13	continue to be a world-leading city on implementation
14	of both resiliency and sustainability programs.
15	CHAIRPERSON TREYGER: No, I justand I'll
16	give you that that we'rethere have beenthere have
17	been aggressive, I think, plans to do outreach in
18	local communities with regards to recovery from
19	Sandy, but I'm talking about resiliency
20	sustainability, the OneNYC ultimate big goal and big
21	picture. I am not seeing a plan right now in my
22	opinion. I'm not seeing a plan right now to tap into
23	and building up human capacity at the local level.
24	I've had that conversation with Director Mesa when we
25	met about investments in our schools. For example,
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 128 1 we have some schools that in Southern Brooklyn that 2 3 build car parts and build homes. I believe--and 4 these are by kids supposedly who have IEP's. In reality, many politicians can't even build a car part 5 or build a home with their hands. So, why can't they 6 7 be tapped into and invested in with regards to 8 building up these batteries or building up these 9 solar panels, or building up? Why do we have to rely--you know, cities around the world are not just 10 11 taking the lead with regards to this climate change 12 action, but they're also rapidly looking to see how 13 they themselves can be part of the manufacturing of these resiliency measures, and I think that that's 14 15 where we're lagging behind. I think New York City 16 should be a leader not just in setting a vision, but 17 in setting the benchmarks and in building up human 18 capacity here in our city so our residents, our 19 children, particularly from historically underserved 20 communities who have faced the brunt of income 21 inequality, that they are trained and equipped with 2.2 the skills and knowledge base to be implementing 23 these plans. I think that is where we have still a lot of work to do. And there was one question I had 24 25 with regards to in the plan. It says that the goal is

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 129
2	that we're not going to allow for long term
3	displacements from future disaster. So the question
4	I have is how do you propose to eliminate disaster-
5	related long-term displacements of more than a year
6	of New Yorkers from homes by 2050? Because obviously
7	from Sandy, there have been people who have been
8	displaced for well over a year.
9	DANIEL ZARRILLI: No, absolutely. I think
10	the lesson from Sandythe lessons from Sandy, many
11	of which are still being learned but have been
12	applied through whether it's our Build it Back
13	Program, all of our recovery/resiliency programs, the
14	point of setting that target is making sure that we
15	are continuing to put in place both the physical, the
16	social, the economic resiliency measures that we've
17	laid out in OneNYC so that when those things are in
18	place we are reducing the damage from whether it's
19	flooding events or, you know, other sort of things
20	that might knock you out of your home, making sure
21	those are in place so that we have reduced damage,
22	and that we've also learned on the lessons on how to
23	stand up the recovery programs so that we can get
24	people back in their homes more quickly, and it's
25	when we put this program in place, the 20 billion
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 130
2	dollars, when we've done the work that we've laid out
3	to strengthen community-based organizations, continue
4	to build upon and improve our emergency planning and
5	recovery programs, all of that taken together can
6	help us achieve that goal. That's the aspiration, if
7	you will, the target that we want to eliminate that
8	long term displacement because we've seen how
9	devastating that can be, and we don't want to see
10	that happen again. It's an aggressive goal, but it's
11	something we need to do.
12	CHAIRPERSON TREYGER: Well, I'd like to
13	have some follow-up on that goal, because that's an
14	issue that's very personal to
15	DANIEL ZARRILLI: [interposing] To all of
16	us, yes.
17	CHAIRPERSON TREYGER: my district in this
18	as well. I think Council Member Menchaca has joined
19	us and also has questions as well.
20	COUNCIL MEMBER MENCHACA: Thank you,
21	Chairs, and welcome again to this very, very
22	important hearing, and what I want to do is
23	concentrate on a couple of areas that are on the
24	ground in neighborhoods. Can you share with us any
25	success stories thus far in helping integrate that

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 131 1 local community sustainable system of communication? 2 3 What we saw right after Super Storm Sandy hit our 4 neighborhoods is the activation of and the creation, we were building the bridge while we were crossing it 5 in our neighborhoods, and so can you point to any 6 7 successes today you can tout that help build that fabric? 8

DANIEL ZARRILLI: Sure. I'll start with 9 the, you know, with two projects I mentioned earlier, 10 11 and I think this tees up a conversation in Red Hook 12 in particular that is very important that's launching The work we've done on the Lower East Side. 13 now. We could have just launched right into environmental 14 15 review with our Rebuild by Design Award a year ago 16 and started doing design and just telling the community here's what we're going to do. 17 We 18 deliberately took the time to bring together the two 19 affected Community Boards, CB3 and CB6, their joint 20 Waterfront Taskforce. We deliberately fought through 21 a nearly year-long process of consensus building and 2.2 education both for the residents on sort of the risks 23 that as we see them, but also education for us the city on the very local considerations that we need to 24 25 bring to bear, and so the parts of the neighborhood

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 132 1 that are important to the community, specific ideas, 2 3 the sharing of knowledge back and forth between, you 4 know, outside experts, yes, but also local experts as well to make sure that there's a dialogue, got us to 5 a point where we are now in a position to launch an 6 7 environmental review process and start final design that is so much more powerful and informed by that 8 local coordination. A different scenario played out 9 in Hunts Point where we needed to do even a little 10 11 bit more in-depth work with community stakeholders, 12 businesses, residents on what a project might look 13 like there for the amount of funding that we had, what were the key priorities. We thought we knew 14 15 what they were, but we knew that there was some --16 maybe there wasn't full consensus a few months ago in 17 the community on what those priorities were going to 18 be, but we went through a facilitated process that 19 ultimately identified here are the priorities for the 20 community, here are the ways that we want to spend this money, education for all involved including the 21 2.2 city on what it was going to take to make that 23 community more resilient, and I think we've gotten now to a point in just a couple of days and have gone 24 back out to the community to have this discussion 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 133 1 around here's how we're taking the next steps 2 forward. I think, you know, maybe no one's 100 3 4 percent happy, and I think that's probably the--maybe a successful outcome that we've brought together the 5 right voices to make sure that we're moving forward 6 7 together, and that's going to be so much more 8 powerful than if we had just said we know what we're going to do and we're going to move forward. I think 9 that way is over. And that also then tees up an 10 11 incredibly important conversation as we've just signed the first design contract for work in Red Hook 12 and we want to work with your office and the entire 13 community in Red Hook on what that integrated flood 14 15 protection project means for the community, how to do 16 that, and I think every community's going to have its 17 own version of that sort of engagement. It's not 18 going to be a cookie cutter sort of approach, but the 19 fundamental underlying philosophy is that we want to 20 bring those community voices to bear, because it 21 makes the projects better. It makes them more 2.2 successful and because it makes it of the community 23 and is that much more powerful. COUNCIL MEMBER MENCHACA: Great. And thank 24

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you for those scenarios that you've been in a lot of

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 134 1 ways leading in the community with that special 2 3 attention to creating consensus, and we're all proud 4 in Red Hook. We're all doing it together to get that 5 project into fruition stage. What I want to also kind of just drill down, in so many ways we've 6 7 learned that communities are resilient when they can 8 work together and create that fabric. What I 9 continue to see a gap and I'd love to figure out if we can get to the bottom of this is the education 10 11 component that allows for communities that aren't all 12 speaking the same language and really bridge the gap 13 of literacy. So much of what we're seeing today, the people who are engaging are engaging, but I see a 14 15 bigger plan for all our communities to be able to 16 engage, and when I look at in my district in Sunset 17 Park and Red Hook, we have a lot of gaps in literacy, 18 and this knowledge to not just stay within a very 19 particular kind of community member, does the plan 20 speak to a real attention to the literacy gap in our 21 city and also the language gap? 2.2 DANIEL ZARRILLI: So, I'll start with 23 maybe how that impacts some of our projects, and I think we'd love to work with your office to think 24 through some different strategies, because what we 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 135
2	do, and we did this for the NBRC application, we've
3	done this for all of our outreach, we try to
4	translate all of our materials into all the local
5	languages that we know, or most relevant in any given
6	community, but I still think that there's more that
7	we can be doing to make sure we're reaching the right
8	people, because sometimes the flyer that's in three
9	or four languages it's a good start, but I think we
10	need to be doing more. We'd love to have a longer
11	conversation with you about how to make that more
12	successful.
13	COUNCIL MEMBER MENCHACA: Could the plan,
14	the action plan, include a real commitment to a
15	literacy for all campaign where everybody in our city
16	should have access to an education class that allows

16 should have access to an education class that allows 17 them to learn English. So, we want to get people to learn, understand English, to be able to come to 18 19 these meetings to be able to engage as part of a 20 plan, as part of a kind of core component, and then 21 two, while we get there, to really commit to 2.2 understanding the need in different communities and 23 be able to resource a kind of multilingual approach 24 beyond just translating, but really having active members within the planning stages to have 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 136
 communities brought in and to learn a little bit
 about the resiliency measures of our city.

4 DANIEL ZARRILLI: You know, I think it's things we're very interested in. 5 It has an easy equity angle to make sure that all New Yorkers are 6 7 able to participate in this process and inform this 8 process. Specific commitments, I think I'm going to 9 need to follow up with you on, you know, what sort of things might be in the realm of possible here and we 10 11 would love to hear more of your ideas on this.

12 COUNCIL MEMBER MENCHACA: Great. So, I 13 hope to get to that point. The next two questions 14 are about Red Hook specifically. Do you see any 15 challenges coming up? You know, there are multiple 16 levels of kind of approvals that we're moving 17 through, but are you anticipating any challenges, for 18 example, the micro grid project or any of the other 19 projects that we're working on together as we move forward? 20

DANIEL ZARRILLI: So, I mean, there's a lot going on in Red Hook right now, and I think, you know, we want to recognize the folks at NYCHA for their aggressive implementation of their program and how that's going to be brought to bear in Red Hook,

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 137 1 which is one of the biggest public development 2 3 complexes receiving FEMA funds. I think they've done 4 The--I'll leave the micro grid. Maybe great work. 5 Nilda has a few more things to say on that. But in particular, the integrated flood protection system is 6 7 going to be a complicated challenge to solve, I 8 think, with and in the community because of the 9 different land owners, because of the different subservice conditions, all the sort of drainage 10 11 interaction that you might have with a coastal 12 investment project. We have a lot of things to 13 solve. We're just at the beginning of that process, but we've been learning some things in other 14 15 neighborhoods in the Lower East Side and Lower 16 Manhattan and other places that we can bring to bear 17 on that, and I think we have a new way of working 18 with our agencies in the city to bring those 19 disparate conversations into really one conversation, 20 which is where they belong. So, I'm looking forward 21 to getting into it. I think it's taken us a little 2.2 longer than I would have liked to get to that point, 23 but we're now just launching that design process and the community engagement's going to be fundamental to 24

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 138 2 that in order to make sure we can bridge all those 3 gaps.

4 COUNCIL MEMBER MENCHACA: There was a 5 decision that was made, and I think it was a great decision, and NYCHA has so much of the credit in 6 7 pushing this forward, to move the senior center from 8 the original location in Sunset Park and move it over to essentially a region that's outside the flood zone 9 A, and we're in construction and we're really excited 10 11 about that. This plan can help us mitigate some of 12 those issues and really remove vulnerable populations 13 form flood zones. Will the plan and action items that we'll see in the future kind of really help 14 15 create citywide policies to kind of remove vulnerable 16 populations from our flood zones and kind of stand 17 around policy, strong policy around those issues? 18

DANIEL ZARRILLI: I think in every project we're learning those sort of things that we want to make sure we can export to the rest of the city as policy, and that's an important one. In some places, parts of the city, we are making specific investments where we have known vulnerable populations, adult care facilities, nursing homes and things. It's not just as easy to pick everything up out of a flood

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 139
2	plain of course, but to at least reduce that
3	vulnerability, but where we have the investment and
4	the opportunity to reduce the flood risk entirely
5	that's great. Other very specific examples we have
6	to get into as they come up.
7	COUNCIL MEMBER MENCHACA: Great. Looking
8	forward to working with you on that. Thank you.
9	CHAIRPERSON TREYGER: Yes, I think Council
10	Member Steve Levin has joined us and has a question.
11	COUNCIL MEMBER LEVIN: Thank you very
12	much Chairs Constantinides and Treyger. Thank you
13	very much. I know you've been here for a long time
14	so I'll keep my questions brief here.
15	DANIEL ZARRILLI: All in a days' work.
16	COUNCIL MEMBER LEVIN: I wanted to ask
17	about the city's efforts with regard to green roofs
18	in our buildings both in our public buildings and in
19	new construction and retrofitting. Can you speak a
20	little bit about what the city is doing to either
21	incentivize or mandate green roofs and how that
22	compares to other cities? So, for example, I was on
23	a panel a few months ago with representatives from
24	Washington D.C. and Toronto, and their efforts, you
25	know, percentage-wise are yielding significantly
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 140 1 2 greater results than we are yielding here in New York 3 City, and I was wondering if you're looking at that 4 and what type of measures you're exploring for that? NILDA MESA: So let me give a little bit 5 of background on green roofs. So they're--so green 6 roofs and solar panels don't usually go together, you 7 8 know, because there's usually not enough roof space. 9 We've been focusing a lot on solar, and green roofs, so just as a, you know, just by way of background, so 10 11 green roofs, you know, a lot of it depends on the age 12 of the roof, the condition of the roof and so forth. 13 So it's, you know, it can be fairly tricky, you know, to do, and there's any number of--14 15 COUNCIL MEMBER LEVIN: [interposing] For 16 retrofits, yeah. 17 NILDA MESA: Yeah, absolutely. And you 18 know, most of our buildings are already up for new 19 buildings. You know, it's a slightly different 20 thing, and with that I'm going to turn it over to 21 Dan--2.2 COUNCIL MEMBER LEVIN: [interposing] Okay. 23 NILDA MESA: who's been doing a lot on white roofs, and--24 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 141
2	COUNCIL MEMBER LEVIN: [interposing] And
3	in particular I want to focus on new construction. I
4	represent downtown Brooklyn and Greenpoint
5	Williamsburg where we have a significant amount of
6	new construction happening now, and it seems as if
7	we're kind of missing an opportunity to get green
8	roofs as part of new construction throughout the
9	city.
10	DANIEL ZARRILLI: Yeah, and some of this
11	we'll probably have to follow up on, but in
12	particular, your colleague Council Member Lander
13	asked some questions around the mandatory green roofs
14	that are happening in other parts of the world. You
15	know, there's a lot of interesting things that I
16	think we need to learn from. Our Department of
17	Environmental Protection has been doing, I think,
18	fantastic work in stimulating different ways to
19	reduce, you know, CSO overflows, whether through
20	investments in green infrastructure, green roofs, and
21	incentivizing private owners even to make those
22	investments. Where we haven't gone at this point is
23	that sort of mandatory every new roof has to be a
24	green roof, and for some of the reasons that Nilda's
25	mentioned, that it conflicts with other sort of

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 142 1 goals, and you know, we've been also--you know, we've 2 3 coated over six million square feet of roofs white 4 over the last several years to make sure we're also 5 reducing energy usage, and a whole range of things that I think we're trying to do that we just want to 6 7 make sure we're doing it in a coordinated way. 8 COUNCIL MEMBER LEVIN: Well, if you're 9 going to stack up those measures against one another, what's the most effective one if you were going to, 10 11 you know, kind of compare whether it's, you know, between green roofs, solar panels--12 13 DANIEL ZARRILLI: [interposing] White 14 roofs. 15 COUNCIL MEMBER LEVIN: and white roofs, 16 how would you--17 DANIEL ZARRILLI: [interposing] Good 18 question. 19 NILDA MESA: Yeah, I mean, it's a great 20 question. It's, you know, because roof real estate 21 is, you know, hard to come by. So, I mean, I'm just 2.2 going to say, it sort of depends. It depends on the 23 building. It depends on how much shadow falls on the building. It depends on the condition of the 24 building, whether it's new, whether it's retrofit. 25 Ι

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 143 1 was at--so before, you know, this job I was actually-2 3 -when I was at Columbia University and running a 4 sustainability program, I was actually the person who 5 launched the green roof program there, and it was-and one of the things that we did was also set up a 6 7 sort of a lab to measure the effectiveness of green roofs, because at that time there were really very 8 9 few that existed. Some of the considerations that we looked at were sort of like the ease of maintenance, 10 11 because what you don't want to have is like you plant 12 a green roof and then have all the plants die. And 13 so, and you also don't want to plant something where it's, you know, going to compromise the integrity of 14 15 a roof. So, there were--you know, we did all these 16 extensive studies. The thing that's great about, 17 that we saw that's great about green roofs, is that 18 it was a little hard to measure sort of on the energy 19 side of it how much it actually effect--how much it 20 actually kept a building cooler in the summer, 21 although we could see that there was a difference, 2.2 but where we saw more of a difference was on actually 23 like the biodiversity of the area and what it did to, you know, all of the sort of natural areas that were 24 25 nearby. And so, with us we were between Morningside

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 144 1 Park and, you know, Central Park and Riverside Park, 2 3 and so what we saw was that in fact it helped, 4 believe it or not, promote, you know, --5 COUNCIL MEMBER LEVIN: [interposing] Biodiversity. 6 7 NILDA MESA: Exactly. So, and you know, there would be--you know, we just saw all of the 8 9 sudden many more butterflies coming, you know? It was like that kind of thing, which is not what we 10 11 expected as a result, but I think it sort of--you 12 know, part of it depends on budget for a building 13 owner. So, green roofs are, you know, generally, you know, can be really expensive, particularly if you're 14 15 putting in a new roof, and you know, it depends on the extent to which you want to--16 17 COUNCIL MEMBER LEVIN: [interposing] 18 Right. 19 NILDA MESA: Or not so much, you know? 20 The cheapest by far are white roofs, you know, where 21 you just go in and paint the roof white, and that 2.2 also, you know, in our studies what we showed was 23 that the--as far as the energy side went that that actually was at least as effective as a green roof 24 25 for a fraction of the price. So, it's, you know,

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 145 1 it's sort of--part of it depends on, you know, what 2 3 is it that the building owners or tenants, you know, 4 would like. Some places it's seen as an amenity. 5 Some places it's just, you know, purely ecological services, but it's something that I think is--it's a 6 7 really good strategy and one that has not, you know, 8 been taken advantage of. COUNCIL MEMBER LEVIN: Right. I mean, so 9 two things that I want, two measures that I want to 10

11 bring to your attention. I think one that they're 12 doing in Toronto is they have a mandatory green roof 13 for any large-scale residential building with an opportunity if a developer does not want to take 14 15 advantage of that that they have to then pay into a 16 reserve fund, and what we heard from the folks in 17 Toronto was that of the--I believe it was of the 300 18 new construction buildings that have, you know, gone underway since this measure has been implemented, 270 19 20 have done it, and 30 have paid into the reserve 21 So, obviously a preponderance of new funds. 2.2 buildings have opted to go ahead and do that. And 23 the other measure that I think that we've heard from the folks in Washington D.C. is that in terms of the 24 25 tax abatement, tax incentive that is in place, they

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 146
2	have I believe 15 dollars a square foot where we have
3	five dollars a square foot, and in D.C. obviously
4	more developers arethis is for new construction
5	where developers are taking advantage of that because
6	there's a greater incentive. So that's something
7	just to look at as well.
8	NILDA MESA: Happy to look into this more
9	and work with you more on this.
10	COUNCIL MEMBER LEVIN: And then lastly,
11	not as a question, but just really something that I
12	think is so important to look at is how we can get
13	all new construction, municipal buildings, schools,
14	fire houses, what have you, to be passive house net
15	zero I think is such an important thing that we can
16	do. I know of a affordable housing developer in
17	Bushwick that does passive house affordable housing
18	now, and if that can be made to work where we have
19	affordable housing with low rent levels, if that's
20	able to be passive house, then really anything could
21	be passive house. So, we should really be exploring
22	that and making sure that that's the standard for
23	every new building that the city finances.
24	NILDA MESA: So, one of theit's a great
25	point. Passive house, the standard itself wasand
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 147
2	this is something we've been kicking around, you
3	know, for a bit, and it's very much central to the
4	work of the building's Technical Working Group,
5	actually, but one of the things that, you know, we've
6	been trying to figure out and we're big supporters of
7	getting our buildings to this point where they're net
8	zero passive housing or whatever it is, but the
9	models right now for the city, there are few examples
10	of residential passive house, but not all that many.
11	There aren't really any great models for commercial.
12	The models that were developed, the models in the
13	the ones that have been developed in Europe, they
14	look at a different energy load because their summers
15	are not as hot as ours, and so that presents special
16	challenges for us, because not only do we have to
17	heat the buildings we have to make sure that they're
18	cool in the summertime, and so that creates special
19	challenges for the building facades and for sizing of
20	the equipment that's going on internally, and it's
21	something that we have to address, and it's something
22	that we are, you know, moving forward with, but right
23	now we don't have a great way of doing it, but we're
24	on the way to doing that. So, it's a perfect
25	question.

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 148 1 COUNCIL MEMBER LEVIN: And as you know, I 2 3 mean, there's professional associations here and in the states that are, you know, between architects and 4 engineers that are always looking at all of this 5 stuff, and so you know, I encourage--6 7 NILDA MESA: [interposing] And we work 8 verv--9 COUNCIL MEMBER LEVIN: you to--NILDA MESA: [interposing] Yeah, we work 10 11 really closely with them. They're on our Technical Working Group, and in fact we received an award this 12 fall from the Passive House Institute here in New 13 14 York City for our support of development of Passive 15 House for New York City. 16 COUNCIL MEMBER LEVIN: Thank you so much. 17 Thank you Chairs. 18 CHAIRPERSON TREYGER: Yes, thank you very 19 much, and I think--are there any other questions? Ι 20 think just to close with the Administration part, is that I think that obviously there's still a lot of 21 work and a lot of things to flush out from the OneNYC 2.2 23 Plan. I think that as far as the vision, I think that many of us share the Administration's views that 24 we have a moral imperative to act now. There's no 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 149 1 We have to act now. I think the areas 2 time to wait. 3 that we still need to work on obviously are the benchmarks that are within our reach while we're 4 still in office and not beyond the years 2025 or 5 2050. I think also we need to tap into the workforce 6 that we have today to be a part of the implementation 7 8 of this plan. I think we have to continue to build 9 and increase human capacity in our people as well, and I think that just to the point I made before, 10 11 Director Zarrilli, about with regards to displacement 12 of people is that the people that would be under the 13 Mayor's order to evacuate in the event of an 14 emergency are the same people who have difficult time 15 evacuating for a variety of reasons, one of which are 16 economic factors. So, the people who are really facing the brunt of climate change and really who are 17 18 really I think are effected the most are the most 19 vulnerable today right now. And that is why we have 20 to act and we have to act, I think, with a sense of 21 urgency today. So, I just will close out by saying that I think this is the beginning, not the end, of 2.2 23 this very serious discussion. I'm very interested in hearing more about the Working Group's findings and 24 conclusions. I think that we need to move from a 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 150 1 place of from voluntary action to urgent action, and 2 3 I think again, the government from the Federal level, 4 state level, local level need to be on the same page with regards to the sense of urgency, because again, 5 if we're leveraging public money with regards to the 6 7 affordability of our housing stock, but not 8 leveraging public money for the sustainability of our 9 people, that's a problem and that's also a gap. And right now, I know that there are discussions under 10 11 way with the state, city and the building trades and 12 real estate executives with regard to the future of 13 the 421A program. I'm not sure why this can be a part 14 of those conversations as well, because if you're 15 saying affordability and sustainability are equally 16 important, why aren't we treating them as equally 17 important in these types of conversations? With 18 that, I will--I think that concludes the 19 Administration's testimony, and just to make a note, 20 there's a triple committee hearing in this room at 21 1:00 p.m., so for the convenience of the public, we 2.2 want to hear every single person's testimony and 23 feedback, we will be moving our committee hearing right next door to the committee room to our left 24 here. 25 That's because at 1:00 p.m. there's a triple

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 151
2	committee hearing that needs a lot of space. So, I
3	appreciate the Administration's testimony. I look
4	forward to continuing working together.
5	DANIEL ZARRILLI: Thank you, and just a
6	thank you for your support of the National Disaster
7	Resiliency Competition Application as well.
8	CHAIRPERSON TREYGER: Thank you.
9	NILDA MESA: Thank you.
10	[break]
11	CHAIRPERSON TREYGER: We're just waiting
12	for the Sergeant at Arms to give us the okay to
13	start, and we'll also set the clock to three minutes.
14	Okay, we'd like to call up our first panel. Begin
15	with Eric Goldstein, Natural Resources Defense
16	Council, Doctor Michael Menser [sp?], Juan Camilo
17	Osorio from New York City Environmental Justice
18	Alliance, Ya-Ting Liu, New York League of
19	Conservation Voters, and Laurie Schoeman from
20	Enterprise Community Partners. Okay, so we've set
21	the clock at three minutes per witness, and I guess
22	we can begin this way. That's fine, Mr. Menser,
23	Doctor Menser, if you want to begin that way. Thank
24	you very much. Make sure the mic is on.
25	

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 152
2	MICHAEL MENSER: Got it, alright. Well,
3	hot topic, cold room. Thank you to the Council
4	Members for this very important hearing today, and
5	I'm going to get right to it. So, my name is Doctor
6	Michael Menser. I teach philosophy and urban
7	sustainability studies at Brooklyn College in the
8	CUNY Graduate Center and work with the Science and
9	Resilience Institute at Jamaica Bay. I'm also an
10	active member of the faculty and staff union at CUNY,
11	the Professional Staff Congress, and President of the
12	Participatory Budgeting Project. My testimony is
13	informed by all these connections, but is on behalf
14	of myself as an individual. My theme today is that
15	making New York City more resilient is going to
16	require a true commitment to establishing regular
17	channels of community participation, not just one-
18	shot events at various levels of government, and if
19	that is not done, well-intentioned top-down proposals
20	could actually further displace and endanger people
21	and even entire neighborhoods. And if OneNYC has a
22	public participation plan, then I would say that it's
23	a top secret one, which is a little bit ironic. This
24	past weekend in Paris, almost 200 world leaders put
25	respond to the climate crisis. The time is right for
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 153 1 major action, and New York City has already begun to 2 take it. Mayor Bloomberg's PlaNYC put NYC at the 3 4 course to reduce its recovery by 30 percent and now we have 80 percent by 2050 as a goal in the SIR [sic] 5 aims to spend 20 billion to enhance resilience. 6 But 7 as Mayor de Blasio's One New York Plan makes 8 perfectly clear, a truly sustainable and resilient New York City requires inclusion in equity. Compared 9 to PlaNYC in the SAR, One New York makes significant 10 11 improvements with respect to both those inclusion in 12 equity. However resilient requires addressing 13 climate change in economic inequality, and One New York's focus on affordable housing, workforce 14 15 development and transportation offer hope if not only specifics in actually creating a more equitable city 16 17 with respect to the physical and social 18 infrastructure. However, One New York gives much less attention to community participation despite 19 20 some other things we heard earlier. Without robust 21 and regular community participation, the One New York 2.2 plan could waste millions of dollars on projects that 23 don't respond to community needs. Even worse, it could put hundreds of thousands of people at risk of 24 displacement, not just from rising sea levels, but 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 154 1 To put it bluntly, without robust and 2 rising rents. regular community participation, the One New York 3 plan could make us less safe, less resilience and 4 more unequal. Yet, unlike the problem with global 5 climate change, the problem of local public input is 6 7 solvable in a short term framework. There are 8 elements of One New York, to give it credit, that do 9 offer glimpses of such democratic resilience. The plan mentions community participation on two 10 different levels. The first is at the level of 11 12 community institutional infrastructure, just to quote 13 from the plan, "The goal is that all New Yorkers have access to high quality, convenient located community-14 15 based city resources that promotes civic engagement 16 and enables residents to thrive." And we can see 17 that with the focus, and this was mentioned earlier. 18 Libraries weren't actually mentioned, but there's lot 19 of community infrastructure from libraries to schools 20 to workforce development centers, small business 21 services and community health hubs. Does that mean--2.2 okav. So, what the thing I really want to call 23 attention to, though, is at the level of planning and implementation that we are most concerned. Community 24 25 participation is necessary to make sure the community

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 155 1 priorities are being addressed, projects are 2 3 developed with community needs and aspirations in 4 mind, and the process implementation does not 5 displace, as I was saying. That's going to require community participation in terms of project review 6 7 and monitoring, regular feedback and also at the 8 level of budget allocations. And so to give one 9 example, the DEP right now is currently constructing bio-swirls [sic] throughout Brooklyn and Queens. 10 For 11 these flood mitigation and biodiversity enhancing 12 spaces to function well, the sites must be properly 13 maintained, the planning cared for and sites kept 14 free of trash and debris. This requires community 15 vigilance and skill. Also community members will possess and report information about how these sites 16 17 function during rain events. For this to happen, 18 agency community communication must be well supported 19 in long term. So we're not calling for public 20 participation in every decision. We don't think 21 there should be a series of public meetings on the 2.2 proper width of sewage pipes, but there are many 23 programs and projects that should be vetted by the public at the beginning of the process. Others 24 should be commenting during the proposal generation 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 156
2	stage as in participatory budgeting. This is not
3	only democratic, it can potentially save the city
4	millions of dollars by avoiding implementing projects
5	that don't meet community needs. In other cases, it
6	might be appropriate for public to choose the project
7	to ensure the project is in sync with community wants
8	and aspirations.
9	CHAIRPERSON TREYGER: Doctor Menser, can
10	you just quickly have a wrap up line. We'll take
11	your testimony and put it in the record as well to
12	review it.
13	MICHAEL MENSER: Sure.
14	CHAIRPERSON TREYGER: Because You've been
15	
	very active and we appreciate this.
16	very active and we appreciate this. MICHAEL MENSER: Got it. So, myjust to
16 17	
	MICHAEL MENSER: Got it. So, myjust to
17	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience
17 18	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience Institute at Jamaica Bay, I think, offers a really
17 18 19	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience Institute at Jamaica Bay, I think, offers a really powerful model of how you can put community input
17 18 19 20	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience Institute at Jamaica Bay, I think, offers a really powerful model of how you can put community input with public agencies, with academic researchers and
17 18 19 20 21	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience Institute at Jamaica Bay, I think, offers a really powerful model of how you can put community input with public agencies, with academic researchers and community-based researchers to actually have a
17 18 19 20 21 22	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience Institute at Jamaica Bay, I think, offers a really powerful model of how you can put community input with public agencies, with academic researchers and community-based researchers to actually have a community-driven agenda integrated with the city to
17 18 19 20 21 22 23	MICHAEL MENSER: Got it. So, myjust to conclude, the idea is that the Science and Resilience Institute at Jamaica Bay, I think, offers a really powerful model of how you can put community input with public agencies, with academic researchers and community-based researchers to actually have a community-driven agenda integrated with the city to do a regular participation process. This is a ten

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 157 1 community organizations, with public agencies going 2 3 forward and the researches is something that I think it could really offer democratic collaboration that 4 would make New York City a global leader in that 5 dimension of resilience. Thank you. 6 7 CHAIRPERSON TREYGER: Thank you very Thank you. Next speaker? 8 much. 9 JUAN CAMILO OSORIO: Good afternoon. My name is Juan Camilo Osorio. I'm going to be 10 11 testifying today as Director of Research with the New 12 York City Environmental Justice Alliance. We are a 13 citywide membership network linking grassroots 14 organizations form low income neighborhoods and 15 communities of color in their struggle for 16 environmental justice. We have submitted longer 17 testimony which I will summarize as follows. Recent 18 [sic] research findings emphasizing the liability of 19 the city's industrial waterfront neighborhoods for a 20 significant amount of time in industrial areas to 21 various climate change impacts, including flooding, storm surge and sea level rise, but also wind and 2.2 23 potential hazardous exposures in the event of severe weather. While the initiatives in OneNYC represent a 24 significant step forward, the complexity of these 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 158 1 challenges require a more detailed implementation 2 3 plan balancing the approach to various types of 4 climate change impacts, a long term plan to address the needs of all vulnerable communities and a robust 5 community engagement plan for transparent decision-6 7 making and community oversight. In order to address 8 these challenges, we urge the City Council to consider the following recommendations. One, require 9 a robust implementation plan for OneNYC. There is 10 11 ambiguity on the policies required to implement goals 12 and a need for strong mandates. For example, a 13 voluntary retrofit program like the Retrofit Accelerator alone is not sufficient to meet the 80 by 14 15 50 goal, and therefore, the city should require large 16 buildings to undergo energy efficiency retrofits. In addition, there's a need for a full renewable energy 17 18 and energy efficiency assessment of public buildings 19 to determine potential for keen energy generation, 20 particularly related with solar panels in schools 21 located in low income neighborhoods and communities 2.2 of color. New York City also requires a balanced 23 long term mechanism to address the needs of all vulnerable communities so vulnerable neighborhoods 24 25 like the South Bronx or Sunset Park that did not

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 159 1 experience the highest levels of flooding during 2 3 Sandy receive comparable levels of resiliency 4 investment. Number two, require a comprehensive 5 assessment and response to climate change impacts. Current resiliency efforts have an almost exclusive 6 7 focus on coastal flooding. The city hasn't addressed 8 the impacts of high winds, and it hasn't fully 9 addressed the public health risks associated with potential hazardous exposures that can occur in 10 industrial facilities under severe weather. 11 And 12 number three, require the city to create a genuine 13 community engagement process to inform and oversee the implementation of OneNYC. With our own inclusive 14 15 and long term decision-making process to engage 16 grassroots efforts in resiliency building plans with 17 clear opportunities for community oversight, OneNYC 18 remains a primarily top-down effort. Such an is--an 19 effort--sorry. Such initiative can be built upon 20 proposals submitted to the City Council by the City 21 University of New York and the Science and Resiliency 2.2 Institute of Jamaica, of Jamaica Bay, in partnership 23 with NEJA [sic]. We commend you for inviting public comments on the city's resiliency and sustainability 24 25 plans. The City Council really plays a critical role

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 160 1 in ensuring that New York City fully takes advantage 2 3 of the opportunity to increase its sustainability and 4 resiliency. Thank you. 5 CHAIRPERSON TREYGER: Thank you very much for your testimony. Next? 6 7 LAURIE SCHOEMAN: Good afternoon. On behalf of Enterprise Community Partners, I would like 8 9 to thank Chair Treyger and Chair Constantinides for the opportunity to comment today. My name is Laurie 10 11 Schoeman and I direct the Green Communities Program 12 at the New York Office of Enterprise. For more than 13 30 years, Enterprise has worked to create opportunity for low and moderate income people through the 14 15 creation of high quality affordable housing in diverse thriving communities. To us, green has 16 17 always been about more than energy efficiency. It's 18 about social justice. From Sandy's disproportionate 19 impacts on low income renters to the high 20 concentrations of asthma in communities with poor 21 housing quality, it's clear that low income 2.2 communities have the most to gain from healthy, 23 sustainable and resilient building. That's why OneNYC is a visionary plan. It seeks to make the 24 25 city a more equitable place by linking people,

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 161 1 economic development and the environment. 2 Economic 3 development and sustainability must go hand in hand. 4 Ten years ago we launched Enterprise Green Communities criteria to prove that it was possible to 5 bring the health, environmental and economic benefits 6 of green building to affordable housing. 7 The 8 Enterprise Green Communities criteria is the leading 9 national housing standard for green and healthy affordable building adopted by more than 22 states 10 11 and municipalities around the nation, promoting high 12 performance, efficient, healthy and resilient 13 affordable housing. In New York City, all affordable 14 housing developments receiving funding from HPD for 15 new construction and substantial rehab must comply 16 with a version of each EGCC [sic] tailored to New 17 York City affordable housing stock called the HPD 18 Overlay. In New York to date we have almost 36,000 19 units of affordable housing in the Enterprise Green 20 Communities pipeline alone. After Hurricane Sandy we 21 launched a resiliency program through which we've 2.2 supported many of New York City's leading portfolio 23 affordable housing owners with TA, grants and tools to promote long term opportunities and infrastructure 24 resilience in low income communities. Resilience 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 162 1 measures are now incorporated into the EGCC standard. 2 3 We would like to particularly highlight the recent 4 program by HPD which--and HGC, called the Green Housing Preservation Program, which assists when 5 owners of small and mid-sized multifamily properties 6 7 across the city to undertake intensive energy 8 efficiency and water conservation measures. The 9 program indeed advances the goals of the Mayor's Housing Plan as well as the city's 80 by 50 carbon 10 11 reduction program. Importantly, the Green Housing 12 Preservation Program and other initiatives like the 13 Retrofit Accelerator are reaching owners of small and mid-size buildings, which is a part of their housing 14 15 stock not well served by other programs. Enterprise commends the steps taken by this Administration, the 16 17 City Council and the affordable housing community to 18 make New York City a green and equitable place to live. I want to thank you all for the opportunity to 19 20 testify here today. 21 Thank you very CHAIRPERSON TREYGER: 2.2 much. Next? 23 YA-TING LIU: Good afternoon, Chair Tregyer, Chair Constantinides, Council Member Chin. 24 Thank you so much for the opportunity to testify on 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 163
2	behalf of the New York League of Conservation Voters.
3	My name is Ya-Ting Liu. I'm the New York City
4	Program Director, and we have over 25,000 members
5	here in New York City and we want what you want,
6	which is to make New York City a more sustainable
7	city, something that would make our people, our
8	neighborhoods, our economy more sustainable, more
9	resilient. So, we definitely applaud this
10	Administration's ambitious agenda in ONENYC, and we
11	echo a lot of the comments that Council Members made
12	earlier about the need for another layer of
13	specificity in order to make the plan stronger. I
14	mean, the bottom line is that we can't assess and
15	track progress or holding anybody accountable if we
16	can't measure it. So, as part of my testimony, which
17	I won't read, but I've attached two copies of
18	documents. One is an implementation plan from the
19	Sustainability Update in 2011 to just show you the
20	layer of detail, specificity and specific concrete
21	action that the city's going to take by date served
22	[sic]. So, just for example, if you turn to PDF page
23	194 in the implementation plan under air quality from
24	this 2011 sustainability update, you'll see things
25	like, "Install over 60 electric vehicle charging

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 164 1 units at city owned facilities and garages. Complete 2 3 upgrades of 400 vehicles. Install diesel particular 4 filters on 685 buses. Complete boiler conversions at 15 schools." That is the level of detail, and also 5 be date serin [sic], right? So, this implementation 6 7 said that these actions will be accomplished in two 8 years from 2011. So, compare that to what we have 9 currently in OneNYC which is the indicators and initiatives table. So if you turn to page 275 also 10 11 looking at sort of what they have spelled out under 12 air quality, you get things that are, again, a little 13 bit more broad and not specific in terms of actions that the city will take. So, air quality initiative 14 15 three under current OneNYC says, "Accelerate 16 conversions of residual heating oil boilers in 17 buildings." And you guys touched upon that earlier 18 in your exchange with Director Mesa, how many 19 buildings are left have yet to convert. She said a 20 few hundred. How many buildings will be converted by 21 day surin [sic]? So, what is the city aiming to 2.2 convert by the end of next year and the year after 23 Some specific numbers would really help us all that? assess whether or not we're getting to this goal. 24 25 Look, I'll just end with that we do want to applaud

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 165
2	the Administration for all these great initiatives,
3	but it's really hard to see the total for the sum of
4	its parts, where all these different initiatives fit
5	into the overall plan, and we think that the next
6	update can be strengthened with something more
7	concrete and more specific, and thank you.
8	CHAIRPERSON TREYGER: Thank you.
9	ERIC GOLDSTEIN: Thank you, Chairman
10	Treyger, Chairman Constantinides and Council Member
11	Chin. I'm Eric Goldstein from the Natural Resources
12	Defense Council. Excellent hearing, terrific
13	questioning, right on target. By his appointments,
14	his statements and his goal setting such as those set
15	forth in New York in OneNYC, the Mayor is showing
16	that environmental issues form climate change to
17	what's going on in neighborhoods are issues that he
18	cares about and where he wants New York City to be a
19	national leader. Never the less, fulfilling such
20	ambitious goals and promises won't be easy.
21	Intermediate goals and timetables are necessary.
22	There's much work that remains to be done in the next
23	two years. In our written testimony we'll set forth
24	in detail the 10 recommendations, I'll just quickly
25	mention now. One, mandate energy efficiency
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 166 1 2 retrofits, and by the way, many of these issues 3 you've discussed. A number of them, the city has 4 indicated they're heading in the right direction and narrowing down and nailing down the commitments to 5 implement them, or what will be telling what we hope 6 7 will come out in April version of OneNYC. One, mandate energy efficiency retrofits for New York 8 9 City's largest privately owned buildings. The best way to get cooperation from building owners from the 10 11 city is to send them clear signals now about the 12 Council's expectations for the future and provide 13 them with feasible, reasonable time tables. Two, 14 expand the conversion to renewables by issuing an RFP 15 for offshore wind that will allow for demonstrated early success of this clean energy technology. 16 There 17 are ways that the city can be aggressively working 18 with the federal government. Three, scale up energy 19 efficiency in affordable multifamily housing by 20 adopting realistic milestones for steps that must be 21 taken to turn this promise into a reality. Four, 2.2 facilitate, and again, details on all of these in the written testimony. Four, facilitate the shift to 23 electric vehicles by building upon local law 130 of 24 2013 in directing the doubling of new charging 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 167 1 stations created in all five boroughs over the next 2 four years. Five, advance exclusive zone system for 3 4 the collecting of commercial waste that will result in a more equitable, less polluting and more 5 sustainable trash hauling system for all city 6 7 neighborhoods. Six, address the most troublesome 8 elements of the city's waste stream which are 9 polystyrene foam and plastic bags, which we know Council Member Chin has been working on; more details 10 11 in my testimony. Seven, strengthen recycling at NYCHA 12 by more fully engaging and employing residents in the 13 program that the city is now rolling out to reach 14 400,000 residents. Without, as you have said, 15 Chairman Tregyer, without engaging city residents in the communities, many of these programs won't be the 16 17 success we need them to be. Eight, I think, advance-18 -the existing funding for the rebuild design projects 19 won't be nearly enough to get the job done and 20 someone needs to stand up and say, "The emperor is 21 only wearing his underwear." Significant additional 2.2 sums from federal, state and city sources will be 23 necessary to see these resiliency projects through their conclusion. Nine, if we want to make our 24 25 neighborhoods more resilient, we need to expand the

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 168
2	city's energy distribution network, paving the way
3	for energy efficient micro grids is one of the most
4	important specific actions the Council, the
5	Administration could take. And finally, ten, the
6	Council and the Mayor should work cooperatively to
7	create a permanent buy-out program in which the city
8	and state agencies acquire from willing sellers their
9	homes and businesses located in the most dangerous
10	and vulnerable flood zones and keep those parcels in
11	an undeveloped state, providing recreational
12	opportunities and natural buffers to protect city
13	neighborhoods. Unfortunately, fortifications and
14	defensive infrastructure alone won't be enough to
15	protect every city neighborhood. We thank you for
16	convening this hearing. We hope you do it
17	semiannually. Huge amounts of material to cover, but
18	your questioning was terrific. Thank you.
19	CHAIRPERSON TREYGER: Thank you very
20	much, and just a quick note and just a quick question
21	as well, because we have a lot of people here, I just
22	want to be mindful of everyone's time. The former
23	Mayor, Mayor Mike Bloomberg, who has been very vocal
24	on this issue of climate change, as someone who
25	chairs the committee on recovery and resiliency I
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 169 1 could tell you that with our public housing stock in 2 3 Coney Island and Red Hook, Rockaways and elsewhere 4 that they had their boilers flooded by Sandy. The temporary boilers that they installed were fossil 5 fuel oil burning boilers that could not even operate 6 7 during cold weather. So, number one, they were 8 faulty, and number two, for people who claim to be 9 champions of climate change, they were still advancing procurement processes that actually help 10 11 advance the factors of climate change. So, we need a 12 bottom-up analysis of all of our procurement and 13 contracting as well, making sure that we're not being hypocritical on government saying that we care about 14 15 this issue, but yet but we are contributing to these I just want that to be part of the record. 16 issues. 17 Now, they are moving away from them now. They're in 18 the process, but that should have been the part of 19 their preparation planning long before. We heard the 20 issues during the Administration's testimony. I'm 21 very curious to hear some of your thoughts, and I 2.2 respect--we respect, greatly respect your input and 23 your expertise on these matters. There doesn't seem to be consensus about what is the gold or platinum 24 standard of energy efficiency standards. We heard 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 170
2	the International Passive House Association as one
3	set of standards. We've heard of LEED. Is there
4	consensus in the environmental sustainability
5	community about what set of standards we should be
6	working towards in New York City, because it's
7	obviously by the testimony from the Administration
8	they are grappling with this? It'll be helpful for
9	us and the City Council to know from the
10	environmental community, is there a consensus about
11	what standards we should be working towards. I
12	appreciate anyone to chime in on that.
13	LAURIE SCHOEMAN: If I could just note,
14	the housing community has made a strong commitment to
15	the Enterprise Green Communities Standard because
16	it's a standard that's been developed to be made
17	relevant for affordable housing developers. It's
18	responsive to the needs of the housing development
19	community, and so this is a standard that for this
20	particular segment of the community works. So, you
21	know, every single community has a specific set of
22	needs, but I just want to say for the record that
23	Enterprise Green Communities Standard is firmly
24	ensconced in the city's
25	

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 171
2	CHAIRPERSON TREYGER: Thank you. Anyone
3	else to chime in? Yes, please.
4	MICHAEL MENSER: I'll just say that there
5	are a variety of different standards, LEED covers
6	energy as well as a whole host of other
7	sustainability questions. There are various
8	categories of that. Obviously you're balancing the
9	desirability of affordable housing versus some of
10	these other things. So there are trade-offs in all
11	of them, but I think we can get you both an answer to
12	that specific question, as well as, and we could
13	probably all agree on this panel, of the benchmarks
14	that we all would think would be most significant for
15	New York City to be seeking to achieve.
16	CHAIRPERSON TREYGER: Thank you. Yes?
17	JUAN CAMILO OSORIO: The only thing that
18	I would add is that while the Technical Working Group
19	has placed a little emphasis on both reviewing
20	research on the subject and advancing research to
21	understand the specificity of New York City, I think
22	that it's really important to not disconnect the
23	identification of the standards with the actual
24	policies to implement them, and that's where we feel
25	that the Administration is falling short.
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 172
2	CHAIRPERSON TREYGER: Thank you. Very
3	helpful. Yes, Co-Chair?
4	CHAIRPERSON CONSTANTINIDES: Great to see
5	you all. Great to see you as always. So, we heard
6	the Administration talking about their goal of, in
7	the private sector, 250 megawatts worth of solar
8	being installed throughout the city and they laid out
9	some of their ways to get there, that there are
10	already 54 megawatts have been installed in the
11	private sector. I think 14 of those in Queens, and
12	now they're going to have a sort of simplified DOB
13	process for self-certification beginning on January
14	1 <sup>st</sup> . What other police recommendations would you
15	make? Because we talk about different energy
16	sources. I mean, we talked about geothermal, and we
17	can name on one hand all the great instances and
18	Passive House. What policy implementations would you
19	make, we can make solar more ubiquitous throughout
20	the city and other technologies as well? How do we
21	take this from the tens or hundreds to the thousands
22	and hundreds, you know, tens of thousands of
23	buildings that are utilizing these technologies? I
24	know, a big question.
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 173
2	JUAN CAMILO OSORIO: I can answer that
3	question. Some thoughts include the following. As
4	the New York City Environmental Justice Alliance is a
5	member of the Climate Works for All Coalition, which
6	has been structuring recommendations around the need
7	to create a full renewable energy and energy
8	efficiency assessment of all public buildings that
9	both identifies the potential for clean energy
10	generation on resilient distribution of energy. But
11	prioritizing opportunities to expand the number of
12	schools that can actually receive solar panels and
13	other types of technologies. Beyond that, I think
14	that New York City is facing a really interesting
15	opportunity to make sure that every dollar spent on
16	creating resilient energy distribution is also
17	incorporating renewables. Right now this is a role
18	that is receiving interesting attention from various
19	levels of government and that more and more can
20	become a citywide priority.
21	CHAIRPERSON CONSTANTINIDES: I agree, and
22	we have a bill in the Council, 478, that requires a
23	cost benefit analysis for every city-owned building,

25 it will have to install solar, whether or not they're

24

and if so, if that cost benefit analysis comes back,

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 174
2	doing any construction or not, those city-owned
3	buildings will have to install solar. Schools are
4	part of that portfolio. So, I agree with you there.
5	But how do we sort of get the private sector
6	involved? Because that's really, you know, we have
7	three or four thousand city-owned buildings and there
8	are a million buildings in New York City. So how do
9	we get those other, the private sector involved, to
10	sort of take on renewables in a way beyond, you know,
11	just solar, geo, you know, all those different
12	technologies.
13	ERIC GOLDSTEIN: Well, we would just say,

14 echoing the questioning of Council Member Lander in the earlier round, that this is an area where 15 16 mandates are necessary, and starting with the largest buildings and providing sufficient lead time, no pun 17 intended, for buildings to address these needs, and 18 19 their opportunities for solar and many other steps that the--many of these large buildings can take, but 20 21 why wait two, one, two, three years before we get rolling on that. We believe that the Council could 2.2 23 play a very effective role, and ultimately, just advancing that legislation even before it passes will 24 25 send a signal to the real estate community that the

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 175
2	city is serious about getting them to move forward
3	and jump on the band wagon, because you're right
4	Chairman Constantinides, no matter what the city does
5	at its buildingsand it's doing a lot and moving in
6	the right direction. Unless we get the private real
7	estate industry to cooperate, we won't make the
8	progress we want to and won't achieve the Mayor's 80
9	by 50 goal.
10	CHAIRPERSON CONSTANTINIDES: Okay.
11	LAURIE SCHOEMAN: Chair Constantinides,
12	one thing I think it'd be important to point out,
13	this is a particularly a truth [sic] for the
14	affordable housing community, let us not forget the
15	need to support efficiency at the building level,
16	because if you're going to be installing renewable
17	energy, it's precious energy and like any other kind
18	of energy system, you want to make sure it's being
19	used efficiently and effectively and additionally
20	investing in operations in maintenance practices that
21	will support efficiency at the building level can go
22	a long way and can be very cost-effective way to
23	drive and accelerate efficiencies in sustainability
24	at the city level.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 176
2	CHAIRPERSON CONSTANTINIDES: Thanks.
3	Would you say also, I mean, there's sort of a
4	proposal out there that for a lot of thefor
5	nonprofits and so on for city buildings, what
6	incentive is there if they're not going to see that
7	savings if, you know, if the library, just to sort of
8	throw it out there, if you're working in a for-profit
9	hospital, what's your incentive for turning off that
10	light or being more energy efficient? How do we sort
11	of move that education process to understand
12	efficiency and say, oh, there's a benefit I can sort
13	of bring back to the hospital, and how do we sort of-
14	-what are your thoughts maybe structuring some sort
15	of, you know, if they're saving in a public
16	institution maybe they should, you know, use that
17	money for operation, something like that? I've heard
18	that talked about in different committees as well. I
19	know it's a littlethat's a lot there.
20	JUAN CAMILO OSORIO: I can respond to
21	that. So, on one end, the New York City
22	Environmental Justice Alliance is in partnership with
23	Block Power and others have been exploring the need
24	to create, to begin thinking maybe [sic] about what
25	are the business models that can actually connect the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 177 1 public sector, the private sector and the nonprofit 2 3 sector in creating, for example, special purpose 4 vehicles that actually can allow the co-ownership of the infrastructure that actually can re-direct 5 revenues resulting from the management of the energy 6 7 infrastructure. This is the case with a micro grid proposal that is being sought for Central Brooklyn 8 9 where the community can actually receive shares of the infrastructure and actually be able to be paid 10 11 for any that benefits savings or for returning energy 12 to the grid. On the other end, I wanted to say that 13 providing clean sources of energy to feed emergency 14 shelters, schooling centers or other types of 15 critical infrastructure, communities could also have 16 on the ground a really important incentive to 17 decommission polluting energy infrastructure like 18 pico-units [sic] that are still the primary source of 19 energy when the grid hits its peak. 20 YA-TING LIU: I was just going to say 21 that, you know, clean heat was used as a such a--it 2.2 is a success story, and it is what the city is 23 modeling their Retrofit Accelerator program after, but I think as Council Member Lander, you know, 24 25 brought that point home is that there was a, sort of,

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 178 1 legislative mandate before the clean heat program 2 3 went into effect to help build in and incentivize 4 building owners to do that conversion. So, it's a public policy question and whether and when 5 government chooses to intervene or send a signal to 6 7 the private sector that if you're not going--you know, you're going to have to change your behavior if 8 9 you don't do it on your own. CHAIRPERSON CONSTANTINIDES: We certainly 10 haven't closed that door. That door's wide open. 11

12 So, we're definitely looking at mandates or, you 13 know, incentivizing and any other carrot on the stick making sure that the private sector understands that 14 15 they have an obligation to be part of making our city more green, and I think the Technical Working Group 16 17 once their report comes out in January, their 18 recommendations come out, we're going to have a very quick turnaround time to evaluate those and look at 19 20 next steps.

JUAN CAMILO OSORIO: If I would add one last thing is that I think it's really important to think creatively about what are the type of incentives to make these investments financially cost effective, but there are going to be cases where

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 179
2	these interventions will not be financially cost-
3	effective, and therefore, you know, we really rely on
4	the ability of the Council to be able to encourage
5	the city to prioritize environmental decisions.
6	CHAIRPERSON CONSTANTINIDES: We
7	absolutely will.
8	CHAIRPERSON TREYGER: Well, I just want
9	to just say, I mean, I raise this myself during, you
10	know, thewith the Administration that right now
11	there's a discussion underway or a negotiation under
12	way with regards to the future of 421A, and there's a
13	discussion and debate underway about mandatory
14	inclusionary zoning as well, and soand the
15	discussion so far have been about, you know,
16	affordability, scale of buildings, how high, density,
17	parking, and nowhere in the discussion are we talking
18	about environmental sustainability. So, the
19	government does have, yes, carrots and sticks, but I
20	have not seen it advance to the highest levels of
21	government in these types of discussions and
22	negotiations, and we're very interested in hearing as
23	well from the private sector, because they have a
24	very big role to play, there's no question, but I
25	think that we should try to work constructively
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 180 1 together and not demonize one another, but to 2 3 certainly say that, you know, what do we need to do 4 to get there. I think there should be universal 5 agreement that we have a problem. I hope there's agreement on that, but quite frankly, I think that we 6 7 still need a lot of work to do with regards to not just talking about these things, but actually seeing 8 9 them in writing in government policies proposals and decisions, and again, I repeat this one more time. 10 11 There is a discussion underway at the conclusion of 12 this year the future of 421A, and we're not hearing 13 the discussions of environmental sustainability and affordability. We're hearing affordability. We're 14 15 not hearing environmental sustainability, so it's a key point. I thank the first panel. Thank you very 16 17 much. Next panel I'd like to call up, Anthony 18 Thomas, New York City Central Labor Council, Daisy 19 Chung from ALIGN, Brigid Flaherty from ALIGN, and 20 Chris Erikson with Allison Ziagra [sp?] from Local 21 Three. Great. I think we'll start this way and move 2.2 our way--actually, sir? Missing someone? Anthony 23 Thomas is--I'll be speaking on Mr. Thomas' 24 : 25 behalf.

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 181 1 2 CHAIRPERSON TREYGER: Okay, very good. 3 So--okay. Want to start this way? Yes, Mr. Erikson? 4 Sure. 5 CHRISTOPHER ERIKSON: I'm on the clock [sic]. Thank you--6 7 CHAIRPERSON TREYGER: [interposing] Oh, just--8 9 CHRISTOPHER ERIKSON: Chairs Constantinides and Vice [sic] Treyger for holding 10 11 this important hearing on New York City's--12 CHAIRPERSON TREYGER: [interposing] Is 13 microphone on? 14 CHRISTOPHER ERIKSON: On, there you go. 15 CHAIRPERSON TREYGER: Thank you. 16 CHRISTOPHER ERIKSON: Thank you again, 17 Chairs, for holding this important hearing on New 18 York City's sustainability plan. My name is Chris 19 Erikson. I'm the Business Manager of Local Three International Brotherhood of Electrical Workers 20 21 represented with 28,000 members engaged in various occupations in the electrical industry in New York 2.2 23 City. OneNYC is particularly relevant because of the goal to put 100 megawatts of solar on municipal 24 25 buildings and to pull power municipal operations with

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 182
2	renewable energy by 2050. This is the work that
3	Local Three members do. The membership has already
4	installed sizable photovoltaic systems in New York
5	City at Stiwell [sic] Avenue Subway Station and
6	Museum in Jewish Heritage and Solaire [sp?] at Batter
7	Park, and most recently at PS 62R, which is the Net-
8	Zero Energy School in Staten Island. These are only
9	a small snapshot that the renewable energy projects
10	that my members have performed, and at this time, if
11	I can introduce a rank and file member of Local
12	Three, Allison Ziogas just to give some remarks on
13	the 62R
14	ALLISON ZIOGAS: As Mr. Erikson stated,
15	my name is Allison Ziogas, and I was recently the
16	foreman at PS 62R, the Net Zero Energy School
17	recently completed in Staten Island. To tell you a
18	little bit about the work that we did at the school,
19	myself and a crew of 15 Local Three journeymen
20	installed the buildings photovoltaic system and wind
21	turbine, which produced 650 kilowatts of power. In
22	practical terms, that translates into a football
23	field size array of over 2,000 solar panels and 62
24	power inverters. The solar panels cover the entirety
25	of the two-story building's rooftop, the southern
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 183
2	facing façade, as well as a separate parking canopy.
3	PS 62R is the first school in the five boroughs and
4	in the Northeastern United States that claim to be
5	net zero, meaning it produces as much energy as it
6	consumed. In addition to these expansive
7	photovoltaic system, the school also features energy
8	generating exercise bikes, a geothermal heating and
9	cooling system, and a highly-efficient LED lighting
10	system with daylight harvesting and dimming
11	capabilities. The work that went into construction
12	at PS 62R is evidence that Local Union Number Three
13	IBW is a right choice for delivering cutting-edge
14	green jobs with a level of professionalism and
15	craftsmanship that is unmatched anywhere in our city.
16	CHRISTOPHER ERIKSON: Thank you, Allison.
17	Again, this project is a clear indication that the
18	city can afford to use union, pay union wages on
19	these projects and it's so important. I want to just
20	acknowledge that reducing the emissions isn't the
21	only part of making our city more resilient, that we
22	have to create, preserve the jobs, good jobs, for New
23	Yorkers, and the well paid workforce at an affordable
24	price point for developers, it has to happen. Good
25	jobs are a vital element for sustaining the healthy
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 184 1 middle class within the city. When workers are paid 2 3 well they add to the overall economic growth of the 4 city. this is not sadly what's going to happen in 5 the next round of solar installations, because the RFP as we understand it is to use purchase power 6 7 agreements, and we take exception with purchase power 8 agreements, because there are no wage standards, no 9 project labor agreements, no local hire provision, no training standards through apprentice programs and no 10 11 plans for integrating students in vocational programs 12 into the type of work, into the future. So, the 13 magnitude of the task at hand for the City Council 14 gives an opportunity to provide job growth for 15 citizens in New York. The members of the Council should compel those producers and suppliers as you 16 17 said earlier that are going to put these components 18 on our city buildings to manufacturing them here in 19 New York. This is such an important point that you 20 made earlier this morning, to make those 21 manufacturers, make the products and assemble the products here in communities that are disadvantaged 2.2 23 is a key part to leverage that you have in this whole project, and I hope that that goes forward, clearly. 24 This morning we also heard briefly about testimony 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 185
2	about transmission lines not being feasible for
3	whatever was the reason, and basically the failure
4	the reason is the failure of privatized energy
5	companies to upgrade and main [sic] the systems.
6	That's why our grid is in such trouble here. So, I
7	don't want to see that happen on these power purchase
8	agreements. You know, that's what you're going to
9	get. There'll be no maintenance. Those projects
10	will go into disrepair, and we'll be replacing them
11	and spending bad money over and over again. So, we
12	hope that you can address the issue of bringing it
13	home for the electrical workers here in the City of
14	New York. Thank you.
15	CHAIRPERSON TREYGER: Thank you and thank
16	you for the work of your members as well. Next?
17	DAISY CHUNG: Thank you Committee Chairs
18	for holding this important hearing. My name is Daisy
19	Chung and I'm the Campaign Director at ALIGN, The
20	Alliance for a Greater New York. ALIGN is a
21	community labor coalition dedicated to creating good
22	jobs, vibrant communities and an accountable
23	democracy for all New Yorkers. ALIGN also co-
24	coordinates the Climate Works for All Coalition that
25	works to reduce initiatives and create good jobs here
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 186 1 in New York City. Just to broadly and summarize my 2 3 comments that I'll be making here, ALIGN both 4 supports the comprehensive sustainability agenda of OneNYC, but also wants to see more detailed action 5 plans and legislative introductions that moves us, 6 7 that move us boldly to the 80 by 50 goal. More 8 specifically, we believe that there are two very 9 actionable areas that the city has yet to address comprehensively, but that immediate action could be 10 11 taken. One is requiring that privately owned large 12 buildings over 25,000 square feet reduce energy use. 13 Two, conducting a full assessment of all New York 14 City public school buildings to determine which 15 renewable energy options, not just solar, all 16 renewable energy options are feasible and practical 17 and plan out and begin to fund system wide 18 installations. Both of these initiatives are 19 essential to meeting 80 by 50 because buildings 20 produce over 70 percent of our city's emissions. In 21 fact, buildings over 50,000 square feet make up just 2.2 two percent of our building stock, but use an 23 astonishing 45 percent of our city's energy. So, going to the first actionable item, requiring energy 24 efficiency in large buildings, you know, there have 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 187 1 2 been, you know, voluntary measures that were 3 mentioned earlier, but you know, as we can--we can 4 measure from the greener greater buildings plan since that time, you know, the vast majority of buildings 5 in privately owned buildings in New York City have 6 7 failed to take action, and I think that is an--that is an indication of where we need to move to next. 8 9 You know, in New York City, you know, buildings will need more than information and encouragement to 10 11 invest in energy efficiency upgrades. These are 12 significant upgrades. We need a mandate and coupled 13 with technical and financial support. This is why we're urging City Council and the Administration to 14 15 move legislation to upgrade our building code, and 16 you know, we can't wait any longer because new 17 buildings are going up and buildings are being 18 renovated every day. Every single day this is 19 happening, and you know, its enormous task. Eighty 20 percent of our current buildings will be standing 21 2050. Finally, in terms of the assessments in 2.2 schools, we would really like to see a full 23 comprehensive assessment of the renewable energy potential on the 1,400 public school buildings here 24 in New York City, and you know, just going to, you 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 188
2	know, the OneNYC's, you know, proposed establishment
3	of a triple bottom line of how we make investments in
4	the city I think is really, really crucial. You
5	know, how we look at projects and their impacts on
6	our economy, our environment and society are
7	crucially important and, you know, the RFP issued
8	very recently around solar installations here in the
9	city without any sort of labor standards, not
10	outlining any process for community engagement and
11	decision-making and any process for sharing the
12	benefits derived from energy savings is concerning to
13	us. You know, for these reasons I encourage the
14	council to seriously consider leading on these
15	initiatives. Thank you.
16	CHAIRPERSON TREYGER: Thank you. And if
17	you could justI appreciate the passion and the
18	energy. If you just try to be mindful of time,
19	because we have a lot of people still to provide
20	testimony today. So, thank you very much.
21	ALEX GLEASON: Good afternoon. My name
22	is Alex Gleason, I'm the Policy Associate at the New
23	York City Central Labor Council. I'll be giving
24	prepared testimony on behalf of Anthony Thomas, our
25	Political Director. Representing 1.3 million workers

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 189 1 across 300 affiliated unions, the Central Labor 2 Council Recognizes the importance of tackling climate 3 change for our communities in places of work. OneNYC 4 created a strong framework for curbing climate change 5 and preparing the city to reduce emissions 80 percent 6 7 by 2050. This is the 80 by 50 goal and was enacted into law at the end of 2014. OneNYC has been a 8 9 catalyst to spark the important conversation on linkages between emission reductions, resilient 10 11 communities and well-paying jobs. It is now our 12 responsibility to build on this framework and use 13 climate change as an opportunity to lift up the 14 working people of New York City and prepare in a 15 proactive manner for our future. As a member of the 16 Climate Works for All Coalition, the Central Labor 17 Council implores the city to take two specific policy 18 actions; one, retrofitting the city's largest 19 buildings, and two, installing renewable energy 20 assets on our local schools. Energy efficient 21 buildings are more resilient buildings as they better 2.2 prepare us for the changing climate around us. Large 23 buildings, those over 50,000 square feet use nearly half of the city's energy. While helpful, the 24 retrofit--while helpful, the retrofit accelerator 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 190 1 program alone is not enough to adequately address the 2 3 problem and more aggressive policy actions are required, specifically, targeted emission mandates. 4 Mandated retrofits are a common sense way to reduce 5 the greatest source of emissions and will create 6 7 thousands of opportunities for new climate-related 8 jobs. Without dealing with large buildings, it will 9 be merely impossible for us to reach the 80 by 50 Another great opportunity for a proactive 10 qoal. 11 climate action is with our diverse public school 12 buildings. Currently, New York City spends an 13 estimated 220 million dollars annually on utilities 14 for the public schools. While we applaud the 15 Administration's initiative to install 100 megawatts 16 of power on municipal buildings, solar power on 17 municipal buildings, we encourage a greater scale and 18 pace to address the problem. The Central Labor 19 Council supports the development of a comprehensive 20 plan for expanding renewable resources across the 21 entire system. It's also worth noting that the 2.2 current RFP for the existing 24 schools does not 23 contain a project labor agreement. A full renewable energy assessment of our school system could 24 25 determine all potential for renewable energy across

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 191
2	the building stock. While there are numerous
3	strategies for the city to take in addressing climate
4	change, mandatory large building retrofits and solar
5	on schools will make a great impact on reducing
6	emissions to the 80 by 50 target. These policies
7	will protect our communities from future storms,
8	reduce our impact on climate change and create tens
9	of thousands of well-paying jobs for the members of
10	our community. Thank you for your time and
11	consideration.
12	CHAIRPERSON TREYGER: Thank you. Thank
13	you for your very powerful testimony, and just to
14	give a quick thoughts andthere's much respect here
15	for the people here and for your very, I think,
16	powerful and informative testimony. I had a moI
17	have a moto in my district with regards to Sandy
18	recovery, that my constituents should not just be
19	witnesses to the recovery, they should be active
20	participants in it as well. So, we worked very hard
21	to make sure that we bring together labor, bring
22	together industry stakeholders, housing recovery, a
23	number of city agencies down to my district, and
24	they've been to the Rockaways as well and other parts
25	of the city to enlist people who have the skills and
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 192
2	interest or want to develop the skills and interest
3	to be a part of this work, and we're making some
4	progress, and there's still more work to do. The
5	same thing I think goes for this issue, that I think
6	that all of us share the goal of making sure that our
7	schools are equipped with modern days,
8	environmentally friendly sustainable technology, but
9	I just, I don't want our students to be witnesses to
10	that. I want them to be a part of that. I want them
11	to be helping in building that, and the students of
12	today will be the Local Three people of tomorrow.
13	They will be the members of labor tomorrow. So, just
14	as fast asjust as is urgency to discuss this issue
15	of mandates and not just voluntary programs, we
16	equally have to make sure that we're building
17	capacity today right now, and there are, recognizing,
18	there are people in our workforce today with the
19	skills already, because even if we did a mandate
20	right now, there's noas you pointed out, Mr.
21	Erikson correctly, as you pointed out, there's no
22	assurance that this will be done by people who we've
23	already invested in who are skilled and who have the
24	credentials and the qualifications, there's no
25	assurance that they'll be doing this work. Is that

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 193
2	correct? So, how are we saying that we're looking to
3	create a win/win to create a more resilient, just
4	environmentally friendly society while we're not
5	still addressing the economic challenges of our city
6	and of our community? So, it's clearly not a win/win
7	at this point. And so I think that I just want to be
8	very mindful of that, and I again ask this panel the
9	same question I asked the previous panel, are there a
10	set of standards that ALIGN or Local Three have that
11	we should be working towards that you think is the
12	gold standard? Because this is something that we
13	need to be better informed about so we could push
14	with the Administration. Thank you.
15	CHRISTOPHER ERIKSON: I'm glad you asked
16	that question again because I was chomping at the bit
17	back there. The standard is the union standard.
18	That is the standard for good jobs in the City of New
19	York, and that's the one that I hope that the city of
20	New York embraces as we move forward. When you
21	talked about solar installers making 10 or 12 dollars
22	an hour and locked into that type of repetitive work
23	forever and ever, that is not a good job. That is
24	not a good career, and that's not where we want to
25	go. Local Three is prepared to discuss with the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 194 1 Administration in recognizing the need to keep the 2 3 cost of solar installations low so that they happen 4 in the city. you know, to somehow transition a 5 workforce out of communities in need into those lowrated solar installer positions for a period of time, 6 7 but then to transmission [sic] into our apprentice 8 programs where they go on to become full blown 9 journeymen electricians and journeywoman electricians like we have here with a career ahead of them. 10 And 11 so there's a lot of stuff in play here, and we 12 represent diversity within the City of New York. 13 More than 50 percent of our apprentices are from our 14 city and are minorities and women, and we're 15 embracing the City of New York in order to bring them 16 in for careers, good jobs, union jobs. Again, I 17 believe that is the standard that we should all 18 aspire to because it's important. 19 Thank you. I'm CHAIRPERSON TREYGER: 20 curious to hear your thoughts as well. Thank you. 21 ALEX GLEASON: I would say that the Climate Works for All Coalition has been working 2.2 23 aggressively to ensure that installing solar panels on our school system, that any savings that are 24 25 generated don't simply go back into the pockets of a

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 195 1 couple of select vendors who happen to get the 2 3 agreements to do the installation and the PPA, but 4 rather that we're able to take those savings and supplement rather than supplant the budgets of those 5 schools and use those dollars and reinvest them in 6 7 such a way that we can create a whole myriad of new 8 programs that may or may not be a pre-apprenticeship 9 program, that may or may not be STEM funding, that may or may not be something else that the 10 11 administrators and that the school's teachers who 12 ultimately are the professionals can decide is the 13 best way to be talking to the kids about these issues 14 and about resiliency, and I think that specifically 15 when we're talking about what we can do tomorrow, 16 that is the most important element. It is taking 17 whatever savings we get, retaining them and using 18 those to create something new and to create new 19 opportunities. 20 CHAIRPERSON TREYGER: Let me just give you 21 a specific example and then we'll move on to the next There's a school called Grady High School in 2.2 panel. 23 Southern Brooklyn, 700 students. The DOE labels that most of them have IEP's, and I will challenge that by

saying that these are kids who have a talent who are

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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 196 1 actually building a home with their hands. A part of 2 3 their project or curriculum is to build homes with 4 their hands. So, I don't understand why the City of New York cannot -- and industry stakeholders and 5 partners partner with a school like Grady High School 6 7 and say, "If you're already building homes with your hands as part of your curriculum, why not--why can't 8 we teach you how to build an environmental 9 sustainable home with your hands? Why can't we train 10 11 you and equip you and give you the skills and work 12 with the Local Three and work with different labor 13 industry to say you are the future?" Everything that we're talking--this whole hearing is about the next 14 15 gener--protecting the next generation, protecting us today and our future, right? So, why not invest in 16 17 them right now and not just prophesize 50 years from 18 now, but invest in them right now, and I think that is what is missing in my opinion, a lot, and making 19 sure that we're tapping in and building capacity as 20 21 we're moving towards these, you know, whether it's 2.2 mandates, or--I hear you, a hundred--I think that all 23 of you make very valid and strong points, but I think equally important is making sure that our residents, 24 25 our people are doing this work and are being trained

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 197
2	and equipped with the skills to do this work and not
3	to outsource it to other countries on a thing like
4	that. So, I thank you very much for your powerful
5	testimony. Thank you. Okay, we have a contingent
6	from Lower Manhattan here who have been very patient,
7	Catherine McVay Hughes, Gigi Li, the Chair of
8	Community Board Three Manhattan, Josh Nachowitz from
9	Downtown Alliance.
10	UNIDENTIFIED: Gigi Li, I have submitted
11	her testimony to Council Member Chin.
12	CHAIRPERSON TREYGER: Sure. Absolutely.
13	UNIDENTIFIED: Because she had to go.
14	CHAIRPERSON TREYGER: Yes. I think it's
15	Marc Matsil, Trust for Public Lands and Ahmed Tigani
16	from Office of Manhattan Borough President Gale
17	Brewer. And we can add one more person since someone,
18	I think, left. Marcy Benstock from the Clean Air
19	Campaign? Okay, next group, that's fine. Okay.
20	Sure.
21	CATHERINE MCVAY HUGHES: So, great.
22	Thank you so much. I want to thank the Chairs of
23	this committee and the Council Members and our
24	Council Member Chin. My name is Catherine McVay
25	Hughes. I'm Chair of Manhattan Community Board One.

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 198
2	You are in Manhattan Community Board One as you know.
3	We are surrounded by water on three sides at a height
4	of seven feet. CB1 experienced one of the highest
5	inundation levels in Manhattan during Super Storm
6	Sandy. Two people drowned in CB1 and we suffered
7	extreme damage to residential and commercial
8	property, tunnels, public transit,
9	telecommunications, and our electric grid. CB1 is in
10	immediate need of resiliency and hardening measures.
11	It has been three years since Sandy and we are very
12	concerned about both the short term and long term
13	timeframe. Lower Manhattan remains largely
14	unprotected while we face an increased potential for
15	suffering extreme weather events and subsequent
16	damage. CB1 is encouraged that progress is being
17	made and thanks the city and state for a combined
18	roughly 15 million dollars in resiliency funding for
19	CB1 which was announced in March 2015 as well as a
20	recent commitment from the city to contribute 100
21	million to leverage potential funding from the
22	Manhattan tip portion, which is south, north of CB1
23	starting on Montgomery Street, but now it also
24	includes Battery Park City and Tribeca in the
25	National Disaster Resiliency Competition Phase Two.
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 199 1 We look forward to hearing who the city will choose 2 from their recently released request for proposal for 3 4 an engineering and planning study to be awarded January 2016 so that the roughly two yearlong 5 engineering study, which we understand will include 6 7 the community, can finally begin. CB1 is encouraged 8 and supports the New York City Council Member 9 Resolution 909 calling upon the Department of Housing and Urban Development to support New York City's 10 11 application for National Disaster Resiliency 12 Competition funding. In September 2015, CB1 13 unanimously adopted the resolution and we also 14 submitted a letter of support on October 2015. WΕ 15 also want to point out in the testimony there's a 16 colored picture here, and the top one was from your 17 report in April 2015 about the potential development 18 for Sea Port City. We're very worried about it and 19 we would like an update, but we were thrilled to see 20 in October 2015 it was no longer there in the 21 picture. So, just for the record we want to put that 2.2 in there, and we also want to make sure that you know 23 that Community Board One has adopted resolutions supporting the Waterfront Edge Design Guidelines 24 known as WEDG by the Metropolitan Water Alliance. 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 200
2	Now, it's the Waterfront Alliance, which also
3	submitted testimony, but I think they've already
4	left. You'll also later be hearing from the Downtown
5	Alliance to my left, but I just wanted to remind you-
6	-I will stop on that note and thankokay. just
7	wanted to let you know that even though Lower
8	Manhattan encompasses only 0.3 percent, that's three
9	one-thousandths of New York City's land area, it
10	contributed 2.4 billion dollars to New York State and
11	another 2.4 billion to New York City tax revenue and
12	provided 9.2 percent of New York City's GDP in 2014.
13	So, roughly 70 percent of all lower Manhattan workers
14	live in the five boroughs of New York City as well,
15	and so therefore it's really important to secure the
16	three edges of the waterfront for CB1. So, thank you
17	again very much, and keep up your excellent work. We
18	really appreciate everything you're doing.
19	CHAIRPERSON TREYGER: Thank you. Thank
20	you very much, and kudos also to my colleague,
21	Council Member Chin, who's been very active and
22	champion for her district on this issue as well.
23	Yes, Mr. Nachowitz?
24	JOSHUA NACHOWITZ: Good afternoon, Chairs
25	Treyger and Constantinides. My name is Josh
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 201 1 Nachowitz and I am the Assistant Vice President for 2 3 Economic Development and Planning at the Downtown 4 Alliance, the Business Improvement District for the 5 Financial District and Lower Manhattan south of Murray Street. I'm happy to be here this morning ot 6 7 offer the Alliance's strong support for Resolution Number 909 and for the de Blasio Administration's 8 9 ongoing efforts to protect our region's most critical employment hubs. On behalf of the Alliance and the 10 11 thousands of businesses we represent, I'd like to thank Council Member Chin, Borough President Brewer 12 13 and State Senator Daniel Squadron for their ongoing 14 exceptional and continued support on this issue. 15 Lower Manhattan is home to over 94 million square 16 feet of commercial real estate and over a quarter 17 million jobs and generates billions of dollars in 18 economic impact for the New York region every year. 19 Despite our setbacks and tragedies over the last 20 decade and a half, Lower Manhattan continues to 21 attract new residents, new business and new cultural 2.2 institutions. Hurricane Sandy had a devastating 23 impact on our community with 39 percent of commercial buildings in Lower Manhattan being damaged by the 24 storm and 320 small businesses being closed for at 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 202
2	least a week. Low-lying areas in Lower Manhattan,
3	particularly Water Street Corridor which is home to
4	approximately 19 million square feet of commercial
5	real estate on its own and over 90,000 workers on a
6	daily basis as well as of course the World Trade
7	Center Complex with approximately 10 million square
8	feet of commercial real estate remain highly
9	vulnerable to flooding and catastrophic storms as
10	well as critical infrastructure elements that are
11	used by the entire city. Numerous subway stations,
12	the Brooklyn Battery Tunnel, the Battery Underpass,
13	and the White Hall Ferry Terminals remain vulnerable
14	to flooding. In the wake of the hurricane's
15	devastation, several projects were identified to help
16	protect Lower Manhattan. The projects included in
17	the city's application to the Department of Housing
18	and Urban Development's National Disaster Resiliency
19	Competition, the NDRC Competition, if fully funded
20	would provide substantial protection to the people
21	and businesses that rely on Lower Manhattan. The
22	City's commitment to ongoing consultation with
23	community stakeholders will help ensure that the
24	project remains sensitive to the unique design
25	context of our community. Earlier this year, Mayor
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 203 1 de Blasio announced a substantial commitment of 100 2 3 million dollars for resiliency initiatives in Lower 4 Manhattan. We applaud this commitment but recognize that it is not enough to protect the island's 5 southern tip and meet Lower Manhattan's resiliency 6 7 needs. The city's NDRC's application will provide 8 sufficient funding to complete the Coastal Defense 9 Project's plan for Lower Manhattan. As we grapple with the ever-worsening realities of climate change 10 11 and sea level rise, it is important, it is more 12 important than ever that we fund these essential 13 projects. As a critical component of New York 14 region's transportation network and the major 15 employment center of Lower Manhattan must be 16 protected from both rising sea levels and the 17 possibility of another catastrophic funding event. 18 The unmet resiliency needs of this community are 19 great and glaringly apparent. We strongly encourage 20 the City Council to pass Resolution 909 and continue 21 with advocacy on behalf of the City's NDRC 2.2 application, and again, we thank Council Member Chin, 23 Borough President Brewer and our other elected officials for their continuing support. Thank you. 24

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 204
 CHAIRPERSON TREYGER: Thank you very
 much. Next please. Next panelist? Next speaker,
 please. Thanks.

MARC MATSIL: Thank you, Mr. Chair. 5 Good afternoon. My name Marc Matsil. I'm the New York 6 7 State Director for the Trust for Public Land. For 8 more than 40 years, the Trust for Public Land, the 9 national nonprofit organizations with a robust presence in New York City has conserved land for 10 11 people to enjoy as parks, playgrounds, gardens, and 12 other natural spaces ensuring livable and resilient 13 communities for generations. More than four million New York City residents now live within a ten-minute 14 15 walk of the Trust for Public Land park, playground, 16 garden, and natural area. We're very pleased to 17 partner with the city and applaud the city on their 18 timely application for a national disaster resilience 19 competition grant to HUD, which builds on the 20 important work of OneNYC. In the advent of more 21 severe climate-driven weather events in recognition 2.2 by the city and global leaders of the threats and 23 devastating impacts of sea level rise and episodic weather events on our neighborhoods and regional 24 25 economy. The city is better prepared to address many

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 205 1 of the challenges. The role of land conservation and 2 3 resilient green infrastructure park land development 4 is buffers that protect our communities, and water 5 quality has never been important. As the Trust for Public Land's return on investment study shows, every 6 7 dollar invested on land and water conservation 8 produces more than seven dollars in economic return 9 for New York that supports local businesses and better protects neighborhoods. Trust for Public Land 10 11 has a long history of working with the city on a 12 multitude of projects, including the community and 13 student driven design and construction of more than 70 inner city playgrounds. These include award-14 15 winning green infrastructure playgrounds designed and constructed by TPL in partnership with the New York 16 17 City Department of Education, School Construction 18 Authority and DEP, and in the community. TPL also 19 worked with the Port Authority and New York City 20 Parks to require remediate, design and construct New 21 York City's first new post-Sandy resilient waterfront 2.2 park. These new and older green infrastructure sites 23 are examples of innovative design that provide significant multiple benefits to the community. 24 Cumulatively, tens of millions of gallons of storm 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 206 1 water are absorbed, and at our waterfront park sites, 2 the new designs incorporate bioswells [sic] with 3 4 flood tolerant plants, underlaying [sic] topography, dune buffers, and permeable pavers that help buffer 5 and reduce storm impacts to our neighborhoods. 6 As 7 importantly, the new and enhanced parks provide 8 millions of children an opportunity to recreate in 9 new park spaces helping to reduce obesity and diabetes and provide shading through enhanced tree 10 11 plantings that reduce urban heat island impacts and 12 the carbon foot print. As part of the NDRC process, 13 TPL will undertake green infrastructure park and open space projects that will be capable of managing storm 14 15 water, reducing flooding, buffering vulnerable neighborhoods and protecting existing vulnerable 16 17 infrastructure. TPL projects are always completed 18 with robust community input through its hallmark 19 participatory design and stewardship process. All of 20 our programs provide multiple benefits from its 21 educational programs, recreation opportunities, and 2.2 they were all completed in a timely manner and under 23 We recently developed in New York City budget. decision support tool in cooperation with the City, 24 Columbia and Drexel [sp?] Universities. 25 This web-

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 207
2	based GIS tool supports and assesses high priority
3	areas for green infrastructure investment to reduce
4	the impact and damage on critical infrastructure and
5	social vulnerable populations. The development of
6	this tool has been funded by Rockefeller University,
7	NOA and private donors and incorporates
8	CHAIRPERSON TREYGER: [interposing] If we
9	could just ask a quick wrap up statement. The full
10	testimony will be given to the record as well. I
11	appreciate it.
12	MARC MATSIL: Okay. Anyway, you know, in
13	conclusion, wethe city should be extremely proud of
14	its post-Sandy progress. Expressed in OneNYC, the
15	NDRC application and the necessary steps that will
16	help to address very real threats to the city's
17	infrastructure and neighborhoods. It's the multiple
18	benefits that really add to the mix, and your support
19	and vision and ideas will translate into a more
20	resilient New York City. Thank you.
21	CHAIRPERSON TREYGER: Thank you. Thank
22	you. Yes.
23	AHMED TIGANI: Good afternoon. my name
24	is Ahmed Tigani. I'm the Community Development
25	Officer for the Office of the Manhattan Borough
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 208 1 President. While she could not be here herself today, 2 3 she'd like me to provide this testimony in support of 4 Reso 909 and the work that you're doing. We want to thank the Chairs and the members of both committees 5 for the opportunity to testify today. One of the 6 7 most important responsibilities as public servants is 8 comprehensive planning for the impact of climate 9 change on dense coastal urban cities like ours. Human activity is causing dramatic shifts in the earth's 10 11 weather patterns and temperatures, increasing the 12 likelihood of super storms like Hurricane Sandy and 13 rising sea levels that threaten coastal cities. As we saw in Paris this week, climate change requires 14 15 significant commitment of government resources and coordination. Local threats require local 16 17 leadership, and useful governments must develop their 18 own resiliency plans. According to a 2014 study from 19 the organization Local Government for Sustainability, 20 a body comprised of over 1,000 cities, towns and 21 metropolises dedicated to building a sustainable 2.2 future, 75 percent of cities now see climate change 23 as an essential element in their overall planning strategies. Cities are not only vulnerable, they 24 produce almost 70 percent of the greenhouse gasses 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 209 1 that cause global warming. So, whether it's by 2 3 reducing carbon emissions or creating natural shoreline buffers like sand dunes and wetlands and 4 5 improving storm drainage systems or building protective barriers, we must act now. Research by 6 7 the New York City Panel on Climate Change suggests 8 that by mid-century, sea levels could rise to 30 9 inches, threatening most of Manhattan. As Hurricane Sandy showed, the impacts will alter life in the city 10 11 as we know it. Time is short and the cost of 12 remediation and prevention is huge. Thankfully, we 13 have a Mayor and a City Council committed to reducing 14 our impact on global climate change and to protecting 15 our most vulnerable areas. The Mayor's OneNYC plan 16 outline an ambitious vision for a sustainable, 17 resilient and equitable city, and the City Council 18 has acted in its own plans to incentivize energy 19 efficiency and reduce our carbon footprint. Most 20 recently, the city has submitted its Lower Manhattan 21 Protect and Connect proposal to HUD as part of the 2.2 NDRC competition. In addition to other coastal 23 resiliency efforts around the edges of Manhattan, the Lower Manhattan Plan proposal weaves together housing 24 and small business preservation with coastal 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 210 1 protection in a strategic alliance addressing the 2 3 significant economic and human risks caused by climate change. The allocation of over 100 million 4 of city funds to this project highlights the 5 Administration's commitment. Because the costs are 6 huge, the Federal Government must take the lead in 7 8 integrated coastal protection and storm water 9 management, improved urban design and preparedness, but locally, support has come from both the private 10 11 and public sectors. Resolution 909 introduced by the Borough President and Council Member Chin calls on 12 13 HUD to support New York City's application. Its 14 passage would be a strong signal to our federal 15 partners that our city's leaders are unified and 16 committed to strengthening our defenses against 17 climate change. We want to thank the members of the 18 committee for the commitment, Council Member Chin for 19 her leadership, state and other elected officials, 20 community leaders, Community Board One and Three for 21 the work they're doing, and we stand ready to commitment the Office of the Borough President to 2.2 23 working alongside you. CHAIRPERSON TREYGER: Thank you very 24

much, and please send our regards to Borough

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 211
2	President. We thank her for her support. Yes,
3	Council Member Chin, did you have a question or
4	comments? Very good. Thank you very much. Thanks
5	to the panel. I'd like to call up Allison Tupper
6	from Sierra Club NYC, I believe Risa DiCaprio [sp?],
7	Cecil Corbin-Mark, WE ACT for Environmental Justice,
8	Jacqueline Espinal from El Puente, Ling Tsou, United
9	for Action, and Marcy Benstock from Clean Air
10	Campaign. We'll make sure you're on the panel.
11	Okay. I think we'llshould we start this way and
12	work our way down?
13	UNIDENTIFIED: Oh, sure.
14	CHAIRPERSON TREYGER: You may begin.
15	LING TSOU: Chair Treyger and Chair
16	Constantinides, and Council Member Chin has left,
17	thank you for holding a hearing on OneNYC. My name is
18	Ling Tsou. I'm a Co-founder of United for Action. It
19	is critical that the city does not achieve its goal
20	of reducing greenhouse gas emission 80 by 50 by
21	continual reliance on nuclear power and/or continued
22	expansion of natural gas or any form of fossil fuel
23	infrastructure. Nuclear power is not clean nor
24	carbon free with its radioactive and toxic waste. We
25	need to close down the aging and dangerous Indian
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 212 1 Point Nuclear Power Plant only 25 miles north of New 2 3 York City. We ask the City Council to schedule a 4 hearing and pass Resolution 694 calling for closing of Indian Point. We also ask Mayor de Blasio to 5 announce that Indian Point needs to be shut down 6 7 immediately. Every aspect of fracking for natural gas pollutes our air, water and land. Methane is 86 8 9 times more potent greenhouse gas than carbon dioxide over a 20 year time frame. Spector Energy has 10 11 started construction of a massive 42-inch potentially 12 explosive natural gas aim [sic] pipeline less than 13 half a mile from the reactors. This combination is deadly. We ask the City Council and Mayor de Blasio 14 15 to demand that FERC [sic] rescind approval for the 16 pipeline, so all the construction work stops 17 immediately, and to require an independent risk 18 assessment of the proposed pipeline adjacent to Indian Point. We also ask that New York City follows 19 20 the example set by Portland, Oregon by introducing and passing a bill to ban all new fossil fuel 21 infrastructure. We believe the 80 by 50 goal is not 2.2 23 enough to help avert possible climate disaster. We ask New York City to adopt a goal of powering the 24 city by 100 percent renewable energy by 2030. 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 213
2	Recently we were successful in defeating the proposal
3	to build the Port Ambrose Liquefied Natural Gas Port
4	off the coast of Jone's Beach. Now, it is possible
5	to move forward with building a large scale wind farm
6	in that same area. We urge the city to select
7	offshore wind in its forthcoming RFP to help get the
8	process of building the offshore windfarm off the
9	ground. We know offshore windfarm presents the only
10	opportunities for constructing utilities scale
11	renewable generation in the downstate region. By
12	being the first city in this region to commit to the
13	development of offshore wind projects will help
14	attract large number of businesses to invest in wind
15	technology, thus creating tens of thousands of good
16	paying jobs and economic benefits for the city, not
17	to mention the huge benefit of combatting climate
18	change. As for the zero waste goal, we believe the
19	city can easily reduce the use of plastic bags by
20	having Mayor de Blasio publicly indicating his
21	support for pending City Council Bill Intro 209.
22	This will help get the City Council to vote and pass
23	this bill and have the Mayor sign it into law. Thank
24	you.

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 214
 CHAIRPERSON TREYGER: Thank you very much.
 Next please.

4 MARCY BENSTOCK: Thank you, Chairs. I′m Marcy Benstock, Director of Clean Air Campaign, and 5 this will be mostly new to you. 6 The OneNYC Plan issued in April included too many bad initiative to 7 implement a ruinous policy, putting more people in 8 9 harm's way in storms and hurricanes, including first responders by building out into the Hudson River and 10 11 other waters around the city. Both the April plan 12 and city budgets include too many big ticket items in and over the water that misuse both natural resources 13 and limited public funds. Shifting these poor 14 15 spending priorities would free up literally billions 16 of dollars for the many proven effective measures on 17 dry land on uplands that would actually protect 18 public safety in natural disasters while meeting 19 essential needs. Three of the best One New York 20 initiatives should be speeded up, making existing 21 buildings on dry uplands more energy efficient, which besides cutting carbon emissions is one of the most 2.2 23 effective ways to reduce unhealthy air pollution. Number two, storm-proofing the existing subway and 24 bus system and making services more frequent and 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 215
2	reliable, and third, upgrading NYCHA developments,
3	public hospitals and other city buildings. Some of
4	the worse [sic] six initiatives are these: One, the
5	3.7 billion coastal protection plan including 335
6	million for the first two segments of the proposed
7	Big U [sic] Project, plus another 114 million to go
8	up along Battery Park City. Besides harming aquatic
9	resources, the in-water parts of these projects are
10	unlikely to work. Second, expanding the ferry
11	network and building multiple new in-water ferry
12	landings, the existing subway and bus network
13	deserves far, far higher priority. Third, fostering
14	site assemblages in mixed-use development in and over
15	the water with misleading spend in tax payer's money.
16	The vast 490 acre in-water part of the so-called
17	Hudson River Park Project is the worst example of
18	this, far more than Pier 40 is included in this real
19	estate venture in the river. The Council can't
20	protect public safety in this number one highest risk
21	hurricane evacuation zone unless the council resists
22	pressure to approve unprecedented air rights
23	transfers next months to squander 100 million
24	rebuilding Pier 40 and dozens of other piers in the

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 216
 river again and again and again. I have three more
 bad initiatives.

CHAIRPERSON TREYGER: If you could just
make sure you just wrap up and we'll take your
testimony as part of the record as well, but if you
just wrap--

8 MARY BENSTOCK: [interposing] Yeah, I hope 9 it's been distributed, and there's much more detail in it. So the fourth one is using engineered 10 11 wetlands, mitigations banks and "natural or soft edges" to justify the destruction of existing 12 13 naturally occurring aquatic habitats. The fifth one 14 is streamlining Army Corps permitting and making inruns around the Federal Clean Water Act to facilitate 15 16 building in and over the water. And sixth, there's 17 too much emphasis on designing in-water structure to 18 recess flooding, which doesn't protect people or 19 property against gale-force winds or the 20 precipitation that comes down from the sky as opposed 21 to water rising up from sea level. Siting new 2.2 development on higher, dryer uplands is the only 23 measure that has proved to be 100 percent affective. Just last point, the big picture, wild fisheries are 24 the single most important source of essential protein 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 217
2	for subsistence fishers from New York City to
3	Bangladesh, and without aquatic habitats there can be
4	no wild fisheries. The Times reported yesterday vast
5	migrations in search of food and water and conflicts
6	over natural resources are increasing. Saving the
7	habitats that can help keep subsistent fishers alive
8	is profoundly important. I hope you'll have
9	questions anytime. Thank you.
10	CHAIRPERSON TREYGER: Thank you very
11	much. Next panel?
12	LISA DICAPRIO: My name is Lisa DiCaprio.
13	I am a Clinical Associate Professor of Social
14	Sciences at NYU where I teach courses on
15	sustainability and I'm also a member of several
16	environmental organizations. I am proposing
17	recommendations for achieving the OneNYC goals to
18	reduce greenhouse gas emissions by 80 percent by 2050
19	and to increase our current rate of recycling. To
20	reduce greenhouse gas emissions by 80 percent by 2050
21	as has been stated, we must rely on energy
22	conservation, efficiency and renewable energy, close
23	down the Indian Point reactors, and phase out rather
24	than build out our New York City's natural gas
25	infrastructure, and we must also support City Council

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 218
2	bills that have already been introduced for
3	benchmarking the reduction of New York City's
4	greenhouse gas emissions, installing solar panels on
5	New York City buildings and solar canopies on New
6	York City parking lots as feasible, and establishing
7	low-energy building requirements for certain capital
8	projects, as is accustom in many global cities. With
9	regard to improving the efficiency of New York City
10	existing buildings, the four bills of the Greener
11	Greater Buildings Plan legislation cover all New York
12	City buildings that are 50,000 square feet or more.
13	As has been said, these 15,000 buildings comprise
14	less than two percent of New York City's one million
15	buildings but are responsible for almost half of New
16	York City's total consumption of energy. Local Law
17	84 requires annual benchmarking for energy and water
18	consumption, and Local Law 87 requires an energy
19	audit and retro commissioning every 10 years. Here
20	are my recommendations. One, amend Local Law 87 to
21	change retro commissioning to retrofitting. Retro
22	commissioning only requires efficiency improvements
23	consistent with the building's original design.
24	Retro fitting by contrast would require substantial
25	changes in the building systems, for example, meeting

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 219
2	high standards in energy efficiency such as Passive
3	House and replacing fossil fuel-based heating and
4	cooling systems with renewable energy alternatives as
5	feasible. Two, adding new legislation to reduce the
6	threshold from 50,000 square feet to 25,000 square
7	feet as Mayor de Blasio has indicated will be a new
8	goal, should also require energy audits and
9	retrofitting as outlined above. The 80 percent by
10	2050 legislation concerns our carbon footprint, which
11	is one-third the national average because of New York
12	City's urban density and mass transportation.
13	However, the carbon footprints of cities are not as
14	comprehensive as ecological footprints that include
15	the environmental impact of our consumption patterns.
16	For example, the generation of emissions and the
17	planetary resources required for agriculture,
18	transportation and manufacture outside of New York
19	City. This is why in addition to the cost of land
20	fill fees, we must attempt to achieve the new OneNYC
21	goal of zero waste to landfill. Thank you.
22	CHAIRPERSON TREYGER: Thank you very
23	much. Next speaker?
24	ALLISON TUPPER: Good afternoon. [off
25	mic comments] Good afternoon. My name is Allison
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 220 1 Tupper and I'm speaking for the New York City Sierra 2 3 Club. Our testimony at this time is limited to 4 aspects of the OneNYC plan that are directly related 5 to building in flood plains which may be in open public waterways or in hurricane evacuation zones, 6 7 and although there are other aspects of the plan that 8 we are concerned about but will not comment on today. 9 The One New York Plan assumes that the city will continue to subsidize new development and 10 11 infrastructure in the worst possible locations, in 12 flood plains which may be on dry land and in the 13 water, in the open public waterways that provide 14 irreplaceable habitats for living marine resources, 15 and in number one hurricane evacuation zones where 16 there's the maximum danger. The lower Hudson River 17 off Manhattan is a prime example of all three, and 18 the Sierra Club has long opposed all building in and 19 We strongly oppose massive public over the river. 20 subsidies that put more people in danger of 21 hurricanes and storms, and we urge the City Council 2.2 to remove them from its budgets and from the 10 year 23 capital plan. Build it Back and other programs should encourage existing homeowners to move away 24 from the shore if they want to with adequate buy-25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 221
2	outs. Upcoming Land Use and Zoning decisions must
3	also encourage staying out of and away from the water
4	instead of doing the exact opposite as is currently
5	being proposed. We laud the plan's emphasis on
6	improving energy efficiency in existing buildings and
7	on the education of public and building owners and
8	managers on damage prevention measures, but the City
9	Council can prevent much more damage than individuals
10	can by changing its spending priorities and
11	multibillion dollar annual budgets by stopping
12	subsidies of building and infrastructure near the
13	water. Thank you for the opportunity to speak on
14	these important issues.
15	CHAIRPERSON TREYGER: Thank you. Next
16	speaker?
17	JACQUELINE ESPINAL: Good afternoon.
18	Thank you, Chairs, for the opportunity to testify
19	today. My name is Jacqueline Espinal and I'm
20	representing El Puente, which is a community-based
21	organization for social and environmental justice in
22	Brooklyn, and El Puente's also a member of the
23	Environmental Justice Alliance. Today, I would like
24	to testify on behalf of Catherine Chicken [sic], one
25	of community members. Her testimony goes as follows:

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 222
2	"My name is Catherine Chicken. I live with my
3	husband, two children and two family pets in a house
4	in development for incorporation for low income
5	families. We live in a six-story building on the
6	Lower East Side of Manhattan between Avenue A and
7	Avenue B, about four to five blocks from the East
8	River Park, which was completely flooded by Sandy.
9	When Sandy hit, our building suffered from a total
10	loss of electricity, heat and hot water for entire
11	week. Other public infrastructure in the
12	neighborhood was also affected. The school's
13	basement where my children attended at the time was
14	completed flooded and closed for two weeks. During
15	the first days after Sandy, my husband stood in
16	lengthy lines and neighborhood supermarkets to
17	purchase ice to keep our perishables from spoiling
18	and can foods to hold us over. Luckily for us, we
19	have a gas stove and we were able to cook on it.
20	without electricity to keep our refrigerator going,
21	imperishables from spoiling, it was just a matter of
22	time before we had to throw all of it away. One day
23	turned into two then three days, it became more
24	difficult to find ice and canned food. My husband
25	had to travel to Brooklyn on a bike to get these
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 223 1 Streets were closed after certain points in 2 items. 3 the city. There were no traffic lights and began looting in stores in our area. There was no gas in 4 any of the gas stations. On the third day, we 5 decided to use our last half-tank of gas to drop our 6 children off with family in New Jersey so they could 7 take warm showers, eat cooked food, home-cooked food 8 9 and use electricity instead of candles after 5:00 p.m. My husband and I had to stay behind at our 10 11 apartment to care for our pets. My mother, who also 12 lives in the Lower East Side in a high-rise co-op was 13 forced to leave her home and stay with us as she did not have electricity. She didn't even have running 14 15 water in her building. For baths [sic] would boil 16 water on our gas stove and mix it with cold water. 17 We feel fortunate to still have cold running water as 18 most people in larger buildings in our area had no 19 During this entire ordeal I was sick water at all. 20 with a flu which made our horrible situation even worse. One week without heat hot and no hot water 21 2.2 and no can food felt like an eternity? If all large 23 buildings in New York City in 2012 had already been energy efficient because our aggregate carbon 24 emissions as a city would have been much lower, Sandy 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 224
2	wouldn't have been so destructive. It wouldn't have
3	hit ground as a hurricane. It would have been a mild
4	storm. Access to food wouldn't have been such an
5	issue. Our perishables wouldn't have spoiled and we
6	would have been able to carry on for a week or more
7	with food in our refrigerator. We havewe would
8	have had hot water for warm bath and we would have
9	had heat to keep us warm instead of wearing layers of
10	clothing and warm boots at home to keep us from
11	suffering cold. Our children wouldn't have had to
12	live the tense and traumatic experience of Sandy.
13	They wouldn't have continued leaving with their
14	parentthey would have continued living with their
15	parents, sharing with friends and going to school
16	like they normally do. They would have been able to
17	carry on a normal life." Thank you.
18	CECIL CORBIN MARK: Good afternoon,
19	Chairman Constantinides and Chairman Treyger and the
20	members of the Committee on Environmental Protection
21	and Recovery and Resilience. My name is Cecil Corbin
22	Mark and I'm the Deputy Director of WE ACT for
23	Environmental Justice. We are a 27-year-old
24	environmental justice membership organization whose
25	mission is to build healthy communities by assuring

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 225 1 that people of color under low income participate 2 meaningfully in the creation of sound and fair 3 4 environmental health and protection policies and practices. WE ACT also serves on the Mayor's 5 Sustainability Taskforce which has provided advice 6 7 and guidance on OneNYC Plan, and we also serve on the 8 building's Technical Working Group which is focused 9 on the One City Built to Last. From January to August of this year, WE ACT engaged over 400 10 11 residents and members of our organization across all 12 four Community Boards in Northern Manhattan to 13 develop a kind of resiliency plan for all Northern 14 Manhattan. We're proud to report that we did that in 15 collaboration with four of your colleagues, including 16 our Speaker, Melissa Mark-Viverito's office. 17 Likewise, we work closely with the Mayor's Office of 18 Sustainability, the Office of Recovery and Resiliency, the Office of Emergency Management, and a 19 20 host of city agencies including but not limited to 21 DEP and DOH. We see this process that we undertook 2.2 as a way of engaging those who are experts on their 23 neighborhoods, i.e., the residents who live there, with government and a host of other experts, 24 25 scientific public health planners, academics, and

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 226 1 We've provided copies for all of you of 2 architects. 3 that plan. Through that process we developed a 4 comprehensive plan that is both grounded in and goes 5 beyond OneNYC, and for that reason, we're thankful for the opportunity to testify today. With that 6 7 said, I also want to sound a note of caution. OneNYC 8 was launched in April, and while WE ACT both believes 9 that government can act more swiftly than it usually does, even we think that we have to allow them at 10 11 least a year to see real progress, especially given 12 the breadth and ambitious targets laid out in OneNYC. 13 We encourage the committee to not let their oversight 14 responsibility fall off the radar because you've 15 conducted this hearing today. And now, to focus on 16 the reason for the hearing. We believe that Mayor de 17 Blasio's vision of combining both the issues of 18 sustainability and economic equity really is 19 something that will advance us far into the future. 20 We think it is a key to making sure that those 21 neighborhoods most burdened with--2.2 UNIDENTIFIED: [interposing] The simple 23 answer is -- [off mic comments] CECIL CORBIN MARK: Excuse me? I'm sorry? 24 25 UNIDENTIFIED: Oh, the other lady [sic].

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 227 1 CECIL CORBIN MARK: Oh, okay. We believe 2 3 that that will provide the neighborhoods most 4 burdened with environmentally polluting facilities and some of the least efficient and worst managed 5 buildings as well as the worst health outcomes an 6 7 opportunity to be focused on and to make sure that 8 they are not forgotten as we create more 9 sustainability. There are a number of initiatives that have been launched and we want to point to them 10 11 as measures of their success, but to also make sure 12 we and you encourage both the Administration to 13 develop a plan that has both actionable metrics as 14 well as clear timelines. At the scale, I think this 15 important at the Community Board level. WE ACT believes that breaking this plan down into broader 16 17 metrics that are compiled with the Community Board 18 level will allow more local residents to both engage 19 and track accomplishments or shortfalls of OneNYC. 20 We also want to encourage you to continue [sic] past 21 legislation that will ensure that this plan is around 2.2 for future generations beyond this Administration. Ι 23 know I've been doing--can I just take back the time for the disturbance? Okay, good. So, some of the 24 initiatives including things at the launch just 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 228 1 recently that we hope will be the keys to keeping our 2 3 city below two degrees Celsius of warming include the 4 One City Built to Last, which is projected to reduce greenhouse gas emissions by 90,000 metric tons and 5 avoid nearly 40 million dollars in city's annual 6 7 energy cost. Under this initiative the city has 8 moved forward and retrofitted 770 public buildings, and we see that as a good step. We hope that we can 9 continue to work with the city particularly under its 10 11 New York City Retrofit Accelerator as we did with the previous Administration and this Administration in 12 13 the Clean Heat Program to engage both tenants and 14 residents in the neighborhoods to push for clean heat 15 and to get the building's energy retrofitted. The 16 New York City Clean Fleet, also a good program. Just 17 recently launched and we look forward to working with 18 the city on that. The Million Trees Initiative, we 19 really congratulate the Administration for reaching 20 this benchmark, but we would urge that the city share 21 with us the neighborhoods that benefitted from the 2.2 program and how many trees are still alive and doing 23 well, because the value of this program is not in the planting of the tree but in the shade that the trees 24 25 can bring over their lifetime to help reduce the heat

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 229 1 island effect in our city, the amount of pollutants 2 3 that can be trapped by the leaves instead of going 4 into the lungs of those suffering from asthma and 5 respiratory illnesses as well as the carbon they can capture to help reduce greenhouse gas emissions. 6 The 7 Home Weatherization Campaign, while that's a good 8 thing and a necessary thing, it's not sufficient. We 9 actually need the city to really be thinking about partnering with the Federal Government to get funding 10 11 from the State Government and private philanthropy to 12 really work with local groups like Northern Manhattan 13 Improvement Corporation in Manhattan to really help reduce the energy cost particularly targeting those 14 15 resources to things like HDFC cooperatives and Mitchell-Lama buildings. We would advise that the 16 17 joint committees and the city consider developing 18 those types of aggressive partnerships with local 19 CBO's because we believe that's where we're going to 20 get the best bang for our buck. WE ACT is a part of 21 Energy Efficiency for all--2.2 CHAIRPERSON TREYGER: [interposing] Thank 23 you. Just quickly wrap up, and then we'll--CECIL CORBIN MARK: [interposing] Quickly 24 25 wrap up.

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 230
 CHAIRPERSON TREYGER: take your testimony,
 sure.

4 CECIL CORBIN MARK: So, I'll just point 5 to two other things. I think it's important to really move on the RFI for renewables. There is a study 6 7 that I'll call to your attention that was done on 8 behalf of the New York Power Authority, and that 9 really pointed out the amount of jobs that could be generated by really investing in offshore wind. 10 The 11 city can also use other tools at its disposal such as 12 its unilateral power purchasing agreements that they 13 can enter into, and we encourage the City Council and this committee to actually really push them on that 14 15 as well. The solar--the reform of DOB rules is 16 excellent, and the stuff going on with NYCHA around 17 recycling, we encourage the city to actually focus on 18 looking at what residents have done in terms of 19 programs. We have one of our member that co-founded 20 an organization called the West Harlem Morningside 21 Height Sanitation Coalition, and we are looking for 2.2 more programs like that and encourage the committee 23 to really question the city about those types of programs and evaluate what they're doing against what 24

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 231 1 residents have done and take the best practices from 2 3 both. Thank you. 4 Thank you very CHAIRPERSON TREYGER: 5 much. Thank you to the entire panel. Thank you very Next? Next panel, Elizabeth Malone [sp?], much. 6 7 Jessica Roth, Catherine Skopic, I believe, Mark 8 Dunlea, and Alice Slater. 9 MARK DUNLEA: Thank you. CHAIRPERSON TREYGER: Sure. 10 11 MARK DUNLEA: My name is Mark Dunlea and 12 I'm speaking on behalf of the People's Climate 13 Movement New York. We were the host committee for 14 the 400,000 people last year, had 5,000 people march 15 last week on behalf of 100 Percent Clean Energy by 16 2030. Like a lot of the speakers today we [sic] did 17 not have a climate change for New York City, that's 18 not what OneNYC is. I agree we need to have a lot 19 more details, a lot more benchmarks. I certainly 20 agree with Council Member Treyger that there is not 21 adequate public input into the development of OneNYC, 2.2 and I hope we can now move to actually transform 23 OneNYC into a real plan. Unfortunately, OneNYC is not adequate in terms of trying to avoid catastrophic 24 climate change. Coming out of Paris last weekend, 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 232 1 the one really positive note was that the industrial 2 3 nations agreed to support the developing countries in 4 lowering the goal for a global warming from two degrees centigrade to 1.5 degrees centigrade. Now, 5 given that we lowered that, to make that real we have 6 7 to change what we previously agreed upon. So, the 8 idea that we stay with 80 by 2050 is not an adequate 9 goal at this point, and the previous goal estimated that reduced annual emissions needed to be about 10 11 three percent annual reduction. I'm sorry, 3.5. With 12 the 1.5 degrees, we need to be seven percent average 13 reduction. I think a number of people have spoken already about the issue of the need to develop 14 15 offshore wind. Certainly we were very disappointed by the comments by Nilda Mesa about it. Apparently, 16 17 seems to be the one thing that the Governor and the 18 Mayor disagree upon, which is to go slow on offshore 19 The people who wrote the NYSERTA [sic] Report, wind. 20 University of Delaware, recently stated that we've 21 actually moved backwards in the last 10 years on development of offshore wind in the United States all 2.2 23 because we relied upon market forces, and I know that Council Member Constantinides who recently taken real 24 leadership at the City Council level on geothermal. 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 233 1 We need to do the same with offshore wind, which 2 3 would be a real economic development and job creation 4 program. I'm sure some of my colleagues up here 5 right now are going to say we need to say no to natural gas, we need to say no to fossil fuels. 6 What 7 Paris was saying was we're coming to the end of the 8 era of fossil fuels, and yet, if you listen to what 9 Nilda was saying today, if you read what Governor Cuomo writes in his own energy plan, they are looking 10 11 to expand natural gas. It was wonderful that we 12 stopped fracking, but fracking is one particular extraction methods. Methane short term is 87 times 13 more potent as a greenhouse gas than carbon. 14 So, 15 thank you very much, and not just divest [sic] the 16 city pension plans from coal, but from all fossil 17 fuels. Thank you. Thank you very 18 CHAIRPERSON TREYGER: 19 much. 20 CATHERINE SKOPIC: My name is Catherine 21 Skopic. I'm Chair of the People's Climate Movement New York, Legislating Co-chair and Executive Action 2.2 23 Committee in the Setanini [sic] Point [sic] now, WE ACT and the United Nations Representative for the 24 Anglican Community Office. I want to thank the New 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 234 1 York City Council for holding these hearings and in 2 3 particular the Progressive Caucus who's done so much 4 to help the environment. I just got back from Paris 5 last night. So, I was there, and it was extremely, extremely exciting. I'm just going to make a few 6 7 comments. One of the most interesting things was a meeting with 700 mayors from around the globe, and 8 9 word is that the mayors could do more than a lot of the other organizational governmental level people 10 11 can, and one of the things that came out of that was 12 that they have an education network. So even though NYC would like to think of ourselves as one, we can 13 14 learn from what other people have done. There was a 15 fellow there from Sacramento who he said it took them 16 nine years to develop--this is starting in the 70's--17 building regulations because he found that voluntary 18 participation in retrofitting did not work. So, just 19 the same as Brad Lander's question this morning. 20 Let's not waste any more time with voluntary. We 21 need regulation. Some people are calling it 2.2 mandatory, but based on the experience in California, 23 there's no reason why we can't learn from their experience. We need regulations for the 24 retrofitting. So, that's one point. And I thank the 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 235
2	New York City Council. I mean, I thank of course
3	you, but I also thank Nilda Mesa and Dan for the
4	presentation, for the Mayor and for the 70
5	organizations who worked on OneNYC, but there are
6	some discrepancies that I'm a little troubled with.
7	In accordingin addition to what Mark just said,
8	Nilda Mesa continually called clean heat, and you
9	know, from extraction to delivery methane natural gas
10	is more greenhouse gas producing than is coal.
11	Methane is more. So, we can't call natural gas clean
12	heat. That is a misnomer, and we have to stop that
13	thinking if we're going to get to our goal. Another
14	thing she said, I couldn't believe it, and I'm sorry
15	Nidla wherever you are, renewable energy is
16	intermittent. Not true. Right here in the East
17	River it's actually a tidal straight. It's not
18	technically a river. We have tidal going on right
19	now, tidal energy being produced. That's non-
20	intermittent. We have geothermal. During our
21	theological seminary they havebut the council [sic]
22	had the most excellent geothermal heating a while
23	back. Both of those are not intermittent. So,
24	anyway, I'm sorry. And then she said you can't have
25	green roofs and solar; not true, because it puts
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 236
2	solar up on a pedestal so you can have both. So,
3	I've been a little concerned with one of the people
4	who's working on this has some of these
5	misconceptions. So, I have a whole bunch of other
6	things I wanted to say. Just one other thing if I
7	may just very briefly indulge. One of the most
8	fascinating meetings I went to at Copper [sic] 21
9	[sic] was on community energy, and I hadn't realized
10	that Denmark there's 20 offshore wind farms. That
11	was done by community energy. And Spain, UK both had
12	solar, both had community energy, and you know what,
13	the big utilities do not like this so much, and they
14	cut back FIT, Feed in Tariffs, which allow the
15	development of solar. So, I think something that
16	we're going to have to look at is what is our
17	relationship with the big utility companies, because
18	they have a vested interest in not us having micro
19	grids and solar. So, that's just something I bring
20	up because other countries around the world have
21	experienced cutbacks on renewables because of the big
22	utilities. I could say lots more, but I'm over my
23	time. Thank you.
24	CHAIRPERSON TREYGER: Thank you very much.
25	Thank you for your testimony. Next speaker?
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 237
2	JILL CORNELL: Thank you. Good morning.
3	I'm Jill Cornell. I'm a Board Member of the Brooklyn
4	Long Term Recovery Group and I'm reading comments
5	that Elizabeth Malone, our Co-vice President for the
6	Board prepared for this today's hearing, and we
7	appreciate the opportunity to give comments.
8	Regarding Resolution 090 2015, the Board supports the
9	resolution calling on HUD to approve New York City's
10	application for the National Disaster Resilience
11	Competition. Climate change threatens to swamp
12	literally our longstanding coastal neighborhoods home
13	to many of our most vulnerable populations and much
14	of our shrinking middle class and working class
15	families. The recovery templates for both HUD and
16	the National Flood Insurance Program do not reflect
17	the complexity of our dense urban environment, and
18	New York City needs funding to develop innovative
19	approaches that would serve as a new template for
20	urban resiliency rebuild needed by across the nation.
21	Regarding OneNYC, on the whole our experience with
22	the Mayor's Office of Recovery and Resiliency has
23	been positive. We're especially appreciative of the
24	resiliency team as they address the crucial National
25	Flood Insurance Program issues and the special study
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 238 1 They have welcomed and sought out 2 areas. 3 opportunities to engage the residents we serve, 4 frequently presenting at our general assemblies and 5 engaging our grassroots organizations to inform the public. Several of our members were partners in the 6 7 development of Flood Help NY, the interactive website 8 that explains much of the flood mapping process and 9 impacts. Their collaborative approach bodes well for community engagement should they win the resiliency 10 11 competition, and our expectation of an inclusive 12 process is the basis of our support for resolution 13 090 2015. Regarding the recovery arm of the Office 14 of Recovery and Resiliency, the Board is concerned 15 that the sunset target for Build it Back, December 31<sup>st</sup>, 2016 is unrealistic. We realize this is not on 16 17 today's agenda, but due to recent Build it Back 18 policy decisions we ask that this committee carefully 19 review the process by which mission accomplished is 20 declared. Attrition due to client fatigue remains 21 rampant in the Build it Back Program. While the Board sympathizes with the challenges created by HUD 2.2 23 templates that do not fit our situation, HUD cannot be placated at the cost of our residents. Last week 24 Build it Back sent short deadlines for clients with 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 239 1 complex problems, discretionary elevation, pathway 2 3 determination and outstanding transfer amounts among others. These clients, as well as those with 4 5 outstanding appeals, may be dumped from the Build it Back reducing the applicant base by eliminating 6 7 complex and difficult clients. The number of Sandy 8 survivors who are unable to access or complete the 9 process will make true resiliency even more difficult to achieve. Our communities are aware that this 10 11 daunting challenge must be met and that the rebuild 12 will be long and complicated. The Brooklyn Long Term 13 Recovery Group is composed of organizations committed to our neighborhoods and intends to remain engaged 14 15 for the foreseeable future, and our 2016 strategic 16 plan includes both continuity of our recovery 17 services and transition to resiliency collaborations. 18 Build it Back should be accountable to those they 19 fail to serve. We cannot leave our neighbors by the 20 wayside and declare victory for the lucky few. 21 CHAIRPERSON TREYGER: Jill, all I'll say 2.2 is I could not agree more that it will not be 23 presentations and press conferences that determine how this recovery will be judged. It will be judged 24 by the number of people who have received their 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 240
2	reimbursement checks to people who have gotten their
3	homes rebuilt, their apartments reimbursed for,
4	renters reimbursed, people displaced back home. Until
5	those people are made whole again, this recovery is
6	far from over, and that's why I have been very
7	cautious and not attending these announcements or not
8	participating in them because I want to make sure
9	that the people on the ground will dictate this
10	recovery and not just press conferences and
11	announcements. So, thank you for your advocacy.
12	Yes?
13	JESSICA ROTH: Good afternoon. Thanks
14	for holding this hearing and allowing me to speak
15	today. My name is Jessica Roth. I'm the Programs
16	Manager for Catskill Mountain Keeper, and since most
17	people have covered a lot of issues and will continue
18	to cover a lot of issues and in hoping to avoid
19	repetition I'm going to talk about some stuff that's
20	a little bit different. Given the six goals of
21	Vision Three of OneNYC, I just wanted to make crystal
22	clear that all the goals are integrally connected to
23	the need to stop all fossil fuel infrastructure
24	build-out now. And by fossil fuels I'm talking about
25	everything from oil and gas, from Balkan shale oil

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 241 1 being transported by train rail, barged down and 2 pipeline to greenhouse to the natural gas, sorry, 3 4 which is obviously a greenhouse gas up to 86 times more potent than carbon dioxide. For goal one it's 5 critical that everyone understand that any reliance 6 7 on natural gas to cut emissions is sending further down--cut emissions, I put that in quotes, sorry--8 9 it's sending us further down the wrong path to climate disaster. The first goal is a percentage 10 11 decrease, which means that if we don't actually stop 12 building out infrastructure, our increases are--we're 13 going to increase our emissions and then we're going to have to figure out ways to make even more drastic 14 15 cuts that nobody's talking about. Not to mention the 16 fact that all natural gas infrastructure build-out is 17 committing us to a future that continues to 18 exacerbate climate change puts us at risk especially the communities that are the most vulnerable to 19 20 climate change impacts. In any aspects of this plan 21 that depends on replacing aging natural gas pipelines 2.2 as opposed to investing in renewable energy build-out 23 is putting us all at more risk. In fact, new pipelines are failing at rates even greater than 24 those from before 1940, which is five times greater 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 242 1 than rates in the 2000's. We have to stop fossil 2 3 fuel infrastructure build-out to support goals two 4 through six as well, but there's a back story that needs to be addressed. While we're talking about all 5 these issues, we also need to understand and be 6 7 responsible for the interconnected aspects of fossil 8 fuel development, extraction and transmission. Ι want to flag two things in particular. One is that 9 as we strive to improve our greenhouse gas emissions, 10 11 get to zero waste, improve air quality, remediate 12 brown fields, improve and manage water resources, and 13 improve and support parks and natural resources, we 14 cannot do it at the expense of those things in places 15 like Pennsylvania and North Dakota. Of course, I understand New York City Council's responsibility is 16 17 to New York City, but if we're to be the global 18 leader that we're claiming to be in this plan in the 19 fight against climate change and considering these 20 issues are all pieces of the same puzzle, we have to consider all of it as we move forward. If we're not 21 2.2 putting all of our political role and resources into 23 immediate effective and just transition to renewable energy sources, then we're continuing to power our 24 city and our lives to the determent of our neighbors 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 243
2	and to our friends, the same ones who were just cut
3	out of the binding language in the Paris Agreement,
4	but the way, that everyone keeps talking about.
5	Which brings me to the second point that fossil fuel
6	infrastructure as currently proposed built and
7	operating is often not actually running directly
8	through New York City, but it will all directly
9	affect New York City. If we're not talking about the
10	issues of the Algonquin Pipeline running through
11	Rockland, Westchester and Putnum and winding up
12	within 105 feet of critical structures of Indian
13	Point Nuclear Facility, then we are ignoring a
14	problem that is in our back door, and even though
15	it's 43 miles from where we're sitting right now,
16	obviously that's a pretty big blast zone for a
17	nuclear facility that is aging and operating without
18	a license and has had more than five actual mishaps
19	in the past year, including shut-downs, disruptions
20	and explosions. In addition, we have millions of
21	gallons of Balkan shale oil transported along and on
22	the Hudson River every week. These exacerbate
23	climate change and transport oil that comes from
24	destruction of communities across the country
25	directly affecting our oil and water. Plus, New York
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 244
2	still has no fracking waste band bill, which means
3	that New York is potentially open for business to
4	take in all kinds of toxic solids and waters all of
5	which will greatly undermine the goals of OneNYC.
6	Fracking waste may not be solid waste produced within
7	New York City but would clearly impact air quality,
8	weather quality and effect natural resources. All
9	these fossil fuel projects must be stopped as part of
10	this plan in order to adequately protect our
11	community and other communities directly connected to
12	us and to move us to a real sustainable and renewable
13	future. Thank you.
14	CHAIRPERSON TREYGER: Thank you very
15	much. Thank you. Next?
16	ALICE SLATER: I'm Alice Slater. I'm with
17	People's Climate Movement New York, and the New York
18	State 100 Percent Renewable Now and Shut Down Indian
19	Point, but my whole raise on debt [sic] is to get to
20	a sustainable New York, and we see what came out of
21	Paris as inadequate, and Catherine referred to the
22	fact that it's going to have to come from us. And I
23	mean, we're in the 100 centennial of Frank Sinatra,
24	you know, New York, New York. If we can do it here,
25	we'll do it anywhere, and we really, we have to talk
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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 245
2	100 percent. I mean, this 80/50 and 30/50, that's
3	like ridiculous. It's got to be like 100 percent as
4	soon as possible, and we have to think about how
5	President Kennedy said we're going to put a man on
6	the moon in 10 years and he did it. I mean, we have
7	to say we're going, you know, we're going to do it,
8	and I wasI'm so thrilled about our City Council and
9	I'm so appreciative of the work you're doing and the
10	questions you asked, and I'm really totally
11	disappointed in the response that we're getting from
12	the Mayor's Office. You know, it's kind of like it
13	sounds like Bloomberg, you know, a little Bloomberg
14	light or whatever. But Ithere are so many points
15	that were made I don't want to belabor it except to
16	say please shut down Indian Point. It's like
17	ridiculous. It was in Al Qaeda's targets. It was on
18	the Times. We were lucky they hit the World Trade
19	Center. I mean, it's a stupid thing, but we could
20	have been like Chernobyl or Fukushima. It's sitting
21	there with more radioactive fuel than they had in
22	Fukushima. But the thing that wasn't mentioned that
23	I want to say, there's a study out by Marc Jacobsen
24	[sp?]. I'm sure you're all familiar with his, you
25	know, solutions project, but he did a whole study
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 246 1 with the University of Delaware that if you put an 2 3 array of windmills offshore Rockaway, Brooklyn out 4 you could literally slow down the hurricane winds, 5 that it would like--it would cut down the hurricane. He's got a whole really famous study. I have a 6 7 footnote to it in my paper, and I think we have to 8 explore it. I'm like, wind is the answer. We're the 9 Saudi Arabia of wind. We have enough wind out there to power the whole state. Oh, and the best news is 10 11 that we have a very shallow sea bed. So you can put 12 the windmills out over the horizon, so you don't have 13 to look at them, you know? Everybody was so hysterical up in Cape Cod that they didn't want to 14 15 see the windmill. We don't even have to see them 16 because we hav this very unusual shallow sea bed 17 going far out, and you could put them out where you don't have to look at them, and it would create--so 18 19 it's just like a miracle. I don't know why we're not 20 doing it. So, I have good questions to the plan. 21 I'll just go very guickly. A lot of them we said 2.2 already. Well, we have to find out what this 23 commitment to offshore wind is. I mean, talking about two, three years from now that they're going to 24 get--we have to do--I don't know what, but let's 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 247 1 figure it out, how New York gets wind going for 2 3 ourselves. And of course, the retrofits should be 4 mandatory, and the solarizing should be--I have a question about the electric vehicles. 5 I think it's great, but are we going to plug it into a coal-fired 6 7 electric plant or an oil-fired electric--I mean, are 8 were going to only have electric vehicles that plug into solar or wind or geotherm--I mean, otherwise, 9 we're just perpetuating the problem. And we should 10 11 have a moratorium on one new pipe, not one piece of 12 I mean, whatever we got to do to make what we pipe. 13 have safe, fine, but I've been talking to some of the union guys, you know. They're talking about it's a 14 15 bridge thing. We don't need a bridge. We have 16 everything we need now. We shouldn't be spending one 17 dime on anything that would perpetuate any fossil 18 fuel at all. And of course, please--oh, and the other 19 thing, on the divestment [sic] thing, this 20 Comptroller is only talking about coal and how 21 they're going to study it. First we thought they 2.2 were going to do it. Now they're going to study it. 23 We want to divest from everything, not just coal, you know. I mean, we should be looking at that. And I 24 had put down, set a deadline for no new repairs and 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 248 1 installation of fossil fuel infrastructure, and have 2 3 a mandatory focus on alternate energy possibilities 4 before building any more gas, oil or coal inf--in other words, a lot of this repair stuff is going to 5 perpetuate it. So, let's not do that. Thank you. 6 7 CHAIRPERSON TREYGER: Thank you. ALICE SLATER: 8 Yeah. CHAIRPERSON TREYGER: And I just want to 9 just add to this very, I think, informative and 10 11 powerful discussion just to say that I think you were 12 also an educator and I was a public school teacher, 13 and I pose this challenge to my students and of course to our generation, that if we don't act, if we 14 15 do nothing because I want to say that sometimes when 16 we talk about climate change people talk about it as 17 if they're prophesizing. I think that language has 18 to change. 19 Right, it's--ALICE SLATER: 20 CHAIRPERSON TREYGER: [interposing] It's 21 happening, and I'm always mindful of saying, well 2.2 100--you know, when you watch the Al Gore 23 documentary, it says, "Well, 150 years from now this will happen." It's happening, right? So, if we do 24 nothing, first of all, fossil fuels as we know are 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 249 1 very harmful to the environment, but it's also a 2 3 finite source, and sometimes people don't always, you know, know that. It's a finite source. We're not 4 doing with as sustainable means that this is 5 something that could be long-lasting, like, for a 6 7 long time. So there's a clock that's already ticking 8 and that is what we have to be mindful of. Secondly, 9 the cost of energy now with these non-sustainable resources continues to go up. So, when I hear from 10 11 critics who say that if we mandate this that you're 12 going to just create unaffordable energy options and 13 un--the cost of energy is already going up using these non-sustainable energy sources. So, I think 14 15 that historically the government does have the power 16 to also help shape the market and to say that we need to have a 21<sup>st</sup> century, in my opinion, a 21<sup>st</sup> century 17 18 green industrial infrastructure revolution the same 19 way we saw--the same infrastructure we're using today 20 is a product of the industrial revolution of the 18, 1900's. 21 2.2 ALICE SLATER: It's a new--23 CHAIRPERSON TREYGER: [interposing] And so yes, it might have led to mass production, but 24 also led to mass production of carbon. And now we're 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 250 1 trying to decrease the production of carbon and 2 3 increase, you know, making sure that we meet the 4 needs of a growing society today. So, I think that 5 this is the challenge of our time, and this is the challenge that we must also address for the sake of 6 7 our children, our future. 8 ALICE SLATER: Can I--9 CHAIRPERSON TREYGER: And they have to be a part of this, and that's why if you heard my theme 10 11 with my Co-chair during the course of this that this 12 is going to be--we always say we want to leave behind 13 a better world to the next generation. We're giving them a challenge as well, and that's what we need to 14 15 invest and work with our youth and work with our, you 16 know, our students, our young people, to make sure 17 that they come up with the answers and implement the 18 answers as well. 19 ALICE SLATER: you know, I just wanted to 20 add to that that we do have all the technology, and 21 there are--we have to say what are the obstacles? Ι 2.2 mean, you got the Koch brothers on the New York 23 Ballet, on the Metropolitan Museum of Art, at New

25 fighting this. In Boulder, Colorado they took over

York Hospital. You know, there's huge forces

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 251
2	their utility. They made it public because the util-
3	-I don't know what Con-Ed is doing, but it can't all
4	be good. We should have like a public utility. It
5	shouldn't be for profit. It shouldn't be traded on
6	the stock market so that they make money selling oil,
7	because how can you make money selling sun? It's
8	free. You know, I mean, there's no money in it. So,
9	it's just all free people power, and we really have
10	to think about some of these things, like get rid of
11	these obstacles, you know, that are slowing us down
12	because the solutions are here and we can do it right
13	away.
14	CHAIRPERSON TREYGER: Thank you. Yes,
14 15	CHAIRPERSON TREYGER: Thank you. Yes,
15	your
15 16	your CATHERINE SKOPIC: Yes, I just wanted to
15 16 17	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to
15 16 17 18	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to close on your point, but even if we stop tomorrow,
15 16 17 18 19	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to close on your point, but even if we stop tomorrow, all greenhouse gases, all methane, what's already up
15 16 17 18 19 20	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to close on your point, but even if we stop tomorrow, all greenhouse gases, all methane, what's already up there is going to last 50 to 100 years. So, what you
15 16 17 18 19 20 21	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to close on your point, but even if we stop tomorrow, all greenhouse gases, all methane, what's already up there is going to last 50 to 100 years. So, what you said this morning about getting the adaptation and
15 16 17 18 19 20 21 22	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to close on your point, but even if we stop tomorrow, all greenhouse gases, all methane, what's already up there is going to last 50 to 100 years. So, what you said this morning about getting the adaptation and teaching these schools so their students really know
15 16 17 18 19 20 21 22 23	your CATHERINE SKOPIC: Yes, I just wanted to make one comment if I may, and yes, we do have to close on your point, but even if we stop tomorrow, all greenhouse gases, all methane, what's already up there is going to last 50 to 100 years. So, what you said this morning about getting the adaptation and teaching these schools so their students really know because this is going to be their life. I think

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 252 2 to 100 years. So, I just wanted to underscore your 3 suggestion that we really get that into the schools 4 in all the curriculum.

5 CHAIRPERSON TREYGER: Thank you. Thank you very much. Thank the panel for your very 6 informative testimony. Okay, Clare Donohue, Kim 7 8 Fraczek, Annie Wilson, Anna Paola White [sp?], and 9 Patrick Robbins. I just want to make sure that-there's supposed to be one more panel after this. 10 Ι 11 just want to make sure people are here or not. Is 12 Sheila Guist [sp?] here? Okay, Sheila, that's okay. 13 Sheila, we're just making sure that you're still here. Alanna Judah [sp?]? Alanna has left? And 14 15 Lance Jay Brown, is Lance here? So Lance has left, okay. Okay, so then--yeah, Ms. Sheila Guist could 16 17 just join the panel, because this is the final panel 18 for today, and I guess we'll start this way. Sure.

19 KIM FRACZEK: Great, thank you. Thank 20 you for the opportunity to be heard today. My name 21 is Kim Fraczek. I'm the Co-Director of SANE Energy 2.2 Project based in New York City. So, today in 23 December the temperature is going up to the mid 60's Fahrenheit. We clearly know what we are facing. We 24 25 know that the Paris agreements were not firm enough

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 253 1 to save our climate that our life balance relies on, 2 3 and I feel comfortable using "we" here because the 4 New York City Council has been a stellar partner on many of our climate environmental initiatives. 5 We thank you for your thoughtful and thorough questions 6 7 pertaining to the city on the OneNYC plan today. 8 Sane Energy Project applauds the initiative to work 9 together toward a plan to address the plethora of issues that stem from our climate and the larger 10 11 system that is not an equitable service to all the 12 residents of New York City and beyond. Building 13 efficiency, micro grids and renewable energy are issues you can count on us to support you with 14 15 grassroots community education and action steps. 16 Together, we have successfully defeated Port Ambrose 17 Liquefied Natural Gas Port, and now we must complete 18 that equation with a wind initiative in the location 19 off the Rockaways, which we see as part of OneNYC. 20 Aside from the growing the local jobs and community 21 involvement component that we will work hard to 2.2 mandate, hopefully by partnering with our union and 23 community allies to build wind in service to all residents of New York City, but using our vast 24 resources to shut down the climate changing fossil 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 254 1 fuel infrastructure like Port Ambrose would have been 2 3 and other current infrastructure carrying natural gas 4 like Peaker [sic] Plants and pipelines that are 5 creating disease, pollution and climate changing emissions in our city. In OneNYC the crisis of 6 7 greenhouse gas emissions is addressed by a suggested 80 percent reduction of greenhouse gases by 2050 and 8 9 we know that offshore wind in the Rockaways is a key to making this happen to reduce our dependence on 10 fossil fuels. In addition, offshore wind turbines 11 12 mitigate climate change effects according to a peer-13 reviewed study out the University of Delaware, walls 14 of offshore wind turbines can dissipate outer-15 rotational near surface hurricane winds by 56 to 88 miles per hour and storm surge by 12 to 72 percent. 16 17 This is a shot at building renewables that New York 18 City cannot miss due to the destruction of Hurricane 19 Sandy. The Bureau of Ocean Energy Management has 20 identified New York as their top priority in 21 establishing offshore wind, and with the city issuing the recent RFI we feel secure this project is on the 2.2 23 table and will have to work together to make sure that we build it correctly with the community and 24 local labor involvement for equitable agreements 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 255 1 taken to account our precious ecosystem and marine 2 family and also in a timely fashion as we cannot wait 3 4 for two years to make an agreement on this project. We want to make sure that we can build this in 5 conjunction with the solar initiatives that OneNYC is 6 7 addressing as wind, power and solar power work 8 beautifully hand in hand. As we're seeing with the 9 REV process, our institutions need the people to push them to move and mandate the bold initiatives they're 10 11 proposing, or it will just turn into a bunch of 12 proposals that look good but are not going to move. 13 So we need the space to try the initiatives like the Net Zero School in Staten Island, for instance, to be 14 15 the examples. We really look forward to working 16 together with the New York City Council on this wind 17 farm off the coast of the Rockaways, and we look 18 forward to supporting the other mandates on building 19 efficiency micro grids and solar to lead this nation 20 in becoming a fossil-free, equitable, accountable, 21 and local-driven city. Thank you. 2.2 CHAIRPERSON TREYGER: Thank you very 23 much. Next speaker? PATRICK ROBBINS: Hello, good afternoon. 24 My name is Patrick Robbins. I am the Co-director of 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 256
2	Sane Energy Project. I just want to thank Council
3	Member Treyger, Council Member Constantinides for the
4	opportunity to speak. From a big picture, right now
5	we're living in a time that holds enormous potential
6	for a just transition to renewable energy. The
7	director of the Bureau of Ocean Energy Management has
8	declared that New York State is its number one
9	priority for bringing utility scale offshore wind to
10	the United States. This aligns perfectly with the
11	city's own commitment to power all city buildings by
12	renewable energy. Furthermore, the price of solar
13	panels has dropped precipitously over the last
14	several years, and we can expect a similar decline in
15	the price of batteries. Between this combination of
16	economic forces, policy shifts, and the hard work
17	being done to advance community scale solutions
18	across New York City, we know that New York City is
19	preparing for enormous changes not only in the source
20	of energy we use, but a rethinking of how that energy
21	is distributed and who has a say in our energy
22	choices. we hope that the city will stand by its
23	support for a distributed renewfor distributed
24	renewable power generation as specified in the OneNYC
25	plan and makes solid commitments to strong
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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 257 1 distributed renewable generation benchmarks going 2 3 forward. We recognize that there are already 4 community scale renewable solutions being advanced all over the city such as generation pilot projects 5 and small scale solar photovoltaics. We hope that 6 7 this Administration will take these solutions seriously and advance pathways to take them to scale 8 such as securing further energy jobs training and 9 removing structural barriers to renewable energy jobs 10 11 training, making sure jobless or low income New 12 Yorkers are able to fully participate in a just 13 transition. While the environmental benefits to this approach are considerable, there are also health 14 15 benefits and economic benefits to consider to as we bring greater renewable energy onto the grid. We hope 16 17 that we can do so in a way that phases out the dirty 18 peak [sic] power plants that cause health problems for so many New Yorkers for so many years. 19 As the 20 plan notes, there are significant aspects of our just 21 transition that lie outside the jurisdiction of the 2.2 city, from statewide energy policy to utlitiy 23 structure. This is why we hope that OneNYC can help us work toward our real goals for the reforming the 24 energy vision process that's real renewable, 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 258 1 equitable, accountable, and local. We are calling 2 3 for that at the state level and see many aspects of 4 OneNYC that can help us get there. Lastly, I just 5 want to say, and you know that I say this at every hearing if there's a topic of carbon emissions 6 7 measuring, we very much hope that as the city proceeds to measure its climate impacts, it include a 8 9 20-year timeframe for equivalence between methane and carbon dioxide. At that timeframe, methane is 86 10 11 times as potent a greenhouse gas as carbon dioxide. We know that if you use a longer time frame, 100 12 13 years, it looks differently. We don't have 100 14 years. We have 20 years if that. So, thank you so 15 much for the opportunity to speak, and we look 16 forward to working with you. 17 CHAIRPERSON TREYGER: Thank you very much. 18 Next speaker? 19 Thank you, Chair Treyger CLARE DONOHUE: and Constantinides, for hosting this and for your 20 stamina and holding out for lunch. I'm Clare 21 I'm the Senior Advisor at Sane Energy 2.2 Donohue. 23 Project. Our focus is on infrastructure. We'd like to see all of the shale gas infrastructure eliminated 24 and moved to renewable infrastructure. 25 We've

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 259 1 submitted an outline of several proposals, 10 2 proposals that the city might consider as part of the 3 4 OneNYC plan. It analyzes the cost of the plan, the carbon benefit and the jobs created. There's three 5 initiatives that are very good that are low-hanging 6 7 fruit. They are considering waste management and energy efficient retrofits. We're very much in favor 8 9 of the obvious there. And I'd like to address your question which you asked three different times, what 10 11 is the gold standard for energy efficiency? It's Passive House. Passive House reduces the need for 12 13 any energy of any form by 80 percent. It's doable. It's being done now, and you know, there's a big 14 15 movement actually in New York. It's a technology 16 that started in America, was ignored and is now the 17 building standard in all of the European Union. So, 18 it can be New York City's, you know, building 19 standard, too. And of course, it was disappointing 20 to hear the Administration mention natural gas, shale 21 gas over and over again as a benefit, as having reduced our carbon. The conversion of New York 2.2 23 City's boilers to natural gas was a travesty that was pretty much shoved down the throat of landlords and 24 25 building owners. All is not lost, and in fact, even

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 260 1 though the report states that they can't get any more 2 3 efficiency out of that, it's not true, because if 4 people converted to dual boilers there's still a lot of opportunity for biodiesel, which is zero 5 emissions. So, they can do a lot better than natural 6 7 gas, which actually creates more particulate matter 8 than the heavy--than the oils. And I just also want 9 to point out that in all of the OneNYC Plan, there is one paragraph that addresses infrastructure and it's 10 11 very vague. We really need a lot more detail about 12 what is planned, because otherwise we're afraid that, 13 you know, what will happen is that they'll be going for replacing gas pipelines. If you'll see from this 14 15 chart, replacing gas pipelines is one of the least 16 efficient ways to reduce carbon and one of the most 17 expensive ways each job created by that would cost 18 the city 243,000 dollars. That doesn't seem like a 19 very good investment. Likewise, converting NYCHA 20 boilers to shale gas, you know, this is not going to 21 help anybody. During, you know, Sandy, those 2.2 buildings are on the ocean. They have exposure to 23 They have exposure to sunlight. If they had wind. been set up with solar panels on the roof they would 24

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 have been working the whole time. Thank you so much
 for the time.

4 CHAIRPERSON TREYGER: Thank you, and 5 thank you for answering our question that we did ask 6 a number of times to the Administration. Yes, next 7 speaker?

8 Hi, good afternoon. ANNIE WILSON: I'm 9 Annie Wilson. I work with the New York Environmental Law and Justice Project, and I'm a member of the New 10 11 York City Safe Energy Campaign. So, relating to the 12 One New York City Plan, generally speaking the 13 holistic approach, which includes the quality of life improvements, the income issues, jobs, housing, 14 15 health seems to be a good incorporation and a vision that we need to incorporate in all of our decisions, 16 17 and I would add that generally the plant-based diet 18 has been excluded from any considerations for policy, 19 and that possibly along with health issues and 20 emissions issues related to animal agriculture. We 21 could certainly benefit from a widespread campaign of 2.2 information so people can make informed choices 23 relating to what they eat every day and the impacts on our atmosphere. So, relating to what is the 24 25 directive by the Governor to the Public Service

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 262
2	Commission on Energy and a new clean energy standard
3	which was issued on December 2 <sup>nd</sup> , my concern is that
4	we are revisiting what renewable energy is, and this
5	will trickle down to the choices made in New York
6	City. And given that there must be a clean energy
7	standard produced by June of 2016, I hope that the
8	city will be involved in comments and supporting what
9	real renewable energy standards could be. There seems
10	to be gray zones such as biomass such as gas, such as
11	hydroelectric that would have to be addressed in
12	these proceedings. So, I'm putting you on notice of
13	that. And the other concern is the RFI that the city
14	has issued, public procurement, renewable energy for
15	all city operations. I hope that the review of
16	choices including offshore wind will also take a hard
17	look at what has been a lobbied proposal by the
18	developers, the Champlain [sic] Hudson Power Express
19	that have coupled with Brookfield, EDP Renewables,
20	Ibradrola [sp?], and Burlesk [sp?] Gas Metro. The
21	importation of hydroelectric produce electricity in
22	Quebec to the Champlain Hudson Power Express, which
23	is a 360 mile dual cable system that involves over
24	20,000 acres in the state of New York from the Boward
25	[sic] of Quebec, going along the CXS CP rail lines

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 263 1 for about half of the trajectory. 2 The rest is under 3 the Lake Champlain and Hudson Rivers; has a 4 decommissioning plan of abandonment. They intend to leave it there in 40 years, and I don't think that 5 anyone's taken a hard look at the--at that aspect of 6 7 this project. In any case, it's supposed to land in 8 northern Queens and then come on through to across 9 the street from Ravenswood. And so I hope that the city will not choose to support this type of energy 10 11 proposal as part of the RFI, and I would like to add 12 briefly that there are 22 unions that are opposing 13 this proposal that has a permit, a profit permit 14 issued by the DOE that is still not fully implemented 15 until several studies have been produced, which will 16 probably be by May/June, I think. So, as for 17 offshore wind, we need to have a good look at what's 18 available. The--I'm sorry. Deepwater One is not 19 being built. Block Island is being built. The 20 Consortium with Nypa Lypon [sic] Con-Ed, nothing's 21 happening, and maybe the city needs to look at the 2.2 reality of this market and why and how and what kind 23 of subsidies would be necessary. There needs to be a hard look at this option and why it's not advancing 24

1 COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 264 2 itself within the market-based economy, and I will 3 close--

4 CHAIRPERSON TREYGER: [interposing] If you5 could just make sure we have your full testimony.

ANNIE WILSON: Okay, I'm wrapping up, and 6 7 I will close it. I hope that the closure of Indian 8 Point and the proposed resolution 0694 will be 9 introduced to have a hearing and that there is absolutely no need for the ongoing operation of 10 11 Indian Point, and that there are over 3,000 megawatts 12 of transmission systems. We do not need Indian 13 Point. We do not need additional gas infrastructure to support the closure of Indian Point, and I hope 14 15 that even though it's not a mandate by the city, it's 16 certainly a large city that would be taking a 17 position regarding licensing of a very hazardous 18 nuclear facility nearby. Thank you.

19CHAIRPERSON TREYGER: Thank you very much20for your testimony. Appreciate it. Next speaker?

21 SHEILA GUIST: Hi, I'm Sheila Guist. I'm 22 an at-large rights activist for the last 60 years and 23 a retired social studies teacher for the New York 24 City system and a member of a number of environmental 25 groups at present. Some of the lessons I thought we

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 265 1 might have learned 35, 40 years ago, you know, over 2 3 shoreum [sic], you know, we have to do the same 4 lessons again. It's really discouraging, but very grateful to you for having this hearing, and I don't 5 want to be too repetitious. I think Ling Tsou and 6 7 Catherine Skopic and any here have covered the issues 8 about Indian Point, but I'd like to start by saying 9 our timing, we just closed the Paris talks and the time is for cities and states and countries to 10 11 implement policies that would restrict global warming 12 to one and a half degrees. We have to move to 100 13 percent renewables by 2030, not 2050. We don't have 14 that time, and we have to move away from dangerous 15 fuels, fossil fuels and nuclear, and we won't reach 16 this goal without offshore wind. So, all of those 17 points have been made, but how do we get -- unlike the 18 report earlier that it's going to be three years 19 before we even open up some consideration, we have to 20 see how we can move this offshore wind to be 21 realized, especially this wind farm off the 2.2 Rockaways, especially the wind farm is not only to 23 supply energy, but it will supply jobs and the jobs will supply tax payers who then fund these projects. 24 So, wind really offers a big economic advantage over 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 266
2	many of the other things, especially this, you know,
3	large scale production. And you had some points that
4	you made earlier about developing in New York, the
5	people who can carry this forward, and I think that's
6	very important. What I was concerned with was that
7	the issue of power purchasing agreements as the means
8	of getting this started be the issue that we face.
9	Now, when Chris Erikson spoke about the problem with
10	labor standards that was involved in the solar
11	purchasing agreements, I would assume that you could
12	work that out, because I don't want to offer an
13	avenue of development that would counteract those
14	very other concerns that we need to consider.
15	Alright, Ithat's it? Alright, just let me
16	CHAIRPERSON TREYGER: [interposing] Just a
17	wrap up sentence, and then we'll take your take your
18	testimony as part of the record.
19	SHEILA GUIST: I want to thank you for
20	having Resolution 694 open, but it needs to come to
21	hearing in this session. And I've been disappointed
22	by the people who think that it's a resolution not
23	legislation. It's very important because the Mayor
24	thinks that nuclear is the answer to his meeting his
25	renewable clean standards. So the most important

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 267 1 thing you can do also is to change your language to 2 3 make sure clean excludes methane and nuclear. And 4 the other thing that you can do that I think is rather important is to put pressure on FERC [sic] to 5 rescind the permit for the Algonquin pipeline because 6 if Indian Point explodes, you know, like Tom Lara 7 8 [sic] said, we'll all go together when we go, and 9 there's your case for sustainability. We're not here to sustain. So, I think that these things working 10 11 together against the build-out of the gas 12 infrastructure, closing Indian Point and seeing that 13 that offshore plant--farm off the Rockaways takes off in the next year, I think we'll get some place. 14 15 Thanks. 16 CHAIRPERSON TREYGER: I think we have to 17 bring you back to the classroom and you should 18 develop our resiliency curriculum for the DOE as a 19 opposed to them hiring consultants from, you know,

23 speaker?
24 ANNA PALOAI: Hi, I'm Anna Paloai [sp?].
25 I'd like to thank everybody for still being here to

respect to our educators. Thank you very much.

God knows where, but thank you. Thank you. And I

was a fellow history teacher and I always give much

Next

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COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 268 1 2 listen. So, I was actually encouraged to come here by a couple people that I now consider mentors. 3 Ι 4 was really sad to hear about this gold standard that kept coming up and about "that we would buy from 5 whatever source that we needed to in order to achieve 6 7 our goals" which already have not been defined. Ιf 8 possible, I would really like to suggest healthy 9 energy choices as a standard or even like a direction to head. As a future nurse for the State of New 10 11 York, having served as the President of the Nursing Student Association of New York State, we brought a 12 resolution from 3,000 future nurses in this state. 13 14 We brought it to 400 future nursing leaders at the 15 National Student Nurse Association level, and the Resolution 50 that we passed in our House of 16 17 Delegates was environmental health hazards in 18 undergraduate nursing, and one of the main points was 19 really--because at the time when we had developed 20 this resolution we hadn't banned fracking yet in New 21 York State. So, having also been part of CUNY Divest 2.2 [sic], which got Student Organization of the Year 23 from the University Student Senate, which is the elected government at the City University 24 25 representing the students including we passed 11

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 269 1 student government resolutions including the Doctoral 2 3 Student Council and also the Professional Staff 4 Congress passed a resolution along with us, and our Board of Trustees has just not heard us. They took it 5 all the way to the Financial Committee Hearing, and 6 7 they said because it was too complex in terms of like 8 divestment from fossil fuels that they weren't even going to hear--they weren't even going to think about 9 I was really also sad to hear that on a 10 divestment. 11 city level a lot of our City Council Members had 12 pulled out from resolutions to divest from fossil 13 fuels, and I'd just like to point out that this plan, the One New York Plan really doesn't have a, you 14 15 know--as a future nurse, I'm going to have to be 16 there on the front lines of like FEMA with the climate change, but also there's--in California, 17 October 23<sup>rd</sup>, Porter Ranch, 700 households--700 18 19 households were moved and 2,000 people applied, and 20 this was from a natural gas leak. This is just one 21 of the examples of like things that people don't like 2.2 to point out, but that -- if we are going to talk about 23 sustainability, we really need to talk about what our emergency plans are going to be for cases like Indian 24 Point. What happens if that doesn't--like, if that 25

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 270 1 natural gas pipeline that we're allowing--we're 2 giving them two years to sit here and think about 3 4 wind energy, and we are allowing them to put in a 5 pipeline that could blow up tomorrow. You know? It doesn't make sense to me as a nurse. Also, the 6 7 natural gas from the Marcellus Shale is going to be 8 piping in 60 to 70 times more of the amount of Radon 9 into our houses. Radon sits on our floor. It's going to affect our children, our pets, our elderly. 10 All 11 these populations are going to be another thing that I feel like we have not considered in terms of 12 13 sustainability, and I feel like healthy energy choices, not including natural gas and not including 14 15 nuclear, this is something the American Nurses 16 Association in 2010 already put as a resolution. 17 Nurses and healthcare providers all over have already 18 said that this is not sustainable, not only from a 19 health, like, from a health standpoint, but just from 20 like logical standpoint. So I'm asking that we make 21 that a consideration, and I really appreciate you 2.2 holding this hearing today. 23 CHAIRPERSON TREYGER: Thank you for that, and just a quick question also, and my co-Chair who's 24

been so great and so--he's done a great job already

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 271
2	in the couple months, six months. It's wonderful,
3	and he's already been full steam ahead on this issue.
4	Justwe've heard from a lot of advocates today about
5	the push for offshore wind, and I'm justI'm curious
6	to know where are these wind components, these wind
7	farms being made? Are they made in New York? And if
8	they're not, how can we create a regional economy
9	
	right here that is making the energy solutions for a
10	right here that is making the energy solutions for a sustainable future right here in New York as opposed
10 11	

13 PATRICK ROBBINS: I'm happy to speak to that concern. We actually know that there is a 14 15 potential local supply chain in New York State. Offshore wind could generate 17,000 jobs if you're 16 17 looking at the 700 megawatt windfarm that's being considered, and it's really a matter of timing. If 18 19 we wait, then some other area will develop that manufacturing base sooner than we will. So, from a 20 21 policy standpoint it's really important to get that going as quickly as possible because, you know, the 2.2 23 benefits of those 40,000 jobs that could be created for the wind energy industry overall in the 24

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 northeast, those will go to the states and the areas
 that act first.

CHAIRPERSON TREYGER: Alright. So, do we
know of any New York-based manufacturer that's making
these types of products right now?

7 UNIDENTIFIED: Deep Water Wind is developing Block Island, has the Project One, which 8 9 is east of Long Island that they're not building, and then there's the consortium, and then there's another 10 11 Deep Water project off of New Jersey that is being built. And but my understanding is that they are 12 13 facilitating an assembly location, but I do not know where the parts are actually being made. Does anyone 14 15 know--16 CHAIRPERSON TREYGER: [interposing] Okay,

17 eys.

18 UNIDENTIFIED: where the turbines are 19 actually being made?

20 UNIDENTIFIED: Yeah, we--the turbines 21 right now are made in Europe, but the builder, Deep 22 Water, is anxious for them to be made here because 23 we're so much cheaper. So, they're very, very looking 24 forward to having--Long Island would be a perfect 25 place for the Deep Water Port that would support the

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 273
2	whole east coast. But the supply chain, we held a
3	wind roundtable in May. We got people from all over
4	the state together, and there are onshore wind
5	manufacturers in Upstate New York that can easily
6	convert those sort of things, all the smaller pieces
7	and technology. So, it would benefit the entire
8	state, not just Long Island and New York City.
9	CHAIRPERSON TREYGER: Well, one of the
10	things I'd like to explore working with my Co-chair
11	and this Administration is how do we connect and
12	engage, you know, local-based supply chain
13	manufacturers to our local schools, to our local
14	because, you know, this is where OneNYC should be
15	connecting all different stakeholders towards one
16	vision, and so for example, I mentioned before, we
17	have programs in some of our high schools to build
18	homes and car parts using old 20 <sup>th</sup> , 19 <sup>th</sup> , 18 <sup>th</sup> century
19	standards. Why can't we teach and equip our young
20	people with the skills to start building towards the
21	21 <sup>st</sup> century, and that is something that I think it
22	was lacking in OneNYC that working together we could
23	certainly work on. But with that, I just want to say
24	thank you to the panel. Thank you to everyone who
25	provided very helpful informative testimony, and I
	I

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 274
2	thank my Co-chair and both of our committees. This
3	isand he'll have a closing remark as well. This
4	has been very, very informative. There's a lot of
5	work to do, and I think that there's agreement that
6	we need benchmarks, actionable goalssound like a
7	teacher, actionable goals. We need benchmarks and we
8	need them sooner rather than much into the abyss.
9	And I think that we need to create a win/win
10	opportunity to certainly create a more
11	environmentally sustainable city, world, but at the
12	same time address inequities that have plagued many
13	of our communities as well. So, I thank you. I
14	thank you for your powerful testimony.
15	UNIDENTIFIED: I'm sorry to interrupt,
16	but I would like to add just a little detail in the
17	context of what you're stating here. I was at a
18	meeting last week with solar installers that are
19	disgruntled with the existing system for permitting,
20	for example, and now the permitting system with the
21	end of 20he's coming by with a tax rebate issue,
22	that their installations are facing four to six
23	months stalls because of the existing system. And
24	this is something that an action by the City Council
25	and possibly a removal a 500 dollar fee with the Fire

COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 275 1 Department's requirements for the variances that are 2 3 limiting the potential. So, whether it be this smaller installation--4 5 CHAIRPERSON CONSTANTINIDES: [interposing] We actually have that bill, not to interrupt you, but 6 7 we do have a bill that hasn't had a hearing yet --8 UNIDENTIFIED: [interposing] Okay, and 9 then the wind--10 CHAIRPERSON CONSTANTINIDES: [interposing] 11 but we do have that bill in, and it is something we 12 strongly are considering. UNIDENTIFIED: Okay. So, I was relating to 13 14 the --15 CHAIRPERSON CONSTANTINIDES: [interposing] 16 Not to cut you off, but we--UNIDENTIFIED: [interposing] deployment 17 of both the wind and the solar--18 19 CHAIRPERSON CONSTANTINIDES: [interposing] 20 Yes. UNIDENTIFIED: and how we need to have an 21 2.2 improvement on the systems. Thank you. 23 CHAIRPERSON TREYGER: And with that--thank you. And with that, I turn over to my distinguished 24 Co-chair Costa Constantinides. 25

1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 276
2	UNIDENTIFIED: Okay, thank you.
3	CHAIRPERSON CONSTANTINIDES: Thank you,
4	Mark, Council Member Treyger, for your great work and
5	your stamina as well. This was a long hearing, but a
6	worthwhile hearing, and I think your commitment came
7	through the entire way and make sure we do this
8	right. And there is a lot of work left to do. We've
9	done a lot of work, but there's a lot more work to
10	do. We have to do it much more quickly. We
11	recognize that buildings are the elephant in the room
12	that we have to deal with, both our city owned stock
13	and the private sector, and how we deal with
14	buildings is going to determine how we deal with
15	climate change here in New York City. So, we're
16	committed to that here at the City Council. We're
17	going to be moving things forward in 2016, because
18	2015 is on its way out very, very quickly, but we
19	will be working on issues such as wind, solar panels,
20	hydropower, electric vehicles, light. All of those
21	topics will be coming up in 2016. So I look forward
22	to working with Co-chair. I look forward to working
23	with my colleagues. I want to thank the Staff
24	Attorney for the Environmental Protection Committee,
25	

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 Samara Swanson [sp?] who put an extraordinary amount
 of effort in.

4 CHAIRPERSON TREYGER: And I want to--he 5 actually took the words right out, because I was 6 going to thank Samara, and I also want to thank the 7 Committee Attorney Brad Reed [sp?] from the 8 Resiliency Committee and Bill Murray and Johnathan 9 Seltzer [sp?] as well. They deserve a round of 10 applause as well.

[applause]

12 CHAIRPERSON CONSTANTINIDES: All three of them put an extraordinary amount of work to make this 13 14 hearing run and to make sure that all the information 15 that was testified here today are then actionable and 16 we can work on them, and I want to thank my staff, 17 Nick Wazowski [sp?], my Legislative Director and 18 Chief of Staff Nick Olsen [sp?] and Communication 19 Director Sharhar Sharon [sp?] who was hear earlier 20 today. I wish you all a very happy holidays and look 21 forward to working with you as we move forward into 2.2 2016 and implementing the work that we must do, not 23 that we want to do, but we must do in 2016. So, thank you. 24

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1	COMMITTEES ON RECOVERY AND RESILIENCY & ENVIRONMENTAL PROTECTION 278
2	CHAIRPERSON TREYGER: Thank you. And with
3	that, we adjourn the hearing.
4	[gavel]
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## CERTIFICATE

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date January 6, 2016