CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON ENVIRONMENT PROTECTION,
RESILIENCY AND WATERFRONTS

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March 1, 2024
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HELD AT: 250 BROADWAY – HEARING ROOM, 16TH FLOOR

B E F O R E: James F. Gennaro, Chairperson

COUNCIL MEMBERS:
Alexa Avilés
Robert F. Holden
Kristy Marmorato
Sandy Nurse

A P P E A R A N C E S

Sana Barakat, Deputy Commissioner, Emergency Management, Department of Citywide Administrative Services

Steven Caputo, Assistant Commissioner, Emergency Management, Department of Citywide Administrative Services

Elijah Hutchinson, Executive Director, Mayor's Office of Climate and Environmental Justice

Lydia Wiener, Policy Advisor at Mayor's Office of Climate and Environmental Justice

Brent Taylor, Assistant Commissioner, Department of Citywide Administrative Services Fleet Management

Matthew Berk, Assistant Commissioner, Department of Citywide Administrative Services Real Estate

Carleen McLaughlin, Department of Environmental Protection

Flandersia Jones, Director-at-Large of New York State Nurses Association

Ben Dorman, Deputy Director of Climate Jobs New York

Richard Mantell, Vice President of United Federation of Teachers

Azucena Qadeer, Political Director of TREEage

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

Jeffrey Wu, Policy Analyst with Climate Jobs National Resource Center

Alia Soomro, Deputy Director for New York City Policy at the New York League of Conservation Voters

Shravanthi Kanekal, Senior Resiliency Planner for the New York City Environmental Justice Alliance

Adam Roberts, Policy Director for the Community Housing Improvement Program

Rami Dinawwi, Environmental Justice Campaign and Policy Manager at El Puente

SERGEANT-AT-ARMS: Check one, two. Pre-recorded sound test for the Committee on Environmental Protection. Today's date is March 1, 2024. It's being recorded by Michael Leonardo on the 16th Floor Hearing Room.

SERGEANT-AT-ARMS: Good afternoon and welcome to today's New York City Council hearing for the Committee on Environmental Protection, Resiliency and Waterfronts.

At this time, we ask that you silence all cell phones and electronic devices to minimize disruptions throughout the hearing.

If you have testimony you wish to submit for the record, you may do so via email at testimony@council.nyc.gov. Once again, that is testimony@council.nyc.gov.

At any time throughout the hearing, please do not approach the dais.

Thank you for your cooperation.

Chair, we're ready to begin.

ACTING CHAIRPERSON NURSE: Thank you. [GAVEL] Good afternoon. I am Council Member Sandy Nurse. Good afternoon, everyone. Thank you for being here. Unfortunately, Chair Gennaro could not join us

this afternoon so I will be serving as Acting Chair of the Committee on Environmental Protection, Resiliency and Waterfront for this afternoon's hearing. Chair Gennaro wants you to know that he is receiving followup medical treatment for an eye injury. Fortunately, his prognosis for a full recovery is good but, before we begin our first hearing of the new legislative session, on behalf of Chair Gennaro, I would like to thank the returning members of this Committee, Council Members Holden and Restler, for their hard work last session and for their enduring commitment to the work of the Committee. I would also like to welcome our new Members, Council Member Marmorato, Salamanca, Aviles, Zhuang, and Brannan. We look forward to working with all of you to create a greener, more resilient New York City.

Today, we will be holding an oversight hearing on the installation of solar photovoltaic systems, also known as PV systems, and battery storage capacity.

The Committee will also hear a few pieces of legislation related to increasing the installation of solar PV and battery storage systems in New York

City. The Committee welcomes testimony from the Department of Citywide Administrative Services, the Mayor's Office of Climate and Environmental Justice, advocates, and interested members of the public.

Decarbonization is the key to New York City's strategy to combat climate change, a fight which has never been more important. According to the initial finding of this year's report from the New York City Panel on Climate Change, New York City can expect sea levels to rise between 6 inches and 12 inches by the end of the 2030s, and we'll see temperatures increase by 2 and 4.7 degrees Fahrenheit in the same time frame. Not by the end of the century, but by the end of the next decade. Our window to meaningfully mitigate the impacts of climate change is rapidly closing.

We're having some technical problems. One second.

All right, we're going to resume.

The City has a legal obligation to decarbonize. Local Law 97 of 2019 requires the City to achieve a 40 percent reduction in emissions from government operations by 2025 and a 50 percent reduction in such emissions by 2030. On the state

level, the New York Climate Leadership and Community Protection Act requires New York State to reduce statewide emissions by 40 percent from 1990 levels by 2030 and 85 percent by 2050. Solar PV systems and battery energy storage systems will be critical to decarbonizing our electric grid and in meeting our city, state, and climate goals. In 2014, the de Blasio Administration announced a goal of installing 100 megawatts of solar power generation on City buildings to help the City meet its goals of reducing greenhouse gas emissions by 80 percent by 2050. However, as of September 2030, DCAS has only installed 23 megawatts of solar PV panels on City facilities, less than a quarter of the City's goal to install 100 megawatts of solar by 2025. Battery energy storage systems, which can capture energy at the time of production and store it until it is needed, are critical to the success of renewable energy systems, such as solar, that produce electricity from the natural environment and cannot scale up production in real time in response to demand and will help ease our transition away from fossil fuels. The PowerUp NYC report found the potential for 400 megawatts of energy storage on

City-owned unused vacant land and parking lots, over 3,000 megawatts of battery storage capacity in repurposed power plants, and another potential 7,000 megawatts of battery storage capacity on private vacant land. These are valuable tools that we can use to decarbonize but only if the City takes decisive action. The Committee looks forward to hearing from DCAS and MOCEJ on how the City plans to utilize the resources available to us to increase the production of solar power and the deployment of battery storage systems that will help the City wean itself off of fossil fuels once and for all.

In addition to hearing from the Administration, the Committee will hear the following legislation. Intro. number 129, sponsored by Council Member Brannan, would require DCAS to install solar power capturing canopies at each City-controlled parking lot that receives solar radiation, where such installation would be cost effective.

We will also hear several bills sponsored by myself. Intro. number 347, would exempt rooftop solar installation projects from any fees in connection with an application for a street crane permit. Intro. number 353 would require the City to

install 100 megawatts on City-owned buildings and other properties by 2030.

Lastly, Intro. 354 would require DCAS in coordination with MOCEJ to identify City-owned lots suitable for installing energy storage systems and install at least 300 megawatts of energy storage capacity on those lots by 2030 and 400 megawatts by the end of 2035. These bills build on and codify previous goals outlined in the OneNYC, PlaNYC, and PowerUp NYC plans to ensure the Administration is on track to meet the City's clean energy goals. The City must be aggressive in urgently and equitably meeting our climate goals. New York City can catalyze good union labor jobs by leveraging federal opportunities to fund solar and energy storage. The City can also address environmental injustices by prioritizing investments in disadvantaged communities.

I would like to thank the Committee Staff, Committee Counsel Claire MacLachlan, Policy Analysts Ricky Chawla and Andrew Bourne, Financial Analyst Tanveer Singh, and my Director of Climate and Environmental Policy, Annel Hernandez, and Chair Gennaro's Legislative Director, Nabby Kaur, for all their hard work.

Finally, I will note that written testimony which will be reviewed in full by Committee Staff may be submitted to the record up to 72 hours after the close of this hearing by emailing it to testimony@council.nyc.gov.

We ask that all witnesses who are testifying today abide by the three-minute time allowance. I'm usually pretty flexed. It's not as strict as Chair Gennaro, although these were his remarks.

Please note that public witnesses are not permitted to film themselves as they testify, nor are they permitted to show pre-recorded video as part of their testimony. Thank you.

I want to recognize Council Member Alexa Avilés and Kristy Marmorato for being here.

Now, I'll turn it over to Committee Counsel.

COMMITTEE COUNSEL MACLACHLAN: Thank you. I'm Claire MacLachlin, Council Committee on Environmental Protection, Resiliency and Waterfronts at the New York City Council.

Our first witnesses will be from the Administration. We have Sana Barakat, Deputy

Commissioner for the Division of Energy Management at DCAS, and Elijah Hutchinson, the Executive Director of Mayor's Office of Climate and Environmental Justice.

Will you please state your name to the record?

DEPUTY COMMISSIONER BARAKAT: Sana Barakat.

EXECUTIVE DIRECTOR HUTCHINSON: Elijah Hutchinson.

COMMITTEE COUNSEL MACLACHLAN: Are you testifying as well or are you here for questions?

ASSISTANT COMMISSIONER CAPUTO: I'm here to support with questions and we have a few others as well so Steven Caputo from DCAS.

COMMITTEE COUNSEL MACLACHLAN: Thank you. I will now administer the oath. Please raise your right hands.

Do you affirm to tell the truth, the whole truth, and nothing but the truth before this Committee and to respond honestly to Council Member questions?

DEPUTY COMMISSIONER BARAKAT: Yes.

EXECUTIVE DIRECTOR HUTCHINSON: Yes.

ASSISTANT COMMISSIONER CAPUTO: Yes.

COMMITTEE COUNSEL MACLACHLAN: Thank you. You may begin when ready.

DEPUTY COMMISSIONER BARAKAT: Good afternoon. I want to first wish Chair Gennaro the best and a speedy recovery.

Good afternoon again, Acting Chair Nurse and Members of the Committee. My name is Sana Barakat, and I am the New York City Chief Decarbonization Officer and the Deputy Commissioner of Energy Management at the Department of Citywide Administrative Services, commonly known as DCAS.

I am joined today by Steven Caputo, Assistant Commissioner for Operations at DCAS Energy Management; Elijah Hutchinson, Executive Director of the Mayor's Office of Climate and Environmental Justice, known as MOCEJ; Lydia Wiener, Policy Advisor for Clean Energy at MOCEJ; and Carleen McLaughlin, Director of Legislative Affairs at the Department of Environmental Protection. Thank you for the opportunity to testify on the City's effort to install solar photovoltaic systems, commonly known as solar PV, and battery storage capacity.

Solar PV and battery storage are vital components in the City's efforts to move away from fossil fuel generated electricity, and we have made tremendous progress to increase solar and battery storage capacity in the city, both in the public and private spheres. Ten years ago, in recognition that climate change represented the most pressing existential threat to New York City's quality of life, the City set a goal to reduce citywide greenhouse gas emissions by 80 percent by 2050 and at the time became the largest city in the world to commit to that target. One of the major policies established by the Administration at that time to achieve the 80 by 50 goal was to expand solar capacity on municipal building rooftops to 100 megawatts by 2025. Prior to setting the 100-megawatt target in 2014, the City had less than one megawatt of solar power installed on municipal buildings. Since then, we have grown our capacity exponentially and are now considered an industry leader. By 2022, we installed 16.7 megawatts of solar capacity, representing a nearly 40 percent increase from the prior two years. We have since expanded our solar capacity even further by another 44 percent. To date,

the City led by DCAS has installed over 24 megawatts of solar capacity across 155 municipal properties in all five boroughs. Notably, of the 24 megawatts of solar currently installed, 55 percent of these systems are in the State-designated disadvantaged communities known as DACs. We are continuing to add megawatts at a rapid scale. Since DCAS last testified before this Committee in December, we installed another 1.5 megawatts. Based on our current pipeline, budget, and staff capacity, we expect to more than double our current capacity to approximately 50 megawatts by 2025. If conditions remain the same, we expect to hit 70 megawatts by 2027 and 100 megawatts by 2030. These achievements were all made possible through the docked commitment of DCAS and our partner agencies to identify all viable city properties for solar. We are using every tool at our disposal to install solar systems, including capital investment as well as power purchase agreements known as PPAs. Our PPAs have allowed us to significantly increase the rate of our solar installations in a cost-effective manner. We are also committed to being good stewards of our City-owned solar assets so that we can maximize system performance, greenhouse gas

reductions, and energy cost-saving while ensuring the longevity of system lifespans. We currently have a solar operations and maintenance contract with an M/WBE vendor to provide O and M services to a selection of sites with the highest operation, operational and maintenance needs. We also recently released a solicitation for a comprehensive O and M contract to cover all City-owned solar installations to ensure the City's investments and operating at full capacity and peak performance. In other words, we're not just focused on solar energy now, but we're focused on protecting these investments into the future.

While the City's rapid scaling of solar capacity is nothing short of remarkable, we now know that 100 megawatts by 2025 is not feasible. I'd like to take this opportunity to explain some of the challenges we have faced and continue to face in our efforts to reach 100 megawatts of solar capacity.

First, as I mentioned previously, when the prior Administration set the ambitious 100 megawatts by 2025 goal, neither city government nor the private sector had any significant experience with large-scale solar installation. There could be

no pilot for such an undertaking. We jumped right in, and the City worked with the electrical utilities and established its solar installation program from the ground up. Procurement and contracting for solar at this scale did not have precedent, and it has taken time to develop the necessary procurements. Just as we were starting to scale up our program, COVID set the City's progress back by about two years, resulting in obstacles and delays that linger to this day as we are still dealing with a constrained supply chain as well as commodity and shipping cost increases and shipping delays. It is challenging to find viable sites to install solar due to many municipal buildings needing roof repair or replacement and the limited space in our dense urban environment. We are in a competitive job market, and it is a challenge to recruit and retain staff to implement and maintain solar installations. Finally, as we all know, the City is facing extraordinary budget pressures that could hamper our progress in the coming years.

However, this Administration is working to overcome these challenges to continue the rapid growth of our solar program. This work includes DCAS

taking full advantage of our design build authorization granted by the state in 2021. We are aggressively advancing design build contracts under this authority and are on track to release DCAS' first design build solicitation for rooftop solar installation this spring. Gaining access to a PPA issued by the New York Power Authority that will bring solar installation to over 60 City-owned buildings in Brooklyn and Queens, including schools and wastewater resource recovery facilities known as WRRFs, this agreement will add over 30 megawatts of solar capacity. The solar installation on Wards Island WRRF will be the largest solar installation on a wastewater treatment plant anywhere in the world. The City of Yes for Carbon Neutrality Zoning Amendment, which will significantly increase the available space for solar and battery storage in the city. I'd like to express my gratitude to the Council for passing this important reform.

We are also working to expand and sustain a green workforce in the city, including new energy specific civil service titles, offering professional development courses in renewable energy and partnering with schools to develop educational

programming centered around solar PV systems installed on school roofs.

Finally, the Administration released PlaNYC, Getting Sustainability Done, and PowerUp, the City's long-term energy plan, which together lay out concrete steps the City will take to increase solar and battery storage in the city, including creating a plan to repair priority City buildings' roofs and identifying and assessing sites for battery storage.

In addition to expanding our solar portfolio, we are also ramping up the City's battery storage capacity. Expanding that capacity is essential to ensuring the reliability and resilience of our grid as the City transitions away from fossil fuels and increases its electricity use. Last year, the New York Independent System Operator, NYISO, found that the New York City area could face a grid reliability deficit as large as 446 megawatts beginning in summer 2025 due to a forecasted increase in peak energy demand and the unavailability of certain fossil fuel generators. To this end, DCAS and partner agencies have completed several battery storage installations and have even more in the pipeline. So far, the City has installed

approximately 0.28 megawatt of battery storage on City properties, including four libraries, the Brooklyn Army Terminal, Red Hook Recreation Center, and six FDNY firehouses. Through our NYPA partnership, we have three large-scale projects in development at NYC DEP that will exponentially increase battery capacity on City property, adding approximately 19 megawatts of capacity, Spring Creek is 5 megawatts, Wards Island 10 megawatts, and (INAUDIBLE) in Westchester, which is 4 megawatts. Finally, thanks to the passage of the City of Yes zoning amendment referenced earlier, we have 5 more megawatts worth of projects on school properties that can now move forward.

While we are ramping up battery storage on City property, the City is also committed to catalyzing development of citywide battery storage on both public and private property. DCAS recently released a request for information to private developers seeking more information about their needs and what would enable them to develop more storage in New York City. The City is also participating in the review of the New York State Energy Research and Development Authority's, NYSERDA, Energy Storage

Roadmap, which, if approved, will support a build out of 4.7 gigawatts of storage deployments in the state. Widening our lens beyond just City-owned property, our colleagues at the Mayor's Office of Climate and Environmental Justice are doing a tremendous amount of work to catalyze storage and solar capacity citywide. The City set a goal to install 500 megawatts of various battery storage capacity citywide by 2025, and we already have 448 megawatts of solar installed citywide. The cost to install solar PV in New York City has decreased significantly in recent years, making it viable in more locations. MOCEJ has and will continue to advocate that incentives be tailored to accommodate New York City's unique, dense urban environment and see that a fair share of state and federal funds supporting solar and storage development reach New Yorkers. For example, last legislation session, the City supported the state bill that would extend and expand the solar and storage property tax abatement, which creates improved pathways for all New Yorkers to access the benefit of renewable energy. To keep pace with this increased funding, MOCEJ works closely with the Sustainable CUNY Ombudsman program to ensure private

developers have access to technical support throughout the permitting process.

I would like now to turn to the legislation being considered today. Intro. number 353 by Council Member Nurse would require DCAS in coordination with MOCEJ to complete the installation of 100 megawatts of solar PV systems on the roofs of City-owned buildings by the end of 2025 and 150 megawatts on the roofs of City-owned buildings and other properties by the end of 2030. This bill would also prohibit the use of power purchase agreements in satisfying the solar PV system targets. The Administration supports the spirit of this bill and is committed to setting ambitious targets for solar PV installation on viable City buildings and other properties. However, we want to work with the Council to establish mandates that are both ambitious and achievable. We will also want to ensure that all tools remain available to us to deliver solar PV project in as quick, efficient and cost-effective manner as possible, including PPAs. PPAs are effective project delivery vehicles that have helped DCAS scale up our solar installations. Losing the ability to use them to achieve our solar installation

mandate would severely hamper our ability to meet the mandates in this bill.

Intro. number 354 by Council Member Nurse would require DCAS in coordination with MOCEJ to develop a plan to achieve at least 300 megawatts of storage on City-owned lots by the end of 2030 and 400 megawatts by the end of 2035. Once again, the Administration supports the spirit of this bill and is committed to reaching ambitious levels of battery storage installation on viable City-owned property. However, the megawatt targets set in the bill are infeasible given how early we are in battery storage expansion citywide and the physical and operational constraints with battery storage. We have a lot yet to learn and believe it would be premature to set a battery storage target at this early juncture.

Intro. number 129 by Council Member Brannan would mandate that DCAS install all solar canopies and electric vehicle charging equipment at each City-controlled parking lot. We welcome a discussion on the parameters of a pilot program to determine if solar canopies might indeed be cost-effective. Today, the City has one solar canopy with charging in place. From a pilot, we would seek to

understand the relationship between the cost of a canopy and the value to the City produced by such. Among other items, the cost of a canopy must consider total cost per canopy install, staff and time required per install, the required maintenance and repair work overhead, and the varying warranties and expected useful life for different parts of canopies that would impact costs.

Lastly, Intro. number 347 also by Council Member Nurse would exempt solar installations from any fees in connection with an application for a street crane permit for such installations. The Administration would like to discuss this bill with the Council further to better understand the intent. In general, the City has not seen any indication that crane fees are an impediment to the installation of solar PV system on private property. Further, fees serve an important purpose for the City in ensuring it can recoup cost for its services, and the Administration would not want to set a precedent of waiving such fees.

We appreciate the support you have shown for our work, and we look forward to continuing our partnership with the Council in expanding the City's

solar and battery storage capacity. I am happy to answer any questions the Committee has. Thank you.

ACTING CHAIRPERSON NURSE: Thank you. Recognizing Council Member Bob Holden has joined us.

I'm going to get right into the questions. You mentioned in your testimony, I was reading and trying to eliminate any questions you already answered to help us all enjoy our very sunny Friday. Since 2022, you said you've added on about, I think you said 1.5 megawatts in your testimony?

DEPUTY COMMISSIONER BARAKAT: Correct.

ACTING CHAIRPERSON NURSE: Okay. Can you tell us how many buildings does that represent? I saw you mentioned 155 in your testimony, but that's in total inclusive of the additions since you've last testified?

DEPUTY COMMISSIONER BARAKAT: Correct. 155 sites, 44 megawatts.

ACTING CHAIRPERSON NURSE: There's a question on why these are not reflected on the website and if it would be possible to have those updates on the website.

DEPUTY COMMISSIONER BARAKAT: We will be updating the website by the end of this month, and we

appreciate the comment, and we will start updating them on a regular basis as the systems come online, we will do that.

ACTING CHAIRPERSON NURSE: Okay. For the 50 megawatts that you've stated you plan to hit by 2025, how many buildings would that likely capture?

DEPUTY COMMISSIONER BARAKAT: Overall, including the 24, it would be about 177 sites.

ACTING CHAIRPERSON NURSE: In total?

DEPUTY COMMISSIONER BARAKAT: Yes.

ACTING CHAIRPERSON NURSE: Okay, and that's across schools?

DEPUTY COMMISSIONER BARAKAT: Across schools, wastewater treatment plants like we mentioned, city hospitals. The 1.5 actually was for the first solar installment we accomplished on a City hospital.

I don't know, Steve, what else, if you want to help me out here?

ASSISTANT COMMISSIONER CAPUTO: Yeah, we have cultural institutions, we have schools, we have firehouses, we have a tremendous amount in the pipeline, and just to clarify 170-plus sites are

representative of the 50 megawatts so we'll have over 300 total.

ACTING CHAIRPERSON NURSE: So 177 plus…

ASSISTANT COMMISSIONER CAPUTO: The 155 that are…

ACTING CHAIRPERSON NURSE: You've already done.

ASSISTANT COMMISSIONER CAPUTO: Correct.

ACTING CHAIRPERSON NURSE: Great. In the past, the Admin has testified that supply chain issues from the pandemic have been an ongoing challenge for the City's rollout of solar installations. Is this an ongoing issue, and has there been any indication that supply chains for solar infrastructure will normalize, or do you anticipate that these issues will persist for the near future?

DEPUTY COMMISSIONER BARAKAT: Thank you for that question. Yes, supply chain issues linger to the state. In fact, it intensified since the pandemic, and that's why we've been seeing delays in getting equipment and the reason why we haven't achieved the target that we wanted to achieve.

I don't know if, Steve, you want to add anything?

ASSISTANT COMMISSIONER CAPUTO: Yeah, if I could just add, these are extraordinary supply chain issues. I know everyone is always talking about supply chain issues, but we've had to wait a year and in fact, many, over three dozen projects, we're waiting six months for the type of equipment that brings multiple strings of solar together, waiting up to a year for inverters which allow the conversion of the energy produced in solar to actually go into buildings. It's truly extraordinary. It's both a supply chain issue and tremendous new demand. The federal incentives have really spiked demand, which is a great problem, but it's made it harder for us to get the projects that we've had in the queue done for a long time, and we believe that we would have had additional 15 or more megawatts done by today had those supply chain issues not existed.

ACTING CHAIRPERSON NURSE: Thank you for that. The PowerUp NYC report states that the City will apply for funding from the U.S. Environmental Protection Agency Greenhouse Gas Reduction Fund to support its public solar initiatives. That fund

includes the U.S. Solar for All Competitive Grant Program, which provides 7 billion for solar projects specifically in low-income neighborhoods. The deadline for municipalities to apply for a Solar for All grant was September 2023. Did the Administration consider using the Solar for All grant program to fund its community solar and public solar programs?

DEPUTY COMMISSIONER BARAKAT: I will pass it to Elijah to talk more about the EPA grant, but I wanted to mention also (INAUDIBLE) that DCAS has also taking advantage of the Inflation Reduction Act, and we will be applying for those incentives as well for our solar projects, and now it's Elijah's turn.

EXECUTIVE DIRECTOR HUTCHINSON: Thank you for the question. Yes, we actually were able to submit an application and we did so in conjunction with NYSERDA and the State to make our application more competitive. We will be finding out very soon whether we were awarded. We're expecting those application announcements to happen this spring, and we applied for 60 million dollars to support the public solar program.

ACTING CHAIRPERSON NURSE: Great. In the 2022 report, pursuant to Local Law 24 of 2016, DCAS

stated that the City had 46.3 megawatts of solar capacity in progress with the expectation that it would surpass 20 megawatts of installed solar capacity by the end of Calendar Year 2022 and 40 megawatts by the end of 2023. I don't know if this is the same question, but it's highlighted, so I want to make sure I ask it and not upset Jim. How many megawatts of solar capacity from those projects have come online?

DEPUTY COMMISSIONER BARAKAT: As of December of 2023, we were at 24 megawatts, and like we mentioned before, we have about 50 megawatts in our pipeline. We expect to have those implemented by 2025. We are also planning to be at 70 megawatts if conditions stay the same, and we would be at 70 megawatts in 2027 and 100 megawatts in 2030.

ACTING CHAIRPERSON NURSE: Thank you. MOCEJ has stated that the City will develop a community solar pilot on three to five City-owned properties. This pilot will provide discounts to households that subscribe to the pilot in disadvantaged communities. When is this project expected to come online?

EXECUTIVE DIRECTOR HUTCHINSON: We currently don't have an exact date for when that project is scheduled to come online, but with the grant award for public solar, we'll be developing a program model to launch public solar in general, which will help inform how we launch the community solar programs.

ACTING CHAIRPERSON NURSE: How many households would roughly that include?

EXECUTIVE DIRECTOR HUTCHINSON: The public solar would service about 5,000 households in low- or moderate-income populations.

ACTING CHAIRPERSON NURSE: Okay. Separately, the City has announced a public solar NYC program that would provide low-income homeowners with financing and technical assistance to install solar panels. What kind of intentional outreach and financial assistance will the City provide to selected homes?

EXECUTIVE DIRECTOR HUTCHINSON: We have the benefit of having a one-stop-shop resource for anyone who's interested in either doing Local Law 97 retrofits or installing solar or other renewable technologies with their home with the NYC Accelerator

so that's at nycaccelerator.com. That's a really helpful resource for us. If the accelerator themselves can't handle the questions, we also coordinate with NYSERDA on their clean energy hubs to deal with a range of building types and owners to direct them to the available resources that we have.

ACTING CHAIRPERSON NURSE: Are you all doing events in these specific communities?

EXECUTIVE DIRECTOR HUTCHINSON: Yes, we have we have various events that do outreach for either creating educational materials or having planned events including District events.

ACTING CHAIRPERSON NURSE: How many do you do a year?

EXECUTIVE DIRECTOR HUTCHINSON: I can find that answer and get back to you…

ACTING CHAIRPERSON NURSE: (INAUDIBLE) the followup.

EXECUTIVE DIRECTOR HUTCHINSON: Sure.

ACTING CHAIRPERSON NURSE: Would the public option be executed through a power purchase agreement?

DEPUTY COMMISSIONER BARAKAT: We have many procurement mechanisms that we use, one of them as being the PPA.

ACTING CHAIRPERSON NURSE: Okay, and how will the City ensure that property owners receive a proportionate share of those benefits?

EXECUTIVE DIRECTOR HUTCHINSON: As part of the grant for public solar and the energy savings associated with it, it's a requirement of the grant agreement that the reductions in energy utility costs be 20 percent of what they're used to paying so that's a requirement of the grant itself and how we design around the program.

ACTING CHAIRPERSON NURSE: Okay. I just have three questions, and then I'm going to turn it over to Council Member Holden.

You mentioned the support for the intent of Intro. 353 on solar power, but you have concerns. Can you tell us how you utilize the power purchase agreement and how it helps DCAS increase the rate of installations?

DEPUTY COMMISSIONER BARAKAT: Yeah, like I mentioned my testimony, the PPAs are a very important tool for us because it has helped us speed up the

implementation of the project. It's a much more cost effective and a much faster process, especially in our financial crisis and the capital budget constraints that we have. It's been good for us, and the one great advantage is that when you're doing a PPA, actually the developer is taking ownership of the asset and also operating it and maintaining it, and they do a great job because there is an incentive right to do well with it so it's been a great tool for us.

Steve, if you want to add more.

ASSISTANT COMMISSIONER CAPUTO: Yeah, if you don't mind, just a followup on that. Historically, the reason why we gravitated towards power purchase agreements is that the City wasn't eligible for the federal tax incentives because we're not taxable so the model of a PPA brought together a developer that had tax equity interest and then they monetize it so we get the savings. That's changed since the IRA so we're very interested in preparing to issue some large-scale procurements for capital funds. The other reason PPAs have been very helpful is it enabled us to get to scale quickly. At the time, we only could do one project at a time through

capital, PPAs allowed us to do dozens at a time. I also want to emphasize that we've paid a lot of attention to labor standards in the PPAs. They're all subject to prevailing wage. Broadly speaking, we've now negotiated and entered into an agreement with the building trades for union electricians, and our current PPA is not subject to that actual agreement, but it's all a union job so we're very attentive to that as well.

ACTING CHAIRPERSON NURSE: You're saying cost-effective, but could you just gimme a little more detail, by how much percent is it more expensive to do it in another fashion?

ASSISTANT COMMISSIONER CAPUTO: Sure. On average our capital costs are about 9 dollars per watt, and our PPA costs are about 4 dollars a watt so it is really extremely cost-effective. The other thing, and it's particularly valuable now with our capital constraints, it requires no upfront investment. It's all paid for through our energy bills.

ACTING CHAIRPERSON NURSE: The DCAS solar installations on public buildings, are those completed with union labor?

ASSISTANT COMMISSIONER CAPUTO: It would be case specific. Some of them go back into the 1990s, but any procurement that we do directly is subject now to the project labor agreement that we directly entered into with the Construction Trades Council and also Local 3, and it was really transformative because up until that point, there was a lot of tension and lack of being on the same page and the industry has really developed since then as a result of this PLA so yes, any of our direct procurements will be union labor.

ACTING CHAIRPERSON NURSE: Okay. I'd love to request in the followup that you could give us a breakdown of just how many have been done, how many union contractors have been used so we could just have that.

DEPUTY COMMISSIONER BARAKAT: Sure.

ACTING CHAIRPERSON NURSE: Even for the old projects.

Lastly, you mentioned that you support the intent of 354, but you have concerns about just the ambitious targets. MOCEJ's PowerUp NYC report says we had the potential for this amount of energy

storage so could you just clarify your position a little bit more?

DEPUTY COMMISSIONER BARAKAT: Sure. You want to take it?

EXECUTIVE DIRECTOR HUTCHINSON: Sure. Within PowerUp, that was a first of its kind look across the city for available sites where we would determine where there's feasibility. We wouldn't expect the maximum number of sites to be all available for storage. There are other feasibility constraints like interconnection issues and permitting with site safety constraints as well so we would have to continue to do a pass at what is feasible out of those 400 sites?

ACTING CHAIRPERSON NURSE: It sounds like it just needs more analysis.

EXECUTIVE DIRECTOR HUTCHINSON: That's correct. It needs more analysis.

ACTING CHAIRPERSON NURSE: Okay. I'm going to turn it over to Council Member Holden for questions you have.

COUNCIL MEMBER HOLDEN: Thank you, Chair, and thank you for your testimony.

A couple of questions, because you mentioned in your testimony about the electrical grid reliability. We're going to face problems next year in fact. My District probably leads the city in blackouts and brownouts. Our electrical grid, and I've been on Con Edison's case for quite some time to upgrade and especially to bury some of the lines because most of my District, a good part of it, has overhead wires, electrical, and then we had so many causes of blackouts, the latest being a squirrel and, yeah, it's not funny though when you're blacked out for a whole day because of a squirrel and but we also have, if we get 30 miles an hour winds, we get knocked out. It was a big problem on a Friday night, months ago, rush hour, where we had winds of 35 miles an hour and rain, and we were blacked out, the entire District was blacked out. What happened? Our traffic lights were out, every traffic light on a Friday night, just try to imagine, Friday night, 5 o'clock, rush hour starts, and it's a problem, the winds and so forth, and rain. People couldn't cross the street because there were no traffic lights, no walk signs, nothing. I've been on DOT about this, and certainly I think you guys can help, because I go to other cities

and you look at, even their stop signs have lights around it when they're kind of hidden or at least many people don't know about it or the visibility is off, they put solar-powered lights around their stop signs. Some of their traffic lights have solar backups at least or are powered by solar. I would think the cost would drop of installing devices, and I don't know if you worked with DOT because I've been asking DOT to come up with a plan to show us how not only to back up the, obviously, the blackouts, but to increase the solar canopy and capacity in the District by coming up with ideas to solar-powered safety devices, pedestrians, we're seeing an increase of pedestrians struck and killed because of, and it has to do with sometimes visibility because there's so many, if you look at our streets, there's so many signs now, and we don't highlight one, maybe with a light, with a solar powered light, so have you worked with, to make, I know I'm getting into a very long question here, but I just had to lay the foundation. Are you working with DOT? Did they contact you about solar items, street furniture, traffic signals, even safety devices that would be solar-powered because again, when the grid goes down, electrical grid, I'm

out, and safety is paramount. For a whole night, people were complaining that they couldn't even cross the street because the traffic kept going and there were no traffic lights. I would think that the greatest city in the world, the one that leads in technology, would have solar backups for many of our, and I know this is off topic slightly, but I don't know if you're prepared to answer that, but what would you say?

DEPUTY COMMISSIONER BARAKAT: It is definitely a DOT question, but I want to say that we work with DOT on a lot of the energy efficiency projects and actually we have a meeting coming up with them and we can bring it up and let them know of your concerns.

COUNCIL MEMBER HOLDEN: But they haven't brought it up to you.

DEPUTY COMMISSIONER BARAKAT: Not yet but, like I said, DOT is the next agency we're meeting with.

COUNCIL MEMBER HOLDEN: This is what I mean. This is what I mean. I'm running out of time to try to get some, so if you could bring it up, I would appreciate it, and then if you can get back to the

Committee, because this should be a priority. If you're saying that the electric grid is going to be inadequate by next year, we need to prepare, and these are small items. I don't think they're, again, I don't know the cost, but I wouldn't think a small solar panel, in other cities the panels, I mean they don't look very large to power a light ring around the stop sign to make the corner safer, and there's so many in some cities that, and some are in the south, some are in the north, so it's not really a question. I know in certain areas, like in Manhattan, you might have a problem because sunlight is a commodity, but if you could bring that up, if you can come up with some suggestions on cost and even to the point I'm willing to even fund some projects that would make my District safer to cross the street and certainly in an emergency.

DEPUTY COMMISSIONER BARAKAT: Yeah, thank you for that, and I just want to emphasize again that DOT may be working on it separately and not coming to us. That could happen. They could be doing something independently than taking funds from our agency.

COUNCIL MEMBER HOLDEN: Yeah. I did speak to OEM about it so they said they would push DOT and

try to work with them, so you can also check with OEM because I complained to them first about this, that we don't have no solar powered, when I asked the question, they couldn't answer it, but they have no solar-powered safety devices, which I think should be, certainly there should be thousands around the city now already installed. Thank you. Thank you so much, Chair.

ACTING CHAIRPERSON NURSE: Thank you, Council Member Holden. Council Member Avilés.

COUNCIL MEMBER AVILÉS: Thank you, Chair. Thank you, everyone, for being here today.

I'd like to talk a little bit about peaker plants. I represent a District that is home to what was supposed to be a temporary peaker plant, which has become a permanent fixture, and we all know how highly polluting these plants are. I'd like to know is the Administration considering technology such as battery energy storage systems and how they can increase grid reliability to accelerate the decommissioning of the peaker plants, and if you could give us an update on where that process is.

DEPUTY COMMISSIONER BARAKAT: Sure, that's a very important issue, and I'll have Elijah answer it.

EXECUTIVE DIRECTOR HUTCHINSON: Hi, thank you for that question. I really appreciate it, and we share your concerns. The City is very concerned with the implications of keeping these peaker plants online. They're largely sited in environmental justice communities, as you stated, that already suffer from significant air quality issues and extreme heat so we're prioritizing creative solutions that will lead to the closure of these plants as quickly as possible. One of these is through battery storage deployment, and the Administration is absolutely considering how we can have technology such as battery storage, increased grid reliability and speed up the decommissioning of these peaker plants as soon as possible.

COUNCIL MEMBER AVILÉS: Are there any particular upcoming milestones that we're hoping to meet to make sure that we do this as quickly and as urgently as it's needed. I heard we're planning a lot. I heard no specificity so I'd love any specificity you could give.

DEPUTY COMMISSIONER BARAKAT: I'll pass it to my colleague, Lydia, for some more details. Thank you.

POLICY ADVISOR WIENER: Hey, everybody. My name is Lydia Wiener. I'm a Policy Advisor at MOCEJ.

COMMITTEE COUNSEL MACLACHLAN: Excuse me, Lydia. Can you please raise your right hand?

Do you affirm to tell the truth, the whole truth, and nothing but the truth before this Committee and to answer honestly all questions?

POLICY ADVISOR WIENER: Yes. Thank you, Council Member, for that question. In terms of getting these peaker plants offline, two of the biggest projects that we are looking forward to that will accelerate getting the plants offline are the two transmission lines that will be bringing renewable power both from Canada and from Upstate New York. One of those being the Champlain Hudson Power Expressway, or Chippie, as lots of us like to call it, and that is right now expected to come online in the spring of 2026 so that is the first major milestone of big projects that will accelerate getting these offline among, of course, a number of

smaller initiatives that we're pushing, but that's major.

COUNCIL MEMBER AVILÉS: Just for clarity, is that for Astoria? Is that for that plant or is it specific to a particular peak or facility?

POLICY ADVISOR WIENER: The addition of the power from that one transmission line well exceeds the reliability deficit that the NYISO has projected for 2025 so all of those plants that were slated to come offline in 2025, once that comes online we'll have that additional capacity.

COUNCIL MEMBER AVILÉS: Thank you.

ACTING CHAIRPERSON NURSE: Thank you, Council Member.

Just while we're on battery energy storage systems, what are reasons that energy storage system permits get delayed, and what can the Council do to help reduce delays if there are any recommendations.

DEPUTY COMMISSIONER BARAKAT: I don't know if Elijah wants to talk about this, but permitting is a DOB question, so we defer to DOB for that. Unless you have something to say.

EXECUTIVE DIRECTOR HUTCHINSON: Yeah, we recognize a lot of the frustrations around the permitting and we're closely coordinating with the other agencies, the permitting and regulatory agencies involved with DOB and FDNY in those battery storage questions and convening with them so that we can understand what are the issues and what we can do to solve it.

ACTING CHAIRPERSON NURSE: What has DCAS learned from its energy storage pilot program, if there's anything you want to share with us. Big takeaways.

DEPUTY COMMISSIONER BARAKAT: I just want to say that we still are very excited about the pilot program because with the pilot, you learn a lot, right? All the lessons learned that you get from the pilot, you would apply it to larger scale systems, right, and that's the idea, and it's been great because the lessons learned include the challenges that you would have with installing storage systems, interconnection, we learned about the cost, we learned about O and M issues and so on. All these lessons, obviously, are going to be used to further the scaling of our projects.

ACTING CHAIRPERSON NURSE: I was going to ask approximately how much does it cost to install a battery energy storage system. I understand they're probably different variables, but like on average on what you're looking to roll out, what would you say is about an average cost of a system?

DEPUTY COMMISSIONER BARAKAT: Yeah, again, based on what historical data that we have, about 24 million is what we're seeing now, up to 24 million.

ACTING CHAIRPERSON NURSE: Per site?

DEPUTY COMMISSIONER BARAKAT: Per site, and depends on the condition of the site, obviously.

ASSISTANT COMMISSIONER CAPUTO: Just to further add to that, that's for about a 5-megawatt system. We have, and as we said and as the Deputy Commissioner said in her testimony, we don't yet have experience building at that scale, but that's why we have about almost 20 megawatts under development now, and we're going to learn a lot about that now.

ACTING CHAIRPERSON NURSE: Okay. I have just one more question related to the cost of that. How does the price change as storage capacity increases? What is the typical cost of a battery

energy storage system that might be installed behind the meter of a residential or commercial building?

DEPUTY COMMISSIONER BARAKAT: The cost for residential, I think, is doubled, if I remember correctly then, I want to say, 50k to 100k, if I remember correctly and for commercial, it could be even more than that.

ACTING CHAIRPERSON NURSE: Okay. If you could send that.

DEPUTY COMMISSIONER BARAKAT: We will follow up, yeah.

ACTING CHAIRPERSON NURSE: That would be helpful.

Okay. I have some questions on behalf of Council Member Gennaro.

Under Local Law 97, New York City is required to reduce greenhouse gas emissions from the government operations by 40 percent by 2025. The Administration has admitted they are not going to meet that requirement. At our December EPRW hearing, Chair Gennaro asked DCAS to provide a roadmap by March 12th of this year for how they plan to meet that requirement and when they will meet it since they won't make the 2025 deadline. Committee Staff

have spoken with CLA several times about this. We've been told that DCAS has a letter addressing this, although they haven't disclosed to Committee Staff what the letter says. If you all want to respond in terms of when that roadmap would be available to the Committee.

DEPUTY COMMISSIONER BARAKAT: Sure. So Chair Gennaro had given us a date of March 12th at December hearing, and we are on target to give the answer by then, and the reason why we need a bit more time, not because we don't have projections, we do have the projections, we have a model, of course, and we have the projections. However, as you know, there have been some development since the last hearing, including the fiscal situation that we're in so we want to make sure we're giving you an accurate projection, and we are in discussions with OMB now on the next plan to see what might be the possibilities maybe of restoring funds or things like that so we want to give you an accurate number and are on target to do it by the 12th.

ACTING CHAIRPERSON NURSE: Okay. I just have a couple questions about Council Member Brannan’s bill. Does the Administration believe that

there are any categories of City-controlled parking lots where it would not make sense to install solar canopies even if they are cost-effective?

DEPUTY COMMISSIONER BARAKAT: Parking lot question. Brent, would you like to come up?

COMMITTEE COUNSEL MACLACHLAN: Can you please state your name for the record?

ASSISTANT COMMISSIONER TAYLOR: Brent Taylor.

COMMITTEE COUNSEL MACLACHLAN: Okay, raise your right hand.

Do you swear to tell the truth, the whole truth, and nothing but the truth, and to answer all Council Member questions honestly?

ASSISTANT COMMISSIONER TAYLOR: Yes.

COMMITTEE COUNSEL MACLACHLAN: You may proceed.

ASSISTANT COMMISSIONER TAYLOR: Hi, good afternoon. There's certainly a lot of nuance between the parking structures within the city as Council Member Holden mentioned. Manhattan particularly is very challenging. Right across the street at Elk Street, we have a wide-open parking lot that's buttressed by two buildings from the east and the

west side so the amount of sunlight that you're going to get is going to be nominal during any portion of the day. Other factors include grade. Also taking that parking lot into account, it's got a pretty significant grade that would require a really significant construction project to bring it level so those would not be the most ideal spaces. Also, the height of construction that you're looking to establish, in terms of what kind of vehicles could plug into those chargers. Could we plug in heavy duty or medium duty vehicles like last mile delivery trucks and that sort of thing? Those are factors we want to take into account as well as electrical service going in. These solar canopies are grid-tied so we are going to have to connect to the grid for them and the access to the grid from where those canopies would be installed is going to vary from location to location. The complexity of the job is going to vary quite a bit as well. So yes, we would definitely take each parking location on a case-by-case basis and evaluate it for the feasibility of the installation.

ACTING CHAIRPERSON NURSE: Okay. Thank you. I just have a few more questions, and then we're going to turn it over.

Okay. Do you want to go ahead?

COUNCIL MEMBER AVILÉS: Thank you. Very gracious, Chair.

I just wanted to follow back up on the peaker plant question. Forgive me, you may have answered this in your answer, but I may not have fully grasped the response. In terms of the peaker plants, does the Administration know how many megawatts of additional battery energy storage in New York City would allow us to decommission all the peaker plants without sacrificing grid reliability?

POLICY ADVISOR WIENER: For that question, battery storage alone cannot enable all of the peaker plants to be decommissioned. It has to be a combination of battery storage and added renewable capacity to New York City's grid.

COUNCIL MEMBER AVILÉS: Do you know how much we would need to, how much that would equal in terms of the megawatt need?

POLICY ADVISOR WIENER: I think it depends on the combination of the renewable assets that are

providing that capacity, but we can do some research and get back to you with that.

COUNCIL MEMBER AVILÉS: Thank you. Thank you, Chair.

ACTING CHAIRPERSON NURSE: Thank you. I have one question about Intro. 353. How does DCAS and MOCEJ plan to maximize solar tax credits now for the first time available to municipalities for solar installations on public buildings?

DEPUTY COMMISSIONER BARAKAT: As I mentioned earlier, we are taking advantage of the federal grant through the Inflation Reduction Act. We are going to apply for the grant for the tax credit that you mentioned. I believe it becomes available to us at the end of March, so that's when we will be applying for it.

ACTING CHAIRPERSON NURSE: Okay, thank you. In your testimony, one of the things you mentioned is you were working to expand and sustain a green workforce in the city, and you said you had new energy specific civil service titles. Can you share what some of those are, some of those titles?

DEPUTY COMMISSIONER BARAKAT: I don't recall all of them. I can get back to you with all

the titles, but it's very exciting because it's really helping us get more resources.

ACTING CHAIRPERSON NURSE: No, it would be great to know those jobs exist. A lot of us have been trying to work and organize job fairs in our city to fill a lot of these vacancies that we keep cutting and so having those would be great to share with our communities.

DEPUTY COMMISSIONER BARAKAT: We'll do that.

ACTING CHAIRPERSON NURSE: Okay. Two more questions, almost there. The PowerUp NYC report was set to include the Renewable Rikers Energy Study, but it was not part of the report. When does MOCEJ plan to release the report?

EXECUTIVE DIRECTOR HUTCHINSON: We have not set an exact date for releasing the report quite yet, but we're planning to release it in this spring.

ACTING CHAIRPERSON NURSE: Spring. Very exciting. We're all on the edge of our seat waiting for that report.

EXECUTIVE DIRECTOR HUTCHINSON: Yes.

ACTING CHAIRPERSON NURSE: DCAS is now managing land on Rikers Island transferred from DOC

to DCAS. However, while transfers were made in July 2021 and December 2021, no transfer was made in either July 2022, December 2022, July 2023, or December 23. When does DCAS expect the next land transfer?

DEPUTY COMMISSIONER BARAKAT: Would you like to answer? It is truly a question for DOC, but we'll try to answer it.

ACTING CHAIRPERSON NURSE: I know, but it's nice to get you guys in the room. I don't get an opportunity to ask you like this directly.

COMMITTEE COUNSEL MACLACHLAN: Please state your name for the record.

ASSISTANT COMMISSIONER BERK: Matthew Berk.

COMMITTEE COUNSEL MACLACHLAN: Please raise your right hand. Thank you.

Do you affirm to tell the truth, the whole truth, and nothing but the truth before this Committee and to respond honestly to Council Member questions?

ASSISTANT COMMISSIONER BERK: Yes. Thank you for the question, Council Member. I would just like to point out that while DCAS is the agency that

would receive transfer of the property, it's up to the holder agency to proactively come to us and request the assignment. At this point in time, we don't have a date yet from the Department of Corrections when the next transfer will be.

ACTING CHAIRPERSON NURSE: Great. For the pieces of land that you do have and hold, do you have any plans for those?

ASSISTANT COMMISSIONER BERK: I'd have to defer to my colleagues who are working on Greater Rikers plans.

ACTING CHAIRPERSON NURSE: Okay. Thank you. Last question on the wastewater treatment plant report. When will we see that?

ASSISTANT COMMISSIONER BERK: That is from a DEP study that is a feasibility study for the wastewater recovery facility also on Rikers Island that wasn't anticipated to be released until this spring as well so we'll release both of those studies together.

ACTING CHAIRPERSON NURSE: Okay. Looking forward to that.

Thank you so much for being here. I was trying to bounce around. I had very little time to

review these before taking over so thank you for bearing with a little bit wonky hearing, but that will be the end of our questions.

DEPUTY COMMISSIONER BARAKAT: Thank you so much.

COMMITTEE COUNSEL MACLACHLAN: We will now turn to public testimony. Each panelist will be given three minutes to speak.

Panelists are reminded that they may speak only on topics related to the hearing.

Please note that public witnesses are not permitted to film themselves as they testify nor are they permitted to show pre-recorded video as part of their testimony.

For panelists testifying in person, please come to the dais as your name is called and wait for your turn to speak.

For panelists who are testifying remotely, once your name is called, a Member of our Staff will unmute you and the Sergeant-at-Arms will give you the go-ahead to begin. Please wait for the Sergeant to announce that you may begin before delivering your testimony.

Our first in-person panel will be Ben Dorman with Climate Jobs NY, Flandersia Jones with New York State Nurses Association, and Richard Mantell with UFT.

BEN DORMAN: Thank you, everyone. Thank you, Members of the Committee. Thank you, Members of New York City Council. My name is Ben Dorman. I'm the Deputy Director of Climate Jobs New York, and we direct the Carbon Free and Healthy Schools campaign here in the city. Our union coalition is made up of municipal public sector unions like UFT, DC37 CSA as well as private sector unions within the building and construction trades, 32BJ and NYSNA.

Every day, these members work across the city to help keep things running, and they know more than anyone that we need to invest in improving our City buildings right now. They have also seen firsthand the effects of climate change worsen with super storms like Hurricane Sandy, extreme heat, and wildfire smoke that we all saw as recently as this past summer. If we continue to wait to act, the cost of recovering will only rise. Our coalition is committed to making sure that we leave the planet a better place for the next generation, and we hope to

capitalize on the opportunity for federal and state funding incentives that are available right now so we also welcome the support and the willingness of the Mayor and his Administration to work with us to find solutions, and we urge the Council and this Committee to support the legislation proposed by Council Member Nurse today. This legislation to rapidly scale up solar installations on public buildings is a huge step to promote sustainability, create good jobs, and solidify the financial health of the city. Currently, buildings within New York represent 80 percent of our total greenhouse gas pollution, and that means that public buildings and schools represent a massive opportunity for us to transition our energy sources to renewable technology like solar power. With this legislation, we can significantly reduce our carbon footprint and mitigate the adverse effects of fossil fuel pollution in our communities. In addition, by enacting this legislation, the City can create family-sustaining jobs for workers right here in our city. To complete these solar installation projects, we will bring people into the renewable energy workforce of the future, and in this way, we can transition to a green energy economy while uplifting

communities most affected by the devastating impacts of climate change. Investing in solar installation on public buildings will also produce major cost savings for the City. By reaching 100 megawatts of publicly owned solar alone, New York City can produce energy cost savings of, according to our estimates, around 12 million dollars per year. Then on top of that, once we reach 150 megawatts, the City could save 20,405,000 dollars per year. What that number would represent is more than 600 million dollars over a 30-year time span. Put very simply, passing this legislation will pay for itself more than twice. We want to be able to provide that cost savings to the City to reinvest in public services across the board so we hope to take this huge step to invest in our future and build a more sustainable, equitable, and resilient economic future. Thank you.

FLANDERSIA JONES: Good afternoon. My name is Flandersia Jones. I live in the Bronx and work at BronxCare Health System. As a nurse serving the vibrant communities of New York City and as a director at large of the New York State Nurses Association, I am here in support of Intro. 0353,

requiring the installation of solar systems on the roofs of City-owned buildings.

Healthcare professionals know we need to act on climate change now. We witness firsthand the precautions of environmental degradation on public health. Nurses work daily in New York City buildings, we send our children to public schools, and we live in communities that have seen the effect of pollution and extreme weather events. The climate crisis is a public health crisis. We see its manifestations in exacerbated respiratory illnesses due to air pollution, heightening incidences of heat-related illnesses, and the psychological toll of natural disasters. Clean air, land, and water are fundamental prerequisites for good health. Yet, climate change threatens the health and well-being of individuals and communities. Extreme weather events such as hurricanes, wildlife, record rainfall, and droughts wreak havoc, disproportionately affecting vulnerable populations. Investing in renewable energy infrastructure reduces carbon emissions and creates economic opportunities, resilience, and good paying union jobs with benefits. As members of the New York State Nurses Association, we advocate for a healthy

environment as a fundamental component of public health. Now is the time to rally behind initiatives that promote sustainability and resilience. Intro. 0353 aligns with our mission to safeguard our patients' and community's health and being. I urge you to support this vital legislation. Thanks for holding this hearing today.

RICHARD MANTELL: Hi, my name is Rich Mantell. I'm Vice President of the UFT, and one of the coordinators of the Carbon Free and Healthy Schools Campaign. Thank you, Council Member Nurse, for holding this hearing today.

The UFT is thrilled to be here in support of Intro. 353 in relation to the installation of solar panels on City-owned property that will prioritize schools and other City-owned property in disadvantaged areas and bar the use of power purchase agreements. This is a moment we can go big, enlisting federal support and building on earlier work to put solar on New York City schools and implementing energy efficiency retrofits and solar power across our school buildings. Together, we can make New York City schools a model of green infrastructure, make schools healthier and safer for students and school

community, create good union jobs, and save millions in energy costs. With Intro. 353, we can simultaneously improve working and learning conditions for educators and students alike, increase wages, create good union jobs and pathways for students to get good union jobs, and create hubs of energy and community resilience. Money from the Biden administration's 2 trillion infrastructure plan to tackle climate change is available, and we cannot miss out on this opportunity. We can use these funds to make all of our schools' buildings clean and green. Public schools are among the worst climate polluters and largest emitters of greenhouse gases in the city. Many of our school buildings need basic repairs and upgrades from antiquated heating and air conditioning systems to deteriorating rooftops to outdated electrical grids. By investing in school infrastructure, we can create tens of thousands of good union jobs while making schools healthier and safer, all while tackling climate change. With energy efficiency retrofits and renewable power that cut energy consumption by 50 percent, we can save more than 100,000 tons of carbon emissions every year, the equivalent of planting 400,000 trees or taking 20,000

cars off the road, and a critical step to reaching the City's goal of an 80 percent reduction in carbon emissions by 2050. Part of realizing the just transition and job creation impacts of this campaign is the proposed ban on the use of power purchase agreements where a private sector company owns the energy system installed in our public assets and is responsible for installation, operations, and maintenance. Solar energy in public buildings financed through PPAs are not subject to project labor agreements and instead follow labor practices that are below quality job standards. PPAs do not maximize the potential savings from solar. Rather, they shift most of the cost-savings that come from solar energy to private solar developers, thereby reducing the City's ability to reinvest in communities hit hardest by climate change. We appreciated Mayor Adams support for healthy schools and reinvesting the cost-saving from their own solar power into ongoing maintenance and classroom instruction during his campaign, almost done, and we hope we can count on him to see that promise come to fruition. Thank you.

ACTING CHAIRPERSON NURSE: Question from Council Member Holden.

COUNCIL MEMBER HOLDEN: Thank you. Thank you, Chair. You mentioned one school, PS62, has a solar installation and who installed that?

RICHARD MANTELL: It's not just solar. That particular school is the greenest school in the city. It has underground water wells as well to help heat. They have windows that are controlled by how bright the sun is. They darken, they lighten to put light in the building, and the School Construction Authority built that.

COUNCIL MEMBER HOLDEN: They maintain it? There's no power agreement with a company?

RICHARD MANTELL: Not that I'm aware of.

COUNCIL MEMBER HOLDEN: Okay. So it could work?

RICHARD MANTELL: It does work.

COUNCIL MEMBER HOLDEN: Yeah. So it could work, but I'm just saying if School Construction can maintain the installation. How many schools have solar installations? Do we know?

RICHARD MANTELL: I don't know the number off the top of my head.

COUNCIL MEMBER HOLDEN: There are 1,750 schools.

ACTING CHAIRPERSON NURSE: It's 155 buildings, but that was inclusive of other City-owned property. I thought it was 70 schools.

RICHARD MANTELL: It's less than 100. I think you're right.

ACTING CHAIRPERSON NURSE: Yeah, I thought it was 70.

RICHARD MANTELL: They put the solar panels on when the roof is in need of repair so if you can have a brand-new building, the roof is in perfect condition, they won't put solar panels on it.

COUNCIL MEMBER HOLDEN: But I could see other uses, let's say outdoor space over a schoolyard or partial where they can go out in the rain even because there's a cover so you actually, it's a win/win, you have a canopy, it's a solar. I'm not sure whether that's feasible, I'm just imagining.

RICHARD MANTELL: Sort of. In this particular school, PS62, I mean they have a lot of land. There's a parking area, and over the parking area they put solar panels.

COUNCIL MEMBER HOLDEN: And it could pay for itself, right? You said double, and how many years would that be, or let's say, an installation at one school? Do you have an idea?

RICHARD MANTELL: On the individual level? No.

COUNCIL MEMBER HOLDEN: Yeah, on the, just say installation of a school, 1,000 students, we'd have to do some, obviously some calculations, but just like a ballpark. You said, you had mentioned it would pay for itself.

RICHARD MANTELL: Yeah, for the solar installation bill, based on our analysis at the 100-megawatt amount, for that goal at 2025, and then for the 150 at 2030, it would pay for itself more than twice.

COUNCIL MEMBER HOLDEN: And the larger the building, let's say a school, a good-sized school, with a lot of acreage, some schools go on and on, there's several acres, that would be actually more beneficial. You save, obviously the carbon footprint you would save, but also paying for itself because the more acreage you have, I guess, on a solar installation, the more you're saving, and then,

especially in, schools in my District like I said, the electrical grid earlier is horrendous. We lead the city in blackouts so that would be beneficial, and I would look to get my schools, at least, on the list to be solar powered.

Now, do you know if there's any waiting list for this, or is there any plan that DOE, along with school construction, is installing?

RICHARD MANTELL: As I said, if a school needs a new roof, they'll put solar panels on it when they do the roof, but that's the only thing I know of down the pipeline.

COUNCIL MEMBER HOLDEN: They only do that when. The roof needs some work. Is it maintenance or if they need a new roof?

RICHARD MANTELL: If they need a new roof.

COUNCIL MEMBER HOLDEN: If they need a new roof. Not if they have to maintain it or, okay. Thank you. Thank you all for your testimony.

ACTING CHAIRPERSON NURSE: Thank you, Council Member Holden.

COUNCIL MEMBER MARMORATO: Can I ask a question?

ACTING CHAIRPERSON NURSE: Oh, I'm sorry. One more question.

COUNCIL MEMBER MARMORATO: I would just like to ask one question. Now as far as the schools are concerned, who funds this? Where does the funding come from for the solar panels on the school?

RICHARD MANTELL: The Mayor’s Office.

COUNCIL MEMBER MARMORATO: The Mayor’s Office? They will completely fund it on their own. That's a great deal. No, I'm just saying.

ACTING CHAIRPERSON NURSE: That's what we're fighting for is to get the money.

COUNCIL MEMBER MARMORATO: I wasn't sure if it was going to come out of our capital.

ACTING CHAIRPERSON NURSE: It's part of the City budget capital, and part of what we've been advocating for is that the reason why we put this legislation is because these folks have been fighting for it, but there's also federal money that they're trying to go for.

COUNCIL MEMBER MARMORATO: So it's coming from different pots?

ACTING CHAIRPERSON NURSE: Cobbled. Yeah.

COUNCIL MEMBER MARMORATO: Okay. Thank you.

ACTING CHAIRPERSON NURSE: Thank you all.

COMMITTEE COUNSEL MACLACHLAN: Our next panel will be Jeffrey Wu with Climate Jobs National Resource Center and Azucena Qadeer with TREEage.

ACTING CHAIRPERSON NURSE: Whenever you all are ready.

Oh, and I also want to recognize Council Member Gennaro is on the Zoom, which is great news. I don't know if Council Member Gennaro wanted to say anything.

CHAIRPERSON GENNARO: Sure, am I on? Can people hear me?

ACTING CHAIRPERSON NURSE: We can hear you.

CHAIRPERSON GENNARO: Am I coming through?

ACTING CHAIRPERSON NURSE: You are.

CHAIRPERSON GENNARO: Yeah. Okay. Well, I just want to thank Chair Nurse for stepping in to Chair while I was having medical treatment on my eye. I just got back. I can't stay long. I thought it was important to go forward with the hearing, to not defer it. It's my understanding through my Chief-of-

Staff, Henry Yam, who was in the room that we've got a lot of good testimony from the Administration, and I thank you, Chair Nurse, for having the bills that we're hearing today. Also, there's Council Member Brannan's bill that's being heard. I don't want to jump in with questions or anything because I haven't heard the whole flow of the hearing. I want to thank the new members of the Council. You should just know that I'm not always going to be remote. Sometimes I'm actually going to show up, okay, and with that said, I'll end where I began, which is by thanking Chair Nurse for stepping in and doing a great job Chairing this hearing. She's a great Colleague, a great friend and a real environmental hero, and I'm grateful to have her as a Colleague so Sandy, here I am, getting all familiar.

ACTING CHAIRPERSON NURSE: It's okay, Jim.

CHAIRPERSON GENNARO: Chair Nurse, go back to doing what you're doing.

ACTING CHAIRPERSON NURSE: Thank you so much. I'm glad to see that you're in good spirits and coming out of a good doctor's appointment.

CHAIRPERSON GENNARO: You bet.

ACTING CHAIRPERSON NURSE: I asked all your questions.

CHAIRPERSON GENNARO: Thank you so much. And thank you, Claire, for being a great Counsel to the Committee. She's wonderful, and don't you go taking her, Sandy, because she's staying right here with our Committee.

ACTING CHAIRPERSON NURSE: I have a hard enough Committee so I'll leave Claire with you, but thank you so much, Council Member.

CHAIRPERSON GENNARO: Thank you, Sandy.

ACTING CHAIRPERSON NURSE: When you're ready.

JEFFREY WU: Honorable Members of the New York City Council. My name is Jay Wu, and I'm a Policy Analyst with Climate Jobs National Resource Center. Our organization has state coalitions across the country, and we support initiatives that will build a clean energy economy, create good union jobs, and improve equity in our communities. That's why we strongly support Council Member Nurse's public solar power bill, Intro. 353, because this bill is not only a huge step towards building a green economy, it's smart and practical for New York City, and the

quicker we move, the more funding we can draw from federal and state programs to meet our climate goals with cost-effective solutions. That's why we must start now. At this moment, the federal government is dedicating historic sums of funding through the 2022 Inflation Reduction Act, which includes a groundbreaking policy called direct pay. Direct pay is uncapped as-of-right cash incentive provided to the public sector for building and owning renewable energy projects. That means from now through 2032, for every 1 million the City spends on solar, the City gets 300,000 back in cash from the U.S. Treasury. Renewables projects located in low-income communities are potentially eligible for a further 10 to 20 percent of project costs, but this add is only available through the end of 2024, making it all the more urgent. In addition to federal funds, the City could draw roughly 10 million from New York State's Solar Incentive Program and, based on our estimates, up to 78 million through New York State's Building Aid Reimbursement Program. That's another 15 percent on top of the 30 percent in federal dollars, meaning that about half of the market cost of City solar projects would be paid by federal and state funding

sources. With these incentives plus the energy cost savings generated by solar over the course of its useful lifetime, solar pays for itself two and a half times over. The time is now to act boldly. By waiting any longer, New York City will lose the chance to access these huge opportunities to fight climate change with cost-saving solutions, and create union jobs. We urge the City Council to enact this legislation. Thank you for your time and consideration.

ACTING CHAIRPERSON NURSE: Sorry, I have a question. The direct pay as an as-of-right cash incentive, I'm sorry, I'm very ignorant to this is this something that the City is applying for or taking advantage of or is this something new that the City would then be able to become eligible for?

JEFFREY WU: When we say as-of-right, that means when you spend the money then you're essentially entitled to getting it back. It's not like applying to a grant. It's more like filing your taxes except as a public entity you don't have taxes, but you'd fill out similar paperwork from the IRS.

ACTING CHAIRPERSON NURSE: Okay, I'll do my research in the meantime, but thank you.

AZUCENA QADEER: Thank you, Chair Nurse and the Environmental Protection Committee, for the opportunity to testify this afternoon. My name is Azucena Qadeer, and I am the Political Director of TREEage, a student-led climate justice organization with over 1,000 high school students across all five boroughs fighting for a greener future in New York City and State. I am also a senior at the Beacon School in Manhattan, and I've had a crazy four years being a high schooler. I saw the skies turn orange on my 17th birthday, I saw the streets flood on my first day of 10th grade, and poor air quality has forced me and my classmates to evacuate my school's basement 18 times last year alone. As my graduation day closes in, I've been thinking a lot about how I want to leave my school. I've been thinking about my legacy. How am I going to leave my school? How am I going to leave my city? I am here today hoping to leave my city with a greener future. I speak for TREEage's students who strongly support the passage and full implementation of Intro. 353 and 354. We are overly reliant on fossil fuels that are killing us slowly every day. Our carbon emissions run rampant in this city. Intro. 353 has the power to transform our

City's buildings, some of the largest polluters in the city, and turn them into sources of power for our city. Intro. 353 begins and invests in New York's renewable energy transition, but 354 ensures it. Notably, these bills will be critical in the energy transition of New York City's 1,300 school buildings, many of which are old and are in severe need of investment, repair, and renovations. We cannot keep putting a band aid on the issue of climate change, and New York can lead the change. This City Council has the power to set us up with a sustainable, long-term system that is just the first step in saving New York City from the countless more climate disasters that will hit us. Thank you.

ACTING CHAIRPERSON NURSE: Thank you and appreciate you being here. We always love having TREEage at our hearings and at our rallies so thank you for being here.

COMMITTEE COUNSEL MACLACHLAN: We will now move to remote testimony. Our first witness on Zoom will be Alia Soomro with the New York League of Conservation Voters.

ALIA SOOMRO: Good afternoon. My name is Alia Soomro, and I'm the Deputy Director for New York

City Policy at the New York League of Conservation Voters. Thank you, Council Member Nurse, Chair Gennaro, as well as Members of the Environmental Protection Committee for the opportunity to testify. I have submitted longer written comments.

As we are all aware, New York State and New York City have set ambitious carbon emission reduction goals such as New York City's 80 by 50, Local Law 97, and New York State's CLCPA. Achieving these targets necessitates a significant build out of renewable energy infrastructure, particularly in the form of solar, wind, energy storage systems which are backup energy sources for homes, businesses communities, or the electrical grid. Moving towards renewable energy sources is not only a climate priority, but it's also an environmental justice priority. The burden of fossil fuel based peaker plants, which have disproportionately been located in environmental justice communities and contribute to toxic air pollution and asthma, has persisted for far too long. To alleviate this burden and pave the way for a cleaner, more resilient and just future, it is imperative to increase renewable energy sources and battery storage at a utility scale. NYLCV recommends

that the City Council enact legislation establishing a goal for New York City to have at least two gigawatts of battery storage by 2030. We realize this is ambitious, but we think the City can do more. By doing so, we can ensure that when energy demand spikes, as it often does in densely populated urban areas like New York City, we do not compromise the health and safety of our residents, especially those in vulnerable communities. With that said, NYLCV would also like to stress the importance of distinguishing e-bike lithium battery fires with energy storage systems, the latter of which is much safer under current regulatory standards. FDNY and DOB have strenuous standards, regulations, and annual inspections for battery storage systems on buildings. NYLCV supports Intro. 129 sponsored by Council Member Brannan and Introductions 353 and 354 sponsored by Council Member Nurse. regulations. As New York City transitions to a more sustainable and resilient future with the switch to renewable energy, it's crucial that we maximize City-owned properties and City-owned space with more renewable energy systems. We support these bills because they complement the City's own goals to establish 100 megawatts of solar

by 2025 and 500 megawatts of energy storage by 2025 as well. As we continue to build out our generation of renewable energy, including solar and wind, energy storage will play a key role. We look forward to working with the City Council, the Admin, and fellow advocates to get these bills over the finish line. Thank you.

ACTING CHAIRPERSON NURSE: Thank you.

COMMITTEE COUNSEL MACLACHLAN: Thank you. Our next witness is Shravanti Kanekal from the New York City Environmental Justice Alliance.

SHRAVANTI KANEKAL: Thank you. Good afternoon, and thank you to Council Member Nurse for Chairing this hearing today on behalf of Council Member Gennaro. My name is Shravanti Kanekal, and I'm the Senior Resiliency Planner for the New York City Environmental Justice Alliance, which is a non-profit citywide membership network that links 11 grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental justice.

ACTING CHAIRPERSON NURSE: I think you froze. If you can hear us, let me know.

SHRAVANTI KANEKAL: I can hear you.

ACTING CHAIRPERSON NURSE: Okay. You froze for a second. You had introduced the organization where you left off.

SHRAVANTI KANEKAL: Okay, I will continue. NYCEJA through the Climate Works for All Coalition has been an ardent supporter of the City's goal to install 100 megawatts of solar PV systems on municipal buildings and structures. We're very supportive of Intro. 353, legislation that will ensure that this goal is not just a promise but a commitment to a cleaner and more resilient future for New York City. New York City has been far too reliant on fossil fuel infrastructure for far too long. Peaker power plants are some of the most expensive and least efficient ways to produce electricity. In addition, they add the burden of utility rates that is created for lower- and moderate-income families. As we move towards a more sustainable future, environmental justice should stand at the forefront of our commitments because we know that not all communities have been equally affected by environmental challenges (INAUDIBLE) and structure that are located in historically disadvantaged communities across the city.

We also support Intro. 354 that requires the City to identify much-needed areas for energy storage systems. It is essential for us to focus on energy storage as we make the transition towards renewable energy. The City should prioritize the deployment of these energy storage systems in grid-constrained or blackout-prone neighborhoods. Decarbonizing our grid will be critical to reducing air pollution that comes from fossil fuel infrastructure that we are so currently reliant on. The shift can play a life-saving role in environmental justice communities in addition to creating a number of good green jobs. By prioritizing these projects in environmental justice communities, we ensure that they are not only equal participants in our City's sustainable future, but they also reap the benefits of reduced energy costs, improved air quality, and job opportunities in the green economy. Thank you for your time.

ACTING CHAIRPERSON NURSE: Thank you.

COMMITTEE COUNSEL MACLACHLAN: Our next witness is Adam Roberts with the Community Housing Improvement Program.

ADAM ROBERTS: Thank you for holding this hearing today. I am Adam Roberts, Policy Director for the Community Housing Improvement Program, also known as CHIP. We represent New York's housing providers, including apartment building owners and managers. We are strongly supportive of legislation to promote the installation of solar panels on existing buildings. Our members are already installing solar panels on apartment buildings throughout the city. However, too many of them face obstacles when seeking City approval to do. In particular, the Fire Code severely limits the ability to comprehensively cover a roof with solar panels. Without sufficient coverage, the high cost of installing solar panels can become prohibitive. Installing them is only a worthwhile endeavor if they can actually power an entire apartment building. The City of Yes Carbon Neutrality zoning text amendment does reduce the zoning obstacles to sufficiently covering a roof with solar panels. Yet this text amendment will not remove the strict limits put in place by the Fire Code, meaning the City Council must act. While it's not being heard at this hearing, Intro. 73 would remove many of these Fire Code restrictions.

Battery storage systems face similar roadblocks to solar panels. The City of Yes will reduce the zoning limitations of battery storage systems, but FDNY will still have significant leeway to block their installation. We recognize that severe limitations placed on solar panels and battery storage systems are well-intentioned efforts to limit the risk of fires. Yet, even as these technologies have become much safer, the City continues to make their installation incredibly difficult. Unless this problem is addressed, New York's apartment buildings will continue to be hampered in their efforts to comply with Local Law 97 and other sustainability legislation. The Council should do everything in its power to ensure compliance with its own laws is feasible. Again, thank you for holding this hearing today.

ACTING CHAIRPERSON NURSE: Thank you.

COMMITTEE COUNSEL MACLACHLAN: Our next witness is Rami Dinawwi.

RAMI DINAWWI: One second. Can you guys hear me?

ACTING CHAIRPERSON NURSE: We can.

RAMI DINAWWI: All right. Good afternoon, folks. My name is Rami Dinawwi, and I am the Environmental Justice Campaign and Policy Manager at El Puente. El Puente is a human rights organization that was founded over 40 years in the south side of Williamsburg, known as Los Tures. We are a member of the Climate Works for All Coalition, a coalition of labor, community, faith, environmental justice, and climate organizations that have come together to fight climate change and inequality in New York City by demanding a just transition for workers and environmental justice communities. Today, we've come to support a couple of bills that hold the key to transforming the future of our city. As a resident of this city, I've witnessed the impact of the outdated fossil fuel infrastructure in our city, particularly in low-income neighborhoods and communities of color. For far too long, New York City has relied on fossil fuel infrastructure with some of the most harmful facilities disproportionately affecting low-income neighborhoods and communities of color. These areas face multiple environmental burdens, compounding the challenges they already endure. Intro. 353, a groundbreaking legislation that mandates our City to

lead by example in transitioning to a renewable energy future. This bill ensures that the promise of 100 megawatts of solar energy systems on municipal buildings by 2025 becomes a committed reality. The climate crisis respects no boundaries, and it is our collective responsibility to act decisively. By implementing this bill, we not only curb citywide emissions but also set a precedent for other cities to follow. The urgency is real, and the bill provides a plan for a cleaner and more resilient future. Some might question the feasibility of such a transition as we've heard. However, the bill strategically addresses concerns by requiring the City to prioritize solar installations in public schools, City-owned properties, and disadvantaged communities. This ensures an equitable distribution of benefits and opportunities. Our moral imperative is clear. Environmental justice communities face disproportionate challenges, and Intro. 353 is a crucial step towards addressing these disparities. By prioritizing solar installations in these areas, we not only make them equal participants in our sustainable future but also empower them with reduced energy costs, improved air quality, and job

opportunities in the green economy. In addition to supporting Intro. 353, we must acknowledge the importance of Intro. 354. This bill mandates the City to identify areas for energy storage systems, a critical component of our transition to renewable energy. It is essential for the City to prioritize these energy storage systems in grid-constrained or blackout-prone neighborhoods, ensuring a reliable and resilient energy future for all. I will conclude by saying Intro. 353 and 354 represent a bold step towards a cleaner, more equitable and resilient New York City. By supporting these bills, we affirm our commitment to environmental justice, sustainable energy, and a future where our city leads the way in combating the climate crisis. Let's think about the impact on our children, on our neighborhoods, and on our shared future. I urge each and every one of the Council to vote on this bill, and together we can be the change that we want the city to…

SERGEANT-AT-ARMS: Your time is expired.

RAMI DINAWWI: We want to see in our city and beyond. Thank you.

ACTING CHAIRPERSON NURSE: Thank you, Rami. That is the end of our witnesses.

Before we leave, I wanted to give a shout out to the climate clock which was a gift provided to the Council last year. It melds art, science, technology, and grassroots organizing to get the world to #ActInTime. The project is centered on a simple tool, a clock that counts down the critical time window to reach zero emissions, our deadline while tracking our progress on key solutions so shout out to Climate Clock and thank you all for being here.

If we have inadvertently missed anyone that has registered to testify today and has yet to be called, please use the Zoom hand function if you are testifying remotely and you will be called in the order that your hand was raised.

Seeing none, I will now turn it over to myself for closing remarks, and we are closed. Thank you all. Have a good Friday. Thank you. [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 March 8, 2024