

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON ENVIRONMENTAL PROTECTIONS

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HELD AT: 250 Broadway-Committee Rm. 16th Fl.

B E F O R E: COSTA G. CONSTANTINIDES
Chairperson

COUNCIL MEMBERS:

RAFAEL L ESPINAL, JR.

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

Dan Zarrilli
Mayor's Senior Director for Climate Policy and
Programs and the City's Chief Resiliency Officer

Mark Chambers
Director of the Mayor's Office of Sustainability

Jainey Bavishi
Mayor's Director of Recovery and Resiliency

Amy Peterson
Director of the Mayor's Office of Housing and
Recovery Operations which Manage the Build it
Back Program

Gabriella Velardi Ward
Resides Across the Street from Graniteville
Wetland Forest

Rachel Eve Stein
Deputy Director for Sustainability and Resiliency
At the Center for New York City Neighborhoods

Isabelle Silverman
Senior Fellow at Environmental Defense Unit

Catherine McVay Hughes
Co-Chair of New York Rising Community
Reconstruction Program for Southern Manhattan

Judith Weis
Professor of Merida at Rutgers University, Marine
Biologist

Buck Moorhead
Board Member with New York Passive Houses

Diana Switaj
Director of Planning and Land Use at Manhattan
Community Board One

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

Lisa DiCaprio

Professor of Social Sciences at New York
University

Patrick Houston

Climate and Inequality Campaigns Organizer at New
York Communities for Change

[gavel]

CHAIRPERSON CONSTANTINIDES: Alright,

good afternoon, my apologies for being late but could not be helped due to our commute to say. I am Council Member Costa Constantinides, Chair of the Committee on Environmental Protection. I want to recognize I have two members of our committee here today, Council Member Rafael Espinal and Council Member Kalman Yeger both from Brooklyn, thank you both for being here.

Today the committee will hold oversight on the mission work and accomplishments of the Mayor's Office of Sustainability and the Office of Recovery and Resiliency. With the work of these two offices the Mayor has made it clear that ours is a city constantly working to stay ahead of the climate change curve and we do this by addressing growth and income inequality at the same time that we address sustainability. At today's hearing we'll hear from the administration about the progress made in advancing this work to date. The New York City Mayor's Office of Sustainability, MOS works to improve the quality of life for all New Yorkers and to protect the common environment by ensuring the city has clean air and surface waters, green streets

and is moving city residents towards zero carbon and zero waste goals. MOS works to reduce NYC's impact on climate change by implementing strategies to limit green house emissions from the city's transportation, energy, waste and building sectors. The Office of ORR, Office of Recovery and Resiliency was established in 2015 by our Mayor De Blasio to lead this effort to build a stronger more resilient. New York guided by scientific data and analysis of the New York City panel on climate change, ORR works to ensure that NYC's communities, economy and public services can withstand and combat the impacts of 21st century threats such as climate change. This work spearheading our resiliency program with about a 20-million-dollar budget. Together MOS and ORR play a significant role in the city's effort to mitigate, adapt and recover from climate change. The offices are guided by and oversee several city initiatives including the One NYC plan and its related greenhouse gas reduction and climate resiliency goals along with the efforts to recover and rebuild from super storm Sandy. One NYC is Mayor De Blasio's update of the previous administration's Plan NYC when NYC is divided into four sections or visions each with a

1 theme of growth, equity, sustainability and
2 resiliency. Today's hearing will focus on the latter
3 two visions of sustainability and resiliency. New
4 York City is responsible for one percent of the green
5 gas emissions in the entire nation. We have taken a
6 number of aggressive steps to advance the goals
7 enumerated in One NYC, New York City passed my Local
8 Law 66 of 2015 which requires the city to reduce
9 citywide greenhouse gas emissions 80 percent by 2050.
10 While many steps have been taken to reduce green
11 house gases and improve sustainability we still have
12 a lot of work to do and on some things, we've
13 committed have not been yet completed. At a minimum
14 climate change education and community partnerships
15 need to be strengthened. When NYC puts forward
16 initiatives towards achieving 80 by... our 80 by 50
17 goal, one is to develop the near term local actions
18 and long term regional strategies to reduce green
19 house gas emissions in the power sector, the second
20 initiative is to develop a mode shift action plan to
21 reduce greenhouse gas emissions in the transportation
22 sector, the third initiative is to build up zero
23 waste to reduce green house gas emissions from the
24 solid waste sector and the fourth initiative is to
25

1
2 continue implementation of one city built to last to
3 reduce green house gas emissions from buildings, 30
4 percent by 2025 which is not far away as, as we feel,
5 right, about seven years away to try the long term
6 path from... away from fossil fuels. Buildings
7 including fuel heating oil, natural gas, electricity,
8 steam, biofuel are responsible for over 70 percent of
9 our citywide green house gas emissions. Given this
10 and the vast... and the vast majority of existing
11 buildings are expected to remain well beyond 2015,
12 the city's stock of 1,100,000 buildings represent the
13 greatest potential source of citywide green house gas
14 emissions is indisputably necessary for the city to
15 reduce emissions from the building sector. Six years
16 ago, the council enacted the greens buildings law
17 effecting over five... 50,000 square feet, now that
18 legislation needs to be strengthened to accelerate
19 retrofitting of large buildings which we are working
20 on. Those measures would undertake and will make the
21 city a national sustainability leader and keep the
22 city's promises to future generations to reduce green
23 house gas emissions and protect our earth, you know
24 this... I really look at this in, in two parts, right,
25 I think we've talked about this together, this is...

1
2 we're going to be looking at the promises we've made
3 to those who were affected by climate change and, and
4 hurricane Sandy, we're going to make sure today,
5 we're going to talk about those promises and how
6 we're keeping them and making sure that as we move
7 forward those promises are kept. And in looking to
8 future and saying what is our resiliency and
9 sustainability goals for the future, how do we make
10 sure as climate change affects us whether it's heat,
11 whether it's another catastrophic event, whether it's
12 just... you know every day is a little bit... every time
13 it rains there's just a little bit more flooding in
14 Southeast Queens, an extra inch, those inches add up
15 and how are we going to be pro-active as a city on
16 these particular issues together. So, I'm looking
17 forward to hearing that testimony today not only what
18 we've done but how we can think about our
19 sustainability plan and our resiliency plan for the
20 future as we know climate change is going to impact
21 the city in different ways and you've all... we've
22 talked about these issues together. So, I look
23 forward to having this back and forth conversation.
24 Alright, no one has come yet, so I will... I will at
25 this time... we're... let's hear from the administration.

1
2 So, we have... so we have Eric Ulrich also here from
3 Queens, Council Member Eric Ulrich. So, we have... I'm
4 just going to let you all introduce yourselves,
5 Samara's going to swear in the administration panel
6 and then we'll take your testimony, thank you.

7 COMMITTEE CLERK: Would you please raise
8 your right hands, do you swear or affirm to tell the
9 truth, the whole truth and nothing but the truth
10 today?

11 DAN ZARRILLI: Yes.

12 MARK CHAMBERS: Yes.

13 DAN ZARRILLI: Over to us?

14 CHAIRPERSON CONSTANTINIDES: Yes.

15 DAN ZARRILLI: Great. Good afternoon, my
16 name is Dan Zarilli, I'm the Mayor's Senior Director
17 for Climate Policy and Programs and the City's Chief
18 Resiliency Officer. I want to thank you Chairperson
19 Constantinides and members of the committee for this
20 opportunity to speak about the progress that the De
21 Blasio administration has made as a global leader in
22 the fight against climate change. Today I'm going to
23 briefly describe the city's actions to address
24 climate change, a description of the team that leads
25 the city's climate program and an overview of the

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three main themes of our current work before turning it over to my colleagues. First a bit of history, New York City first formed an office of long term planning and sustainability in 2006 to develop a strategic plan that included climate action for the first time, that plan known as Plan NYC was released in 2007 and shaped the city's actions to address future threats in a number of ways. In October 2012 the impacts of hurricane Sandy brought home the reality that climate risks were much more immediate than many had thought, and the risks were not limited to hurricanes; rising seas, more heat, stronger storms threaten us as well. In response in June 2013 the city released its first comprehensive climate resiliency plan to supplement its climate actions and set forth a detailed risk assessment and new initiatives launching an over 20-billion-dollar program to prepare New York City for a future with climate change. When the De Blasio administration came into office that legacy informed our work and we knew that we had to expand on it as well. In April 2015 the administration released a groundbreaking One New York, the plan for a strong and just city that we call One NYC, a strategic plan for inclusive growth

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and climate action. One NYC supported by our partnership with 100 resilient cities addressed the challenges that we face as a city with growing population and inequality crisis, aging infrastructure as well as the risks of climate change. What was previously known as the Office of Long Term Planning and Sustainability is now operating as the climate policy and programs team charged with delivering the sustainability and resiliency portions of One NYC with a new focus on equity. Today we're continuing to deliver on these commitments from One NYC, the team with direct reporting to the First Deputy Mayor is leading the administration's efforts to deepen our climate work, fill the void of leadership left by Washington D.C. and deliver results for New Yorkers. Our team's current climate actions can best be summed up in three themes; sustainability, resiliency and accountability. Our climate mitigation or sustainability work is focused on reducing our own contribution to climate change by cutting our greenhouse gas emissions as quickly as possible, this work is led Mark Chambers in the Mayor's Office of Sustainability the mandate of which is to make New

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York City the most sustainable big city in the world and a global leader in the fight against climate change. To accomplish this goal the MOS team is working to keep the city on track to meet our goals of reducing greenhouse gas emissions 80 percent by 2050 or what we call 80 by 50, an effort that we recently accelerated to align with the Paris agreements 1.5 Celsius stretch goal. We've already achieved the 15 percent reduction getting to the 80 by 50 means making our buildings, the largest sources of GHG's in the city much more energy efficient, expanding renewable energy options, sending zero waste to landfills by 2030 and improving our air quality. Mark's going to speak a lot more about this work. Our climate adaptation or resiliency work focuses on adapting the city to the risk of climate change such as rising seas, more frequent and intense storms and extreme heat. This work is led by Jainey Bavishi in the Mayor's Office of Recovery and Resiliency. ORR specifics mandates to ensure that the city's neighborhoods, economy and public services are prepared to withstand and emerge stronger from the impacts of climate change and other 21st century threats. To accomplish this goal the ORR team is

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working with many agencies to deliver on the city's over 20-billion-dollar investment program in institutionalizing resiliency into city operations more broadly and Jaimey's going to get into this in a... in a bit more detail. And finally, New York City is bringing this fight straight to the fossil fuel companies that cause this climate crisis in first place. With their decades long campaign of deception and denial about the risks caused by burning fossil fuels and we're doing this is two ways, we're divesting our pension funds of approximately five billion dollars in fossil fuel reserve owners by 2022 and we filed suit against five investor owned fossil fuel companies; Exxon Mobile, Chevron, Conoco Phillips, BP and Shell. Most response... these are the companies most responsible for climate change and, and we're seeking damages to pay for preparing the city for the impacts of climate change. All this work not only benefits New Yorkers it also serves as a model to other cities around the nation and around the world. Through networks such as the C40 climate leadership group, 100 resilient cities and others were demonstrating the ways in which we can combat climate change in working with other cities to scale

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up effective solutions. As you'll continue to hear today this team is making significant strides across the entire administration and in partnership with the city council and many stakeholders on the necessary actions to prepare New York City for the future. We've achieved much, we've been recognized with significant awards and yet we have so much more to do before we'll ever be satisfied. I'd like to thank the council and the members of the Environmental Protection Committee for your close partnership and shared commitment to our goals, we look forward to continuing our work with you as we build a more sustainable and resilient New York City. I'll turn it over to Mark Chambers.

MARK CHAMBERS: Thank you Dan. Good afternoon, my name is Mark Chambers, I'm the Director of the Mayor's Office of Sustainability. Similar to my colleagues I want to thank Chair Member... Chairperson Constantinides and the members of this committee for the opportunity to discuss the work of MOS. The council in this committee have been invaluable partners over the years so again we thank you very much. MOS's charge is to ensure New York City is the most sustainable big city in the world,

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our work at MOS is grounded in the belief that environmental sustainability, environmental justice and economic sustainability for our residents must work hand in hand. We recognize that to become the most sustainable big city in the world we have to be conscientious about... [clears throat] excuse me... of the resources we consume and the structures we build and where we build them. We have to act with urgency while innovating because of the unique conditions of our density in our island home and most importantly we recognize we have to do things on a bolder scale than ever before because the challenges are greater than ever before. As Dan mentioned we've known for years that we have to address the existential crisis of climate change. Across the globe greenhouse gas emissions are growing at an unprecedented rate causing a rise in the average global temperature and changes to climate patterns. The hurricanes that devastated the gulf and the Caribbean and the wildfires in the American West have showed us the terrible cost of our warming planet. We had hoped we could depend on Washington for leadership but sadly we cannot, President Trump's decision to pull the United States out of the Paris climate agreement last

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year simply put was a failure in moral leadership on one of the most significant challenges facing humanity. Even before the failure in Washington we under... we understood the risks posed by climate change and we were taking action to reduce our emissions 80 percent by 2050 than in June of last year Mayor De Blasio signed executive order 26 committing New York City to the principles of the Paris agreement and it's stretch goal to limit global temperature rise to 1.5 degrees Celsius. Hundreds of other U.S. cities and institutions followed suit sending a profound signal to the world that the majority of Americans will not retreat from this exponential fight. The success of Paris agreement hinges now more than ever on the involvement of cities like New York to put their resources, their innovation and their leadership into play. Please allow me to briefly outline some of the progress that the De Blasio administration has made on the sustainability front. I'm sure... as I'm sure Jaime will reiterate her remarks everything you'll hear today about our accomplishments is the sum of efforts by numerous city agencies, community organizations and advocates as well as private and philanthropic

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partners. So, onto our progress. Our greenhouse gas emissions are down significantly, since 2005 GHGs have decreased citywide by approximately 15 percent despite significant growth of the city's population and economy. Per capita GHG emissions in 2015 was an average of 6.1 metric tons of carbon dioxide equivalent per capita, significantly lower than average American's 19 metric tons per capita. Part of this could be attributed to the nearly 500 million dollars the city is spending on energy efficiency in private buildings. Our buildings are greener, the energy used in the city's building stock is the largest contributor to GHGs. The city is cutting greenhouse gases in its own buildings by investing in high value energy efficiency projects. These projects are expected to yield more than 67 million dollars in avoided annual energy costs and approximately 176,000 metric tons of avoided GHG emissions, the equivalent of taking almost 38,000 cars off the road. The city has also contributed roughly 16 million dollars for energy efficiency projects in private buildings. This year the New York City retrofit accelerator launched a new high performance retrofit tract to assist private buildings with retrofits over the next ten to

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15 years which are expected to reduce GHGs 40 to 60 percent and NYC carbon challenge is working with more than 100 companies and organizations to have voluntarily committed to reducing their GHGs 30 to 50 percent. To date participants have cut emissions by close to 600,000 metric tons of carbon dioxide and are collectively saving nearly 190 million dollars in annual... annually in, in lower energy costs. Solar installations have increased... have increased six-fold since Mayor De Blasio took office. Part of this increase is a result of solarize NYC, our program to expand access to clean, reliable and affordable solar power for all New Yorkers by reducing market barriers for solar and by attracting more solar energy companies to the city. Solarize NYC has active campaigns in Harlem and Brownsville with more partnerships on, on the way. The first official campaign was announced in 2017 and featured solar campaign partnership with WE ACT for environmental justice called solar uptown now which centered in... which we centered in Harlem. More recently solarize Nehemiah launched a group purchasing campaign for rooftop solar for the Nehemiah homes in Brownsville, Brooklyn. We're rapidly expanding access to electric

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vehicles or EVs. In 2015 the city decided to lead by example with the launch of the NYC Clean Fleet which included the commitment to create the largest municipal electric fleet in the United States with a goal of cutting municipal vehicle emissions in half by 2025 scaling up to an 80 percent reduction by 2035. By the end of 2017 the city had already procured 1,030 out of 2,000 electric vehicle sedans it committed to integrate into the fleet by 2025. In 2017 Mayor De Blasio announced the city's ambitious goal of having electric vehicles comprise 20 percent of new vehicle registrations by 2025. To support this goal the city has invested in creating EV fast charging hubs to be developed in collaboration with Con Edison, these fast charging hubs will be scaled up to a total of 50 locations citywide by 2020 and accompanied by 100 curbside parking spots to provide access to multi-hour charging. For sending less waste to landfills than ever before, organic waste like food scraps, soiled paper, and yard waste generate methane gas, a harmful greenhouse gas and this waste accounts for one third of everything New Yorkers throw away. e-waste in our landfills leach heavy metals and can compromise... can compromise our

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ecosystem. To address this the city's organics collection program is now the largest in the country serving more than 3.3 million residents and our e-waste program has recycled more than 15 million pounds of electronic waste since 2015. New York City's air is the cleanest in five decades, New York City's air quality is the cleanest it has been in 50 years but we're still redoubling our efforts to ensure our air gets only cleaner by helping buildings choose cleaner energy sources through our green buildings and solarize NYC programs. Over the course of the year we will continue to act with urgency and boldness in our effort to make New York City the most sustainable big city in the world, but our success depends in a large part on deepening our partnership with the council and this committee. We are interested in working with the council to pass energy efficiency mandates as was discussed earlier for large buildings and we're exploring ideas to further expand access to solar and to electric vehicles as well as reducing single use plastics. In conclusion I would like to thank the committee for the opportunity to discuss MOS's portfolio and the progress we've made in ensuring that our air is cleaner, our energy

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is greener and that we send less waste to landfills. Fulfilling our climate agenda is no easy task and we look forward to deepening our partnership with the council in that effort. I will now turn the floor over to Jainey Bavishi to update the committee on the city's resiliency work. Thank you.

JAINEY BAVISHI: Thanks Mark. Good afternoon. I am Jainey Bavishi the Mayor's Director of Recovery and Resiliency. I want to thank Chairperson Constantinides and the members of the committee for this opportunity to speak about the work and the accomplishments of the Mayor's Office of Recovery and Resiliency and the complimentary role my office plays to MOS's climate sustainability work. Five years ago, hurricane Sandy devastated New York City with unprecedented force, it was the worst natural disaster we've ever faced made worse by climate change. As we assessed the damage it was clear that we could not just plan to simply recover from the storm, instead we used that moment to not only address the risk of another Sandy but to broaden our approach to the chronic risks of climate change. In May of 2014 Mayor Bill De Blasio established ORR to lead the effort to build a stronger more resilient

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New York. ORR spearheads an over 20 billion-dollar One NYC resiliency program to ensure that the city's neighborhoods, economy and public services will be ready to withstand and emerge stronger from the impacts of climate change. Since its creation ORR has been at the forefront of the global resiliency movement that is changing the way cities respond to climate change. As Dan mentioned in April of 2015 Mayor De Blasio released One NYC, not only was the document groundbreaking in it's focus on becoming the fairest city in America it was also the first resiliency plan of any city on the planet. Guiding the city's resiliency agenda is the administration's commitment to use the best available science to inform policy. The New York City panel on climate change, an independent body of leading climate scientists advises the Mayor on the latest localized climate change projections. Because of the increases in global, global temperatures as a result of the burning of fossil fuels and other greenhouse gases the NPCOMMITTEE CLERK projects that by the 2050's average New York City temperatures are projected to increase by 4.1 to 5.7 degrees Fahrenheit. Annual precipitation is projected to increase between four

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and 11 percent and sea levels are projected to rise between 11 and 21 inches and that is on top of a foot of sea level rise that we have already witnessed since 1900. What this means is that extreme events like flooding and heat waves are becoming more frequent and more intense and a similar Sandy like event in 2050 could cause 90 billion dollars in damage compared to Sandy's 19 billion. With these climate facts in mind something that is short... in short supply in Washington we're making bold and innovative investments in preparedness and resiliencies that make sense for today and tomorrow. As additional changes in the climate began to materialize and sea level rise accelerates different options might become more practical or perhaps even absolutely imperative. That's why we're investing in such a way so as not to preclude future actions we may need to take at climate... as climate risks evolve. I'd like to briefly describe the city's progress with our One NYC resiliency plan, comprised of a multi-layered approach to neighborhoods, buildings, infrastructure and coastal defense. Needless to say, our resiliency work is the, the... our resiliency work to date is the product of a massive team effort let

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out of the Mayor's Office and implemented by nearly every city agency and includes state and federal agencies as well as myriad of community organizations and private and philanthropic partners. Our city is safer and more resilient than it was before hurricane Sandy and much more is coming. Our neighborhoods are more resilient, tens of thousands of households are benefiting from investments in single family, multi-family and public housing stock. Building and zoning codes have been upgraded, every school damaged during Sandy was up and running in record time and we continue to make significant progress in making our schools more resilient. We provided 54 million dollars to hundreds of local small businesses to assist in their recovery from Sandy and launched business prep and Rise NY... NYC to support their long-term resiliency. And last year we released Cool Neighborhoods NYC, a comprehensive strategy to mitigate the drivers of extreme heat and protect the most vulnerable New Yorkers from the impacts of extreme heat. Our buildings standards are smarter, we upgraded the city's building codes including 16 new local laws to account for vulnerabilities related to extreme weather and climate change. Additionally,

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FEMA in partnership with the city is drafting new more precise flood insurance maps that will more accurately communicate flood risks and keep premiums affordable. The city is also working with FEMA to create a second map product, product reflecting future conditions that account for climate change, this will assist us in making coastlines more resilient and climate ready while keeping flood insurance affordable for those who need it. Our infrastructure is better protected, this includes upgraded traffic infrastructure, hard in telecommunication systems, new green infrastructure and we continue to fortify our wastewater treatment plants all of which ensure vital public services continue during and after emergencies and DEP investments ensure uninterrupted access to high quality drinking water including a new backup water syphon in Staten Island. We've also released preliminary climate resiliency design guidelines which provide direction to engineers and designers on how to incorporate resiliency considerations into all capital projects. Our coastal defenses are being implemented and our storm water management efforts and stronger, this includes a new Rockaway Boardwalk

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with integrated coastal protections, completed T
groins and sea gate and nearly ten miles of new dunes
across the Rockaway Peninsula and in Staten Island.
Construction is underway on new sewer infrastructure
in Southeast Queens and expanded blue belts in Staten
Island to reduce the impacts of flooding and we're
looking forward to breaking ground on the 760-
million-dollar Eastside Coastal resiliency project
next spring. Over the course of 2018 the ORR team
will continue building New York City's resilience for
the impacts of climate change, this city has some of
the brightest and most dedicated people working
everyday on behalf of our residents, but we can't do
it alone, so much of what we do demands on the
experiences of communities, communities directly
affected by climate change as well as local and
global resilience experts. Our success also depends
on our partnership with the council and this
committee to help foster a culture of resilience in
New York City, one that is grounded in the lessons of
hurricane Sandy but is ultimately geared to
addressing the risks... the broader risks of climate
change that we face. For example, how we manage storm
water and how we use land will be critical to how we

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weather future storms. I look forward to having these conversations with the council. As I conclude my testimony I want to thank this committee for this opportunity, building urban resilience in the age of climate change is a long-term process, we... we'll always need to innovate and adapt to account for changes in rising temperatures and seas. Success will look different at different points in our future, but it will always demand democratic partnership and collaboration across actors at all levels of society. We thank the committee for its dedication to this issue and look forward to working with the council as we continue to protect our city from the risks of climate change. I will now turn the floor over to Amy Peterson from the Housing Recovery Office to update the committee on the progress of the build it back program and the city's housing recovery efforts.

AMY PETERSON: Hi, thank you. Good afternoon, noon Chairperson and members of the Committee on Environmental Protection. I'm Amy Peterson, I'm the Director of the Mayor's Office of Housing and Recovery Operations which manages the build it back program. Thanks for inviting me to testify today. Through the city's hurricane Sandy

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housing recovery program build it back the city has prioritized helping homeowners remain in their affordable long-standing waterfront communities, ensuring these New Yorkers have the resources necessary to recover and make their homes and communities more resilient. Within the city's hardest hit waterfront communities build it back is rebuilding and elevating approximately 1,375 homes to today's stringent regulations for flood compliance, another 6,675 homeowners with moderate Sandy damage have been assisted with repair and reimbursement helping neighborhoods that were not in the flood plane when Sandy hit and homeowners who did not have flood insurance. Approximately 250 homes are being acquired through a combination of buy out and acquisition programs. Build it back provided multiple ways for homeowners to repair and rebuild their homes including the direct management of construction projects by the city, city managed construction. Over the last few years the city has brought on additional resources to ensure that we can get this work done from partnering with the building and construction trades unions to expand construction capacity in 2015 to adding our new modular program in 2017. As a

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result of this concerted effort the city has completed 97 percent of the city managed construction projects and 90 percent of all construction projects including the homeowner managed construction. We are working on the last elevations and rebuilds including the new modular program, an innovative program expending contractor capacity and speeding the duration of construction for each home, community-based projects including groups of attached homes in Coney Island and new infrastructure in Sheepshead Bay Courts and our most complex and challenging elevations and rebuilds throughout Queens. Overall build it back through it's single family programs helping 8,300 homeowners and landlords of one to four unit homes housing a total of 12,500 families, build it back has served over 99 percent of these homeowners by starting construction, reimbursement for repairs or acquisition of their homes. For 93 percent of those homeowners we've completed construction, reimbursement and acquisition. We've distributed over 133 million dollars in checks to over 600... 6,100 families. Through our construction partner HPD we've accelerated relief to multifamily households benefiting more than 19,600 households and

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143 developments through repair resiliency and reimbursement services. Funded by the US Department of Housing and Urban Development the build it back program, single family program is funded by a 2.2 billion dollar federal community development block grant dollar and overseen by our office in coordination with HPD and the Department of Design and Construction. The CDBGDR disaster recovery funds provide assistance to homeowners after all the other forms of disaster assistance have been exhausted. Hurricane Sandy impacted neighborhoods outside FEMA's 100-year flood plane and as a result built it back's repair and reimbursement program provided much needed support for homeowners who didn't have flood insurance and many of whom were outside the flood plane. About half of the housing flooded by Sandy was outside of FEMA's 100-year flood plane and of those in the flood plane less than 50 percent of those had flood insurance. Two thirds of build it back homeowners receiving the repair and reimbursement lived outside of the flood plane and only one quarter of those homeowners had received NFIP payments. For this reason, we are encouraging residents to purchase flood insurance. In 2014 the city dedicated funding

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to provide rental assistance to homeowners displaced by construction so they are not burdened with existing mortgage payments and additional rental payments while their homes are being elevated and rebuilt. We expanded our services to include comprehensive relocation assistance, assistance partnering with the center for New York City Neighborhoods and the New York Disaster Interface Services. Services were designed to help address barriers to securing temporary housing including large multigenerational families specific... physical or mobility needs and pet friendly units. Nearly 1,100 homeowners have received assistance with temporary housing and relocation and 83 percent of those homeowners were temporarily relocated within their original community or their borough. Hurricane Sandy was an unprecedented storm for New York City, build it back... build it back began with key policy decisions that drove subsequent successes and challenges. The city prioritized keeping families in their homes and neighborhoods and prioritized homeowner choice in the process. The resulting program design and implementation have been driven by many factors including the unique nature of housing

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and site conditions in New York City specifically in the communities most impacted by hurricane Sandy in Southern Brooklyn, in Southern Queens and the East and South Shores of Staten Island. An ever-evolving regulatory environment from 2013 today ranging from post Sandy changes to building codes and flood map requirements, the need to complete thousands of single family home construction projects in the busiest construction market in decades, and I wouldn't say of the least, the most... the complexities of providing relief within the federal disaster funding framework. We have learned so much collectively over the last five years about what it takes to elevate and rebuild homes in these communities, about the importance of clear communication on how different federal programs from flood insurance to SBA loans to HUD funded programs can assist homeowners during the recovery and about the impact of neighborhood resiliency planning. This is why we believe the joint city council and Mayoral Sandy recovery task force is such an important effort for the city. With your partnership we will lay out the principles and best practices for future recovery efforts with a focus on preparedness, technical

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assistance for building owners and community engagement. The transformation in these neighborhoods is remarkable and I would welcome the opportunity to take the committee on a tour to see these homes. Thank you.

CHAIRPERSON CONSTANTINIDES: I, think based on the nodding from many of my colleagues here I think we might take you up on that offer but I'm going to ask a few questions then I'll turn it over to my colleagues to ask questions, I don't want to monopolize all the time. With that said let me ask a little bit about, you know what is the level of funding allocated for city agencies for renewable energy projects?

MARK CHAMBERS: So, renewable energy projects in particular relate to solar or...

CHAIRPERSON CONSTANTINIDES: In, in general, right, I mean it doesn't... I'm going to try to go through all... let's, let's go through all of it then.

MARK CHAMBERS: Well, I mean I think the best way to say it is that the city has allocated 1.2 billion dollars over ten years towards... [cross-talk]

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CHAIRPERSON CONSTANTINIDES: Right...

[cross-talk]

MARK CHAMBERS: ...projects that range in all levels of energy efficiency including solar and including preparing buildings to be able to, to access more, more renewables and more distributing generation.

CHAIRPERSON CONSTANTINIDES: Alright, so 1.2 billion over ten years, how much of that have we spent so far?

MARK CHAMBERS: So, we spent approximately 500 million.

CHAIRPERSON CONSTANTINIDES: About 500 million and what is... what is that... what have we... walk me... what did that... what did... what did we get for that, how did... walk me through what we got as far as solar projects, I think you put it... it's in your testimony, right?

MARK CHAMBERS: Yeah, sorry... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Let's just re, re... let's re-go through that.

MARK CHAMBERS: So, so far... so, the pre... the predominant agency that distributes these funds is DCAS, the Department of Citywide... [cross-talk]

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CHAIRPERSON CONSTANTINIDES: Uh-huh...

[cross-talk]

MARK CHAMBERS: ...Administrative Services they have installed about ten megawatts of solar already, that's on 57 city buildings... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh...

[cross-talk]

MARK CHAMBERS: ...and additionally they're going to install an additional 100 megawatts of solar by 2025, the intent is to start construction on 100 projects this year which will ultimately add an additional 18 megawatts to the city's solar capacity totaling 29 megawatts over time.

CHAIRPERSON CONSTANTINIDES: And how are we working with the city agencies to implement... how, how do we choose the buildings, how do we sort of roll this out effectively and, and when we're building a new building or we're, we're doing construction on a city building how are we making those choices, imbedding that into those agencies to make sure that's a consideration for them?

MARK CHAMBERS: Absolutely, it is a... it's an all hands-on deck effort... [cross-talk]

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2 CHAIRPERSON CONSTANTINIDES: Right...

3 [cross-talk]

4 MARK CHAMBERS: ...I would look at this
5 from the point of view of preparing city agencies to
6 be able to respond to co-changes that we've worked
7 with this committee and many others onto established
8 thresholds for new construction but as far as
9 actually deploying the, the dollars DCAS particular
10 has utilized several different mechanisms to bring
11 agencies together, there's the ACE program which
12 allows for city agencies to suggest energy efficient
13 projects to, to DCAS in which they will evaluate and
14 then they will grant money out of that 1.2 billion to
15 making sure that agencies are building new buildings
16 and retrofitting their buildings with those dollars
17 to get the maximum amount of efficiency out of those
18 projects. From the Mayor's Office of Sustainability,
19 we help with that coordination and for the... office to
20 make sure that city agency from DCAS to SCA to
21 Department of Education, everyone that is building
22 buildings in the city is working together and that is
23 only become even more strengthened as we've pushed
24 forward on other sustainability plans, in particular

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our 1.5-degree plan which better aligned city agencies towards those goals.

CHAIRPERSON CONSTANTINIDES: I, I mean I'm looking at... you know they're building an extension in the school in my district just for an example, are we going to... how do we ensure that the sustainability aspects and resiliency aspects get baked into that cake before it's built, right, it's, it's a lot easier to bake those things in at the beginning then to go back and have to retrofit them down the line and say oh we're now going to have to change everything we've done so how do we ensure that we're baking those into the cake at the... at the frontend and rather than having to go back and retrofit them later?

MARK CHAMBERS: Absolutely, the, the best way to do that is by aggressively pushing on energy codes and aggressively pushing on building standards to make sure that everyone is operating from the same rulebook and that those buildings are... as a base are incorporating energy efficiency strategies into their, their outcomes and into their construction plans.

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CHAIRPERSON CONSTANTINIDES: Alright, so just looking at Local Law six of 2016 that required the development of a geothermal screening tool...

MARK CHAMBERS: Uh-huh... [cross-talk]

CHAIRPERSON CONSTANTINIDES: ...as well as a detailed analysis of geothermal technology installation on city owned buildings... [cross-talk]

MARK CHAMBERS: Yes... [cross-talk]

CHAIRPERSON CONSTANTINIDES: ...how is this screening tool coming, is it... is it publicly available yet?

MARK CHAMBERS: The report is, isn't public available, the screening tool will be online this summer... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Okay... [cross-talk]

MARK CHAMBERS: ...and, and so we're very excited about that to make sure that the screening tool is a... it's a first screening to allow for any user to be able to look at both the geological and the hydrological benefits of, of different areas across the city and, and be able to use that as a tool to determine whether or not geothermal is appropriate for that, it also analyzes different

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types of geothermal technologies to see what might be best in those locations.

CHAIRPERSON CONSTANTINIDES: And as far as city owned buildings that are doing major construction projects have there been any yet and with a cost benefit analysis found that geothermal was the, the, the right way to go, looking at the social cost of carbon as well?

MARK CHAMBERS: So, that I'd have to come back to you on... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Okay... [cross-talk]

MARK CHAMBERS: I'd have to check on, on which, which projects have completed that analysis.

CHAIRPERSON CONSTANTINIDES: And, and as far as... we're looking at the, the NYCHA boilers and, and the 200 million that we're spending on these new boilers on, on fossil fuel boilers have we considered doing renewable energy as either a supplement or a substitute to these boilers and, and how... you know how have those conversations gone?

DAN ZARRILLI: So, I think part of that answer is, you know these boilers... definitely need

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new boilers and so they're very much more energy
efficient boilers... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh...
[cross-talk]

DAN ZARRILLI: ...to provide heat and
there's a, a need to provide the heat as quickly as
possible... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Absolutely,
uh-huh... [cross-talk]

DAN ZARRILLI: ...to these into these
developments so I think our team can probably go back
and find out a little bit more detailed information
on the exact standards and how that's going to be
applied.

CHAIRPERSON CONSTANTINIDES: Okay.
Alright and as far as... you know so we have... and I
knew it as, what was 478 our bill? So, I, I, knew it
as, as... you know the bill that we tapped for... and
I'll ask and then I'll, I'll... I have two more, I have
one and, and one other after this. Our solar ready on
city owned buildings bill, when something's deemed
not solar ready, what are the steps that we take to
make those be... you know we can't just say afterwards
well, you know not solar ready, you know too bad like

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how do we then, you know work to make sure those buildings become solar ready over a five-year period or whatever it is?

MARK CHAMBERS: Absolutely, the... first the determination of being solar ready has, has many components; size of, of the building, structural capacity of the building and... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh... [cross-talk]

MARK CHAMBERS: ...so forth, if the... a building is determined not to be solar ready then it depends on what would it take to get there and that then goes into the framework of how each, each of the construction agencies are evaluating adding those components to, to projects that are coming online for those buildings. So, if a building is then slated for let's say a façade, you know replacement or, or an upgrade adding the components that would make the, the building solar ready are then added to that project, same thing goes for electrical robes and so forth.

CHAIRPERSON CONSTANTINIDES: So, we're doing construction, we're, we're taking that into consideration as well, we're baking that into the

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cake as well saying that, you know some things are not going to be solar ready, if you're standing next to a 12-story building and you're a five-story building there's nothing we can do there... [cross-talk]

MARK CHAMBERS: Right... [cross-talk]

CHAIRPERSON CONSTANTINIDES: ...but when we're doing construction on a school or a library is there mayoral money coming in because I know that very often council members and borough presidents put the dollars in for school upgrades and, and library upgrades in particular, how are we making sure that DDC and, and there, they're... we're adding additional Mayoral dollars for sustainability and resiliency to make those roofs solar ready or to make the buildings resilient?

MARK CHAMBERS: I mean I think to, to kind of reiterate the, the answer to the original question about the, the, the retrofit money that's exactly what it's being used for is to be able to where we can do energy efficiency projects that are the, the first in line and the... and the low hanging fruit absolutely and where there's a little bit more work that needs to be done to allow the, the sites to

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fully take advantage of whether it is solar or whether it is cool roofs as well which has a significant impact on the... on the buildings those are then incorporated into those buildings in their construction... [cross-talk]

CHAIRPERSON CONSTANTINIDES: And I know... and, and I got... I can only use my district and I know my colleagues will use their districts as a form of reference as I, I have a three-million-dollar project coming in one of my libraries, it's going to close this summer. I just want to make sure that as that's happening that, that we're building in opportunities for solar and for resiliency and it, it's... you know that change the scope of the DDC project which then, then puts the project off years away or is that something that DDC's already taking into account, I keep driving this point home but I want to make sure that we're getting good answers here and, and that we're, we're flagging this as all my colleagues I'm sure will as well?

MARK CHAMBERS: We're happy to follow up on that as well.

CHAIRPERSON CONSTANTINIDES: Okay, great and the last thing I have is on... well you know what

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I'm, I'm going to pass this off, I'm going to let my colleagues ask... [cross-talk]

JAINY BAVISHI: I just wanted to add from a resiliency perspective, I mentioned in my testimony that we've released preliminary climate resiliency design guidelines and it's for this exact purpose so... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Right... [cross-talk]

JAINY BAVISHI: ...that when we are spending money on city, city capital... when we're spending city capital on capital projects that we are accounting for resiliency considerations as we design and build those projects and we're working very closely with OMB on, on those guidelines.

CHAIRPERSON CONSTANTINIDES: So, when... so, when they... so, I'm going to go... I'm going to take that deep, deep... a little bit deeper then, so when they put out a cost to a council member that says, you know there... it's going to cost two million dollars to renovate a library, the resiliency and sustainability aspects are built into that cost?

JAINY BAVISHI: I can't speak to how DDC presents cost to a council member, the... I would...

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so, I'll leave that one alone but, but I, I do think that we're, we're... the, the kind of resiliency design guidelines are just one instrument that are going to help us build a culture of resilience and, and that's ultimately what we need to do, we need to start baking these costs in, we need to start accounting for them because baking them in now will essentially make our investments go further in the future...

[cross-talk]

CHAIRPERSON CONSTANTINIDES: And there's all this... go ahead Mark.

MARK CHAMBERS: So, I'll just... one more point to that is Local Law 31 also contributes to this. I mentioned before about making sure that the standards are in place so that everyone's working from the same rulebook, Local Law 31 which goes into effect this year does require city buildings to achieve a very low energy standard so that also helps in being able to make sure it's baked in from the beginning.

CHAIRPERSON CONSTANTINIDES: Okay, I'm, I'm going to probably come back for a second round because I have more but I don't want to monopolize the microphone so who is... who is up first?

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COMMITTEE CLERK: Richards and Menchaca.

CHAIRPERSON CONSTANTINIDES: Alright, so first I'll, I'll pass it off to Council Member Richards and then Council Member Menchaca.

COUNCIL MEMBER RICHARDS: Thank you Council Member Costa.

CHAIRPERSON CONSTANTINIDES: Sure.

COUNCIL MEMBER RICHARDS: Thank you, I know my colleagues want me to stop asking so many questions when I chair hearings too but, but such an honor to be here. Mark... [cross-talk]

MARK CHAMBERS: Yes... [cross-talk]

COUNCIL MEMBER RICHARDS: Welcome...

MARK CHAMBERS: Thank you, thank you.

COUNCIL MEMBER RICHARDS: I think this is your first budget hearing...

MARK CHAMBERS: It is my first hearing.

COUNCIL MEMBER RICHARDS: Congratulations, you didn't do so bad your first... [cross-talk]

MARK CHAMBERS: I appreciate that... [cross-talk]

COUNCIL MEMBER RICHARDS: ...round but I didn't get through my questions yet so... [cross-talk]

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MARK CHAMBERS: Let's begin.

COUNCIL MEMBER RICHARDS: Just a few questions, so I wanted to go through what are the strategies around air quality and what are you still seeing as some of the largest contributors to... who are some of the largest contributors to poor air quality in the city and sort of what are some of the strategies you're looking towards in your new capacity?

MARK CHAMBERS: Sure, so... I mean I want... I want to point out, I mentioned in my testimony that New York City does have the, the best air quality it's had in the last five decades, so progress is being made but progress still needs to be made... [cross-talk]

COUNCIL MEMBER RICHARDS: Uh-huh... [cross-talk]

MARK CHAMBERS: ...being able to look at the reductions from the air, low class air quality again has a lot to do with how we are treating our building sector and how we are focusing our attention on being able to first with the support of this committee transition out of dirtier fuels to cleaner fuels which the city has been very active in... and

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very successful in transitioning but we have more work to do. Being able to look at our building sector and being able to reduce the amount of fossil fuels that are going into the heating and hot water of our buildings is an essential part of addressing our localized air quality. In addition to that we consistently are working locally and region, regionally through DOT to, to look at this transition to electric vehicles will also... which will also have a significant impact on our localized air quality from the transportation sector.

COUNCIL MEMBER RICHARDS: So, you would be open to a number four oil phase out?

MARK CHAMBERS: I think that... getting... moving away from, from fuel oil is... as we've seen is a very effective way to deal with air quality.

COUNCIL MEMBER RICHARDS: Okay, so that's something we certainly have some legislation on and we look forward to working with you on. I wanted to go through your electric... your EVs, so I think we set a goal of 2,000 EVs... sedans being integrated into the system we're now at 1,030 that have been converted, how many do you anticipate this year will convert?

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MARK CHAMBERS: I'd have to check on, on an actual... the, the, the final number for this year, I mean we've, we've significantly increased every year and also, we're kind of driving sort of the local market of getting to these vehicles that are coming out online, so I can get back to you on exactly what the number is for this year but... [cross-talk]

COUNCIL MEMBER RICHARDS: Yeah... [cross-talk]

MARK CHAMBERS: ...we are... we are aggressively moving to, to meet our target early.

COUNCIL MEMBER RICHARDS: Right and then there's been some challenges in which we've heard from companies like UPS and others who want to go full EV and there's been a lot of challenges around infrastructure, can you speak to... [cross-talk]

MARK CHAMBERS: Absolutely... [cross-talk]

COUNCIL MEMBER RICHARDS: ...what are the thoughts, how are we going to expand opportunities?

MARK CHAMBERS: Sure, the, the real challenge is around charging, you know being able to have the sufficient infrastructure for charging is essential for both last mile delivery as well as for

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private vehicle ownership and fleet ownership transitioning to electric vehicles. The Mayor has committed ten million dollars at first the, the additional money coming to establish fast charging hubs throughout the city, the goal is to have about 50 fast charging hubs established in the next few years which would... [cross-talk]

COUNCIL MEMBER RICHARDS: You said 50?

MARK CHAMBERS: 50... [cross-talk]

COUNCIL MEMBER RICHARDS: ...okay... [cross-talk]

MARK CHAMBERS: ...all throughout... all throughout the city, currently working on a, a roadmap to look at the distribution of that and the goal there is to not just move forward with, with slower charging which we're doing as well, there'd be a 100 of the... of the typical kind of level three chargers but moving towards fast charging throughout the city where these hubs would allow for, for both businesses as well as private owners to be able to charge more quickly and we're also trying to change and normalize the behavior of moving over to electric vehicles, it's essential for both our vehicle

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emissions reductions as well as a, a transition to more of a kind of shared mobility program.

COUNCIL MEMBER RICHARDS: And how do you... how are you tying... so a lot of new development going on around the city, how are you working with HPD and others to sort of ensure that they're... and, and obviously we've up, updated our building codes but around things like EV... [cross-talk]

MARK CHAMBERS: Sure... [cross-talk]

COUNCIL MEMBER RICHARDS: ...charging stations, solar, geothermal, is there a close connection, are we really working together strategically on ways to enhance more green... renewable energy?

MARK CHAMBERS: Absolutely, I, I mean... I think the best way to think about it is that these are all an integrated system, is how do we move electrons around more effectively and to do that we have to attack it from several levels. Being able to advocate and kind of put money behind additional charging is important to be able to, you know kind of change behavior, it's also important for work with our kind of private sector partners to encourage them to switch over to electric vehicles and it's also

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looking at how that works with the building system, a more efficient building usually has the ability to, to look at how it better uses that electricity and that might come from storage... [cross-talk]

COUNCIL MEMBER RICHARDS: Uh-huh... [cross-talk]

MARK CHAMBERS: ...vehicle... electricity storage but it also comes from having more charging options when, when a vehicle... when a, a building is either built or being retrofitted. We have currently on, on the books a, a bill that allows for additional charging conduit that is installed once a new parking goes into place... [cross-talk]

COUNCIL MEMBER RICHARDS: Okay... [cross-talk]

MARK CHAMBERS: ...and we are actually working now on a... on a bill that would increase that significantly by requiring electric vehicle infrastructure to be installed in buildings when new spaces are added and that, that's part of attacking this from all different sides and letting a building better utilize and more flexibly utilize its energy for the benefit of all.

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COUNCIL MEMBER RICHARDS: Two more questions, so obviously environmental justice is important to this committee and the chairman has certainly taken this by the helm as well, I know Council Member Inez Barron had also sponsored some legislation around this, what are some your strategies around addressing, you know some of the more vulnerable communities such as Rockaway, Sunset Park where, you know low income residents exist, what is the strategy around ensuring that we can address climate change through an EJ lens?

MARK CHAMBERS: Absolutely, I mean... I think one of the, the major tenants is that when it comes to the, the impacts of climate change they... you know we need... we share in the burden, we also need to share in the benefits so the ability to make sure that we are establishing not just the framework that is applicable to all but also to make sure that everyone will benefit from a lot of the work that we're being... we're doing. The, the building's mandate that Chairperson Constantinides mentioned earlier is it, it does begin to address that work by making sure that we are kind of prioritizing a lot of our older buildings and, and larger buildings, making sure that

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those buildings are operating more efficiently and also by spurring on a significant amount of job growth in, in terms of the actual work that's going to be needed to be able to, to retrofit those buildings, I mean we, we're looking at upwards of 17,000 jobs that could be created as a result of moving forward on, on this and we believe that that as well as additional efforts to kind of target areas around the city that may have been historically underinvested in allow for us to really be thoughtful and... as well as effectively tying together the, the work that we're doing around environmental social justice as well as economic and environmental attributes.

COUNCIL MEMBER RICHARDS: Alright, last question, Dan Zarrilli, 145 million dollars for the Rockaways, where are we with our little project, you're going to... okay, sorry, that's right, sorry. He, he lived in the Rockaways then I think...

JAINY BAVISHI: The projects have various schedules but they're all expected to be completed around 2021.

COUNCIL MEMBER RICHARDS: 2021... [cross-talk]

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JAINY BAVISHI: That's right... [cross-talk]

COUNCIL MEMBER RICHARDS: Okay. And we're going to hear a little bit more as we... [cross-talk]

JAINY BAVISHI: Sure, we can keep... [cross-talk]

COUNCIL MEMBER RICHARDS: ...communicate... [cross-talk]

JAINY BAVISHI: ...you updated as... [cross-talk]

COUNCIL MEMBER RICHARDS: Okay... [cross-talk]

JAINY BAVISHI: ...the... as, as progress... [cross-talk]

COUNCIL MEMBER RICHARDS: Okay... [cross-talk]

JAINY BAVISHI: ...as we make progress on those projects.

COUNCIL MEMBER RICHARDS: Alright, good thank you.

CHAIRPERSON CONSTANTINIDES: Alright, thank you Council Member Richards, just very quickly before Council... I hand it over to Council Member Menchaca, what would you think about take...

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transitioning your offices to an actual department...

you know department or agency and, and sort of...

[cross-talk]

DAN ZARRILLI: I think we'll, we'll get back to you on that.

[off-mic dialogue]

CHAIRPERSON CONSTANTINIDES: And I, I think... just figured I'd, I'd ask I, I, I think I knew the answer, but I figured I'd ask that question as well and at this point I'll turn it over to Council Member Carlos Menchaca.

COUNCIL MEMBER MENCHACA: Thank you Chair and thank you to the members of the committee and I also want to welcome you Mr. Chambers to this incredible work that we're doing, welcome.

MARK CHAMBERS: Thank you.

COUNCIL MEMBER MENCHACA: So, the... I, I think I want to start with Amy... with Amy first, a lot of the work that, that you testified today really kind of shows a, a big... unless... is that on too? That's off too, okay. Let's try again. I don't know if this is what's causing it, okay. Are, are these solar powered or, or... [cross-talk]

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2 CHAIRPERSON CONSTANTINIDES: Share,
3 share, sharing is caring.

4 COUNCIL MEMBER MENCHACA: Okay, share,
5 share... okay, let's try... let's try this, okay. Great
6 news, we're in the 90's in the percentage of work and
7 I, I just hope you, you feel proud, I know we, we do
8 too, there's a lot of work that went into this..

9 [applause]

10 COUNCIL MEMBER MENCHACA: Yeah, hell
11 yeah, you deserve that work, you've been at the helm
12 of this turning the ship around in a lot of ways,
13 have not been easy, you got a lot of heat from
14 everyone about this and you and your team have really
15 kind of dedicated the right resources and so I think
16 the, the questions that I have beyond us going and,
17 and touring because I think that's going to be an
18 important part, we got to... we got to go see this
19 work, are there one or two places that would be
20 important for us to kind of look at first that you
21 want to talk about, I want to give you the
22 opportunity to do that and then secondly in
23 anticipation, I think it was... I don't know who
24 testified to this but the, the cost of, of response
25 tomorrow will be astronomically more than in 2012 so

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I, I kind of want to get a sense from you about how we're... how we're thinking about that, build it back is very specific in its... in its program to literally build it back but how, how are we thinking in... and in... and in preparation... and in preparation?

AMY PETERSON: Yes, so thank you. I think that one, the, the idea of the task force that we're jointly going to engage on is really important and Jaaney and I who are both on that task force have had a lot of discussions about what we need to focus on in thinking and we'd like it to be something that, you know we could engage on and, and have, you know kind of completed by the next anniversary which is in October, we're about to approach another hurricane season. In terms of neighborhoods there's so much unique about New York City and so much unique about what we've done both in Coney Island where we had huge challenges with attached homes and being able to get multiple homeowners to engage, we have some success stories where we actually have elevated homes and been able to do alternative mitigation for homeowners. Sheepshead Bay Courts is where a group of homeowners came together and formed a homeowner's association to be able to make some improvements to

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an entire block but really if you go to Edgemere and Arverne and the Rockaways and Staten Island you can see blocks and blocks of homes where multiple homes have been elevated. I think in looking forward the things that we think about and the rest of the country are thinking about, I mean one of the horrible things that happened over the last couple of years is the additional hurricanes in other states across the country and in Puerto Rico and so some of the things that we did after Sandy like rapid repairs which was a unique new program that had never been done anywhere else has kind of been taken and, and redone in different communities so I think we have an opportunity now both to think about build it back but really to think about how all of the things both from a preparedness before the storm but then all of the benefits that come to homeowners that currently aren't in any way related, right, FEMA individual assistance, flood insurance, SBA loans, HUD, they're not inter... related at all, how we can make sure that they're related and it's very clear what... how people can prepare themselves for a future storm and how we as a city can deliver the, the response that we need to respond.

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COUNCIL MEMBER MENCHACA: Got it and, and

I think the task force is the place where a lot of this is going to happen and I'm really happy to know that, that there's... and in your testimony and now in your question and answer you really focused on all the other programs that are not... and not immediate to the response but part of the larger conversation around flood insurance, I know there's a lot of advocacy happening, I'm not going to concentrate on that but I know that that, that's happening. Great, so I'm looking forward to the tour and, and kind of seeing some of this work and talking about it, I think we just need to talk about it because I, I think so much of what we saw in response and the lag time is still in the air and we got to just flush it out with real information and so I'm going to work with... I want to work with you and the committee to make that... make that happen. And then I think... well here's the other piece about, about kind of build it back concept, it's still... it's still kind of designed around floods and rightly so I think but that's not all that could come in terms of climate change crisis moments, we're talking about fires, we're talking about... there's a lot of other things, tell us a

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1
2 little bit about how you're thinking about it as
3 you're... as you're kind of transitioning through and
4 what to expect, how, how, how... be specific?

5 AMY PETERSON: Yes, so certainly on
6 emergency preparedness and, and disasters generally
7 that's something that New York City emergency
8 management's focused on but yeah, and our office is
9 the housing recovery office and so we're really
10 looking at an overarching housing recovery plan for
11 moving forward and it can be a climate related
12 disaster but it could be another disaster and you
13 know while the city has faced disasters before and
14 developed programs after them and certainly deals
15 with small housing emergencies very effectively
16 figuring out the ways to help homeowners, homeowners
17 prepare so that everyone knows what they need to have
18 access to in case there is a disaster for their own
19 particular home preparedness and then how we would
20 provide shelter in the immediate aftermath and how we
21 could help people... how we could help restore housing
22 depending on what the disaster is something we're,
23 we're all talking about.

24 COUNCIL MEMBER MENCHACA: Great, looking
25 forward to, to hearing more about that. Some general

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questions, this... these questions are coming from Red Hook, some of our Red Hook folks watching from home. So, NYCHA had a voluntary emergency response... NYCHA had a voluntary emergency response form which with special needs and it went from paper to online and has that model been rolled out, is there any, any update on, on how that's going, how that's getting rolled out, what the impact has been and where has it been, is it citywide, is it certain boroughs, anybody have an update on that?

JAINY BAVISHI: I don't, we would have to... [cross-talk]

COUNCIL MEMBER MENCHACA: Are you aware of it though?

JAINY BAVISHI: I'm not aware of it.

COUNCIL MEMBER MENCHACA: Okay, it'd be good for us to get an answer on that... [cross-talk]

JAINY BAVISHI: Sure... [cross-talk]

COUNCIL MEMBER MENCHACA: Also the emergency preparedness for Red Hook and Gowanus and really all kind of public housing we, we're noting that there are short... a shortage of IV bags in the mainland of America because of what's been happening in Puerto Rico so there's, there's a lot of resources

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2 that were sent over and kind of depleting or just
3 using, I don't know if that's on your radar at all,
4 I'm seeing some nods over here on your team, can you
5 give a sense about what, what that looks like, I've
6 worked on... I've worked on a lot of legislation with
7 office of emergency, OEM management and there's a lot
8 of push back for this, they're like we got it, we
9 know how to do it, don't tell us how to do it but I'm
10 unclear about whether or not OEM is ready and
11 prepared in, in, in moments where we have been...
12 having to respond nationally in Puerto Rico, Houston
13 and whether or not we're ready here and have
14 replenished our, our, our kind of emergency and
15 resiliency items, anybody? I know OEM isn't here but...
16 [cross-talk]

17 JAINY BAVISHI: Right, this, this would
18 be a question for, for... [cross-talk]

19 COUNCIL MEMBER MENCHACA: Okay... [cross-
20 talk]

21 JAINY BAVISHI: ...emergency management.

22 COUNCIL MEMBER MENCHACA: Let's see, what
23 else. Okay, so last question on solar stuff, so I'm
24 really happy that the Chair really drilled down on
25 the larger concepts around solar and embedding it

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into all the work we're doing, hundreds of millions of dollars are coming to Sunset Park under a really great opportunity that the community has been bold about in demanding for resources; Brooklyn Army Terminal just released a... an RFP so it sounds like its on your radar to bring possible solar farm to the rooftops of, of the Brooklyn Army Terminal, I'm thinking about NYCHA and the half a billion dollars that's coming to Red Hook and we went with another kind of power plant concept, some folks said we should have gone solar instead of... so, how, how can we... how can we bring information to communities so they can really push for this because they're, they're pushing on the ground but we're, we're saying no and I kind of want to get a sense about what's causing the no and, and where we can move that to a yes especially with, with bigger... with big multimillion dollar projects and then I'm going to add another piece to that which is ULURPs so a lot of ULURPs that are, are potentially on their way. In Sunset Park there's something called Industry City, I don't know if you've ever been there but it's pretty massive, it's six million square feet of property and they're considering proposing an opportunity to

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change the zoning, would you join us in that conversation to figure out how we can create community capacity to think about this when we have that conversation?

MARK CHAMBERS: The short answer is yes, I, I, I think we're, we are committed to everything you said around being able to not just increase access but also increase awareness, I think... I mentioned Solarize NYC which was... is something that I'd love to come talk to you a little bit more about is a great opportunity for communities to do just what, what you're suggesting. Additionally, I think it's important though that we also mention that solar is extremely important, it's one tool in the tool kit, you... we, we actually need everything on deck, you know it's solar as well as significant demand reduction so being able to, to work to get more distributive generation but also working to make sure that buildings are operating more efficiently are all important pieces and, and critical to doing that.

COUNCIL MEMBER MENCHACA: One final note, schools, there are six schools coming to district 38, more schools are get... more seats are getting built in my district than anywhere in the city that's due to

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the organizing that's happening on the ground and parents and kids and everyone's asking for on addressing the overcrowded school issue and I just haven't heard anything about solar for any of these new schools that are coming and, and so that, that just worries me that there's no synergy that's real and at the front of a lot of this work so I'm hoping to work with you on making sure that every investment has every kind of community investment... oh participatory budgeting, by the way PBNYC dot org or you can go vote, it's vote week until Sunday, oh there's a lot of love for it here including you all... you all if you live... have you voted, any of you voted yet, do you know, okay, part... participatory budgeting... okay, if you don't have a council member that is participating in part... in PB write them a letter and advocate but PB projects is another place where we can bring solar stuff and it'd be great to work with you to figure out PB sized projects, we're pushing the Mayor to do matching with PB so that if we put a million the Mayor should put in five, that's the matching that we're talking about for capital that we can actually start thinking about some of these bigger projects that are community based and,

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and get, get that imagination and these... and these spaces where kids are designing the future and they go to... they go to solar but then we, we come with a price tag of a million and two million dollars for a project and it's not possible so I look to work with you and, and bring you on board to our advocacy campaign.

MARK CHAMBERS: Looking forward to it.

COUNCIL MEMBER MENCHACA: Awesome, thank you.

CHAIRPERSON CONSTANTINIDES: Carlos that's an awesome idea. We're going to work on this together, I'm, I'm excited about that. Alright, I have a few more questions to ask, so when it comes to resiliency I know that FEMA has put in millions of dollars to build... you know to... sort of reinforce those buildings that were affected by, by hurricane Sandy, I know in my particular neighborhood I think we've spoken about this in private but like Halletts Cove Peninsula, you know Astoria Houses, eight of the... eight buildings there were affected by Sandy they're getting resiliency treatments, the other eight buildings, the other buildings there on the campus because they did not have flooding are not

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2 getting those same treatments so if, if there were to
3 be a future storm those buildings would be in, in a
4 very bad way where the other buildings we've just
5 made them resilient, how do we... how do we find the
6 monies because I know it is... the... that's the real
7 challenge, right, is, is, is finding these real
8 dollars to do these, how do we... what's our plan to
9 find those monies to make sure that we're, we're,
10 we're making all of our, our, our public housing and,
11 and neighborhoods resilient and not just those that
12 we're getting those FEMA dollars for that were
13 already affected? I'm not leaving... give... I'm not
14 giving you the one...

15 JAINY BAVISHI: I don't have the answer,
16 I mean this, this is... it's, it's an incredibly
17 important question and part of the answer is that the
18 way federal funds flow for resilience projects is
19 broken... [cross-talk]

20 CHAIRPERSON CONSTANTINIDES: Absolutely...
21 [cross-talk]

22 JAINY BAVISHI: ...they, they... the way...
23 we, we get federal money in a very reactive way but
24 we need to be doing proactive work, in the meantime
25 as I mentioned before we're, we're trying to make

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2 sure that we're not just thinking about resilience
3 projects in a silo that every time we do substantial
4 rehab or new construction that money is going towards
5 building a more resilient city and you know we'll
6 have to think creatively about alternative financing
7 schemes and, and you know we, we've started some
8 conversations with private sector partners around
9 that, there is no silver bullet but we're completely
10 committed to continuing to explore creative
11 solutions.

12 CHAIRPERSON CONSTANTINIDES: Because I
13 mean... I know in, in, in Western Queens you have the
14 Astoria Houses, the Ravenswood Houses, the
15 Queensbridge Houses all along the waterfront there
16 and, you know some were, you know affected by Sandy
17 in a very real way, some were, were affected but not...
18 you know did not lose power but their buildings
19 weren't flooded but still affected by Sandy and how
20 do... just to answer the real question is how do we
21 ensure that our, our public housing residents, our
22 communities, low income communities, communities of
23 color are protected those are our most vulnerable,
24 right, that, that's what... at the forefront of what
25 we're trying to do.

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JAINY BAVISHI: That's right and we share those goals.

CHAIRPERSON CONSTANTINIDES: And so, looking at... going back to schools for a second, what is the average cost of a renewable energy project in a school or, or, or a city owned building?

MARK CHAMBERS: We'd have to come back to you on, on doing an actual average, I mean I think it's important to understand that there are different ways to finance... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh... [cross-talk]

MARK CHAMBERS: ...solar on a particularly renewable energy project on, on a... on a project... on a building particularly a school so we... I'm happy to come back to you and talk to you about whether or not it's your capitalizing the cost or whether or not you are using some other kind of power purchase agreement and so forth.

CHAIRPERSON CONSTANTINIDES: And how do we work... how do we... how can we better work together with agencies like school construction authority to make it achievable, I mean any... Council, Council Member Menchaca talked about that and you know I

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2 definitely want to do more solar in my schools this
3 year, I'm... I mean I've, I've... I have my own capital
4 budget but when I look at the price tag to do that
5 it's, it's out of the range of, you know doing one
6 school, you have 17 schools in your district it
7 would... it would take me longer than I have in office
8 to get that done so how do we... how do we work with
9 the agencies to make those affordable up front so we
10 can make these investments in partnership between the
11 council members, the borough presidents and, and
12 then... and your offices as well?

13 MARK CHAMBERS: Yeah, I mean I think...
14 it's a conversation we'd love to have, it... again it's
15 important to make sure that looking at different
16 financial models is going to be the way to make that
17 money stretch further... [cross-talk]

18 CHAIRPERSON CONSTANTINIDES: Uh-huh...
19 [cross-talk]

20 MARK CHAMBERS: ...because you're not just
21 investing in the actual panels themselves but you're
22 also... there are the, the energy that they're
23 producing and being able to utilize that energy for
24 the building itself or for sharing it is part of how
25

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you're able to distribute those costs so I'm happy to have that conversation... [cross-talk]

CHAIRPERSON CONSTANTINIDES: I'd love to have that conversation with you because I mean as our, our... we're sitting there going through the city budget I think it's important for us to see how we can best do this work together because we have whole bunch of schools and, and city owned buildings that are on our list for solar readiness, I was like how do we take that from where they are that they are solar ready to actually implementing solar in, in a more quick basis in all partnerships.

MARK CHAMBERS: Yeah and I think... I think power purchase agreements are one of the, the key ways in order to be able to do that quickly and so we can have that conversation.

CHAIRPERSON CONSTANTINIDES: And, and I know this is not an Education Committee hearing but I'll ask the question anyway but... as we implement these renewable energy projects whether it's geothermal, whether it's solar, whether it's other wind, you know if it's at a school or a library or a place where people gather how do we... is, is there a curriculum, are we creating opportunities working

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2 with the Department of Education to educate our
3 children about, you know what solar is and, and why
4 it's important it's on our buildings because they're
5 going to be the ones who are going to lead this city
6 in the future so I... are we making those partnerships
7 in the DOE to make that part of the, the science
8 curriculums?

9 MARK CHAMBERS: Absolutely, D, DOE has a
10 kind of a very active sustainability program in which
11 they are looking to make a lot of those synergies
12 happen within their offices and additionally we work
13 with them to be able to use the, the, the mantle of
14 the Mayor's Office of Sustainability to be able to
15 promote a lot of the same visions, the same education
16 throughout. We have a program called green NYC which
17 is really a public education and outreach arm of the
18 Mayor's Office of Sustainability and working with
19 Department of Education is exactly the, the type of
20 synergy that we look forward to and, and be able to,
21 to be able to make sure we're pushing messages out to
22 the public that are consistent so you're seeing it at
23 school but you're also seeing it online and you're
24 seeing it in other places.

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CHAIRPERSON CONSTANTINIDES: Are, are there... is, is, is... are they going to PTAs, are they going to community boards, how do... how can we better connect, you know with families and, and so they're understanding what's going on in their... in there, their children's schools and can get better educated themselves?

MARK CHAMBERS: So, happy to have that conversation, there's a lot of different ways and outreach that we're doing but also outreach that is... more outreach that's possible, the more people that are asking questions and the more places in which we can be again both physically and virtually allow for... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh... [cross-talk]

MARK CHAMBERS: ...both kind of parents as well as students as well as neighbors to be able to look to how they can better utilize their particular environment towards their benefit so we're happy to have that conversation and happy to work with you on that.

CHAIRPERSON CONSTANTINIDES: I'm not... I'm not sure if my colleagues have asked this question

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2 yet but we know... you know the, the Governor's talked
3 about Indian Point going offline in the near future,
4 how do we ensure that we're ready for that and not
5 just putting more stock in sort of unclean grid,
6 right, you know we don't... we don't want to have the
7 Peaker Plants throughout our city just to be turned
8 on more often, how are we working to ensure that
9 we're going to have a cleaner source of energy as
10 Indian Point goes offline?

11 MARK CHAMBERS: Well it's a great
12 question, I think... I think when... in... last year in
13 January when the Governor announced that Indian Point
14 would be... plans, plans to retire as early as 2021 it
15 definitely raised some concerns and I think the Mayor
16 was consistent and it has continued to be consistent
17 that any closure plan for Indian Point really should
18 address New York City's, you know reliability of
19 energy, the costs, you know local emissions as well
20 as greenhouse gas emissions so we are... we are
21 concerned with what, what does come to replace Indian
22 Point and we are using the opportunity to advocate
23 primarily for transmission into the city making sure
24 that any renewables that we're also advocating for
25 can actually get to, to the city... [cross-talk]

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CHAIRPERSON CONSTANTINIDES: Uh-huh...

[cross-talk]

MARK CHAMBERS: ...and that we're able to have reliable energy throughout that time period as we transition from our current energy sources to renewables and particularly offshore wind as well as upstate solar, upstate hydro things along those lines.

CHAIRPERSON CONSTANTINIDES: Are there things that we can do as a city that maybe aren't reliant on the state to get those things done or, or we're kind of at the mercy of, of this partnership with them?

MARK CHAMBERS: No, I mean I think that as with our... as we talked before about kind of working on the... on the, the federal government, I mean more cooperation is better... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Right...

[cross-talk]

MARK CHAMBERS: I think... [cross-talk]

CHAIRPERSON CONSTANTINIDES: I, I wholeheartedly agree... [cross-talk]

MARK CHAMBERS: ...but we are actively trying to use our purchase power... purchasing power to

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2 be able to guide the market and also working with
3 the... with NYSERDA and state as well as the New York
4 Independent State Operator to make sure that we're
5 prioritizing the actual components that will let us
6 get access to that power and actually be able to use
7 it in the city simultaneously. Again, the demand
8 reduction in the city is going to be critical to us
9 being able to manage changes that are outside of our
10 control with changes that are within our control so
11 reducing the demand that the building sector is, is
12 demanding out of... out of the energy sources is really
13 our number one strategy to be able to reduce
14 emissions and it's the largest impact we can have
15 right now.

16 CHAIRPERSON CONSTANTINIDES: Because I
17 know... I mean, you know again frame of reference, my
18 own district, right, I have... I have... we have power...
19 we have 55 percent of the city's power coming from
20 Western Queens both my district and Council Member
21 Van Bramer's with Ravenswood, you know plant there,
22 you have NRG, you have Astoria Gen, you know those
23 Peaker Plants when they click on, you know the closer
24 you get to those power plants the higher the asthma
25 rates and there's no... there's a... there's a direct

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correlation there, I mean folks will try to make different... I, I'll draw that straight line I don't need to have you guys do it but I'll, I'll say that the closer you get to those power plants the higher the asthma rates are and, and asthma has a real effect on our community, so I think... I don't want to see those plants closed on any more than they have to be.

MARK CHAMBERS: And I, I, I completely agree, and I think we're, we're actively working to...

CHAIRPERSON CONSTANTINIDES: Alright, so I... any other questions guys? Yeah, absolutely...

COUNCIL MEMBER MENCHACA: So, I, I, I was just really happy that the, the Chair's really focusing on this kind of larger, larger piece about schools and, and one thing I want to inject as we move forward is or are all the economic development opportunities and training the future workforce and so this is... this is a... even like in build it back and making sure that, that... this is... this is all going to have to get built by people and they need to be built by our people, New Yorkers and... especially minority women businesses, public housing residents and, and so I'm really hoping that we can work together on a

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plan that already is out there and peace meal and when we think about Sunset Park for example with some... one of the, the largest portfolio of city owned property that's getting investment and we're thinking about green... or kind of resiliency infrastructure that we bring... that we... there's, there's a real connection between the jobs and, and this new technology and, and the training and working with our unions and so that's, that's already... I, I don't want to open that up too much other than that... as, as a member of the committee and with the support of the Chair I'd like to continue to work on and think about that and measure our success and to be able to say this is what we're doing, and this is... this is how we're going to do it.

DAN ZARRILLI: Just one thing to add to that because I think we completely agree in connecting people to the jobs that are being created is a... is immensely important in connecting New Yorkers to these jobs is immensely important so we can... we... right now you can go into the Workforce One Centers and we have a partnership with building trades and so we're screening people to be able to take advantage of pre-apprenticeship training

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programs that we're willing to pay for that ultimately puts them on the path towards apprenticeships and to careers in the construction trades and so that already exists, we would love your help in helping to spread the word on that.

COUNCIL MEMBER MENCHACA: And then the final question with the Green NYC program what happened to the birdie?

DAN ZARRILLI: The birdie's a... [cross-talk]

COUNCIL MEMBER MENCHACA: Is the first time this public hearing has been able to happen since you guys killed the bird?

MARK CHAMBERS: So... [cross-talk]

COUNCIL MEMBER MENCHACA: No, seriously what happened... I'm getting a lot of calls on this by the way.

MARK CHAMBERS: Fair enough... fair enough, I mean I... we are... we are happy that, that everyone is, is in... is invested in, in outreach and education around, around a lot of the things that Green NYC is focused on, birdie is alive and well... [cross-talk]

CHAIRPERSON CONSTANTINIDES: We're glad to hear that...

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MARK CHAMBERS: ...birdie is still an employee of, of the city as, as... and he, he remains the, the mascot of, of Green NYC program, I mean there's nothing that ever happened to birdie I think it was... I think that it was... it was strictly... [cross-talk]

COUNCIL MEMBER MENCHACA: I did not realize it was a rumor, okay, I'm really happy to know that birdie...

DAN ZARRILLI: The rumors of birdie's demise are greatly exaggerated, yes.

COUNCIL MEMBER MENCHACA: Okay. Thank you for... this is why we have public hearings...

MARK CHAMBERS: Birdie exists.

DAN ZARRILLI: Oh yeah, birds on... [cross-talk]

COUNCIL MEMBER MENCHACA: You were just... okay, this... [cross-talk]

MARK CHAMBERS: I mean I think one thing... one thing that's important to say is that we have to reach all, you know 8.6 million residents of this city and some of them want to be reached through birdie, some of them want to be reached through other

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channels and we're going to leave no stone unturned...

[cross-talk]

COUNCIL MEMBER MENCHACA: We could increase the family.

MARK CHAMBERS: Exactly.

COUNCIL MEMBER MENCHACA: Amen to that, thank you so much.

MARK CHAMBERS: Thank you.

CHAIRPERSON CONSTANTINIDES: I have two, two last questions, one on Green NYC, what is the budget for the outreach?

MARK CHAMBERS: So, the budget is... it's spread over some time but it's about a million dollars.

CHAIRPERSON CONSTANTINIDES: Okay and, and that's for... that's citywide?

MARK CHAMBERS: Yes.

CHAIRPERSON CONSTANTINIDES: That's, that's for citywide outreach, outreach and, and...

[cross-talk]

MARK CHAMBERS: For... within, with, within the Green NYC program.

CHAIRPERSON CONSTANTINIDES: Within the Green NYC... [cross-talk]

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MARK CHAMBERS: The other... so, as with zero by 30 and with other like agency programs that are aligned with Green NYC... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh... [cross-talk]

MARK CHAMBERS: ...they also have budgets but for... particularly for the management of the Green NYC program it's about a million... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Could we use more?

MARK CHAMBERS: Anything that helps to increase awareness and anything that helps move us further in our pathway towards 80 by 50 is... will be great.

CHAIRPERSON CONSTANTINIDES: Alright and, and so my last question, Jaaney I'm not going to leave you out, so as we're getting millions of dollars... billions of dollars in recovery and resiliency funding, funding, you know from the... you know from the federal government as more of these projects come online is the city budgeting appropriately for long term maintenance?

JANEY BAVISHI: Long term maintenance is certainly on our radar, we've haven't actually gone

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through a budgeting process for some of these new coastal protection projects that are, are not online yet but it... but we... our colleagues at OMB are well aware that that is a, a... will be a need and we will certainly budget appropriately as these projects come online.

CHAIRPERSON CONSTANTINIDES: Alright, great. Well I, I appreciate all your testimonies today, I look forward to our partnerships, I'm so glad to hear it was fake news that birdie is no... was, was, was injured in any way but I, I really in, in all seriousness appreciate your time and your partnership and look forward to doing a lot more together. Thank you.

MARK CHAMBERS: Same here, thank you.

CHAIRPERSON CONSTANTINIDES: Thank you. Alright, so we're going to have our next panel, please step forward; Gabriella, Gabriella Velardi Ward; Rachel Eve Stein; Isabelle Silverman and Catherine Hughes if you all step forward please. Alright, if we could start here on the left.

GABRIELLA VELARDI WARD: Just put it on, yeah there it is. This is very encouraging, but I want to emphasize a particular case of proactive

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proactivity or no proactivity. My name is Gabriella Velardi Ward and I live across the street from the Graniteville wetland forest and it's my home and the home of many of my neighbors that are in jeopardy of being flooded because the forest and wetland across the street from us is in danger of being cut down and filled in and a big box store gas station parking lot for 835 cars and two other very large buildings are going to go there if we can't stop it. I'm familiar with the good work of the Mayor's Office on Sustainability has done in the past and let me explain that, I was... I worked for the Park Department for 23 years as an architectural designer in capital projects as an architectural designer and as construction supervisor and I was the parks representative to the Mayor's Office of Construction for sustainable construction in the late 1990's so I was in on the ground but now it's evident that sustainability alone is not sufficient, it's failed because we have not done enough fast enough. So, now we must seek resilience as a last resort. I applaud your desire and political will to prioritize resilience if resilience also means prevention of flooding before it occurs and does not mean after the

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fact resilience, after the damage is done resilience, after people's lives are destroyed resilience. Today I'm here to represent the environmental justice community of Graniteville in Staten Island. In the last few years Staten Island has lost much of its natural resilience and now Graniteville is in danger of losing its wetland forest which is if not stopped will become a South Avenue retail project. The Graniteville wetland forest saved this community during hurricane Sandy, we were not flooded. If we lose the wetland we will lose our property and maybe even our lives, we're very close to Arthur Kill and if... we have no, no buffer between Arthur Kill and us. So, let me ask why is that New York City has approved the destruction of this free and natural resilient buffer against disaster, why is it that New York City has allowed the destabilization of this environmental justice community in the name of profits, why is it that this toxically overburdened community is going to lose the only resilience it has, why is it that no one seems to care if Graniteville is flooded in the coming years and be assured it is not a matter of if we are flooded it is when we are flooded, why is it that no one cares that the loss of the only open

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green space we have, the wetland forest will leave us defenseless in the face of rising tides, why is it that no one cares that profits at large... of large corporations are prioritized over the lives of people, why is it that all of this is okay because it's legal and then let us ask why is this happening in an area that has majority of black and brown people. The days of development on wetlands are gone, climate change is not going to happen in 50 years, it's happening now. In fact, this morning I heard that the Gulf Stream is at its weakest in 1,600 years, if we lose the Gulf Stream we're in severe danger, if Western Europe will be... will go back to the ice age and, and the East Coast of the United States will be in real trouble so, that's, that's the latest, it's happening now. I applauded the prioritization of sustainability coming from the Mayor's office over 20 years ago, the decrease in our carbon footprint is laudable, lead was meant to encourage developers to put sustainability first and that came out of the committee that I was on. I did not... it did not work, it didn't do enough early enough and fast enough. We need to acknowledge that nature has the best system of protection, we must

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protect the wetlands that still exist, we must create new wetlands, marshes and oyster beds, we must leave the forest alone, have we learned anything from last years severe hurricanes. There must be regulation to prohibit the construction of anything public or private that's the big elephant in the living room, the private sector they have to be... they have to conform to the regulations of the public... of the public sector also because if you're doing one thing and they're doing another you're, you're losing. The public and private on wetlands, no grandfathering in, no exceptions, no approval environmental just... in... environmental impact statements without serious consideration of climate change and the damage the project will cause to people's lives. There can be no proforma approvals any longer, we need to take these steps if we are to survive, we can no longer have out of control development and growth, in the human body out of control growth is called cancer. We humans are acting like a cancer spreading throughout the earth, forcing the inhabitants of small islands to relocate because the oceans are rising and gobbling up the, the land and I want to inform everybody in New York City not only those here, Staten Island is a small

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island, we're in trouble not just the South and East shore, the whole North shore and especially the Northwest shore where Graniteville is. Property rights cannot be sacrosanct when those rights destroyed people's lives. How do we stop the madness, how do we get off this moving train, let's heed the warnings that act to protect the vulnerable in this city which I've heard a lot about today, no matter who they are or where they live by setting our wetlands, marshes and forests, let us act to prevent flooding in Graniteville, let us act to protect our natural resiliency? Staten Island gets lost in the shuffle a lot, Staten Island is not an urban center, it's not an urban community, it's very suburban in a lot of ways and it needs to keep its wetlands and marshes and forests, it needs to keep them because we need it. Thank you.

CHAIRPERSON CONSTANTINIDES: Thank you, next up.

RACHEL EVE STEIN: Hi, good afternoon, my name is Rachel Eve Stein and I'm the Deputy Director for Sustainability and Resiliency at the Center for New York City Neighborhoods. I'd like to thank Committee Chair Constantinides and the members of the

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Environmental Protection Committee for holding today's hearing on the Mayor's Office of Sustainability and the Office of Recovery and Resiliency. The center promotes and protects affordable home ownership in New York so that middle and working-class families are able to build strong thriving communities. Our focus on flood resiliency, disaster recovery and long-term sustainability stems from our home owner recovery efforts following hurricane Sandy. When Sandy struck our homeowner services, expertise and strong relationships with community groups and impacted neighborhoods allowed us to respond quickly and focus on both the short and long-term needs of homeowners. Over the last three years we have expanded the center's climate resiliency resources and programs for homeowners. Today we offer the following services; flood insurance information, flood help NY dot org is a first of its kind web platform that engages and informs homeowners about how they can protect their homes from rising sea levels and how to lower their flood insurance rates, increase literacy of flood insurance and resiliency issues and connects them to related tools and services from the center.

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Resiliency audits and counseling, for qualifying homeowners we also offer resiliency audits and counseling through the residential technical assistance pilot program. To participate homeowners must meet income thresholds and live in one of the following New York rising neighborhoods; Carnarsie, Gravesend, Bensonhurst, Bergen Beach, Georgetown, Marine Park, Mill Basin, Mill Island, Red Hook, Rockaway East, Howard Beach, and Lower Manhattan. Recently we expanded to include Coney Island, Brighton Beach, Sea Gate, Manhattan Beach, Gerritson Beach, and Sheepshead Bay. eligible homeowners receive a free home resiliency audit and elevation certificate all together valued at about 1,800 dollars. The homeowners are then scheduled for a housing counseling session at a nearby community-based organization to discuss flood insurance options and financing for resiliency retrofits. Flood insurance and home resiliency retrofits are highly technical and complicated topics which is why the free expert assistance provided through this program is invaluable to homeowners. We thank all of the city council members who helped us understand the needs of their constituents and have been crucial to getting

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the word out about our services. We look forward to working with you on future events. Back water valves. In addition to the home resiliency audits and counseling services we are expanding our services to provide free backwater valve installations for qualified homeowners in Coney Island, Brighton Beach, Sea Gate, Manhattan Beach, Gerritson Beach, Sheepshead Bay, and Howard Beach. Backwater valves help reduce flood damage by preventing sewer, sewer back flow which can save homeowners thousands of dollars in property damage and clean up, I should also mention it is in Canarsie as well. For closure prevention and homeowner stabilization services, along with these specialized services the center continues to offer high quality foreclosure prevention, housing counseling and legal services to homeowners throughout New York City. Thanks to generous support from the city council we also provide specialized service for senior homeowners including a state planning and scam prevention. Our partnership with the Mayor's Office of recovery and resiliency has been essential to the success of Flood Help NY services, their marketing and outreach support have helped us reach our audience of coastal

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communities, they are crucial to the success of our home resiliency art... audit. ORR provided technical assistance throughout the design phase and have continued to give us expert guidance as we design the residential backwater valve installation program. We are committed to supporting the city's 80 by 50 energy reduction goals through our energy sustainability programming. Last year the center was awarded funding from NYSERDA for the community energy engagement program or SEEP for short which provides New Yorkers with technical and financial guidance to implement energy efficiency and renewable energy retrofitting projects. The center has coordinated with the Mayor's Office of Sustainability to ensure both homeowners and multifamily building owners get the support they need to make cost saving and energy receiving retrofits. To that end we send multifamily leads to the retrofit accelerator program and they direct homeowners to us. We think engaging homeowners is critical to the city's energy reduction goals. Homeowners are in a unique position to adopt energy retrofits because they have control over the structure and use of their property but still face a number of technical and financial barriers. We are

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dedicated to overcoming these barriers with New York homeowners and hope to work with MOS on this endeavor. Thank you very much for the opportunity to testify today, we look forward to working with you to promote resiliency while preserving affordability in our flood prone neighborhoods.

CHAIRPERSON CONSTANTINIDES: Alright, thank you.

RACHEL EVE STEIN: Uh-huh...

CHAIRPERSON CONSTANTINIDES: Isabelle?

ISABELLE SILVERMAN: Okay, now it's on. Good afternoon Chair Constantinides and staff. My name is Isabelle Silverman and I'm a Senior Fellow at Environmental Defense Fund. Thank you for the opportunity to testify. I'm going to leave out EDF, I mean IDF is a not for profit organization, I think you know that, we have 35,000 members in New York City and over two million in the country. Over the past few years EDF has worked closely with the Mayor's Office of Sustainability on several important sustainability issues such as the clean heat initiatives, the retrofit accelerator, the Mayor's carbon challenge, large building retrofit mandates, electric vehicles and other energy and environmental

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issues. We appreciate the productive working relationship and the open dialogue we have with the Mayor's Office of Sustainability and are encouraged by the discipline and focus behind their efforts. EDF supports the Mayor's Office of Sustainability's work and wants to see them succeed in achieving the city's goals of reducing greenhouse gases emissions by 80 percent by 2015. As per New York City's reports the 1.5-degree report aligning New York City with the Paris Climate Agreement and New York City's roadmap, map to 80 by 50. MOS has been declared the lead agency for the vast majority of key actions that will help move us towards the 80 by 50 goal. Implementing and overseeing the different key actions and programmatic goals will be challenging to say the least and will require resources beyond what is currently allocated. The city should take every step to make sure that MOS is adequately staffed and funded to advance the daunting task of decarbonizing the city over the next 30 years. Major collaboration and coordination across various agencies which is the key function of MOS will be necessary to achieve the city's ambitious goals. At the same time the Mayor's Office... MOS will need to stay at the forefront and...

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of upcoming sustainability issues and opportunities.
We only have 32 years to get this right and avoid
costly major sea level rises. Without adequate
funding and staffing MOS success will be hampered and
then regarding the Mayor's management report, the
city should include MOS's performance in the Mayor's
management report, it should analyze MOS and other
city agencies performance and progress towards the
city's, city's 80 by 50 goal. I did a little search
in the MMR, the Mayor's Management Report, there was
nothing about greenhouse gas emissions or
sustainability work searching for these words and yet
that's probably the most difficult... one of the most
difficult tasks we'll have over the next 30 years.
The city should also track the financial costs to the
city of New York, of rising temperatures, extreme
weather events and rising sea levels on an ongoing
basis. And then I just wanted to mention briefly what
you said about asthma, of course the phase out of
number four heating oil helps tremendously... [cross-
talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh...

[cross-talk]

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ISABELLE SILVERMAN: ...by providing... of course you know that and we'll, we'll be happy to help with that, advance that and... [cross-talk]

CHAIRPERSON CONSTANTINIDES: I'm, I'm looking forward to it.

ISABELLE SILVERMAN: Yeah, exactly because these buildings really didn't have to do anything so far, they just stayed or they went from six to four oil which wasn't a big deal so now it's their turn to help clean up our air and keep us healthier and then I think also they're implementing rules that are going to be redone for Local Law 87 and those can also help us towards reducing greenhouse gas emissions. Everybody's talking about that eventually about 60 percent of buildings will have to go to heat pumps, electric heat pumps and move away from burning fossil fuels in their basements to generate heat and domestic hot water so it will be very helpful to have some pilot projects on that because they... the real estate agent industry's a little hesitant do it in large multifamily buildings or commercial buildings, it hasn't really done... been done enough in the city, more single family homes so that... the city will be...

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very helpful if the city could help with pilot projects or heat pumps and then what you said about the Peaker Plants being turned off in the... turned on in the summer, I think it's so sad that... to think about so much electricity's probably just being wasted in the city by air conditioning down to 67 degrees and, and, and air conditioning being on when people are not even there, lights being on and then we turn on Peaker Plants for basically to waste energy so... I mean that's sad. The retrofit mandates you're working on, one of the ideas that EDF has is as we have a minimum temperature in the... during heating season, the 68 degrees that we have to provide to tenants... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh...

[cross-talk]

ISABELLE SILVERMAN: ...maybe we should also look at a maximum temperature in the heating season so let's say 78 degree and if they go consistently over that temperature and overheat consistently which causes great discomfort obviously to residents when they can't turn off their radiators that then the landlords are confronted with looking at their heating system and how to balance it better

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to avoid overheating and underheating and that... tenants could actually file a complaint with the city when there is overheating and underheating. So, of course we're looking at all of that and then set a 2050 goal, so the real estate industry knows where we eventually want them to go to, you know electrification. So, thank you very much and of course we're available for questions.

CHAIRPERSON CONSTANTINIDES: Thank you Isabelle.

CATHERINE MCVAY HUGHES: Good afternoon Chair Constantinides. My name is Catherine McVay Hughes, I served 20 years as Manhattan Community Board one Chair, half that time as Chair and Vice Chair and after super storm Sandy I was appointed Co-chair of the New York Rising Community Reconstruction Program for Southern Manhattan. So, I just want to go over a couple key points here. As you know 2017 was the cost, costliest year ever for weather and climate disasters in the United States totaling 306 billion dollars. Moody's, a major credit rating agency has added climate to credit risks now warn cities to address their climate exposure or face rating downgrades and FEMA, the future of the Federal

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Emergency Management Agency, FEMA and its federal flood insurance program is uncertain and FEMA's flood insurance premiums are to rise this year. They are slated to expire at the end of this July 2018 and FEMA is more than 25 billion dollars in debt. We do not know if or how much the federal government will assist in rebuilding our communities if there's another Sandy, it was only a superstorm it wasn't even a hurricane one. So, the hurricane Sandy recovery task force, can we get a status update on that I asked some of my elected officials and I, I never heard back on this. The members of this task force were to be appointed by the Mayor and the city council speaker within 120 days of the enactment of this local law, this deadline has already passed. In addition the task force was to submit to the Mayor and the Speaker a report no later than 12 months, it should be an update... it should also include an update on the lower Manhattan coastal resiliency project, you have the map here known as LNCR which includes CB one's segment, South of Brooklyn Bridge including the historic South Street Seaport in the financial district, you know Lower Manhattan is an island too and we feel left out just like Staten Island. FiDi is

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the fourth largest business district in the country and where one out of every 18 citywide jobs are located according to our local business improvement district, BID. LMCR is in the planning phase with a budget total to be determined and a completion date to be determined. Okay, as you know I'm also a member of the New York Harbor Regional Storm Surge Barrier Working Group, we need to construct a layered defense of local sea walls and regional New York harbor storm surge system, so it could address future storm surges. A 20 to 25-foot-high off shore storm surge barrier system and I have a diagram in the testimony so you can see it here, so this is the circle of protection, would one, avoid the complex hydrogeological built infrastructure and social infrastructure issues faced by the current dual purpose SIRR and RBD projects; two, could protect the metro area for the next 100 years allowing for a long term change; three, would protect far more communities than the current SIRR and RBD projects for the same 20 billion dollar cost, about the cost of one 19 billion dollar Sandy type storm that was in 2012. The social justice case for the metropolitan New York, New Jersey regional storm surge barrier

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system has been demonstrated in a recently published environmental law in New York, developments in federal and state laws. For disclosure purposes I'm one of the five authors on that, it highlights and maps the low and middle-income communities and communities of color, suffer more from Sandy and its aftermath than wealthier neighborhoods. The same communities also experienced lower and less effective rebuilding efforts. The circle of protection defends diverse income and racial groups at lower costs and with better outcomes than local community-based barriers such as are currently being planned. The regional storm surge barrier is one of five alternatives currently being considered by the US Army Corp of Engineers in New York, New Jersey harbor and tributaries known as HATS, coastal storm risk feasibility study alternative to, has the perimeter defenses only addressing sea level rise and building a regional storm surge barrier to address the threat of storm surge, this would shore in the coastline, you heard is over 500 miles just on the New York City side and provide a comprehensive protection for the entire region, it has historic support and it is currently alternative to and intensively selected

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plan and I hope that this committee will hold a hearing on it and support it as well. The Mayor's management report, MMR, the city must track the financial cost of climate change and add indicators to capture sea level rise, energy use and green house gas emissions. The 372-page preliminary 218 MMR annual report was released in February 2018 and fails to reflect the city's targets and goals to meet its C40 commitment by 2020 and its 80 by 2050 target. This document needs to be updated to include indices that are annually measured and publicly shared so that the progress can be monitored and evaluated going forward. Also Local Law 22 of 2008 requires a 30 percent reduction in citywide greenhouse gas emissions by 2013 and requires annual inventory and analysis of greenhouse gas emissions by the city government emissions by 2017, you know we heard some numbers being bantered around and I just wanted you to see on this document that the city produced last fall on page 43, the citywide annual greenhouse gas emissions, it's been steady, it... if you just look at the chart from 2005 so 2016, 2020, 2015, 2014, 2013 it's pretty stable there so we'd had the 15 percent in the first ten years but how are we going to get to

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the 80 by 2015 and this committee you have the answers and the power to make sure that we're... this city does not... you know that we stay above water so thank you very much for the opportunity to testify.

CHAIRPERSON CONSTANTINIDES: Thank you all for your testimony, I appreciate your time, thank you. Alright, so Margarita Irmier [sp?]; Buck Moorhead; Judith Weis and Diana Switaj. I'm going to ask everyone... I, I don't want to use the clock today but I'm also going to ask you to be very succinct. So, if you can just make sure that your testimony is succinct today I, I don't want to have to use the clock and, and let's do this together so I appreciate that. Lisa I, I, I got you as well, yep I got you, you're coming up next. Alright. Alright, if you can start there on the left. Make sure your... push the button and make sure it shows red there.

JUDITH WEIS: Can you hear me now? Yeah... [cross-talk]

CHAIRPERSON CONSTANTINIDES: I hear you now, alright... [cross-talk]

JUDITH WEIS: My name is Judith Weis, I'm a Professor of Merida at Rutgers University, I'm a Marine Biologist and I would like to comment on

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shoreline structures which are in the works since they've got sea level rise and, and hurricanes and so forth, there are all kinds of ways of protecting shorelines and they have different effects on the animals that live in the water. In terms of the marine life clearly a natural shoreline, a marsh such as... the woman who was testifying before who's marsh is threatened, marshes are, are ideal, they provide habitat for a variety of marine animals, for birds and other land animals and wildlife. The salt marshes also sequester a lot of pollutants including heavy metals, including nitrogen that's a pollutant problem for nutrient pollution including carbon dioxide which is the cause of the sea level rising in the first place. Some marshes also provide to a degree protection for residents living behind it as she said before. Enhanced salt marshes un... it would be very unlikely to say, and I wouldn't say if we had more marshes we wouldn't have had all the problems from Sandy, Sandy would have topped over marshes so it, it's clear we would benefit from more, more marshes and enhanced marshes but marshes alone are not going to protect us from something of the magnitude of Sandy. There are a variety of different kinds of

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1
2 hardened shorelines and on the reverse side of the
3 paper you have, I hope you have it, there... on the
4 back side there are some photos, right, so not all
5 hardened and modified shorelines are equivalent.
6 There are some... there are, are relatively new
7 experiments going on, it's more than experiments,
8 its, it's, it's trying out and, and apparently
9 working pretty well something called living
10 shorelines which are in areas where the shoreline of
11 a marsh is getting eroded and sea level rise is
12 effecting it and, and it's clearly eroding inward you
13 put some large... either large boulders in the seaward
14 side of the marsh or you can put oyster or something
15 hard, oysters are certainly ideal, you have a double
16 bed of fish from having oysters there and it, it is
17 going to protect the marsh from the erosion that's
18 happening from the sea level rise and I would like to
19 recommend to you a book that came out last year
20 called Living Shorelines and it's the first one in,
21 in the references that I've provided. These articles
22 about all sorts of kinds of living shorelines and I
23 recommend that book to you heartily as giving you the
24 background as you have to deal with considering these
25 issues. There's also what is prevalence along the

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Hudson River called riprap which are big boulders along the edge of the slope and, and that's what, what is mostly along the upper West side Hudson River coastline and it turns out that riprap is much better than a hard... than, than a sea wall, riprap is almost as good as a natural shoreline in terms of the number of organisms and the diversity of organisms that can live there. Another relatively... let, let me say less destructive approach is a breakwater which is a kind of a wall but it's not right at the shoreline it's out in the water a bit and this is one of the, the things planned for the, I believe it's the Southern coast of Staten Island that they would have these breakwaters which is also not that bad because it's not totally... it's not eradicating the intertidal zone which is what a sea wall does. A sea wall comes right up and you've got the land on the one side and the water on the other side and you have no longer an intertidal zone and the intertidal zone is... there's, there's... you know myriads of creatures that live in the intertidal zone and their habitat is totally gone if you put a wall right at the edge, if you put the wall out in the water they still have their intertidal zone. And so, the last one I wanted to

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mention are bulkheads or sea walls which is a very common thing that urban communities have and that's the kind where you're intertidal zone is gone all together and it's by far the least conducive to marine life but there has been some, some experiments and, and it... written up in one of the chapters in that book about what the city of Seattle did with their sea wall. A sea wall doesn't have to be just a flat wall, you can give it texture, you can give it things that stick out, you can envision, you know large flower pots attached on the outside of the sea wall so now it will gather some sediments, you'll get a whole bunch of other animals being able to live on it so providing texture and a three dimensional aspect to that flat wall can be really helpful and there's an article about the Seattle sea wall. If you just google Seattle sea wall you can learn a lot about it and see pictures of what they did and that was done, I'd say... I don't know five, five to ten years ago, less than ten years ago. So, the... that was what I wanted to talk about. I would just like to make one comment in reference to a remark that was made earlier about the... what was it called... the, the, the barrier, the storm surge barrier, pictures I've

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seen of, of that plan includes at the New Jersey end and the... is it... it's Rockaway or Coney Island end permanent things that are projecting into the New York Harbor so it's not that the stuff sits on land and then when the storm is coming it closes up, they're sitting permanently there narrowing the channel for the water to go in and out and then when the storm is coming then the whole thing closes but it's permanently obstructing the normal flow of the water and if you picture water that's going pretty fast and now you reduce where its got to go through its going to go through like dickens, right, it's going to go through a lot faster because you've taken away a lot of the room for it to be in and under those circumstances the scouring and destruction of the shore line and the bottom by this water that's going full force into and out of the harbor can be really destructive and I don't think the people who are planning that thing have thought, thought about that... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Alright, alright... [cross-talk]

JUDITH WEIS: ...part... [cross-talk]

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CHAIRPERSON CONSTANTINIDES: Thank you...

[cross-talk]

JUDITH WEIS: ...and that's... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Thank you,
next.

BUCK MOORHEAD: Hi, I'm Buck Moorhead,
I'm a Board Member with New York Passive House. Thank
you Chairman Constantinides for having this hearing
and your patience in listening to all of us speak
here, we... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Okay...

[cross-talk]

BUCK MOORHEAD: ...appreciate it. New York
Passive House fully supports the goals of, of the 80
by 50 plan. We recognize as, as most people do that
75 percent of, of the city's energy use is in
building energy... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Uh-huh...

[cross-talk]

BUCK MOORHEAD: ...and about half of that
energy is actually in heating and cooling load so
focus on measures that address the buildings envelope
and reduction of those required heating and cooling
loads will effectively reduce the overall required

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energy use. We appreciate the efforts that the city council has made very aggressively and specifically your committee to propose legislation that's directed at energy conservation and also alternative energy measures that you've done, I mean there were six or seven bills in June I think or some... if I'm... I may be miscounting but we... so we... [cross-talk]

CHAIRPERSON CONSTANTINIDES: We passed 16 bills last year out of the committee, so we were busy...

BUCK MOORHEAD: Oh, I was just missing a digit there.

CHAIRPERSON CONSTANTINIDES: Yeah, there you go.

BUCK MOORHEAD: So, we appreciate the efforts of the city council, we also appreciate the efforts of the Mayor's Office for long term planning and sustainability which has been working... you know we, we find when New York Passive House assists with these measures that we're, we're talking with city council and we're also talking to the Mayor's Office about ways to find the best ways to, to draft that legislation so that it's, it's readily understood and that it's implementable and that you can measure and

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verify outcomes at the end because we want it all to work... [cross-talk]

CHAIRPERSON CONSTANTINIDES: Right... [cross-talk]

BUCK MOORHEAD: Energy conservation is, is really the, the, the least sexied of these alternative... it's not an alternative energy it's simply reducing the amount of energy you require, we'll always want solar and wind in alternative energy but it will be... you'll just need less solar if, if one takes care of the envelop properly so we will continue New York Passive House as a collaborative organization, we want to work with city council, with the Mayor's Office as we can, with other of our colleagues, environmental organizations to try to help form the best way forward so thank you for what you're doing.

CHAIRPERSON CONSTANTINIDES: Thank you.

DIANA: Hello, good afternoon, my name is Diana Switaj, I'm Director of Planning and Land Use at Manhattan Community Board one who's district includes most of Manhattan below Canal Street South of the Brooklyn Bridge as well as Ellis, Governor's, and Liberty Island. Thank you for holding this

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important hearing today and inviting testimony on sustainability and resiliency. CB1 commends the many years of leadership from the city council in tackling greenhouse gas emissions from our buildings, the largest source of the city's carbon emissions. Intro 1745 of 2017 is a bold and innovative step towards cutting carbon emissions and reaffirm New York City's leadership in tackling climate change. We look forward to the council reintroducing and passing this bill, a critical step in the holistic approach to addressing sustainability and resiliency. Lower Manhattan continues to be one of America's largest business districts and our residential population is one of the fastest growing in the whole city. Our district is only 1.5 square miles, but it has a huge impact on the city and regional economies. In 2013 Lower Manhattan had a gross economic output of over 62 billion dollars and generated an estimated 2.4 billion dollars in city tax revenues. Our district remains a resilient place that more and more people want to live, work and visit. We have a lot of work to do to ensure that these powerful growth trends result in a district that is protected and livable for all. At a height of seven feet Community District

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one experienced one of the highest indentation levels in Manhattan during superstorm Sandy, two people in our district drowned and the storm resulted in billions of dollars of damage to infrastructure, housing and commercial property and utilities. As we approach the sixth anniversary of superstorm Sandy the board is concerted both the short term and long-term time frames as Lower Manhattan remains largely unprotected. We face an increasing potential for suffering extreme weather events and subsequent damage to Lower Manhattan and low-lying areas across the city. CB1 has worked collaboratively with the city, state and federal representatives since October 2012 when Sandy devastated our community. We thank the city for the funds it has already contributed towards resiliency in Lower Manhattan. The Lower Manhattan coastal resiliency project or LMCR is underway but there is a substantial funding shortfall, CB1 maintains that it is critical to fully finance the LMCR project and ensure that our district is protected in the future. It is unclear where the required funding will come from and we urge the city to find ways of securing additional funding resources for the construction of a more resilient Lower

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Manhattan. As the LMCR project goes through the initial analysis and preliminary design stages more is uncovered that adds challenge to an already monumental task. Not only is Lower Manhattan surrounded by water on three sides, but all of the edges have been built out on land fill presenting unique vulnerability and challenges. The Office of Recovery and Resiliency team is uncovering more complexity in protecting Lower Manhattan than was ever imagined and this will lead to greater challenges, cost and commitment. CBI also commends the Mayor's Office of Sustainability and the Mayor's Office of Recovery and Resiliency on the work they have done thus far to analyze the problem and begin to formulate a plan both for the long term and more recently for intermediate measures. This is herculean task that has never before been attempted however every year since Sandy that the city doesn't endure a hurricane feels like a narrow miss and eventually our luck will run out. We must all work together to ensure that creative and effective sustainability and resiliency measures are put in place to protect Lower Manhattan and the entire city now and in perpetuity. Thank you.

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2 CHAIRPERSON CONSTANTINIDES: I look
3 forward to working with you guys and, and exploring
4 this further so thank you all for your testimony
5 today. So, the, the, the last panel Lisa DiCaprio;
6 Andress Banning, Benzing, sorry and either Pisa Core
7 or Patrick Houston. Alright, do you want to start
8 there? On the... on the left there, yep, uh-huh.

9 ANDREAS: Thank you Chairperson
10 Constantinides for allowing us to testify today at
11 the public hearing. My name is Andreas Benzing, I'm
12 President of New York Passive House and I will keep
13 it very short. Mayor De Blasio has called climate
14 change the challenge of our generation and New York
15 City has responded to this challenge by committing to
16 achieving greenhouse gas reduction of 80 percent by
17 2050. Passive House buildings which which achieve
18 substantial energy reductions and resiliency through
19 cost effective and skillful design and construction
20 are key to achieve these commitments. These buildings
21 use up to 90 percent less energy for heating and
22 cooling and up to 70 percent less energy overall.
23 Furthermore, in the event of power outage they can
24 remain comfortable for long periods even in extreme
25 weather. With the substantial lower energy

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requirement, the Passive House approach enables the construction of net zero energy buildings that feature low to no resilience on fossil fuel energy. It is exciting to see the application of Passive House evolving in New York City, it currently has about 100 building, large buildings as well going up in the city or, or around the city. We hope it will be included in the commercial court as well and we applaud your leadership in pushing energy efficiency for buildings in the city. Thank you so much.

CHAIRPERSON CONSTANTINIDES: Thank you.
Thank you.

LISA DICAPRIO: Well my name is Lisa DiCaprio, I am a Professor of Social Sciences at NYU where I teach courses on sustainability. Thank you for the opportunity to speak at this oversight hearing on recovery and resiliency. In it's January 7th, 2018 New York Times article on the implications and politicization of the new theme of flood maps for New York City David Chin notes that New York with it's 520 miles of coastline quote, "has more residents living in high risk flood zones than any other city in the country and the pace of development along the water has only increased since superstorm

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Sandy", are the waterfront edge design guidelines adequate given new scientific studies about the relentless rise of our oceans which will only accelerate in the future? The climate central surging seas risk zone map illustrates how New York City will be flooded at different levels of sea level rise. We should be especially alarmed by the current and projected days of sunny day, high tide flooding. This phenomenon as New York Times reporter Justin Gillis explained in his September 3rd, 2016 article, flooding of coast caused by global warming has already begun is now real and not just a theoretical possibility. Quote, "for decades as the global warming created by human emissions cause land ice to melt and ocean water to expand scientists warned that the accelerating rise of the sea would eventually imperil the United States coastline, now those warnings are no longer theoretical, the inundation of the coast has begun, the sea has crept up to the point that a high tide and a brisk wind are all it takes to send water pouring into streets and homes" end quote. A new national oceanic and atmospheric administration report on sunny day, high tide flooding is detailed in a March 28th, 2018 Washington

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Post article by Jason Samuels. Federal report, high tide flooding could happen every other day by late this century. By 2050 according to this report's projections quote, "high tide flooding will occur between 50 and 250 days per year along the East coast depending on the greenhouse gas emission scenario", end quote. Astrid Caldas, Senior Climate Scientist at the Union of Concerned Scientists is quoted as saying quote, "just imagine seeing streets and property flooded every other day, that gives a completely new meaning to the term nuisance flooding or actually it completely obliterates the concept as flooding would become much more than a nuisance but a rather serious problem requiring significant resources and innovative policies", end quote. In New York City sunny day, high tide flooding is already affecting several low-lying communities in Queens that surround Jamaica Bay as described in Nathan Kessinger's October 12th, 2017 article in Queens, chronic flooding and sea level rise go hand in hand. These neighborhoods include; Hamilton Beach, Broad Channel and Howard Beach. What is the status of the current resiliency projects for these communities which include a new storm surge berm, street raising and

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bulkhead projects? According to projections of sea level rise made by the New York City panel on climate change certain areas of Hamilton Beach and Broad Channel may experience tidal flooding on a daily basis. Are the current resiliency projects adequate given these predictions or are they simply providing the illusion of protection? Related to this question, is New York City sufficiently prioritizing planning and the allocation of resources for resiliency initiatives or even relocation if necessary for existing communities at risk? Thank you.

CHAIRPERSON CONSTANTINIDES: Thank you
Lisa.

PATRICK HOUSTON: Hello, my name is...
hello, can you hear me?

LISA DICAPRIO: You want to try this one?

PATRICK HOUSTON: Yeah. Thank you.
Alright, there we go. Hey everybody, my name is Patrick, I am with New York Communities for Change, Patrick Houston with New York Communities for Change. Thank you for the time to testify and today I'm going to go through the document that I will share with you but for the sake of staying within the time limit

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I'll skip over small sections so if you see me briefing through...

CHAIRPERSON CONSTANTINIDES: Uh-huh...

PATRICK HOUSTON: So, as you know inequality and climate change are two of the greatest moral crisis of our time, they are deeply intertwined and they're especially an issue here in New York and so at the city level New York Communities for Change we're focused on the city's top source of climate pollution and the greatest job creation opportunity outside of direct spending to create jobs which is to clean up dirty buildings here in the city. So, buildings like Trump Towers, like the Kushner building, large buildings like this are only two percent of the city's buildings overall but they're responsible for almost half of the city's climate pollution and so New York as a whole currently generates about 50 million metric tons of CO2 equivalent, a large... and this is to large buildings... large buildings over 25,000 square feet that's the two percent, they generate about 20 to 25 million metric tons of CO2 equivalent pollution. So, that's more pollution than most countries so as you know the administration has done a wonderful analysis of the

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problem and the One NYC which follows on the Plan NYC and the key is to follow through. So, you know the council passed the Mayor's... the council passed and the Mayor enacted law committing New York City to at least 80 percent reductions of pollution by 2050 and the city has bound itself to act but the problem is that the Mayor's plan for addressing nearly half of the city's climate pollution is hugely insufficient in terms of climate and air pollution reductions it also doesn't do a good job at addressing good and fair labor standards and even worse it will lead to and contribute to the widespread MCI issue with the rent hikes in rent regulated housing already about two million New Yorkers depend on rent regulated housing. So, to be precise the pollution impact of the Mayor's plan for large buildings will cut pollution citywide about seven percent by 2030 but those large buildings are nearly again 50 percent of the city's climate problem... climate pollution. The Mayor's proposal would lead to large scale energy... would not lead to large scale energy efficiency upgrades. So, since it doesn't require large scale upgrades except in a limited number of residential buildings it therefor does not create the economic

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activity needed nor that economic activity that is potential. So, NYC will not get the jobs that could employ thousands of people especially people in moderate and low income communities because a lot of these jobs won't require a college education and other forms of advanced education and so I'm going to jump down now so thank you Council Member and Chairperson Constantinides for the plan that you've been working on, this is the Intro 1745 and by our experts analysis the... this Intro 1745 generates about 13 percent of climate pollution cuts by 2050, that's much better than the Mayor's projected seven percent by 2050 so we believe that that plan 1745 is on to a good start and our experts say if continued it can help us achieve 80 percent reductions by 2050 so it's at the right pace. And so, the Mayor's plan and, and Intro 1745 both unfortunately would lead to rent hikes in rent regulated housing and so displacement and homelessness are a crisis that we do not want to contribute to as we address the, the climate issue. I'm going to jump down. And so, it is our hope that any bill that's introduced on buildings on this topic fixes the problem of... and avoids the problem of rent regulated housing and incurring the cost of MCIs from

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the building retrofits. New York City must also... and then the second key part, New York City must also ensure that good labor standards to produce good jobs and high-quality work should be part of any final legislation, on... excuse me... final legislation or package of legislation and budget items. This oversight form shines a spotlight on a fundamental failing of the MOS, the lack of even a plan or proposal much less finalized law to reach 80 by 50, that's impossible without dealing with large buildings that ought to be at the top priority of the Mayor's Office of Sustainability agenda. And last I'm going to jump down one more time to the bottom of the third page, so we believe that, you know it's time... beyond time for New York to become the world's leader with providing... addressing climate issues and becoming a jobs leader as well by requiring that large buildings slash climate pollutions drastically on pace to achieve 80 by 50 and that's going to require that these mandates go through to 2050 and not stop at 2030. Two, that fair labor standards are attached to these jobs and finally that tenants of affordable housing don't incur the cost of the energy efficiency retrofits in large buildings. So, again

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thank you for the ability to testify and thank you for the work that you've begun with addressing dirty buildings in New York City.

CHAIRPERSON CONSTANTINIDES: Thank you, thank you all for your testimony today, I appreciate your time. With that I thank everyone who testified today for your time and your input here today and we look forward to continuing working with both the Mayor's Office of Sustainability and the Office of Recovery and Resiliency. I want to thank the staff as well, today everyone... all of our staff, my Legislative Attorney both of them today; Nadia Johnson our Policy Analyst, Jonathan Seltzer our Financial Analyst and my staff Nick Widzowski so with that I will gavel this meeting of the Environmental Protection Committee closed.

[gavel]

C E R T I F I C A T E

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

May 4, 2018