

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

of the

COMMITTEE ON HOUSING AND BUILDINGS

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October 20, 2010
Start: 10:12 am
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HELD AT: Council Chambers
City Hall

B E F O R E:
ERIK MARTIN DILAN
Chairperson

COUNCIL MEMBERS:
Council Member Gale A. Brewer
Council Member Leroy G. Comrie Jr.
Council Member Elizabeth S. Crowley
Council Member Lewis A. Fidler
Council Member Daniel R. Garodnick
Council Member Robert Jackson
Council Member Letitia James
Council Member Brad S. Lander
Council Member Stephen T. Levin
Council Member Rosie Mendez
Council Member James S. Oddo
Council Member Diana Reyna
Council Member Joel Rivera
Council Member Eric A. Ulrich
Council Member Jumaane D. Williams

A P P E A R A N C E S [CONTINUED]

Erik Martin Dilan
Opening Statement
Chairperson
Committee on Housing and Buildings

Baaba Hom
Counsel
Committee on Housing and Buildings

Laurie Kerr
Senior Policy Advisor
Mayor's Office of Long Term Planning and
Sustainability

Written Testimony:
Con Edison

Written Testimony:
Sustainable South Bronx

Russell Unger
Executive Director
Urban Green Council
Chairperson
New York City Green Codes Task Force

Christine Chang
Attorney
Natural Resources Defense Council

Anthony Bartolacci
American Council of Engineering Companies of New York
Metropolitan Region

Jim Thorpe
Director of Marketing
Sun Power Corporation

Shaun Chapman
East Coast Campaigns Director
Vote Solar Initiative

A P P E A R A N C E S [CONTINUED]

Alison Kling
New York City Solar Coordinator
City University of New York
Also representing
Tria Case
University Director for Sustainability
City University of New York

Sidsel Robards
Co-Founder
Director of Program Development
Greenhouse Project
New York Sun Works

Tushi Yakoveva
Apprentice
Eagle Street Rooftop Farm

Viraj Puri
Founder
Gotham Greens

Elliot Hecht
Business Representative
Local Union Number 3
International Brotherhood of Electrical Workers

Benjamin Flanner
Head Farmer and Owner
Brooklyn Green

Laurie Schoeman
Executive Managing Director
New York Sun Works

Ricardo Gotla
Legislative Director
New York League of Conservation Voters

Erica Suarino
Representing Bob Fox
Cook + Fox Architects

A P P E A R A N C E S [CONTINUED]

Benjamin Linsley
Managing Director
BrightFarms Systems

Gustav Gauntlet
Testifying for Christina Vescovo
Greensulate

Anthony Pereira
President and CEO
Alt Power

Written testimony
Re: Intros 351 and 352
New York City Plumbing Foundation

Written testimony
Good Green

1
2 CHAIRPERSON DILAN: Good morning
3 everybody. My name is Erik Martin Dilan and I'm
4 the Chairperson of the City Council's Housing and
5 Buildings Committee. Today the Committee will
6 conduct a hearing on 13 bills and 1 Preconsidered
7 Resolution for the purposes of an initial hearing.
8 And at the conclusion of today's hearings for the
9 benefit of the members, all items will be laid
10 aside for review and potentially up for a vote at
11 a future date.

12 The 13 bills on this morning's
13 agenda are based on recommendations from the Green
14 Codes Task Force and relate to greenhouses, solar
15 panels, wind turbines and other clean energy
16 sources. Ten of the bills relate to renewable
17 energy systems in buildings and sun control
18 devices. I'll give a brief 1-line description of
19 the bills before us today. The first is Intro
20 340. That's in relation to increasing the
21 allowable extension of sun control devices from
22 building facades. Intro 341 will allow large
23 solar panel rooftop installations. 342 will
24 permit the installation of rooftop solar panels.
25 346 is in relation to the installation of solar

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2 powered energy systems on building walls for
3 ground mounted systems. 349 would require
4 photovoltaic installations on City-owned
5 buildings. 350 is in relation to the adoption of
6 standards and protocols that accommodates the
7 installation of wind energy turbines on buildings.
8 351 will permit the installation of City-owned
9 solar hot water systems on City-owned buildings
10 and will allow for privately owned systems to
11 establish a pilot program for owners of private
12 property to install these solar hot water systems.
13 352 will be in relation to fees for installation
14 of solar powered energy. 353 would establish the
15 creation of a solar map that would be accessible
16 online and establish a smart solar program to help
17 residents establish and businesses to pursue best
18 solar solutions for their locale. And Intro 358
19 will be in relation to exempting solar panels from
20 limits on rooftop coverage and creating all
21 alternative and distributed energy equipment such
22 as photovoltaic and solar thermal collectors as
23 permitted obstructions.

24 Three other bills that are on
25 the agenda relate to greenhouses on top of

1
2 buildings. They are 338, 337 which is in relation
3 to requiring cool roof coating standards aligned
4 with Leadership in Energy and Environmental Design
5 Standards. And finally in terms of legislative
6 items 348 which would require the Department of
7 Buildings to develop detailed criteria for the
8 installation of vegetative green roofs. And the
9 lastly there will be a Preconsidered resolution
10 for the Committee's consideration that calls upon
11 the New York State legislature to amend Section
12 499(AAA) of the New York State Real Property Tax
13 law to allow for the Green Roof Tax Abatement to
14 extent to owners who produce life food producing
15 plants on top of roofs.

16 The Committee obviously expects
17 to hear testimony from representatives of the
18 Mayor's Office of Long Term Planning and
19 Sustainability, real estate professionals,
20 practitioners, developers, contractors and other
21 interested parties before this legislative
22 package. At this time I'd like to introduce the
23 members of the Committee who are present. To my
24 right the Majority Leader from the Bronx, Council
25 Member Joel Rivera; Council Member Gale Brewer of

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2 Manhattan; next to me is Baaba Hom who is the
3 Counsel to the Committee; to my left Council
4 Member Jumaane Williams of Brooklyn; and to my far
5 left the Assistant Majority Leader Council Member
6 Lew Fidler of Brooklyn; as well as Council Member
7 Tish James from Brooklyn as well who has joined
8 the proceedings.

9 At this time I'd like to
10 acknowledge the Administration and Laurie Kerr for
11 the purposes of giving the City's perspective on
12 the legislative items today. And I just want to
13 make special note that the Chair of the
14 Environmental Protection Committee of the City
15 Council Jim Gennaro who is also very interested in
16 this package, he may or may not be joining us
17 today. If he does I will grant him the
18 opportunity to speak briefly on today's agenda.

19 With that, Ms. Kerr I know I've
20 introduced you but if you could introduce yourself
21 in your own voice and then you can begin your
22 testimony.

23 CHAIRPERSON DILAN: Yeah, press the
24 button. You have to restart--

25 MS. LAURIE KERR: Hello?

CHAIRPERSON DILAN: Yeah.

MS. KERR: Good morning Chair Dilan and members of the Committee. I am Laurie Kerr, Senior Policy Advisor at the Mayor's Office of Long Term Planning and Sustainability and a registered architect in the State of New York. Thank you for the opportunity to testify today on the 13 introductory bills that would impact how roofs could be used in New York City, how solar panels are attached to the sides of buildings, and the allowable depth of solar shades.

In PlaNYC, the City set forth an initiative to strengthen energy and building codes to support energy efficiency strategies and other environmental goals. Because New York City's buildings have a major impact on the City's environment, this broad initiative will help the City achieve many of PlaNYC's ten goals including the enhanced reliability of our water and energy systems and 30% reduction in citywide greenhouse gas emissions by 2030, a goal that was codified into Local Law 22 of 2008. Encouraging the greater utilization of the City's rooftops for energy production and storm water management is an

1
2 important part of this initiative.

3 New York City's estimate 1.6
4 billion square feet of rooftop area is one of the
5 City's few underutilized spatial assets. And it
6 is one that can help the City achieve a number of
7 PlaNYC's goals. Through the installation of cool
8 roofs, blue roofs, and green roofs, for example,
9 this area can help detain storm water and help
10 cool the City and reduce our peak loads energy
11 costs and air pollution.

12 Much of this area could also be
13 used to site renewable or distributed energy
14 generation equipment such as photovoltaic or solar
15 thermal panels or micro-turbines. Additionally it
16 could be used for active or passive recreation
17 through the installation of athletic equipment or
18 roof gardens or in the production of some of the
19 City's food in rooftop vegetable gardens or
20 greenhouses. In addition to these green uses
21 rooftop space is also needed for very pragmatic
22 functions such as locating mechanical equipment,
23 cell towers and water towers.

24 This large variety of potential
25 uses which could be overlapping or conflicting

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2 means that the City needs to be deliberate and
3 thorough in the way that it amends its codes
4 relating to roofs. As roofs become more fully
5 utilized health and safety must not be compromised
6 and adequate access to roofs by the Fire
7 Department needs to be maintained. Multiple
8 agencies have overlapping jurisdiction over the
9 use of roofs so the relationship between their
10 requirements needs to be understood and as changes
11 are made the various codes need to be reconciled.

12 Finally a single code or zoning
13 provision can impact multiple uses. For example
14 items as disparate as green roofs, recreational
15 surfacing and solar panels will all need to be
16 considered when establishing appropriate zoning
17 allowances for rooftop systems. When such
18 provisions are changed it will be important to do
19 so once and comprehensively in order to avoid the
20 confusion that would result in the industry from
21 multiple revisions.

22 For these reasons this summer the
23 Office of Long Term Planning and Sustainability
24 convened the interagency green team which was
25 created through Local Law 5 of 2010 to

1
2 comprehensively study how the code should be
3 amended to further the beneficial uses of
4 rooftops. This process is very much underway and
5 involves six agencies.

6 With that said we are happy to
7 provide our initial comments on the bills being
8 considered today but we are also looking forward
9 to hearing the testimony of today's other
10 witnesses as we continue to evaluate the entire
11 universe of impediments to safe, sustainable
12 rooftop development.

13 Intros 338 and 341 would increase
14 the allowable roof area that can be used for
15 greenhouses and solar panels respectively by
16 removing limitations set in the building code.
17 These two measures remove impediments that are the
18 result of outmoded language in the code. Removing
19 such unintended impediments is something the
20 Office of Long Term Planning and Sustainability
21 supports in genera with the caveat that the exact
22 legal language of these bills needs further
23 refinement.

24 Intro 358 addresses the same issue
25 as Intro 338 in its first provision but goes

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2 beyond the purview of the building code and into
3 the zoning resolution in its second provision.
4 Therefore we believe Intro 388 is a better option
5 that Intro 358.

6 In principle the Office of Long
7 Term Planning and Sustainability supports Intros
8 340 and 347 which would increase the allowable
9 depth of solar control devices and clarify the
10 requirements for cool roofs. That said, these
11 proposals require further study and refinement.
12 With respect to Intro 340 the visual impact of
13 continuous 5-foot deep sun control devices
14 overhanging the sidewalk needs to be analyzed as
15 to the safety issues presented by icicles and
16 zoning concerns presented by the potential
17 protrusion of such devices beyond required
18 setbacks.

19 Similarly the exact requirements
20 for cool roofs put forth in Intro 347 may need
21 further clarification. For example the bill
22 currently places no emissivity requirement which
23 is the measure of how well a roof can emit the
24 heat once that has been absorbed. And it's an
25 important factor in the effectiveness of cool

1 roofs. Nor does it address reproofing.

2
3 Two of the proposals, Intros 342
4 and 346 would require the Department of Buildings
5 to develop rules for the anchorage of solar panels
6 to roofs and exterior walls. While we agree that
7 the City should clarify requirements as necessary
8 to facilitate the installation of solar panels,
9 the development of rules may not be sufficiently
10 flexible to prescribe techniques of anchorage in a
11 rapidly changing field with a wide range of
12 product types and design solutions. Local Law 5
13 created an Innovation Review Board in order to
14 provide technical guidance for the safe use of
15 emerging green technologies. And we believe this
16 is the appropriate mechanism to develop any
17 necessary standards.

18 Additionally Intro 348 establishes
19 standards for vegetated room systems. We look
20 forward to hearing testimony today that may
21 address why existing standards are insufficient.
22 In the meantime we would caution against the
23 adoption of standards that may be needlessly more
24 restrictive than the status quo.

25 Intro 350 would require that wind

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2 turbines that have been certified by an assortment
3 of industry associations, state commissions and
4 councils be approved for use in New York City
5 without further review by the City's Innovation
6 Review Board. Many of these entities are new and
7 do not have a proven track record of evaluating
8 new technologies and have not worked in or taken
9 into account some of the unique characteristics of
10 New York City. In addition their standards cover
11 product acceptance only without addressing the
12 installation, inspection or maintenance standards
13 that are crucial for assuring safety.

14 As a result the Office of Long Term
15 Planning and Sustainability opposed this
16 legislation as potentially damaging to life and
17 safety and as a subversion of the careful
18 technical review of windmill standards that has
19 been undertaken by the Department of Buildings'
20 Building Sustainability Board. The Department is
21 now in the final stages of developing and
22 publishing a building bulletin which will
23 establish a protocol for the product acceptance,
24 installation, testing, inspection, approval and
25 maintenance of wind turbine product assemblies.

Two proposals, Intros 349 and 341 would require the City to undertake extensive studies and to install photovoltaic and solar thermal panels wherever they would achieve a payback of 25 years or better on public buildings. The Office of Long Term Planning and Sustainability opposes these bills as running counter to the City's overall strategy of achieving a 30% carbon reduction in 10 years by using the most cost effective strategies available. Using the City's limited funds to install systems with a 25-year payback would drain funds from strategies such as retro-commissioning or upgrading lighting which can typically achieve paybacks within 1 to 5 years. And thus would make it impossible for the City to achieve its mandated carbon reductions. That said the City is aggressively moving forward with the installation of photovoltaic and solar thermal panels in situations where they are cost effective.

Pursuant to Local Law 87 the City is undertaking energy audits and retrofits in all large buildings. And during the audit process solar electric and solar thermal are evaluated as

1 strategies within a bundle of potential upgrades.
2 19 solar thermal projects and 9 photovoltaic
3 systems are now in design, funded by Federal
4 stimulus grants. Additional initiatives include a
5 solar RFP for 3.5 megawatts to be released by the
6 Department of Citywide Administrative Services in
7 early 2011 which will include a sanitation
8 facility, several schools, and a wastewater
9 treatment facility and a solar thermal pilot
10 program managed by the NYC Economic Development
11 Corporation which provided cash grants for 12
12 projects throughout all 5 Boroughs.

14 Intro 352 would waive the
15 permitting fees for street cranes involved in
16 solar installations. We oppose this proposal
17 because the fees are required to pay the
18 inspection and administrative costs of ensuring
19 that cranes are safe which is in the interest of
20 all New Yorkers. If this bill were successful in
21 encouraging more building owners to install solar
22 panels, then the Department of Buildings would be
23 forced to manage increased permit activity without
24 a corresponding increase in the funds used for
25 processing these permits and ensuring that safety

1 protocols are met.

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3 Lastly Intro 353 would require the
4 City to develop a solar map which would be
5 accessible online. This requirement is
6 unnecessary since for the past 9 months the
7 Mayor's Office of Long Term Planning and
8 Sustainability, in partnership with CUNY, the New
9 York City Economic Development Corporation and Con
10 Ed have been developing an online solar map
11 utilizing the detailed LIDAR data that was
12 generated this past summer. This map which will
13 be online this spring will be the most precise and
14 advanced solar map developed by any city and the
15 data will be tied into the utility database to
16 enable users to more quickly ascertain the cost
17 benefits of projects.

18 In addition this same partnership
19 has created solar empowerment zones which are
20 similar in scope to the Smart Solar Program
21 outlined in the bill and three solar ombudsmen
22 have been hired to facilitate these efforts.

23 Thank you for the opportunity to
24 testify on this important legislation. I'm happy
25 to answer any questions you may have at this time.

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2 CHAIRPERSON DILAN: Okay I just
3 want to take this opportunity to acknowledge some
4 members who have walked in. We have the Republic
5 leader to the far left in this case, Jimmy Oddo
6 who has joined us and the Assistant Majority
7 Leader from Queens, Council Member Leroy Comrie.

8 What I'm going to do at this time
9 is I'm going to defer my questions to the end and
10 open it up to members to question the
11 Administration at the outset. We'll begin with
12 Council Member James. And she'll be followed by
13 Council Member Fidler. So at this time I call
14 upon Council Member James.

15 COUNCIL MEMBER JAMES: Thank you
16 Mr. Chair. First let me make a note to the Chair
17 and to the members of the Committee, this is an
18 issue that I have been working on for about a year
19 and a half. In fact I've put in a number of LS
20 requests and why none of these bills reflect that
21 is beyond my understanding. And I speak to the
22 issue of brownstone Brooklyn which is what I
23 represent which is an issue that they have focused
24 on for the last two years, working with a number
25 of solar companies.

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2 In fact I brought a solar company
3 to meet with the staff of the City Council and
4 again why none of these bills reflect that is
5 beyond my understanding--

6 CHAIRPERSON DILAN: [Interposing]
7 Oh.

8 COUNCIL MEMBER JAMES: --that is an
9 issue that I will take up with leadership.

10 CHAIRPERSON DILAN: Council Member,
11 if I can address--

12 COUNCIL MEMBER JAMES:
13 [Interposing] Sure.

14 CHAIRPERSON DILAN: --today is the
15 first time I've been made aware of that.

16 COUNCIL MEMBER JAMES: Um-hum.

17 CHAIRPERSON DILAN: If there is an
18 oversight I apologize. And we'll be happy to
19 discuss it with you to see if there's a way to
20 rectify--

21 COUNCIL MEMBER JAMES:
22 [Interposing] I appreciate that.

23 CHAIRPERSON DILAN: --that
24 situation

25 COUNCIL MEMBER JAMES: Thank you.

CHAIRPERSON DILAN: Your question?

COUNCIL MEMBER JAMES: My question is the following. Notwithstanding the fact that none of these bills reflect my work on this--in this area, the issue is, is there a prohibition within the Department of Buildings or within FDNY which would restrict the construction of solar panels on brownstones?

MS. KERR: There are restrictions. FDNY needs access from the front and the back and some direct pathway in between. This is to fight the fire on the roof and also to be able to break through to let smoke out. So there are, within the fire code, specific requirements for access by FDNY. Department of Buildings, for some project, some building construction types that have reached their maximum height restricts, currently restricts the coverage of solar panels to one-third of the area of the roof and one of the proposals here would eliminate that cap. And our office is in support of eliminating that cap.

COUNCIL MEMBER JAMES: So do you believe that these objections are surmountable? Can there be some compromise so that the residents

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2 of downtown Brooklyn and I see my colleague
3 Council Member Lander has joined us, he represents
4 Park Slope, I represent the neighboring Fort
5 Green. All things related to the green industry,
6 I would like to argue started in brownstone
7 Brooklyn. And because of these restrictions a
8 number of constituents have contacted my office
9 within the last two to three years urging that the
10 Administration review its policy with respect to
11 the installation of solar panels on brownstones.
12 Is it something that we could work on so that we
13 could overcome these restrictions?

14 MS. KERR: Insofar as one of the
15 bills today addresses one of them, I think--

16 COUNCIL MEMBER JAMES:

17 [Interposing] Yes I'm aware of that.

18 MS. KERR: --we're in favor of that
19 moving forward. Regarding I presume the FDNY
20 requirements, we're definitely in the process of
21 discussing those exact requirements in the green
22 team effort that we've been talking about and
23 seeing perhaps whether they might be able to be
24 made less stringent for brownstones. So that's
25 definitely something that's being actively

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2 discussed at this point.

3 COUNCIL MEMBER JAMES: Thank you.
4 And I know I don't have to tell you that given the
5 high unemployment rate particularly in parts of
6 central Brooklyn, parts of my community, there is
7 a need, there is a growing economy particularly in
8 this area. And so I would urge that the
9 Administration act posthaste to make this a
10 reality so that we can create jobs, particularly
11 in communities which unfortunately are suffering
12 from high rates of unemployment. Thank you.

13 CHAIRPERSON DILAN: Okay. Thank
14 you Council Member James. Council Member Fidler,
15 followed by Council Member Williams.

16 COUNCIL MEMBER FIDLER: Thank you
17 Mr. Chairman and I'm very delighted to be
18 participating in this discussion today with the
19 Mayor's Office of Long Term Planning. I think
20 this, you know, the topic of clean, renewable,
21 energy sources I think is extraordinarily
22 important. And I recognize that because it's also
23 a new technology and a blending of new technology
24 with our existing codes that there are going to be
25 some rough edges that we have to discuss. But I

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2 am the co-sponsor of almost every one of these
3 pieces of legislation and proud of it.

4 As is often serendipitous, last
5 night at a civic association meeting in my
6 district, the Marine Park Civic Association, we
7 had a presentation on the issue of solar panels by
8 Con Edison. And the one comment they made to me
9 that they actually asked for my help with was in
10 the area of the tax abatement relative to solar
11 panels. They indicated to me and I haven't
12 obviously since 10:00 o'clock last night not had
13 the opportunity to research this so I'll ask you,
14 that the City tax abatement for the installation
15 of solar panels is sunsetting and that the rate of
16 abatement of property taxes is going to go down
17 from 35% to 20%. Is that accurate?

18 MS. KERR: I would have to get back
19 to you on that.

20 COUNCIL MEMBER FIDLER: Well it
21 would seem to me that if it is accurate that to
22 consider all of these pieces of legislation that
23 are designed to facilitate the installation of
24 solar panels and without maintaining the abatement
25 would be counterproductive. And I would ask you

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2 to go back and look at that. I'm going to have my
3 staff look at it as well. I would imagine that
4 the process is probably going to require state
5 enabling legislation and Council Home Rule and
6 action of some kind. But if it is sunsetting at
7 the end of this year I think we need to act
8 quickly. So I would ask you to see what you can
9 find out about that as quickly as possible and I
10 will have my people working on it as well. And
11 Mr. Chairman, I think we ought to be taking
12 whatever steps we can to maintain the tax
13 abatement incentive while we're doing this at the
14 same time. I think it's really; we'd be missing
15 the biggest piece of the pie if we didn't.

16 There is one topic that is in this
17 package of legislation that I am not so sanguine
18 about. And that's the provisions that liberalize
19 the availability of greenhouses. You know, we
20 have, particularly in the outer boroughs have
21 found that architects aren't always the most
22 scrupulous folks. And very frequently something
23 that is designed on paper to be one thing turns
24 out to be something else entirely. And I have
25 actual personal negative experience with the

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2 greenhouse where building plans were filed for a
3 greenhouse. And as it was being built, lo and
4 behold the walls were sheetrock. And you can't
5 tell that from the design plans. And unless
6 you're checking, you know, the people who see it
7 going up don't know that it's supposed to be a
8 greenhouse. And clearly that is an abuse. So I
9 would ask you if you can tell me why I should
10 allow this to happen and to grant additional
11 privileges for the building of a greenhouse before
12 you can assure me that there is a way to make sure
13 that this isn't going to start to happen all over
14 the place in the outer Boroughs.

15 MS. KERR: Given that you're
16 getting your answer from an architect, that said--

17 COUNCIL MEMBER FIDLER:

18 [Interposing] That's all right if it was lawyers
19 I'd pick on them too.

20 MS. KERR: We agree that there's a
21 lot of opportunity for additional provisions for
22 greenhouses to be abused and allow for the growing
23 of couch potatoes. So that said, this provision
24 is a fairly limited increase and applies only to
25 the building code. So there are certain type of

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2 building construction that limit the areas where
3 you can, limit the area that you can add built
4 area on the roof to one-third. This Intro would
5 include greenhouses within that one-third area.

6 There has been discussion about
7 also excluding greenhouses from the permitted
8 obstructions of zoning and we would oppose
9 extending that--

10 [Audience outburst]

11 [Audio silenced]

12 COUNCIL MEMBER FIDLER: Life is
13 always interesting here at City Hall.

14 [Off mic]

15 COUNCIL MEMBER FIDLER: Well very
16 productive method of lobbying. If we can get
17 back. I guess on the greenhouse issue I would ask
18 your office to look at safeguards on the issue of
19 greenhouses in general. You know, we do have a
20 lot of bad experience with, you know, creating
21 exceptions of any kind to height and FAR and
22 whatnot. I mean I have a building that's about as
23 far away from a college as possible that, you
24 know, filed that they were going to be a dormitory
25 so they could get extra floors. I mean, you know,

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2 once it's done it's done and they're not pulling
3 down the extra floors and then you find out that
4 NYU had absolutely no idea that they were building
5 a dormitory in Mill Basins.

6 So I don't want the greenhouse
7 thing to become the next big thing that's abused.
8 So I would ask that you look at what the Buildings
9 Department can do to make sure that people who
10 file for greenhouses are actually building
11 greenhouses. There's got to be some way. So
12 before I'm willing to grant more exceptions for
13 greenhouses I would need that.

14 MS. KERR: Fine. My understanding
15 is that this one-third area is also allowed for
16 built area. So greenhouses would be allowed
17 within that area. So even in the case where they
18 were building, said it was a greenhouse but it was
19 built area, it would still, it would not be, in
20 other words, an exception. So I think that's why
21 we're confident that it's not an issue. But I'll
22 go back and confirm my understanding of that and--

23 COUNCIL MEMBER FIDLER:

24 [Interposing] Well even if this particular bill
25 doesn't exacerbate, you know, the issue that I'm

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2 addressing, you know, I think, you know, as we
3 draw more attention and encourage greenhouses as a
4 matter of policy, it's going to be abused more. I
5 think we need to look at that now rather than
6 later. So that's what I'm asking and I love
7 greenhouses; I think they're wonderful provided
8 they're really greenhouses. Thank you.

9 CHAIRPERSON DILAN: Sorry for the
10 distraction. We have Council Member Williams
11 followed by Council Member Brewer.

12 COUNCIL MEMBER WILLIAMS: Thank you
13 Mr. Chair and thank you for the testimony. I'm
14 going to be brief. I just want to make sure I
15 followed everything. There were five Intros that
16 you are opposing, is that right? I was trying to--
17 -

18 MS. KERR: [Interposing] I think so
19 yes.

20 COUNCIL MEMBER WILLIAMS: 349, 353,
21 351, 352 and 353. Can you just--and I know you
22 gave a pretty good, can you just give--most of
23 them had to down the solar bills. Is there a
24 synopsis why in general the package seems to be
25 unfavorable?

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2 MS. KERR: Well there are different
3 reasons for different parts. I would say in short
4 the proposals for attachment, clarification of
5 standards for attachment, the roof and walls, we
6 are in general agreement that clarification, if
7 clarification is necessary that should be done.
8 It's just our feeling that the appropriate
9 mechanism for that would be the Innovation Review
10 Board that's directed by the Department of
11 Buildings rather than rule-making.

12 The reason for that is that these
13 are rapidly changing technologies. There are
14 always new ideas, design ideas about how they
15 could be installed. The process of creating rules
16 is fairly cumbersome and once a rule is created
17 it's very hard to change it. That wouldn't
18 necessarily facilitate broad usage of new ideas
19 and new technologies. So the industry, the
20 Innovation Review Board on the other hand, can
21 quickly put out bulletins that respond to new
22 ideas. So we think that's just a better way to
23 solve that. So that's the reason that we oppose
24 the creation of rules in that case.

25 In the requirements for solar

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2 thermal and solar photovoltaic panels on all City
3 buildings, we oppose that because the hurdle of
4 25-year payback period would drain the needed
5 funds from the many other much more cost effective
6 measures that the City needs to pursue in order to
7 achieve the 30% reductions that it needs to make.

8 So that's the reason, but in the
9 cases where they are proven to be cost effective
10 within a packet, bundle of measures, the City's
11 definitely pursuing them already.

12 COUNCIL MEMBER WILLIAMS: Oh so
13 what are some of the other cost effective methods
14 that you need the funding for?

15 MS. KERR: Well right now the City
16 is mandated to achieve a 30% reduction of
17 emissions, carbon emissions from all City
18 operations by 2017. So there's a wide array of
19 requirements. One of them includes the
20 requirement that all City buildings, all large
21 City buildings, be audited and retro-commissioned
22 every 10 years. Retro-commissioning for example,
23 tends to have a payback between 1 and 2 years. So
24 draining funds from a measure that could have a 1
25 or 2-year payback in order to fund measures with

1
2 25-year paybacks is not in the long term interests
3 of the City nor is it in the interests of
4 achieving carbon reductions. So.

5 COUNCIL MEMBER WILLIAMS: So when
6 you say payback, and I'm actually getting more
7 familiar with this now, when you say payback
8 you're talking about funding payback or--

9 MS. KERR: [Interposing] No
10 payback--

11 COUNCIL MEMBER WILLIAMS: --
12 emissions payback?

13 MS. KERR: Payback is a measure of
14 how cost effective something is at achieving
15 energy reductions--

16 COUNCIL MEMBER WILLIAMS:
17 [Interposing] You're talking about fiscal. Oh.

18 MS. KERR: So for example a 1-year
19 payback means that if you put in \$5 a day, today
20 on an improvement, by the end of this year you'll
21 have made \$5 back in energy savings. A 25-year
22 payback means that it would take 25 years to
23 realize those savings. So you would be really
24 getting only \$.05 a year back. So not \$.05 but--

25 COUNCIL MEMBER WILLIAMS:

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[Interposing] So you're saying these Intros--

MS. KERR: --but a very modest amount in comparison.

COUNCIL MEMBER WILLIAMS: --have a 25-year payback--

MS. KERR: [Interposing] Yes.

COUNCIL MEMBER WILLIAMS: --and the ones that you want to fund have a 2-year payback.

MS. KERR: Well the ones that we want are--have a whole range. They tend to range between 1 to maybe 15 years in the packet. But the packages that we're--the overall payback for the City's carbon reduction plan is about a 7-year payback. So the overall plan put forward by the City about 3 years ago is a 7-year total payback. If large amounts of resources are taken away from the very cost effective parts we won't be able to achieve our 30%.

COUNCIL MEMBER WILLIAMS: So just so I'm clear you're saying the ones you're talking about which have better payback are 1 to 15 years with the average of 7.

MS. KERR: Yes.

COUNCIL MEMBER WILLIAMS: But these

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have a 25-year.

MS. KERR: So in other words they're a third as cost effective.

COUNCIL MEMBER WILLIAMS: Oh yeah.

MS. KERR: So obviously--

COUNCIL MEMBER WILLIAMS:

[Interposing] I don't know the truth or not I'm just trying to get--

MS. KERR: [Interposing] Yes.

COUNCIL MEMBER WILLIAMS: --all the information.

MS. KERR: Yeah. So if you--

COUNCIL MEMBER WILLIAMS:

[Interposing] So I can put--

MS. KERR: [Interposing] Right.

COUNCIL MEMBER WILLIAMS: --

validity to it afterwards.

MS. KERR: Okay.

COUNCIL MEMBER WILLIAMS: Okay.

Thank you. And I think the other one had to do with you were opposed to the wind energy? The installation of the wind energy turbines.

MS. KERR: That again is a similar, the opposition is not to the creation of

1 standards, it's just the way we create the
2 standards. Once again the Department of Buildings
3 has spent I think a large part of the last year
4 working with technical advisors from New York City
5 industry to create really comprehensive standards
6 for the installation of windmills. The proposal
7 on the table right now would require New York City
8 to adopt standards created by outside industries
9 by other states and by other groups, not New York
10 City experts.

12 Those standards that the Intro
13 would require New York City to accept are
14 standards that only cover the actual product.
15 They don't cover the various things that we need
16 to have addressed if we're going to have windmills
17 that could potentially fly off and fall on people
18 and things like that. We need to address the
19 installation, the maintenance, the attachment and
20 all of these other things. And the Department of
21 Buildings process bulletin that will be released
22 shortly covers that whole range of issues that
23 need to be covered in order to make sure that
24 safety is actually secured.

25 COUNCIL MEMBER WILLIAMS: Two quick

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2 questions. One, so that the ones that have to do
3 with--you seem to be in support of but there's
4 some other issues, is it a tweaking of the bills
5 that would help you come along on some of those?

6 MS. KERR: Well there are two where
7 we are in general support but feel that some
8 tweaking is required. Those are the ones that
9 would extend the allowances for solar shading
10 devices and the clarification of requirements for
11 cool roofs. We--

12 COUNCIL MEMBER WILLIAMS:

13 [Interposing] What about the wind?

14 MS. KERR: Oh on wind--

15 COUNCIL MEMBER WILLIAMS:

16 [Interposing] All the--that seemed to be one--

17 MS. KERR: [Interposing] Is there
18 another?

19 COUNCIL MEMBER WILLIAMS: No, no
20 I'm--

21 MS. KERR: Proposal on wind?

22 COUNCIL MEMBER WILLIAMS: No that
23 350, is 350 the one you're talking about? The
24 two, of the two, is one Intro 350?

25 MS. KERR: Okay my... the only

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proposal on wind that I'm aware of is... let's see.

COUNCIL MEMBER WILLIAMS: Okay so that's the same.

MS. KERR: Okay.

COUNCIL MEMBER WILLIAMS: Intro 350. And then what was the other one? You said that there were two that you would--some tweaking--

MS. KERR: [Interposing] Oh the other one that needs some tweaking is the cool roof one which we agree that the requirements currently in the building code are not explicit enough to--but we are not sure that the LEED requirements are the correct ones, specifically because the LEED requirements don't have any requirement on something called emmissivity which is the ability of a hot surface to actually emit the heat. And with our analysis has shown us that if that's not included the cool roofs are not as effective as we think they probably should be. We also are concerned that the Intro as written doesn't correctly address the issue of re-roofing. And if we're going to achieve greater cover of cool roofs I think that needs to be addressed as

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2 well. So that's the tweaking that we would want
3 to engage in of those--

4 COUNCIL MEMBER WILLIAMS:

5 [Interposing] And lastly just for complete
6 clarity. So you agree that the solar bills could
7 save energy and finances but not as much as some
8 of the other things that you have.

9 MS. KERR: Correct.

10 COUNCIL MEMBER WILLIAMS: Okay.

11 Thank you.

12 CHAIRPERSON DILAN: Thank you.

13 Council Member Williams. We have Council Member
14 Brewer followed by Council Member Lander. But
15 before Council Member Brewer begins her
16 questioning I'd like to acknowledge some members
17 who have joined. We've been joined by Council
18 Member Crowley of Queens; Council Member Lander of
19 Brooklyn. I did see Council Member Mendez of
20 Manhattan who is sitting in the back row and
21 Council Member Garodnick of Manhattan. Council
22 Member Brewer.

23 COUNCIL MEMBER BREWER: Thank you
24 very much and thank the Chair for having this very
25 substantive hearing. And I will say that some of

1
2 us were in Israel recently and you look out over
3 any major city and all you see are white roofs and
4 solar panels. So there's a lot that we can be
5 doing.

6 Obviously the bill that I'm most
7 interested in and I appreciate your discussion of
8 it is 338. And I also appreciate what Council
9 Member Fidler stated. Have we been in touch with
10 Landmarks generally on these issues? Because the
11 Landmarks Preservation Commission is obviously
12 concerned in a historic district if you can see
13 aspects of a building that are being built and
14 it's not appropriate to the historic district or
15 to the landmarks. So have you been in touch with
16 Landmarks or do you plan to be?

17 MS. KERR: We have not been--well
18 yes. Landmarks is part of our green team that is
19 looking at the comprehensive roof issues. In
20 addition to that there had been a Green Code Task
21 Force proposal that's not part of these Intros
22 that would include solar panels and other energy-
23 creating equipment, would allow them to be
24 considered like other mechanical equipment on
25 roofs from the point of view of Landmarks. And

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2 they've indicated that they would look favorably
3 on that proposal so.

4 COUNCIL MEMBER BREWER: Okay.

5 That's helpful. Thank you. And then second, do
6 we know how many greenhouses exist currently on
7 roofs in the City, legally or illegally?

8 MS. KERR: No I don't know--

9 COUNCIL MEMBER BREWER:

10 [Interposing] We do not know.

11 MS. KERR: No.

12 COUNCIL MEMBER BREWER: Okay. The
13 question I have also is regarding the jobs issue
14 which was brought to our attention by Tish James.
15 One of the questions when I meet with people at
16 Poly Tech and NYU which is a university that is
17 spending a lot of time on looking at some of these
18 issues, there are--Con Ed is often a barrier. Is
19 that, again, part of your discussion because it
20 was mentioned earlier regarding the tax abatement.

21 We may or may not like Intro 350
22 which has to do with the turbines but when I speak
23 to the people who are producing innovative ideas
24 regarding turbines whether or not it's appropriate
25 here, they say that there are a lot of challenges

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2 regarding Con Ed. So I'm just wondering what is
3 your discussion on Con Ed in general because the
4 people who are innovatively thinking of ways to
5 save energy in some of these startups find that
6 Con Ed is a big barrier.

7 MS. KERR: That's certainly been
8 the case in the past and it continues to be but
9 our office and the Department of Buildings have
10 engaged Con Ed in this solar effort for example
11 they're actually a partner. They are also at the
12 table with Commissioner LiMandri in his
13 distributed generation roundtables that he's been
14 having. So we anticipate that some of these
15 issues will at least lessen over time--

16 COUNCIL MEMBER BREWER:

17 [Interposing] Will they have to be legislatively
18 dealt with or will it be something that is dialog-
19 solvable?

20 MS. KERR: We expect that the
21 dialog will solve it.

22 COUNCIL MEMBER BREWER: Okay. The
23 white paint, etcetera, is that something that--
24 this is a strange question. Can you get any kind
25 of white paint? Does every hardware store in New

1
2 York City have the white paint? Or is that
3 something that has to be looked at differently in
4 terms of white paint. I know I put white paint on
5 my roof. I don't know if it's the right kind of
6 white paint.

7 MS. KERR: That's a very good
8 question. Not all white coatings are equal.

9 COUNCIL MEMBER BREWER: Correct. I
10 found that out.

11 MS. KERR: And there's a wide range
12 of optical impacts of these coatings. One is the
13 reflectivity which is the amount of light that
14 bounces off it. The other is emissivity which is
15 the amount of heat that it's capable of releasing.
16 We've done considerable research in this. There's
17 something called the Cool Roof Rating Council
18 which rates these properties of roofs. And
19 depending on the amount of reflectance and the
20 amount of emissivity there are different numbers
21 of products that are on the market.

22 Our ingoing assumption and we
23 definitely want to work with City Council and
24 others to come to a consensus about this, our
25 ingoing assumption is that we need to set the

1 standards for reflectivity and emmissivity. There
2 are a variety of standards out there. There's the
3 one that's been adopted by California in Title 24.
4 There's the LEED standards. There's a Chicago
5 standard, a Florida standard and several others.
6 We would like to be in line with some of those
7 standards. I think the question is which is the
8 appropriate one.
9

10 COUNCIL MEMBER BREWER: Okay.

11 MS. KERR: So if we're in line with
12 some of the other standards, we create a clearer
13 market signal. And it makes it easier for people
14 to buy these things.

15 COUNCIL MEMBER BREWER: Okay.

16 That's great. I mean I go around to the stores,
17 you know, I'm kind of neurotic. And so I'll go
18 around and I try to buy the right paint. But if I
19 start talking about emmissivity and reflectivity I
20 don't know if the local hardware stores are going
21 to know what in the world I'm talking about. So
22 I'm just saying as time goes on, you need to be
23 able to buy it. Okay.

24 We have a big development. We all
25 do coming up. We happen to have Riverside Center

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2 down near the Hudson River. Every time we talk
3 about LEED it's like we're just going to do the
4 minimum. So these big developments that are
5 coming up, I guess we have to pass, generally
6 PlaNYC legislation in order to get them to be the
7 maximum. It's very frustrating to have a brand
8 new building, you're starting from scratch, and
9 you want it to be the most environmentally correct
10 for the future of our City. So how does PlaNYC
11 working with City Planning Commission, for
12 instance, even though we haven't passed every
13 piece possible of legislation to make these new
14 developments what we all hope our future City will
15 be? I mean it has to do with these bills but just
16 generally. And then I'll stop my questioning.

17 MS. KERR: That isn't something
18 that we've addressed--

19 COUNCIL MEMBER BREWER:
20 [Interposing] Okay.

21 MS. KERR: --we've been much more
22 involved in the building codes for all buildings.

23 COUNCIL MEMBER BREWER: Okay I'm
24 just saying that that's something to think about.
25 With a lot of developments coming forward, they

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2 are not going to be the kind that we would like
3 because they don't have to. So I just throw that
4 out for discussion with City Planning. Thank you
5 and I appreciate your support with tweaking
6 perhaps of Intro 338 regarding the greenhouses.
7 Thank you.

8 CHAIRPERSON DILAN: Okay, Council
9 Member Lander and then after Council Member
10 Lander, the list is open so if any members are
11 interested, please advise. Council Member Lander.

12 COUNCIL MEMBER LANDER: Thank you
13 Mr. Chairman, Ms. Kerr, great to have you on
14 board. Thanks so much for being here today and
15 for picking up the work of the Office of Long Term
16 Planning and Sustainability. A couple of
17 questions that I'm sort of grappling with
18 personally right now. In my District together
19 with NYSERDA and Con Ed have launched a sort of
20 reduce your use energy challenge. So a couple of
21 hundred of us are trying to reduce our energy use
22 and I don't know, a month when we tried to do all
23 the simple things like trying to deal with vampire
24 power and unplugging my phone chargers. But I
25 heard that in the earlier round of this, the

1 person who won did in fact install rooftop solar.
2 And so I'm going to have to step it up if I want
3 to compete in later months. And this gets a
4 little bit to some of the questions that Council
5 Member Fidler as asking about how it works for
6 small, you know, homeowners, 1 to 4 family
7 homeowners to kind of take advantage of some of
8 the legislation that we're looking at here today.
9 So a couple of questions. I mean first it's not
10 easy for a home owner or a building owner to sort
11 of figure out well does solar thermal make sense
12 or solar PV or a green roof. Are you thinking
13 about doing anything with folks that would help
14 people evaluate what their options are and make
15 smart choices about what they might do? This
16 could be asked for larger commercial owners as
17 well as homeowners but and that's--

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19 MS. KERR: [Interposing] This is
20 sort of--this is beyond today's discussion. I
21 would say that primarily though those resources
22 are available through Con Ed and NYSERDA and
23 reaching out to them, they have technical
24 providers who can--and there's a wide number of
25 different programs that they offer. And there's

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2 considerable, I think NYSERDA will pay half of the
3 cost of a technical analysis.

4 COUNCIL MEMBER LANDER: So they're
5 great partners and I'm, you know, working closely
6 with both of them, both on some policy things and
7 also on my own home. But I do think there's room
8 for the City and this gets a little bit I think to
9 Council Member Brewer's question even just about
10 types of paint. There are things that are
11 appropriate for us to set standards for and
12 regulate. Then there's a big gap though between
13 that and helping people figure out what makes most
14 sense for them to do. And I just urge you to
15 think about whether the Mayor's Office can be
16 helpful in moving that forward. It remains a
17 confusing field for all the good efforts that
18 NYSERDA and Con Ed and National Grid and a whole
19 range of other actors are doing. And because the
20 City and your office has been so prominent in it I
21 think it would b helpful and I guess just maybe
22 two more specific things. I do want to come back
23 to Council Member Fidler's specific question. The
24 state authorizing legislation for that solar tax
25 credit is set to step down on January 1st. It's

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2 current 8.75% abatement, it's going to go down to
3 a 5% abatement on January 1st. Now and if you
4 could persuade me there only needed to be a 5%
5 abatement and people would use it, great. If not
6 I really do hope that the Mayor and the
7 Administration will join us in pushing to either
8 keep it at 8.75% or do what's necessary to make
9 sure it works for people. It's great to have the
10 authorizing legislation be a little clear about
11 how you attach to your roof and how far it can
12 overhang but if we don't have the right package of
13 incentives in place to help people do it, it won't
14 be worth as much. So I guess you said you
15 weren't--so one, you don't need to get back to us
16 on what's going to happen 'cause what's going to
17 happen is the abatement is going to go down from
18 8.75% to 5% on January 1st. But if you could get
19 back to us on whether the Administration will work
20 with us, believes it's necessary to keep at 8.75%,
21 if not, why not. And if so what can we do
22 together to make sure it stays there.

23 MS. KERR: We can do that.

24 COUNCIL MEMBER LANDER: And then my
25 last question on this front and it certainly goes

1 beyond the--thank you--beyond the scope of today's
2 hearing but again especially--well this is for
3 large building owners and small building owners.
4 I think we all agree that what's going to make
5 this possible for buildings where beyond subsidy
6 and, you know, not necessarily for low income
7 buildings, not necessarily with tax abatements,
8 but just enabling people to essentially borrow
9 against the savings they are going to achieve to
10 do the work. And unfortunately we've had cold
11 water thrown on the idea of pace legislation by
12 Fannie Mae and Freddie Mac. You wouldn't have
13 thought that the financial services industry would
14 have the audacity to, you know, to set national
15 policy at this moment in time. But I wonder, I
16 assume you're obviously--I know you were looking
17 at, you and EDC were looking at how to implement a
18 pace program here given the uncertainty or I guess
19 the unlikelihood of being able to use it as sort
20 of originally envisioned in the stimulus package.
21 But some other things that the folks at the state
22 level are still talking about, on-bill financing.
23 Do you guys have some thoughts about what we could
24 do as a City since it really is the property tax
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2 that seems to me would be the best way to enable
3 people to do this? Are there some thoughts about
4 how we could enable to use their, essentially
5 borrow against their own savings from the kinds of
6 things we're talking about here today to be able
7 to afford to do this work without needing subsidy?

8 MS. KERR: We are definitely
9 working on an energy efficiency entity, we're
10 calling it. We have received about \$40 million in
11 Federal funding as seed money for loans for energy
12 efficiency. And we're in the midst of setting up
13 an entity that can pursue maybe creative financing
14 is no longer a happy concept but new effective
15 ideas that may go beyond pace or alternatives. So
16 that's definitely something that our office is
17 pursuing.

18 COUNCIL MEMBER LANDER: That's
19 great. And are 1 to 4 family buildings in the mix
20 in that thinking as well? Obviously on the one
21 hand there's some argument for kind of that big
22 buildings are where the big benefit is. And so I
23 certainly want us to be attending to those things
24 in commercial buildings and the ones that we're
25 going to require to do the retro-commissioning

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2 work under the law the Council passed. At the
3 same time, boy there are an awful lot of home
4 owners who would be willing to get on board and
5 aren't asking for anything more than the ability,
6 aren't asking for subsidy, are just asking for the
7 ability to find some way to finance the kinds of
8 improvements we're talking about against their own
9 savings, either via their energy bill or their
10 property tax bill. So I would hope that we're at
11 least keeping them in mind and are they part of
12 the dialog around the energy efficiency entity?
13 Or if not, could they be?

14 MS. KERR: I can't answer that.
15 But I think there will be a board that will be
16 ultimately managing this. And they'll be
17 considering the range of building types I'm sure.

18 COUNCIL MEMBER LANDER: Okay. But
19 I guess before we set up--

20 MS. KERR: [Interposing] Over time.

21 COUNCIL MEMBER LANDER: --if we set
22 up that board in a way to attend only to large
23 commercial buildings then going to that board and
24 talking about the need to put something in place
25 for small home owners is going to give us cold

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2 comfort. So it seems to me it should be in the,
3 again, it's one thing to say for a scarce subsidy,
4 for that \$40 million, we're going to prioritize
5 larger buildings. But I think the mission of that
6 entity and the composition of its board ought to
7 include the broad building type, you know, most of
8 the City is 1 to 4 family homes. And I guess I'd
9 ask if you could get back to me and let me know
10 what we could do to make sure that as it gets
11 constituted, even if we're going to prioritize
12 subsidy for larger buildings that we're building
13 into its mission and practice, attention to how to
14 make this work for home owners and smaller
15 buildings. Thank you. Thank you Mr. Chairman.

16 CHAIRPERSON DILAN: Thank you
17 Council Member Lander. We've been joined by
18 Council Member Levin who has a question and then
19 after Levin, again, the list is open if any
20 members want to ask questions, please advise.

21 COUNCIL MEMBER LEVIN: Thank you
22 Mr. Chairman. Thank you very much. I just wanted
23 to touch base very quickly on Intro number 350.
24 And if you can elaborate a little bit further,
25 that's the small scale wind energy bill.

MS. KERR: Yes.

COUNCIL MEMBER LEVIN: And I'm sorry I arrived a little bit late to the hearing but I understand that the Administration has some reservations. I was just wondering if you could elaborate a little bit on that. And the context is that I've heard from a number of folks from actually out of state but where wind energy has become more prevalent about some of the adverse health impacts that neighbors are feeling in terms of usually with regard to larger wind turbines but whether or not we're looking at those potential health effects. And they're somewhat wide and varied but these are very large mechanical devices that create an awful lot of noise and do have an impact in the surrounding neighborhoods. And whether when we're looking at establishing or implementing them in New York City you have some safety concerns obviously with regard to, you know, in high wind situations, there have been instances where blades have become bent, actually broken. And I was just wondering if those were issues we're looking at as a City as we look at this type of methodology.

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2 MS. KERR: I think in general the
3 technical panel assembled by the Department of
4 Buildings has generally focused on health and
5 safety issues and ensuring that those are in fact
6 covered 'cause that's the most serious first step.

7 COUNCIL MEMBER LEVIN: I mean if
8 you could kind of elaborate a little bit further
9 as to what impacts you've seen through this or
10 whether as a potential of this Intro.

11 MS. KERR: I think that on the
12 whole they're ensuring, you know, that the blades
13 aren't going to fly off. And I think they're also
14 I think concerned about transmission of vibrations
15 into structures that could undermine the long term
16 viability of masonry and things like that. So I
17 think it's the sorts of structural issues that
18 Department of Buildings is typically relied upon
19 to try to address.

20 COUNCIL MEMBER LEVIN: Okay. Okay
21 I thank you. I mean I just want to kind of throw
22 it out there. There's been, and this is kind of a
23 source of controversy with regard to this, you
24 know, and elsewhere outside of New York City but
25 other kind of like health effects that this has

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2 had on neighbors. So for instance if you were to
3 have a wind turbine on top of a hospital for
4 example, the people have complained about nausea
5 as a result. I don't know if you've seen any of
6 these reports but nausea or kind of long term
7 sickness and heart beat irregularities and things
8 like that that people have kind of found difficult
9 to, you know, exactly codify exactly, you know,
10 exactly what is going on there. But there have
11 been significant reports of these types of
12 instances. And so I want to make sure that when
13 we're looking at the implementation here in New
14 York City that those effects are taken into
15 account as well.

16 MS. KERR: Maybe if you could send
17 our office any documentation that you have on
18 those health effects, that would be a valuable
19 place to start.

20 COUNCIL MEMBER LEVIN: Great.
21 Great. Thank you very much. Thank you Mr.
22 Chairman.

23 CHAIRPERSON DILAN: Thank you. I'm
24 not sure if I acknowledged but we have also been
25 joined by Council Member Jackson of Manhattan.

1
2 And then next I'll acknowledge Council Member
3 Crowley of Queens for questioning.

4 COUNCIL MEMBER CROWLEY: Thank you
5 Chair Dilan. Good morning. I have a question
6 somewhat in follow-up to Council Member Lander's
7 question about the available funds. How much is
8 the budget for the Office of Long Term Planning?

9 OFF MIC: We don't have a budget.

10 MS. KERR: [Chuckling].

11 COUNCIL MEMBER CROWLEY: Is it?
12 You don't have a budget?

13 MS. KERR: We don't have a budget.

14 COUNCIL MEMBER CROWLEY: Right.
15 But you mentioned a \$40 million grant from the
16 Federal government.

17 MS. KERR: That's not to our
18 office. That's to the creation, unfortunately.
19 That's for the creation of this energy efficiency
20 entity whose sole purpose is--well not--this
21 actually gets at a question, related question that
22 Council Member Lander had asked. There are
23 several purposes that are seen for the energy
24 efficiency entity. One is the actual creation of
25 loan vehicles and management of that and

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2 facilitating--and trying to bring in more funding
3 from this sort of seed funding. The second very
4 big part is to create some sort of information
5 center where people can at the very least
6 understand all of the incentives that are
7 available as well as the tax benefits. So that is
8 definitely on the table so.

9 COUNCIL MEMBER CROWLEY: And in
10 terms of the tax benefit, I understand the solar
11 power benefit, are there other benefits?

12 MS. KERR: There are a lot of state
13 and national tax incentives--

14 COUNCIL MEMBER CROWLEY:
15 [Interposing] Right but New York City tax
16 abatement?

17 MS. KERR: --that - - no there
18 aren't--

19 COUNCIL MEMBER CROWLEY:
20 [Interposing] For property tax?

21 MS. KERR: There are none other
22 than the green roof and solar. But there are
23 great many at the national and state level and New
24 Yorkers should be taking advantage of those.

25 COUNCIL MEMBER CROWLEY: Right.

1
2 For the people in my district, a lot of them would
3 like to participate and I think that they're just
4 straddled with the cost burden. And if the
5 upfront money was made available they'd be more
6 willing to. It seems like many of the incentives
7 brought on by the state are for very low income
8 families. And that sort of middle income has a
9 hard time accessing these types of loans. So I
10 imagine that soon there will be a City entity that
11 will administer this particular \$40 million grant.

12 MS. KERR: Yes.

13 COUNCIL MEMBER CROWLEY: Good.

14 Thank you.

15 MS. KERR: It'll be I think a not-
16 for-profit.

17 CHAIRPERSON DILAN: Okay before I
18 get to Council Member Garodnick I just would also
19 like to clarify that their budget is funded
20 directly through the Mayor, the budget in the
21 Mayor's Office. So I'm certain that they have the
22 funds that they need to do the job that they have
23 to do. And I would suggest to Council Member
24 Fidler, the Counsel has made me aware that there's
25 no tax credit resolution before the Housing and

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2 Buildings Committee. You may want to check and
3 see if potentially if there's something before the
4 Finance Committee and if not I suggest that you--

5 COUNCIL MEMBER FIDLER:

6 [Interposing] I just wrote an LS request so.

7 CHAIRPERSON DILAN: You got it.

8 Okay. Council Member Garodnick.

9 COUNCIL MEMBER GARODNICK: Thank
10 you very much Mr. Chairman. Ms. Kerr, thank you
11 for your testimony. I'm sorry I too came in after
12 some of the questions had been asked. I'm the
13 sponsor of 347 and 346. I'm not going to focus
14 you on those because my sense is that with perhaps
15 some tweaking and perhaps some information from
16 advocates today that we will be able to find a way
17 to address some of your specific concerns on
18 those. I wanted to ask you about two proposals
19 which I am less familiar about and I read in your
20 testimony the Administration's opposition to
21 Intros 349 and 351 on the subject of requiring the
22 City to undertake studies and to install PV where
23 there is a payback period of 25 years or better.
24 It seems to me that when we're talking about City
25 buildings, to require that we lead in a way of

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2 showing the rest of the world that initial
3 investment can in fact pay for itself when you
4 take these steps, it seems like the right policy
5 goal for the City. Now I understand from your
6 testimony that there's a concern about what City
7 funds, limited dollars, exist to be able to pay
8 for this. So my specific question for you is are
9 there other opportunities, is there anything
10 within the bonding authority of the City or
11 installment contracts which would make this more
12 palatable to you from an upfront cost perspective?

13 MS. KERR: I think this is a very
14 interesting and important discussion to have.
15 When you're looking at trying to achieve the
16 energy and carbon reduction targets that we as a
17 City have committed to and that we know we need to
18 address over the next decades and even deeper cuts
19 into the future, I think there's a question of how
20 do you achieve that. Obviously. And our office
21 has generally felt that the best, our best
22 approach is to establish the goals, establish
23 where we want to go and let the technologies fall
24 where they may in achieving that. So let the
25 industry and let the various different strategies

1
2 for achieving these goals fall, play their
3 appropriate roles. So we're establishing the goal
4 but trying to be fairly light handed in terms of
5 predetermining the actual techniques that will be
6 used. We feel that that has a lot of benefits as
7 a strategy because it allows the industry and the
8 people who are the most familiar with the
9 technologies to decide how they're going to
10 achieve those reductions. And it also ends up
11 with the most cost effective strategies. So for
12 example when you are trying to achieve energy
13 reductions in a particular building, rather than
14 going in and determining that a priori you're
15 going to replace the lights and put solar panels
16 on the roof, you actually have an audit done, an
17 energy expert assesses the whole array of
18 potential strategies, gives you a list of how much
19 each one would cost and how much energy it would
20 save per year. And then you can look at that list
21 and presumably pick from the ones that give you
22 the most bang for the buck. And in general the
23 City has looked at its own energy reduction effort
24 with the same sort of strategy. So does that make
25 sense?

1
2 COUNCIL MEMBER GARODNICK: Well it
3 does although, you know, I'm thinking back to some
4 of the bills that we were considering even last
5 year and the last year and a half as the greater
6 greener buildings plan and its first iteration
7 which I believe was supported by the Mayor's
8 Office which had certain requirements based on
9 energy audits. Take a look, evaluate whether or
10 not the improvements could pay back over a period
11 of time and if so they must act. Now of course
12 that was not the version of the bill which
13 ultimately passed which I can understand. But the
14 question is for the City itself. Maybe if this
15 bill did not prescribe solar specifically, it
16 sounds like that might address your issue. If it
17 would say well you need to conduct extensive
18 studies, i.e., an energy audit and if the energy
19 audit prescribed this package of improvements, if
20 those improvements would pay for themselves within
21 a fill in the blank period of time, then you would
22 support this legislation?

23 MS. KERR: Well I'm not sure that
24 that would be necessary, to have an additional
25 piece of legislation because at this point the

1
2 City's audit retro-commissioning bill in fact
3 prescribes the retrofits for City buildings. So
4 unlike the private sector where because of some of
5 the split incentive issues the City pulled back
6 from the required retrofits, in City government
7 buildings the package of requirements that pay for
8 themselves within I think 7 years are required to
9 actually be installed. So that process is ongoing
10 and now the Department of Citywide Administrative
11 Services tells me that it's a standard part of all
12 of the City audits as they go through all of the
13 buildings, 50,000 square feet and above, to audit
14 them, that they'll be looking at the solar thermal
15 and solar electrical as part of an upgrade
16 package. And a fair number of both types of
17 projects particularly solar thermal have been
18 found to be cost effective within a package. So
19 those are going forward. I think 19 solar thermal
20 and 9 photovoltaic are currently on the boards.

21 COUNCIL MEMBER GARODNICK: I see.

22 So I think I'm now understanding your testimony to
23 be a little less about the upfront costs and more
24 perhaps about the fact that some of the existing
25 laws may be in place as a result of that package

1
2 of legislation that we passed last year, is that
3 correct?

4 MS. KERR: I think it's twofold--

5 COUNCIL MEMBER GARODNICK:

6 [Interposing] Or last year or whenever we passed
7 it.

8 MS. KERR: I think it's twofold. I
9 think that setting a very long time horizon for
10 one particular technology would have the effect of
11 draining funds from more effective strategies. So
12 the City's overall plan to reduce its emissions
13 has about a 7-year payback. So if a lot of solar
14 measures had to be installed with a 25-year
15 payback, you wouldn't have the funds to do the
16 less expensive things. So that's part one. Part
17 two is that where they are effective, then they
18 are--and they are working within the overall
19 package of 7-year paybacks, for the City as a
20 whole, they are in fact being installed.

21 COUNCIL MEMBER GARODNICK: So.

22 CHAIRPERSON DILAN: Council Member
23 I need to--

24 COUNCIL MEMBER GARODNICK:

25 [Interposing] Go ahead. That's fine. I'll just,

1
2 the last comment I'll make and then I'll let you
3 move on, is that I think we should have further
4 conversation with the Counsel to this Committee on
5 the subject of what is already in place; two, the
6 timeframes; three perhaps whether there are any
7 existing stimulus dollars or other that are
8 available to put the City in a position to be able
9 to do this. Where I sit that seems like--this
10 seems like the right route and you may agree with
11 that also about how we should be moving forward,
12 making sure that these systems are paying for
13 themselves and reducing our energy use. But
14 that's for further conversation. Thank you Mr.
15 Chairman for indulging me.

16 CHAIRPERSON DILAN: Thank you
17 Council Member Garodnick. We've been joined by
18 Council Member Reyna who has some questions. Then
19 I will close the questioning following Council
20 Member Reyna. And before we get to the Council
21 Member I do want to acknowledge for the record so
22 that the members who are in attendance can get the
23 benefit of receiving their testimony before they
24 leave, we've received testimony from Con Edison
25 which will be submitted into the record as well as

1
2 SSBX, the Sustainable South Bronx which will be
3 read into the record. Council Member Reyna.

4 COUNCIL MEMBER REYNA: Thank you
5 Mr. Chair. I apologize for my tardiness. I just
6 wanted to go on record; I've briefly scanned
7 through the testimony from Ms. Kerr and I just
8 wanted to further continue the dialog referring to
9 Intro 358 which I'm a sponsor of and trying to
10 understand exactly the reasons why 338 would be a
11 better option and perhaps exploring what reasons
12 there are and whether or not separating it is a
13 better option. And we can further continue to
14 discuss these issues that therefore there's a
15 reliable and non-complicated language within the
16 code in order for us to move forward the agenda of
17 setting a green code that's sustainable for the
18 City of New York for the future. I wanted to
19 thank my colleagues for their indulgence in
20 allowing me to make the comment. I know that I
21 was very late. Thank you Mr. Chair.

22 MS. KERR: I guess our question to
23 City Council would be the rationale for these two
24 bills which to our understanding seem to be very
25 similar. So I guess in our first take on it we

1
2 see the similarity, 338 seems to be the clearer
3 bill in that it addresses an issue in the building
4 code that is a building code provision. 358 does
5 that but it also adds a provision that puts
6 language, puts zoning code issues into the
7 building code. And so we think that obviously is
8 not possible to do. So that's why we would prefer
9 338. but maybe we need to discuss this all
10 further.

11 COUNCIL MEMBER REYNA: Correct.

12 Just not to delay this hearing any further, so
13 that further witnesses can come up and share their
14 views. I look forward to our discussion. Thank
15 you.

16 MS. KERR: Thank you.

17 CHAIRPERSON DILAN: Thank you

18 Council Member Reyna. I'm just going to shift the
19 questioning a little bit. We've heard a lot of
20 questions surrounding the policy of these
21 questions for better or for worse. I wanted to
22 shift to some of the fiscal impacts of the
23 legislative package before us. And I'll start
24 specifically with Intro 349. 349 would require
25 photovoltaic installation on City-owned buildings.

1
2 Now I don't remember from your testimony of your
3 position was in support or in opposition. So if
4 you could jus restate that for me that would be
5 great. But the question specifically, how much
6 would the administrative costs be to DCAS to
7 conduct a study as the bill requires? Does DCAS
8 have the current staff to do the study? And we'll
9 start there. It's a three-part question but I'll
10 do it in parts.

11 MS. KERR: Regarding the study, we
12 think that the study is redundant because the City
13 is creating already a solar map. And that map
14 will enable everybody to see the solar capacity of
15 any building in terms of both the area and the
16 amount of daylight that's available at that site.
17 Also Department of Citywide Administrative
18 Services--

19 CHAIRPERSON DILAN: [Interposing]
20 Yeah but I--

21 MS. KERR: --has been working for--

22 CHAIRPERSON DILAN: [Interposing] I
23 want to stop you because--

24 MS. KERR: [Interposing] Okay.

25 CHAIRPERSON DILAN: --maybe you're

1
2 confused with another agenda item before us. The
3 study that DCAS would be required to do would be a
4 feasibility study as to the installation of wind
5 and solar products and other products on City-
6 owned buildings--

7 MS. KERR: [Interposing] Yes.

8 CHAIRPERSON DILAN: --it doesn't
9 require a mapping, as another piece of legislation
10 before us does.

11 MS. KERR: Okay. But those two
12 things are somewhat overlapping but more to the
13 point the auditing of all the large City buildings
14 is including an analysis of solar, of the
15 potential for solar at that time. And so I think
16 it's the City's position that in fact in a much
17 more integrated way, every building is being
18 looked at for its capacity. It's just in
19 combination with other measures which is probably
20 a better way to look at installing solar than
21 doing this overall study. So I would say that the
22 study is in fact happening, just in a different
23 form.

24 CHAIRPERSON DILAN: Okay. So then
25 in short I would take it that there would be

1
2 opposition and it would be based on redundancy of
3 costs and therefore you haven't conducted a fiscal
4 analysis on this? Is that your brief answer?

5 MS. KERR: Yes. Yes.

6 CHAIRPERSON DILAN: Okay just
7 generally how much are the estimated costs of the
8 photovoltaic systems and installation and whether
9 it's our legislation or your private study,
10 roughly how many City-owned buildings have the
11 potential to get the PV systems?

12 MS. KERR: I can't answer that.

13 CHAIRPERSON DILAN: Okay at some
14 point we would like the Administration to conduct
15 an analysis and give to this Committee a fiscal
16 impact, whether it's your agency or OMB or whoever
17 the appropriate entity is, to give this Committee
18 an analysis of the fiscal impacts of these. So
19 I'll skip the next question because I assume the
20 answer will be the same. I'm going to move onto
21 Intro 357 which is the installation of City-owned
22 solar and hot water systems, excuse me, 351, I had
23 the number wrong. And that's the installation of
24 City-owned solar hot water systems on City-owned
25 buildings. And it would also establish protocols

1
2 for the private sector to do it. Same question,
3 and if the answer's the same, that's fine, just
4 please give it. What are the administrative costs
5 to DCAS for this study? Does DCAS have the
6 current staff? And what are the costs to DEP to
7 enact the pilot program? Do they have the amount
8 of staff? And if you have estimates as to what it
9 would cost, what would be the impact on the
10 private sector?

11 MS. KERR: There, by and large, the
12 fact that the audits are already doing the studies
13 on a building by building basis would be part of
14 that answer. In terms of a pilot program,
15 however, the New York City Economic Development
16 Corporation has already launched such a pilot
17 program so that is already underway with 12
18 projects in the 5 Borough. In addition NYSERDA
19 does have funding for solar thermal so those are--

20 CHAIRPERSON DILAN: [Interposing]

21 Okay I--

22 MS. KERR: --moving forward.

23 CHAIRPERSON DILAN: I just want to--

24 -

25 MS. KERR: [Interposing] In the

1
2 private sector.

3 CHAIRPERSON DILAN: I just want to
4 say something generally. And maybe yourself and
5 your staff could keep this in mind because I would
6 imagine whether it's this Committee or the
7 Environmental Protection Committee, that a lot of
8 these bills are going to be coming before either
9 this Committee or that Committee or Council Member
10 Crowley's Committee which is Fire and Criminal
11 Justice Committee, is that when the agenda items
12 is being presented and you're ready to discuss it
13 and you're ready to give testimony, to the best of
14 your ability, if you can come with the fiscal
15 impacts of them so that members can have a clearer
16 picture. This was the subject of major debate at
17 our last stated meeting. And we'd like to have as
18 much information as to the impacts of all these as
19 possible. So I'll move to 352 which I remember
20 the Administration had opposition of, 352 would
21 remove the \$4,000 fee for the street cranes that
22 are used to install solar rooftops. I guess could
23 you elaborate the impact of this. Would the City
24 incur this fee? What are the fees right now, if
25 any, that are collected to be done? And I guess

1
2 would the City be open to a reduced number as a
3 means to incentivize the installation of solar
4 panels?

5 MS. KERR: The Department of
6 Buildings tells us that the fees are really more
7 in the \$1,000 range than the \$4,000 range that are
8 in the findings. So. That seems to be an
9 erroneous piece of information. The City does not
10 feel that it's in the public interest to waive
11 those fees because of the need for the Department
12 of Buildings to recover its costs for the
13 inspection and administration of cranes through
14 these fees. And clearly the public interest is
15 best served by having safe cranes in the City of
16 New York. So the City's position is that these
17 fees should not be waived.

18 CHAIRPERSON DILAN: Okay. Well I
19 can't argue that we--trust me I can't argue that
20 we need safe cranes. This Committee spent plenty
21 of time on it and I don't think we're interested
22 in spending any more time on it. But I guess, I
23 want to take it that your answer may be--the
24 Administration may be willing to adjust the fee
25 within the legislation, whether that's the factual

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2 amount in practice or not, to what's more in line
3 with what the Buildings Department spends, is that
4 an accurate assessment of your answer or I just
5 wasn't sure if you were opposed to removing this--

6 MS. KERR: [Interposing] We could
7 look into whether or not there's room for some
8 reduction.

9 CHAIRPERSON DILAN: Okay.

10 MS. KERR: Of some sort.

11 CHAIRPERSON DILAN: Okay. Great.

12 I'll skip my questions on the solar map because I
13 think you, even though we asked another question,
14 I believe that they were addressed. And just on
15 the entire package, what do you think, the entire
16 package before us today, what do believe the
17 impact on DOB staffing and budget, how do you
18 believe that the package before us would have an
19 impact on the Department of Buildings
20 specifically?

21 MS. KERR: Well there a number of
22 things that they are already doing and that
23 they're already set up to do for example the
24 Innovation Review Board. So I think that's
25 ongoing. So I don't think that would have an

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2 impact. I don't see this as being significant
3 increase in the work for the Department of
4 Buildings.

5 CHAIRPERSON DILAN: Okay and again
6 this may be addressed to someone else in the
7 Administration besides yourself. I guess whatever
8 bills that are agreed to, just for the benefit of
9 the members, I'd like to see the fiscal impact of
10 that as well. I know that there appears to be
11 some minimal costs to the Department of Finance.
12 And I would imagine that those would be minimal so
13 I'll skip those questions. It just requires them
14 to make notifications with the first quarterly
15 assessment of the tax year, that just appears to
16 maybe be a resetting of a printer. The staff can
17 do that offline with you guys. But we would want
18 the answer to that as well.

19 Just two questions on the substance
20 of the legislation and they are cost-related as
21 well. What is the average cost of solar panels
22 and photovoltaic systems and the solar hot water
23 systems? What is the average cost to purchase?

24 MS. KERR: My understanding is that
25 without subsidies, the cost of photovoltaic panels

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2 is about \$10 a watt in New York City. And so
3 1,000, a kilowatt system would cost about \$10,000
4 installed. So that is a ballpark that I hear from
5 the industry. I'm not; I don't have the numbers
6 at my fingertips for solar thermal. It's a little
7 harder to give the quantity.

8 CHAIRPERSON DILAN: Okay.

9 MS. KERR: On that.

10 CHAIRPERSON DILAN: And then the
11 final question has to do with some zoning
12 implications which I know you mentioned concern
13 about in your testimony. Do our zoning
14 resolutions, height restrictions and limitations
15 on permitted obstructions limit the installation
16 of renewable energy systems? And to your
17 knowledge is City Planning considering or planning
18 to consider adding these types of equipment to
19 zoning resolution as permitted obstructions?

20 MS. KERR: Yes to both.

21 CHAIRPERSON DILAN: Yes to both.
22 Okay. I'd like to thank you for your time and
23 testimony Ms. Kerr. I'm sure you'll be before
24 this Committee again. And look forward to working
25 with you on the package and looking forward to

1
2 refining it so that it reflects as early as
3 possible the impact to City government from a
4 financial perspective.

5 Ms. KERR: Thank you Chair Dilan.

6 CHAIRPERSON DILAN: Thank you very
7 much. Okay. So I'm going to call up the first
8 panel. It consists of Mr. Russell Unger of the
9 Urban Green Council; Christine Chang, the National
10 Resources Defense Council; and forgive me if I say
11 this wrong and please correct me, Mr. Anthony
12 Bartolacci, of the American Council of Engineering
13 Companies. That'll be the first panel. And
14 they'll be followed by Mr. Jim Thorpe of the Sun
15 Power Corp.; Shaun Chapman of Volt Solar; as well
16 as Alison Kling who's here to represent CUNY. And
17 I want to, I think because of the hour and I want
18 to apologize to everybody in the audience, I'm
19 required to be out of this room, to clear out for
20 another hearing by 1:00. I will get to everybody
21 who has waited and listen to them. But I do want
22 to at this time to institute a liberal 3-minute
23 clock. So I'd like to ask you guys to just begin
24 and get in the pertinent points of your testimony.
25 And if you want to summarize and if you want to

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2 submit the testimony for the record as if read in
3 full we would certainly do that. So I guess we'll
4 begin with Mr. Unger. And even though I
5 introduced each and every one of you, introduce
6 yourselves in your own voice before you begin your
7 testimony.

8 MR. RUSSELL UNGER: Thank you. Good
9 morning Council Member Dilan and members of the
10 Committee. My name is Russell Unger. I'm the
11 Executive Director of Urban Green Council. And
12 I'm the Chair of the New York City Green Codes
13 Task Force. At least I was since I was relieved
14 of that burden when we released our report.

15 Let me begin by thanking the, you
16 know, the City Council and the Mayor's Office for
17 incredible leadership this year on green codes.
18 The Council this year enacted 9 laws from
19 recommendations that task force made including 1
20 that changed the very purpose of the construction
21 code. So one of the four purposes of the
22 construction code is now environmental protection.

23 Since almost all the bills today
24 deal with alternative energy systems, I'm just
25 going to begin by talking about the task force's

1
2 perspective on this. The transition to a low
3 carbon economy and improving air quality will
4 require a mix of energy sources including
5 alternative energy and distributed energy. In the
6 short term we're focused on removing impediments
7 to them. Most of the City's codes were created
8 before these technologies existed so they didn't
9 contemplate their use.

10 The task force report however did
11 not recommend incentives or mandates for solar or
12 other alternative energy systems. We should
13 applaud any private owner wishing to use these
14 systems. They're taking a leadership role and we
15 hope others will follow their suit. However we
16 question whether singling out a single technology
17 is the most efficient means of achieving our
18 carbon reduction or air quality improvement goals.

19 Because of their extremely long
20 payback time, building integrated alternative
21 energy systems requires significant incentives to
22 be attractive to owners in comparison to many
23 simple energy efficiency investments such as just
24 insulating a roof, we were talking about roofs
25 largely today, have a short payback. And if the

1
2 City is going to incentivize anything, I think it
3 should look to such investments which might, you
4 know, require a little bit of help before you
5 could get the private sector using them.

6 So with those introductory
7 comments, I'll just quickly summarize our views on
8 the bills today. We strongly support
9 Introductions 340, 341, 342, and 347 which would
10 implement recommendations from the task force.
11 These are all no-cost code changes that will
12 facilitate alternative energy and other green
13 practices. One suggestion we have regarding Intro
14 347 on cool roof coatings is that the Council
15 consider prohibiting the sale of non-complying
16 coatings. And that would address issues that a
17 number of Council Members have mentioned in this
18 hearing about ease of compliance. It will address
19 also ease of enforcement.

20 We had similar comments that the
21 Administration had on Introduction 358 and I just
22 note that to fully implement the task force
23 recommendation corresponding to Introduction 340
24 would require action by the Department of City
25 Planning.

1
2 Introductions 342, 346, 348 and 350
3 would all require that the Department of Buildings
4 to develop standards for some, for various sources
5 of alternative energy and other green building
6 practices. And as a general matter we support
7 anything that's going to clarify standards.

8 That's a good thing. But we also note that this
9 year the City established the Building
10 Sustainability Board, the Department of Buildings
11 did this or known also as the BSB and its precise
12 role is to help the Department develop standards
13 for new technologies. And I suggest that it may
14 be easier to work with this board and get faster
15 and maybe more, you know, more effective
16 standards. In particular the BSB recommended
17 standards that are considerably less permissive
18 than presented under Intro 350. This is the bill
19 on windmills that would permit windmills
20 automatically with diameters up to 16 meters,
21 we're talking 50 feet here, which the BSB would
22 limit that to just 3 meters or 9 feet. I'm not an
23 expert on windmills but a 50-foot rotor seems like
24 a very large moving device to place on top of a
25 building in a dense neighborhood.

1
2 Finally for the reasons I discussed
3 at the beginning of my comments, we cannot endorse
4 Introduction 349 and 351 as presented. These
5 would mandate the installation of solar PV and
6 solar thermal systems. The cost of these systems
7 undoubtedly would have to come from the pool of
8 money used for energy efficiency investments and
9 we believe that decisions on energy efficiency
10 should be driven by rate of return that provides
11 the greatest reduction in energy use and
12 improvement in air quality. So thank you for your
13 consideration and the Council's leadership on
14 these issues. I'm happy to answer any questions.

15 CHAIRPERSON DILAN: Thank you and
16 I'm so afraid they're going to call us out of here
17 for a fire drill. As if we need another
18 disruption to the proceedings here today. I
19 believe Ms. Chang was next?

20 MS. CHRISTINE CHANG: Good morning
21 Chairman Dilan and members of the Committee. My
22 name is Christine Chang and I'm an attorney at the
23 Natural Resources Defense Council, an
24 environmental organization based in New York City.
25 Thank you for the opportunity to testify on the

1
2 legislation before the Committee today.

3 NRDC applauds the City Council for
4 its leadership and for continuing to move forward
5 in its effort to address climate change. The
6 greenhouse gas emissions that stem from aggregate
7 energy use in New York City buildings represent
8 nearly 80% of the City's total carbon footprint.
9 The City has already taken a tremendous step
10 forward to address these emissions and move
11 forward to achieve its PlaNYC goal and reduce
12 citywide emissions 30% by 2030 with the passage of
13 the landmark Greener Great Buildings legislation
14 last December.

15 In addition in July 2008 Mayor
16 Bloomberg and Speaker Quinn asked the Urban Green
17 Council to convene the New York City Green Codes
18 Task Force to identify impediments to and
19 opportunities for green practices in the laws and
20 regulations affecting buildings in New York.

21 NRDC is one of the participating
22 groups in the task force which released its final
23 report with 111 recommendations, the genesis of
24 some of the bills under consideration today. The
25 City has an opportunity to build upon these

1
2 important achievements and to move closer to
3 reaching it's 30 by 30 emissions target by scaling
4 up the use of renewable energy sources such as
5 solar, solar thermal and wind power, and by taking
6 additional steps to reduce the urban heat island
7 effect.

8 Despite high electricity prices and
9 abundant resources, in 2009 New York State had
10 only 34 megawatts of cumulative installed solar
11 generating capacity and New York City had about
12 2.5 megawatts of such capacity. New York City has
13 also not taken advantage of its solar thermal
14 potential. A 2008 study by NYSERDA cited the City
15 as one of the most favorable locations in New York
16 State for this cost effective technology. As
17 stated in the legislative findings and intent, the
18 City needs sustainable, renewable and affordable
19 energy sources that contribute to energy
20 independence.

21 The City should take advantage of
22 its plentiful solar and wind energy resources by
23 removing barriers to and encouraging the
24 installation of renewable distributed generation.
25 Currently it takes about one year to get a solar

1
2 power project approved in New York City. But it
3 takes only about three months to get approval in
4 Los Angeles. We support any efforts by the
5 Council to reduce that time period and to
6 streamline the process.

7 Promoting the increased deployment
8 of distributed solar and wind in New York City
9 would not only reduce greenhouse gas emissions and
10 improve air quality but would also result in the
11 creation of a significant number of jobs and
12 increase economic development, greater reliability
13 of the electric grid, reduce long term costs of
14 electricity generation for consumers, increase
15 energy independence.

16 We also support efforts to spur the
17 installation of more vegetative roofs, a/k/a green
18 roofs in the City. On a citywide scale green
19 roofs can substantially reduce energy use and
20 greenhouse gas emissions. And at the same time
21 can help to address urban environmental problems
22 posed by poor air quality, the urban heat island
23 effect, water pollution caused by storm water
24 runoff and loss of wildlife habitat.

25 Research shows that green roofs can

1
2 reduce the amount of energy used for indoor
3 climate control on the top floor immediately below
4 the roof by approximately 10% to 60% and by 5% to
5 15% on the second floor below the roof. Further
6 more the Mayor's Green Infrastructure Plan
7 released last month highlighted the role that
8 vegetated areas such as green roofs can play in
9 solving the City's huge sewer overflow problem.

10 NRDC and the Storm Water and
11 Infrastructure Matters Coalition of which NRDC is
12 a leading member encouraged the City to maximize
13 the use of green infrastructure approaches to
14 reduce sewer overflows. In addition the City that
15 has little available land for urban agriculture,
16 green roofs provide an important space for
17 increasing residents' access to healthy food.

18 We thank you for your leadership
19 today on these issues and we look forward to
20 reviewing these bills in greater detail and
21 providing any specific comments and
22 recommendations we may have as you move forward.
23 We strongly support the Council in facilitating
24 and promoting the deployment of renewal energy
25 sources and sustainable building practices and are

1
2 excited to continue working with you on these and
3 other efforts.

4 CHAIRPERSON DILAN: Thank you.
5 Thank you very much. Okay and if you can correct
6 me. I don't think I pronounced your last name
7 correctly but if you can say it in your own voice
8 and then you can begin.

9 MR. ANTHONY BARTOLACCI: You did a
10 great job.

11 CHAIRPERSON DILAN: Okay.

12 MR. BARTOLACCI: Good morning. My
13 name is Anthony Bartolacci and I am testifying on
14 behalf of the American Council of Engineering
15 Companies of New York Metropolitan Region. The
16 ACEC, New York. I'd like to thank Chairman Dilan
17 and the members of the Building Committee,
18 Chairman Gennaro and the members of the
19 Environmental Protection Committee as well as
20 Speaker Quinn for their tireless efforts over the
21 years. Updating the City's construction codes and
22 making New York a more sustainable place to live.
23 We are here today to testify in support of the
24 proposed sustainable rooftops package of bills.

25 ACEC New York is an organization

1
2 representing leading professional design services
3 firms. Founded in New York City in 1921 ACEC New
4 York is one of the oldest continuing organizations
5 of professional consulting engineers in the US.

6 ACEC New York represents 230 member
7 firms throughout the New York State that
8 collectively employ more than 17,000 people
9 statewide with a concentrated presence of firms
10 located within the 5 Boroughs of New York City.
11 ACEC New York is dedicated to promoting growth in
12 the industry through education of our members,
13 promotion of cooperative relationships, and by
14 addressing specific areas of concern on behalf of
15 our membership.

16 Over the last several years the
17 members of the ACEC New York had devoted hundreds
18 of hours to the review and overhaul of the New
19 York City construction codes and the 2008 revision
20 of the New York City building code. ACEC New York
21 is equally concerned about sustainability issues.
22 According to the World Watch Institute buildings
23 use 17% of the total freshwater flow, 25% of
24 harvested wood. They are responsible for 50% of
25 CFC production, use 40% of total energy flows,

1
2 generate 33% of CO2 emissions and generate 40% of
3 landfill materials as a result of construction
4 waste.

5 For a greener and cleaner future
6 and to ensure that New York City remains on the
7 cutting edge of sustainable technology and
8 engineering it is important that our construction
9 codes reflect the best practices for building
10 efficiency and sustainability. The zoning
11 resolution plays an equally important role in
12 limiting the development of green technologies in
13 New York City. The zoning resolution sets forth a
14 height limit with permitted obstructions for every
15 zoning district in New York City. And many parts
16 of the City are further limited by special
17 district height limits or limited height district
18 regulations.

19 What this means is that for new
20 buildings the height of any of these devices would
21 require the building to be lowered sufficiently so
22 that the building with the green technology on top
23 would fit under the height limit. For old
24 buildings that are already approaching the height
25 limit the installation would be prohibited.

1
2 However the zoning resolution already permits
3 certain devices to exceed the height limitation
4 without penalty. For example elevator or stair
5 bulkheads, flagpole or aerial and parapet walls
6 smaller than four feet high are existing permitted
7 obstructions in the zoning resolution.

8 That is why we particularly want to
9 call out Intro 358 which would address this
10 problem. We support the Council's sustainability
11 objectives and respectfully offer our support for
12 this current round of legislation which reflect
13 these objectives. Also I'd like to point out that
14 our members are available to assist the Buildings
15 Department and Council in addressing any technical
16 issues that are identified in your considerations.
17 Thank you.

18 CHAIRPERSON DILAN: I believe
19 Council Member Brewer has a question.

20 COUNCIL MEMBER BREWER: Just
21 quickly, did anyone look at the financial impact
22 that was brought up by some of our colleagues
23 earlier? In other words how could you get more
24 people to participate with financial support? Tax
25 relief, etcetera. Is that something that's come

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up in discussions?

MR. UNGER: Council Member in respect to any of these bills?

COUNCIL MEMBER BREWER: Well no, just in general because I don't want to be--I know you're talking generally. You have different ways in which people can make their roof greener and obviously in some cases I think others have brought this up, owners would like to have some financial support in order to do that. So I just didn't know if that had come up in any of your discussions. Today we didn't really talk about it. And yet it seems to be it's always the elephant on the roof a little bit. Elephant in the room.

MR. UNGER: Well I can hear--from the position of the task force, I mean our mandate really wasn't to--it wasn't included to look at incentives. What I'd say is that as a general matter, I think that a focus right--our immediate focus on impediments is a good place to start because there are things that people want to do and they just can't either from rules that make it more difficult, lack of information, complex

1
2 processes. I mean if you've ever tried applying
3 for some of the incentives that exist, it's
4 getting to them is more of a problem right now
5 than their availability in my opinion.

6 COUNCIL MEMBER BREWER: All right.
7 Thank you. I'm just saying it's not your fault,
8 it's the Silo US. You know, and so if we can get
9 away from this silo perspective I'm always pushing
10 that in government. Thank you very much.

11 CHAIRPERSON DILAN: Any other
12 members with questions? If not I'd like to thank
13 you all for your time and your testimony on these
14 matters. Okay that next panel, Shawn Chapman, Jim
15 Thorpe and Alison King. And you guys will be
16 followed by, oh again forgive me if I
17 mispronounce, it looks like Sidsel Robards,
18 followed by Patricia Yakarleva [phonetic] this is
19 the next group. This is the next group. I'm just
20 letting you guys get prepared. And Viraj Puri.
21 That will be the next panel.

22 [Pause]

23 CHAIRPERSON DILAN: And I guess you
24 may begin in the order that you came up and just
25 restate your name in our own voice before you

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begin your testimony.

[Pause]

CHAIRPERSON DILAN: No.

MR. JIM THORPE: Okay I think we're on.

CHAIRPERSON DILAN: Oh good, you're live.

Mr. THORPE: Good morning ladies and gentlemen of the Council. My name is Jim Thorpe; I'm the Director of Market Development at Sun Power Corporation. And I'm here this morning to support the solar bills being considered by this Committee.

Sun Power is one of the world's largest manufacturers and installers of solar electric generating equipment otherwise known as PV. It's a NASDAQ listed company with over 5,500 employees based in California. We have offices in Brooklyn as well as a large presence in the metropolitan area with our eastern US headquarters located in Trenton, New Jersey. Sun Power has a robust dealer network throughout New York State including a number of dealers who install systems in New York City.

1
2 Since Sun Power's solar panels are
3 the most efficient available in the commercial
4 market they are ideally suited for New York City
5 where roof and ground space is at a premium. As
6 you know installing solar in the City involves a
7 series of challenges. The bills that you are
8 considering will be helpful in addressing some of
9 the institutional barriers such as a lack of
10 permitting clarity, cost of permitting, and
11 overlapping regulation.

12 We support the suite of bills you
13 are considering as a step on the path of
14 increasing solar energy production in the City.
15 There are three additional points I'd like to
16 share with you today. Intro 349 as there's been a
17 lot of discussion about it which requires the City
18 agencies to undertake the solar feasibility
19 studies and install solar where the payback is
20 within 25 years. This is a bill that could
21 significantly increase the amount of solar
22 installed in New York City if it is expeditiously
23 implemented. I would urge that the solar
24 empowerment zones that have been established under
25 the auspices of the Solar America City program at

1
2 CUNY be used as the first areas targeted for
3 feasibility studies.

4 Identifying City-owned buildings,
5 performing site and economic analyses, working
6 with Con Ed on grid interconnection, issuing
7 competitive RFPs, and installing solar systems
8 within the empowerment zones will give the City
9 some real world experience in getting solar on
10 buildings. The lessons from working within this
11 solar empowerment zone can then be applied to
12 other City-owned buildings throughout the 5
13 Boroughs.

14 I would also like to comment in
15 response to the comments of the Mayor's Office
16 earlier about the investment required in order to
17 make solar happen on these buildings. I would
18 just like to say that it's absolutely possible to
19 implement this 349 Intro without the use of City
20 funds. There are many private entities that will
21 enter into long term contracts called power
22 purchasing agreements and will essentially agree
23 to sell the City the electricity at the same or
24 lower price that they are currently buying it
25 from, from the utility companies where they're

1
2 purchasing it. So that's something that I think
3 that could really be something to investigate,
4 look into, and we'd certainly be willing to help
5 work out the details of what that might look like.
6 But that's a way to address the initial funding
7 that has been brought up a number of different
8 times.

9 In addition to working the Solar
10 American City team at CUNY to test out the
11 empowerment zone concept, I would urge the Council
12 to encourage the City's Albany representatives to
13 pass legislation at the State level that will
14 expand the renewable portfolio standard program
15 known as the RPS program to include larger systems
16 and specifically target down-state deployment of
17 distributed technologies such as solar. A bill to
18 improve the RPS will most likely be introduced in
19 the new legislative session in Albany. Support
20 from the City Council and Mayor's Office will be
21 helpful in demonstrating the desire of City
22 residents to participate in an RPS program that
23 has largely passed them by.

24 Number three, the City should also
25 encourage the New York Department of Public

1
2 Service to expeditiously implement the down-state
3 solar procurement geographic balancing process.

4 All that means is that there should be more money
5 in the RPS program for the City and right now the
6 Department of Public Services needs to implement
7 those regulations and start that process. Again
8 these are all ways that the amount of investment
9 needed in order to bring solar to New York City
10 can be implemented.

11 I thank you for your efforts to
12 improve the climate for solar deployment in New
13 York City and will be pleased to work with you in
14 implementing these bills and any others to be
15 considered in the future by the Council. Thank
16 you.

17 CHAIRPERSON DILAN: Thank you very
18 much.

19 MR. SHAWN CHAPMAN: Thank you very
20 much. Ladies and gentlemen of the Committee on
21 Housing and Buildings and the New York City
22 Council, the Vote Solar Initiative is pleased for
23 this opportunity to offer public testimony on this
24 suite of introduced legislation known collectively
25 as the solar bills. I am Shawn Chapman the East

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2 Coast Campaigns Director of the Vote Solar
3 Initiative.

4 Vote Solar is a nonprofit
5 organization with a mission of bringing solar
6 power into the mainstream with offices in San
7 Francisco, California; Lancaster, Pennsylvania;
8 and Brooklyn, New York. I've worked in over 15
9 states to implement the policies necessary to
10 build solar markets.

11 Vote Solar believes these bills
12 collectively offer several good steps towards a
13 New York City that is more accessible for solar
14 energy. We urge their quick adoption. No
15 individual initiative is going to solve the
16 challenges we face as a City dedicated to
17 deploying significant amounts of solar energy.

18 In just the last year New York City
19 has made important strides in addressing areas of
20 critical need. Some of the recent initiatives
21 include worked on to implement a geographic
22 balancing initiative in the state's RPS program,
23 zoned J down here. An increase in the amount of
24 net metering interconnection that takes place
25 within the City limits. And importantly the

1
2 Sustainable Energy Center at Bronx Community
3 College working collaboratively with city planners
4 and Con Ed to lead solar empowerment zones.

5 This suite of packages reinforces
6 that work. As we said no one policy is going to
7 solve all of these challenges but what these bills
8 do is reduce significantly the cost barrier, time
9 and cost involved in a solar installation. Much
10 publicity has been made on the drop in cost of PV
11 modules. Reuters indicated in one 6-month period
12 in 2008 they dropped by 50%. Well that has a lot
13 to do with global PV demand. What drives--that's
14 just half of the equation though. In most markets
15 a PV installation is about 50% of the cost. In
16 New York City due to regulatory barriers and labor
17 market concerns that can be upwards of 60%. So
18 the single most important thing a local government
19 can do is help speed that up. These bills begin
20 to address those concerns, helping the City and
21 its installer base achieve an economy of scale
22 that can begin to compare to other regions.

23 These solar bills address this need
24 in a number of ways but not limited to eliminating
25 unnecessary crane fees, recognizing solar

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2 equipment as a valuable asset to building
3 structure just as we would signage, creating
4 equity in rooftop assessment and developing a
5 clear strategy for identifying public buildings as
6 a resource for photovoltaic and thermal systems.

7 These are important steps for our
8 cities to take in establishing energy
9 independence, addressing the risk of climate
10 change, which will present critical challenges to
11 our cities' infrastructure and fostering economic
12 vitality. So in summary we appreciate the
13 Council's initiative in this matter. We thank you
14 for allowing us the opportunity to speak here
15 today. And we look forward to furthering the
16 conversation as this process moves forward. Thank
17 you.

18 CHAIRPERSON DILAN: Yeah it is. I
19 thought it was a fire drill at first, when they
20 first came in. It's pretty nuts. Ms. Kling, did
21 I say that?

22 MS. ALISON KLING: Yep. It's
23 Kling.

24 CHAIRPERSON DILAN: Okay.

25 MS. KLING: And I'll probably skip

through some of this. I don't want to get dinged.

CHAIRPERSON DILAN: Your prerogative.

MS. KLING: My name is Alison Kling. I'm the New York City Solar Coordinator at the City University of New York. I'm also here on behalf of Tria Case who's the University Director for Sustainability for CUNY. Thank you very much for the opportunity to provide comments today.

CUNY serves as the lead for the New York City Solar America Cities Partnership. We work with the Mayor's Office of Long Term Planning and Sustainability and the New York City Economic Development Corporation.

We've had a central role in New York City's solar policy since 2005 when we were first awarded funding through the US Department of Energy's Million Solar Roofs Initiative. With this funding we conducted the first solar market survey of New York City which was published in 2006. This survey was followed in 2007 with a policy report identifying market barriers along with recommendations on removing those barriers.

We were given the opportunity to

1
2 start implementing these solutions when our
3 application to the Department of Energy's Solar
4 American Cities Program was approved and New York
5 City was designated one of the first Solar America
6 Cities in 2007. CUNY on behalf of the partnership
7 received funding as well as technical assistance
8 from the National Renewable Energy Lab.

9 One of our primary projects was an
10 analysis conducted by NREL of the PV potential and
11 impact on Con Edison's network grid. This project
12 has created a strong relationship with Con Edison
13 and they have been a supporter of our solar
14 efforts over the last two years. Additional work
15 during this phase included support for an online
16 solar project tracker at Con Edison and a study
17 with the New York City Office of Emergency
18 Management on solar technologies for emergency
19 situations.

20 Also we'll publish an updated long
21 term solar policy strategy for New York City
22 within the next month. Earlier this year the
23 partnership was granted over \$1 million from DOE
24 and NYSERDA to continue its work. I'm just going
25 to run through a few of the projects that we're

1
2 working o over the next two years. As you've
3 heard we established the New York City Solar
4 Empowerment Zones. These are strategic areas
5 throughout the City where solar can have the most
6 impact. They are geographic boundaries we
7 developed with Con Edison where energy use is
8 highly coincident with solar or daytime peaking.
9 And they are targeted demand reductions efforts of
10 the next ten years.

11 We've also hired New York City
12 Solar Ombudsmen; these are two staff members who
13 will support the expansion of our work. As you've
14 heard we're building the New York City Solar Map.
15 This is also leveraging funds from DCAS to
16 purchase LIDAR data and we're building this map to
17 provide estimates of solar potential for every
18 rooftop in New York City. This will be the most
19 granular and detailed solar map in the country.
20 It will identify current solar installations and
21 also allow Con Ed to include solar potential in
22 its energy planning.

23 A few other key initiatives are
24 streamlined permitting. We are working with Con
25 Edison, DOB, NYSERDA and the Fire Department to

1
2 create a streamlined permitting process. And
3 we've actually signed an MOU with the Department
4 of Buildings. And one of our ombudsmen is sitting
5 there two days a week to assist with this project.

6 On outreach and education, we're
7 launching an outreach campaign within the Solar
8 Empowerment Zones to employ as much solar as
9 possible within these areas. Also looking to
10 leverage statewide funding opportunities. Both
11 the New York Power Authority, NYPA, NYSERDA will
12 be providing new funding for down-state solar
13 projects. You heard about the geographic
14 balancing from other testifiers.

15 We are identifying large rooftops
16 in the zones in advance and conducting pre-
17 feasibility studies to encourage as many projects
18 as possible in these areas.

19 As we move forward on all of these
20 projects we are glad to see the Council's
21 attention to solar in New York City. Today we
22 have some concrete suggestions for how the Council
23 could best support solar. I wanted to first say
24 that the passage of the revised New York City
25 electrical code, this code has been approved and

1
2 is only waiting for passage. This new code will
3 remove one of the largest administrative barriers
4 to solar according to an installer survey we
5 conducted earlier this year. This is the
6 requirement that every system must be
7 independently tested by a national recognized
8 testing lab.

9 In general, just provide ongoing
10 support for CUNY and the New York Solar America
11 City partnership. We've proven our ability to
12 strategically move the solar market forward and
13 being industry, local government, utilities and
14 advocates together. For instance the New York
15 City Solar Map which achieves some of the goals
16 set forth within this current legislative package
17 will need ongoing maintenance and updating to be
18 an effective tool.

19 The proposed bills to exempt solar
20 from landmarks, include solar as a permitted
21 obstruction and exempt it from the one-third rule
22 are consistent with feedback we have heard from
23 the industry over the last several years and could
24 have a large positive impact on the market.
25 However as other parties have mentioned it's

1
2 unclear that the permitted obstruction designation
3 can be achieved through legislation as well as
4 zoning changes have to go through ULURP and
5 Department of City Planning.

6 We will be happy to provide more
7 specific feedback as these bills are further
8 developed. And we thank you very much for the
9 chance to speak today and look forward to working
10 with you.

11 CHAIRPERSON DILAN: Okay. Thank
12 you all very much. I just have a brief question.
13 And because I have to get to everybody I would
14 appreciate as concise an answer as possible. And
15 I guess it would be more appropriate for Mr.
16 Chapman or Mr. Thorpe. I guess from your
17 expertise in working in the industry, we talked a
18 lot with the Administration about costs for
19 installation including permitted fees such as
20 crane fees and other associated fees Could you
21 maybe give me as quick an answer as possible as to
22 whether you agree with those cost estimates and
23 maybe reflect your opinion of what the cost to the
24 end user may or may not be?

25 If you could speak directly into

1
2 the mic, yeah.

3 MR. THORPE: I think the bottom
4 line is that I think the figure of \$10 a watt was
5 mentioned earlier. And that's for sort of a
6 smaller system. So the costs depend on the size
7 of the system. So the smaller the system, the
8 higher the cost. So for example on the permit for
9 the crane you're going to have to pay the permit
10 for the crane whether you put one kilowatt or ten
11 kilowatts on a roof. So it's that kind of thing
12 that makes the cost different.

13 Let me just say that in a
14 surrounding state, New Jersey, where there is
15 about 200 megawatts of solar installed and there's
16 a robust competitive marketplace, the average cost
17 of solar are probably about \$6.50 to \$7.00 for a
18 smaller system as opposed to \$10 in New York. So
19 you're seeing a lot of the sort of buildup of the
20 institutional problems of working in the City plus
21 the lack of a real market that allows a lot of
22 competition. It means that the people in New York
23 City pay a lot more than they do in surrounding
24 areas.

25 CHAIRPERSON DILAN: Thanks. Just

1
2 for the benefit of members, could you maybe give
3 us a concise description of what the average
4 installation entails in terms of affixing it to
5 the roof, getting it delivered? Could you just
6 maybe give us a quick run-through of what an
7 average installation entails?

8 MR. THORPE: Sure. I'm not
9 actually an installer. So we sell to installer
10 dealers. So probably there would be people in the
11 audience who could answer this better. But
12 essentially what you need to do is basically
13 prepare the roof. If you go up there you put a
14 roof rack on the roof, put the panels on the
15 racking or you have an integrated roof attachment
16 system. And then you basically have an inverter
17 which goes down in the electrical room so you have
18 to make a run from the panels on the roof down to
19 the electrical room and hook up an inverter which
20 then connects into the grid. So essentially those
21 are the components at least on a PV system. It's
22 different for a solar thermal system.

23 CHAIRPERSON DILAN: Thank you very
24 much. Any other questions? If not we'd like to
25 thank you all for your time and testimony. Okay.

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2 We have Sidsel Robards, Trisha Yarkolev
3 [phonetic], and correct me if I'm wrong, Viraj
4 Puri. And the next panel will consist of Mr.
5 Elliott Hecht, Mr. Ben Flanner and Manuela Zamora.
6 That'll be the next panel. You can, I guess,
7 begin in the order that you were called and please
8 correct any of my mispronunciations and I
9 apologize in advance for them. Yeah, push--yeah.

10 MS. CECILE ROBARDS: Again? Hello.
11 Yeah. I don't have anything written or prepared
12 so I apologize for that. But I'm very new to all
13 of this. My name is Cecile Robards. And I'm the
14 co-founder of the Greenhouse Project, a program of
15 New York Sun Works which works to promote urban
16 sustainability through science education.

17 And we have been working with the
18 great help of Gale Brewer to build a greenhouse
19 urban farm on the roof of Manhattan's School for
20 Children. And we are here to talk about that and
21 support the bill for the greenhouses. The one
22 concern that we did have is limiting the space to
23 only a third of the roof because at our school
24 it's very overcrowded and there's 35 students in
25 each class. So we do need--our greenhouse is a

1
2 classroom and an urban farm and we need to fit all
3 the children in and all the systems in. And if we
4 could only use a third of the roof it would never
5 work.

6 So that's once concern. I think
7 that's it.

8 CHAIRPERSON DILAN: Thank you.

9 MS. TUSHI YAKOVEVA: Hello. I also
10 don't have anything prepared and I'm very new to
11 this so I apologize. I sound a little scattered.
12 My name is Tushi--

13 [Off mic]

14 MS. YAKOVEVA: Sure. I am an
15 apprentice at the Dago Street Rooftop Farm
16 [phonetic] which is--

17 CHAIRPERSON DILAN: [Interposing]
18 Could you just restate your name for the record--

19 MS. YAKOVEVA: [Interposing] I'm
20 sorry. My name is Tushi Yakoveva [phonetic] and
21 I'm an apprentice at Eagle Street Rooftop Farm
22 which is the country's first commercial rooftop
23 farm. It is in Greenpoint, Brooklyn. And I just
24 wanted to introduce our organization because we're
25 unique in the sense that we strike a balance

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2 between a business as well as an organization that
3 makes a positive ecological impact. And also has
4 a large educational component.

5 So I just wanted invite everyone to
6 use us as a resource for education and research
7 because we have been studying the benefits and
8 concerns of growing vegetation on roofs. And I
9 wanted to address a couple of those. One concern
10 is water conservation because as opposed to
11 growing plants like sedum which don't produce food
12 on the roof. Plants require water and it causes
13 increased water use.

14 So some of the ways we've been
15 addressing that is by planting heat resistant
16 crops. Also just like any ground level farmer,
17 planting in accordance to the weather so before a
18 rainfall for example. And we over-winter with
19 cover crops that do not require any water thus
20 still being a green roof year round. But not
21 using water.

22 And then the other concern was
23 runoff water quality. And from what we have
24 observed people that grow food on a roof are more
25 concerned with the quality of the runoff water

1
2 than any other group. And the two benefits that I
3 wanted to mention that have not been stated in the
4 text because they're not ecological or, sorry...

5 CHAIRPERSON DILAN: Relax we don't
6 bite unless you plan on protesting a hearing that
7 has nothing to do with the topic that we're
8 discussing today.

9 [Laughter]

10 CHAIRPERSON DILAN: We don't bite
11 at all.

12 MS. YAKOVEVA: Thanks. I wanted to
13 mention bees. Aside from producing honey which
14 most of us love they are very important as
15 pollinators and vegetation on green roofs produces
16 an additional habitat for them thereby increasing
17 the health of the entire ecosystem of the City.

18 And I wanted to also mention the
19 education aspect which you've talked about a
20 little bit.

21 CHAIRPERSON DILAN: We'll have to
22 ask you to sum up. You can continue but just
23 summarize your point or you're done?

24 MS. YAKOVEVA: Oh I just, you know,
25 I just wanted to say about the education part.

2 CHAIRPERSON DILAN: Is a benefit?

3 MS. YAKOVEVA: Yes it's a benefit.

4 Yeah I mean I was speaking in support of this
5 Preconsidered Resolution. But we invite a lot of
6 classes onto the roof and just showing people how
7 food grows is, you know, is a model for a healthy
8 urban environment.

9 CHAIRPERSON DILAN: Well I
10 personally look forward to taking advantage.
11 Maybe some of the schools in my district which is
12 not far away from Greenpoint so thank you--

13 MS. YAKOVEVA: [Interposing] Great.
14 And just, I just wanted to mention I am an
15 apprentice there so I don't have all the
16 information but the head farmer is Annie Novak and
17 she's incredibly educated about all of this and a
18 wonderful researcher so please feel free to
19 contact us.

20 COUNCIL MEMBER BREWER: And Mr.
21 Chairman you can come to our greenhouse too.

22 CHAIRPERSON DILAN: It is--they're
23 closer.

24 [Laughter]

25 CHAIRPERSON DILAN: But I'll be

1
2 happy to come and I think the Committee staff
3 might like to get out and see it as well. I'm not
4 sure. Mr. Puri, did I say that correctly, please
5 Sir--

6 MR. VIRAJ PURI: [Interposing] It's
7 Viraj Puri.

8 CHAIRPERSON DILAN: Viraj Puri.

9 Mr. PURI: So thank you Chair Dilan
10 and members of the City Council. My name is Viraj
11 Puri. I'm the founder of Gotham Greens. Gotham
12 Greens is building what I believe to be the City's
13 largest rooftop greenhouse and the City's only
14 commercial food producing greenhouse. It'll be
15 20,000 square feet and it's on the roof of a
16 Greenpoint in Brooklyn. It will be powered by
17 onsite solar panels and irrigated by captured
18 rainwater. Prior to joining Gotham Greens I was
19 with the nonprofit New York Sun Works where we
20 worked to promote rooftop greenhouses at schools
21 including PS 333.

22 Prior to getting the approvals to
23 build our greenhouse from the Department of
24 Buildings we actually spent two years scouring the
25 City had a lot of applications rejected. Needless

1
2 to say it was an extremely trying process and
3 that's why I'm extremely pleased and grateful for
4 the leadership of Council Member Brewer. So I
5 think the intention of Intro 338 is great and I do
6 sort of support the intent of it, I do have some
7 reservations.

8 I believe that if the goal is truly
9 to promote urban food production and the
10 associated environmental and social benefits that
11 come with that, the job creation, I think we need
12 to take a closer look and have a little bit more
13 conversation.

14 These are my reservations. I think
15 the definition of greenhouse must be qualified to
16 protect against misuse. I think this was
17 mentioned by Council Person Fidler earlier. I
18 think that's very important otherwise you have a
19 lot of people building greenhouses and there's no
20 real benefit to those greenhouses.

21 Secondly I think the way it reads
22 now in Section 5043, rooftop structures; it limits
23 rooftop structures to a third of the roof. And
24 Council Member Brewer, you asked a question
25 earlier about greenhouses in the City. I'm aware

1
2 of about ten greenhouses in the City that are
3 legal, legal that is and I believe that none of
4 them are less than a third of the size of the
5 roof. So I feel like to really get the
6 educational impacts that you need as well as for
7 it to be commercially viable, a third is not going
8 to work.

9 So really I also think just this is
10 just in support of the fact that I think we need
11 to have more conversations on this. Perhaps the
12 right place for it is not in 5043, rooftop
13 structures, but perhaps a zoning resolution is
14 more appropriate. I also don't think it's out of
15 the realm of possibility for greenhouses to be
16 included in green roof legislation because if done
17 correctly capturing rainwater as well as producing
18 plants with the evaporative transpiration effect
19 has a lot of the same benefits of a green roof.
20 So I believe that also needs to be into the
21 conversation.

22 So green roofs of course have been
23 around for five or seven years. Best practices
24 have been established. Rooftop greenhouses are
25 really in their infancy right now. And I would

1
2 just be concerned if rules and regulations are put
3 into place or any other sort of clauses to make
4 more restrictive might actually do more harm to
5 the people it's intended to benefit. So I just
6 want to reiterate I'm extremely grateful for
7 Council Member Brewer for this proposed
8 legislation but I do think it needs a little bit
9 more work otherwise it's really not going to
10 benefit the people who it's intending to benefit.
11 Thank you.

12 CHAIRPERSON DILAN: Thank you for
13 your input. Council Member Brewer?

14 COUNCIL MEMBER BREWER: I just want
15 to say thank you for all three of you and anybody
16 else testifying and we will keep talking. Thank
17 you.

18 CHAIRPERSON DILAN: Thank you all
19 for your time and testimony. Next we have Mr.
20 Elliot Hecht and I've got to note the Tish does
21 love the fact that there's a lot of Brooklyn
22 groups here, as do I. we'll fix that Tish. We'll
23 fix it. We'll fix it. Manuela Zamora and Ben
24 Flanner. And then the final group will be a panel
25 of four. It will be Erica Suarino, Mr. Benjamin

1
2 Linsley, Ricardo Gotla and Chris... Christina
3 Vescone. That'll be the final group.

4 There's no vote today.

5 [Witnesses getting settled]

6 CHAIRPERSON DILAN: So yeah we have
7 not heard opposition just suggestions for changes.
8 Yeah. Okay. Mr. Hecht? You can begin. And even
9 though I've introduced everyone if you could
10 introduce yourself in your own voice. Yeah push
11 the button on the microphone.

12 MR. ELLIOTT HECHT: Good morning
13 Mr. Chair, Committee, my name is Elliott Hecht.
14 I'm a business representative for Local Union
15 Number 3 of the International Brotherhood of
16 Electrical Workers. We'd like to thank you for
17 this opportunity to speak in this important issue
18 of sustainable energy.

19 Sustainable energy's time is
20 definitely now. The electrical systems will help
21 meet New York City's electrical needs while over
22 time reducing energy costs and carbon emissions.
23 Any restrictions to their installation should only
24 be on a safety basis, nothing else.

25 We agree that some of the existing

1
2 restrictions such as the one-third rooftop rule
3 discussed in Intro 341 should not apply to solar
4 and thermal voltaic installations and generating
5 systems. These panels should not be included in
6 the 33.3% limitation on roof coverage. We also
7 agree that reducing or eliminating the street
8 crane costs to lift solar installation materials
9 onto roofs as the Introduction of 352 says would
10 encourage more complete installations of solar
11 voltaic installations.

12 The electrical contractors and
13 Local 3 have been installing electrical energy or
14 solar voltaic panels for some years now. We have
15 complete installations; many are right across the
16 street at the West Side Highway, Battery Park
17 City. We have a training center training people
18 on the safe installation of photovoltaic systems
19 right here in Park Place.

20 All the installations we have
21 installed are producing electricity in a safe
22 manner. And as you can imagine these
23 installations are subject to all types of weather
24 conditions. They should also be subject to New
25 York City electrical inspections. In California,

1
2 fireman responded to a roof fire at a Target
3 store. The fire inspectors determined that the
4 fire was caused by faulty installations of
5 photovoltaic twist panel and compression
6 connectors. Fire inspectors determined that the
7 faulty connectors, that vibrations on the roof and
8 wind caused those connections to become loose and
9 the arcing caused the fire.

10 PV panels generate electricity from
11 the first time you take them out of their
12 packages, from their wrappings; they are part of a
13 complete generating system consisting of
14 electrical panels and electrical switches,
15 inverters, all of the components that make up a
16 complete electrical generating system. They
17 should be subjected to New York City electrical
18 inspections by New York City electrical inspectors
19 and installed by licensed electrical contractors.

20 I'm here asking you this morning to
21 include those words that they should all--the
22 complete system, the installation of the panels,
23 the installation of all the equipment, should be
24 inspected by electrical inspectors and should be
25 installed by New York City electrical contractors.

Thank you.

CHAIRPERSON DILAN: Thank you very much. I believe we have Mr. Ben Flanner?

MR. BENJAMIN FLANNER: Good afternoon. I'm Ben Flanner. Thanks. Feel free to ask questions or stop me at anytime while I'm speaking as well. I'm the head farmer and the owner of Brooklyn Greens which is a 40,000 square foot organic rooftop farm. It's located on the 6th story of a building on Northern Boulevard in Long Island City, Queens.

I should be at the farm right now working but I wanted to come here to address Introduction 348 and also the resolution to append the New York State property tax law 499.

We started the farm just this year in May and it's a pioneering commercial effort. It's a 10-year commercial lease on a building and we installed green roof covering the entire 40,000 square feet. And we're growing vegetables in it, in basically every inch.

We managed to install the green roof at a low cost. And that's incredibly important to the process. So in reviewing 348,

1
2 first of all I want to support the fact that the
3 Council is creating a firm set of standards and
4 structures because to be honest the Department of
5 Buildings was slightly shocked by everything we
6 were doing when they saw everything. And I think
7 there was some confusion and some delay and it'll
8 be great to get some basic standards set forth for
9 vegetative green roofs on buildings.

10 However I also think that the
11 standards should be looked at a little bit more
12 closely. For example the fire standards. And
13 it's important for such an industry like this to
14 continue which has attracted attention from around
15 the world and internships from Parson's Columbia
16 New School at LaGuardia. It's important that it
17 receives a little bit of coddling and some
18 attention. And also primarily that we can utilize
19 all the growing space as possible so we can have
20 as high as possible of a crop yield.

21 So I think these standards are
22 great and but it needs a little bit more attention
23 in terms of simplifying the process and also
24 making it possible to continue to make innovations
25 and inventive green roof ideas for growing plants

1
2 on the top.

3 Now secondly, I'd like to address
4 the Resolution, the section 499, which is the New
5 York State Real Property tax law. It's an
6 amendment to make a clear allowance for the tax
7 abatement to extend to owners of properties whose
8 green roofs produce vegetables. The Brooklyn
9 Green and myself are in full support of this
10 amendment. A clear precedent of a successful tax
11 abatement application will quickly increase land
12 owners' interest in rooftop farming and make it
13 possible to extend farms around the City much more
14 quickly.

15 I also suggest a few points to be
16 added to the amendment. The process should be
17 simplified. It should minimize the amount of time
18 and time that the landlord and the farming tenant
19 needs to spend on details for the--is that my
20 buzzer?

21 All right well the process should
22 be simplified. I also think that there should be
23 a minimum area to ensure that anyone that gets a
24 green roof tax credit for growing vegetables is
25 indeed producing a significant quantity in terms

1
2 of farming. And it should be carried forward
3 until the full value of the credit is used in case
4 the annual taxes on the building are less than the
5 credit.

6 Number four, I'd love to increase
7 the amount of the tax credit and also investigate
8 removing the \$10,000 cap because with greater
9 scale the farms can actually produce more
10 significant vegetables and have a greater impact
11 on the food system. And then finally I think it
12 would be a great incentive for landlords if we
13 could allow the credit to be an income tax credit
14 and transferable.

15 CHAIRPERSON DILAN: All right,
16 thanks for those suggestions. And we do have it
17 for the record but if you have it in writing, we'd
18 appreciate to get that in writing as well.

19 MR. FLANNER: Sure.

20 CHAIRPERSON DILAN: Okay. Mrs.
21 Zamora, did I say that correctly?

22 MS. LAURIE SCHOUMAN: My name is
23 Jane Dola-Zeden [phonetic]--my name is Laurie--I'm
24 standing in place of Manuela. My name is Laurie
25 Schouman.

2 CHAIRPERSON DILAN: Okay.

3 MS. SHUMAN: And it's great to see
4 some familiar faces, Letitia James from my old
5 district. Gale Brewer. I moved to San Francisco
6 from Brooklyn and then I moved up to Harlem.

7 CHAIRPERSON DILAN: All right guy,
8 we need to--

9 MS. SHUMAN: [Interposing] So it's
10 good to get back.

11 CHAIRPERSON DILAN: --keep the
12 schedule here--

13 MS. SHUMAN: --okay my three
14 minutes is up.

15 CHAIRPERSON DILAN: Yeah.

16 MS. SHUMAN: Greetings Council
17 Members. My name is Laurie Shuman. I'm honored
18 to take on the Directorship of New York Sun Works,
19 the proud parent of both the science barge as
20 Viraj mentioned, Viraj of Gotham Greens and PS 333
21 greenhouse project at the Manhattan School for
22 Children. We're so grateful for Council Member
23 Brewer's support over the years. We could not
24 have been--we could not have done it without you.
25 And so thank you for your support.

1
2 One of the goals of New York Sun
3 Works is to promote urban sustainability as Cecile
4 said through innovative science education and
5 projects. We were proud to have launched the
6 science barge in 2007. Over 20,000 school
7 children and parents and teachers visited the
8 barge, learned about hydroponic agriculture and
9 sustainability and solar panels and everything
10 under the sun that relates to sustainability. And
11 we're excited to open up our greenhouse project in
12 partnership with Manhattan School for Children,
13 Gale Brewer's office and all of the parents,
14 Cecile and Manuela who have been the prime movers
15 of this project for many, many years.

16 A couple of things I wanted to
17 note, first of all, we want to encourage, we are
18 excited about this bill that Council Member Brewer
19 has put forth. We want to encourage more projects
20 to think outside of the box and establish
21 innovative curriculum and innovation in building
22 to advance a green agenda and sustainability in
23 the urban space. And it's funny because I went to
24 a PlaNYC meeting last night and my notes are
25 actually written on the PlaNYC strategic plan.

1
2 And one of the things we think this is important
3 is to synch up these efforts with PlaNYC and the
4 Mayor's agenda. I think that this is a timely
5 point in which to put this bill forward. But in
6 order to really get this advanced I'd like to make
7 some recommendations.

8 In order to advance the mission to
9 promote green space on rooftops in New York City,
10 I'd like to propose that as was said by Ben we
11 create a way to expedite and incentivize the
12 process in the Building Department through
13 refunds, through permit fees that are waived, and
14 through expediting the process. In San Francisco
15 they expedited LEED projects. We got to the front
16 of the line. We had special expeditors assigned
17 to us. I think it'd be nice to see that here.

18 Second thing, I'd like to propose
19 to the Council that they establish a task force, a
20 stakeholder task force if you will, bringing
21 together some of the leaders in this movement in
22 New York City. We can gather together and discuss
23 this, flesh it out, vet, get it moved forward.

24 So thank you for listening. I hit
25 the three minutes. So.

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CHAIRPERSON DILAN: It goes fast. Which we all appreciate. Unless there are any questions from the members? Council Member Brewer?

COUNCIL MEMBER BREWER: Very quickly, I know that it was stated earlier that one-third is an issue and that how it works between the zoning and where it should be placed. Do we have any comments on that? The one-third is too small. And the issue that maybe it should be more zoning than in the building code. Do we have any comments on that? In other words it has to be more than one-third of a roof which is a challenge to be honest with you.

MS. SHUMAN: 33%, I mean, Ben--

MR. FLANNER: [Interposing] Yes. Speaking as a grower I can say that the more the better. You're probably paying rent on the whole space.

MS. SHUMAN: You know and the issue with FAR we're still going to be dealing with the same zoning restrictions, the same FAR issues unless we change the framework in which development occurs around rooftops. We're still

1
2 up against the same obstacles. 34%, if we go over
3 33% we're still dealing with and battling the same
4 restrictions. This is what some of the things the
5 task force could discuss and survey different
6 rooftop projects and understand exactly how much
7 room is needed to get the job done.

8 COUNCIL MEMBER BREWER: Okay thank
9 you very much. Thank you Mr. Chair.

10 CHAIRPERSON DILAN: Thank you
11 Council Member Brewer and thank you all for your
12 time and testimony here today. Our final panel
13 will consist of Christina Vescone, Benjamin
14 Linsley, Erica Suarino and Mr. Ricardo Gotla.

15 [Pause]

16 CHAIRPERSON DILAN: It's a panel of
17 four. So I would suggest that you make it as
18 comfortable as possible. However I only see three
19 people which suggest somebody's missing.

20 OFF MIC: Does that mean we get
21 more time?

22 [Laughter]

23 CHAIRPERSON DILAN: Yeah well I
24 would consider a substitute of somebody is...

25 [Off mic, pause]

CHAIRPERSON DILAN: Do you have prepared testimony? Do you have it signed up? Did she sign--you're here on behalf of who?

[Off mic, pause]

CHAIRPERSON DILAN: Oh okay is that what it is? Okay, why don't--

[Off mic]

CHAIRPERSON DILAN: --yeah why don't you step up. And then I guess we have time for the other gentleman. Yeah, the other gentleman, we appear to be able to finish on time. We should be able to try to fit you in so that you can testify as well. Okay. I guess we'll begin with Mr. Gotla.

OFF MIC: Oh.

CHAIRPERSON DILAN: Oh no, Sir, not in this panel. You'll be on the next panel. And yeah, he'll join in. Yeah.

MR. RICARDO GOTLA: Great. Well my testimony says good morning but it's actually--

CHAIRPERSON DILAN: [Interposing]
Good afternoon now, yeah.

MR. GOTLA: --good afternoon now, yeah. To Chairman Dilan and other members of the

1
2 Housing and Building Committee, it's good to see
3 familiar and friendly faces in front of me today.

4 CHAIRPERSON DILAN: Yeah if you can
5 do me a favor and either--

6 MR. GOTLA: [Interposing] Sure.

7 CHAIRPERSON DILAN: --turn the mic
8 on or pull it closer, which ever it is.

9 MR. GOTLA: Is that better?

10 CHAIRPERSON DILAN: Try it again.

11 MR. GOTLA: Use the mic, does that
12 mean I'm not qualified to testify?

13 CHAIRPERSON DILAN: Right, there
14 you go.

15 MR. GOTLA: Okay. So I thank you
16 obviously for this opportunity to provide
17 testimony on this important suite of
18 sustainability pieces of legislation. My name is
19 Ricardo Gotla. I'm the Legislative Director for
20 the New York League of Conservation Voters. We're
21 an environmental advocacy and political
22 organization. We work to advance sustainable
23 development in a clean energy future in New York.
24 And I'm here today to express our strong support
25 for the package of bills aimed at increasing New

1
2 York City's use of renewable energy and achieving
3 greater building energy efficiency.

4 This legislative package will go a
5 long way in addressing significant sustainability
6 challenges that New York City will be faced to
7 address sooner rather than later. You are all
8 familiar with the demographic projections and New
9 York City is expected to increase in population by
10 1 million inhabitants by 2030 which is quickly
11 approaching. This is an alarming fact when one
12 considers the reality that today our
13 infrastructure is already overwhelmed at our
14 current population of 8.5 million residents.

15 New York City's energy
16 infrastructure in particular is of great concern
17 to NYLCV. During many summer days energy demand
18 is greater than energy supply. And when this
19 occurs the City relies on peaker plants to meet
20 high levels of energy consumption. Many of these
21 peaker plants compromise the City's air quality
22 and produce significant levels of greenhouse gas
23 emissions contributing to climate change.

24 Further, located in outer Boroughs, these peaker
25 plants disproportionately impact the quality of

1
2 life, air and health of New York City's lowest
3 income communities.

4 Put simply we believe that the
5 status quo, gesundheit, that's official for the
6 record. Put simply the status quo is simply
7 unsustainable both for the long and for the short
8 term. And a shift is required by our leaders to
9 move New York City toward a clean energy future
10 and this legislative package is a step in that
11 direction.

12 I'm nearing out of my time and I
13 don't want to hear the buzzer go so I'm going to
14 quickly summarize. I think another point in
15 addition to the solar roofs or solar panels and
16 the increasing wind generation in New York is
17 critically important. And vegetative green roofs
18 not only provides an opportunity to reduce energy
19 costs and energy consumption in buildings by
20 keeping them warmer during the winter and cooler
21 during the summer, vegetative gardens are I think
22 a critical part to... yeah. A crucial part to
23 supplying fresh fruits and vegetables to what many
24 people are referring to as food deserts or areas
25 in the City where is this simple lack of fresh

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fruits and vegetables.

No one step will get us there. This package of legislation, like I said, is I think a critical component of a more, of a broader strategy. And we look forward to working with you in the near future to make this vision a reality. And thank you very much for your time today.

CHAIRPERSON DILAN: Thank you. And next we'll move to Erica Suarino, is that? And correct me if I--

MS. ERICA SUARINO: [Interposing] That's right.

CHAIRPERSON DILAN: --pronounced it wrong.

MS. SUARINO: Good afternoon. Is this on? My name is Erica Suarino and I'm representing Bob Fox of Cook + Fox Architects. Thank you for the opportunity to testify regarding the 13 bills before the Committee today. We support the passage of these bills with the exception of Introduction 353 and offer several suggestions for improvements.

As a whole this package of bills is an admirable step toward a clean energy future for

1
2 New York City. Thank you.

3 Introduction number 341, 342, 346,
4 350, 352 and 358 are particularly important as
5 they remove key barriers to the installation of
6 renewable energy systems. Solar thermal systems
7 offer relatively quick payback to building owners.
8 Solar photovoltaic systems are becoming cheaper
9 and more efficient each year. And building
10 integrated wind energy systems are an exciting
11 prospect for generating onsite renewable energy.

12 However private building owners who
13 wish to install the systems still face both
14 financial and administrative challenges. These
15 bills recognize those challenges and eliminate the
16 headaches and costs associated with obtaining
17 waivers and permits for systems that really should
18 not require special review.

19 Introduction number 350 requires
20 that wind assemblies that are certified for
21 installation by certain outside agencies be
22 accepted for installation by the Department of
23 Buildings without further review of the system.
24 We applaud this removal of additional review for
25 the systems but caution that any systems approved

1
2 for installation in New York City should have been
3 tested for safety in icy conditions. In most
4 cases the potential for vibration to compromise a
5 building's structure is the main danger associated
6 with building integrated wind systems particularly
7 in older buildings.

8 The installation of any wind system
9 on buildings should be certified by a licensed
10 structural engineer. I'm just going to skip ahead
11 now.

12 Introductions 349 and 351 require
13 the City to install cost effective solar
14 photovoltaic and solar thermal systems. The City
15 has taken a strong position on leading by example
16 in carbon reductions and energy efficiency. And
17 we admire the continuation of this trend. However
18 these bills define cost effective systems as
19 having a 25-year payback period or better. This
20 is too long a payback period for the investments
21 in solar systems to be considered cost effective.
22 Many solar panels have useful lives of only 20
23 years making a 25-year payback period unrealistic.

24 Additionally money spent on a
25 system with a very long payback period would

1
2 probably be more usefully diverted to energy
3 efficiency improvements or other uses. We
4 recommend a maximum 10 to 12 year payback period
5 for solar systems on City buildings.

6 Introduction 351 would create a
7 pilot program awarding solar hot water systems by
8 lottery to private home owners. We agree that it
9 is beneficial for the City to promote the use of
10 solar hot water through grants. But these should
11 be targeted at low income housing in order to have
12 the greatest impact.

13 Introduction number 353 requires
14 the creation of a solar map showing existing solar
15 energy systems and the potential of roofs to
16 support new systems. While we appreciate the
17 intent of this bill we do not consider a solar map
18 to be a wise use of taxpayer money. Any owner
19 considering installing a solar energy system can
20 determine very quickly and very cheaply how
21 suitable a particular roof is for solar
22 photovoltaic or solar thermal systems. The
23 location of current systems will be time-consuming
24 to document and prone to becoming outdated given
25 the relatively short lifespan of solar panels.

1
2 Thank you again for the opportunity to testify
3 today.

4 CHAIRPERSON DILAN: Okay thank you.
5 And next we will go to Mr. Linsley?

6 MR. BENJAMIN LINSLEY: Hello?
7 Okay. Chairman, Council Members, thank you very
8 much for allowing me to talk today. My name is
9 Benjamin Linsley. I'm the Managing Director of
10 Bright Farms Systems. I'm talking in support of
11 item 338 on greenhouses.

12 Bright Farms Systems is an
13 environmental and engineering consultancy firm.
14 We focus exclusively on the development of rooftop
15 hydroponic greenhouses, largely for production of
16 perishable vegetables in city areas. We also do
17 have a number of projects that are educationally-
18 focused but most of our projects are about large-
19 scale urban farms, urban greenhouses.

20 I'm speaking in support of item
21 338. I just wanted to take a moment or so to
22 underline the rationale for urban food production
23 at this scale and the underline the potential of
24 commercial greenhouse production. The consumption
25 by urban dwellers of perishable vegetables places

1
2 an extremely heavy burden on the environment.
3 It's one of the largest--it's one of the biggest
4 carbon emitting sectors of agriculture. We truck
5 most of our perishable vegetables in from very
6 long distances in New York. This creates a very
7 expensive product, a heavy burden on the
8 environment but it also means that we get a very
9 rather inferior product.

10 I'm give you a little bit of an
11 example. 95% of US lettuce production is grown in
12 two counties, one in California and one on
13 northern Arizona. It takes 5.5 days for that
14 lettuce to get to New York. Something like 50% of
15 the cost of that lettuce is in the trucking fuel
16 alone. And by the time it gets to New York the
17 lettuce probably has a couple of days of shelf
18 life left and it's extremely expensive. The
19 expense of that lettuce also lead to the urban
20 food desert problem that I'm sure you are all
21 aware of.

22 I just wanted to highlight how
23 hydroponic greenhouses can help to address this
24 problem. Cities are not great areas for growing a
25 lot of vegetables but hydroponic greenhouses aver

1
2 very light. They produce vast amounts of
3 vegetables. It can be done in a very
4 environmentally friendly way. And it can be done
5 on roofs. To give you one example of one of our
6 projects, we have a 10,000 square foot greenhouse
7 being built in the south Bronx in a well-known
8 kind of food desert area in the south Bronx. Just
9 at 10,000 square feet, that greenhouse is going to
10 be able to support the vegetable, fresh vegetable
11 needs of some 4,500 people. It will create 6 or 7
12 jobs. And it will be able to mitigate some 90
13 tons of carbon emissions per year.

14 This is not a small kind of hobby
15 industry. It's a New York born and bred industry.
16 These facilities can deliver very, very real,
17 very, very big outcomes to both New York consumers
18 and to the environment. I'd urge the Council
19 Members to support 338. I basically support some
20 of the comments of our colleagues earlier
21 suggesting that we should look at the 33% usage
22 space and allow for all of the space to be used.
23 I also suggest some qualification around the use
24 of the word greenhouse. I believe the rules, the
25 building code rules were tightened up some 15, 20

1
2 years ago, expressly to stop kind of single
3 residential buildings adding a bit of a
4 greenhouse. It's not really a greenhouse. It's
5 not a production greenhouse. It was just to
6 extend their habitable area. And I would ask for
7 some qualification just to make sure that what we
8 are talking about here is production greenhouses
9 or education greenhouses. So I'm in favor and
10 thank you very much.

11 CHAIRPERSON DILAN: Okay. And
12 I'll, just state your name and then and who you're
13 testifying on behalf of.

14 MR. GUSTAV GAUNTLET: Absolutely.
15 All right my name is Gustav Gauntlet. I'm
16 testifying on behalf of Christina Vescovo. We are
17 both employees of Greensulate. We install green
18 roofs and green walls here in New York City. I
19 myself successful navigated the first-ever green
20 tax abatement approved by the Department of
21 Buildings earlier on this year. So thank you New
22 York City for that and thank you all for being
23 here to hear our comments.

24 The one comment that I have very
25 briefly is on item number 348 which is discussing

1 detailing installation criteria for green roofs
2 here in New York City. And the main point I'd
3 like to express to you all is the importance of
4 having an accredited person in the DOB lead this
5 matter of whether it be installing the green roof
6 or also on the tax abatement, ensuring that the
7 person at the DOB and City of New York is
8 knowledge about green roofs. I say this because
9 of personal experience of going to the DOB,
10 turning in paperwork where people are saying what
11 is a green roof. So it's very, very important
12 that in the State of New York if we're going to
13 have these discussions that everyone involved in
14 these discussions is knowledgeable about these
15 matters. I'd like to suggest specifically a green
16 roof professional, that's a professional
17 designation GRP, as certified by Green Roofs for
18 Healthy Cities, this is an enormous nonprofit
19 organization that does work all over the planet
20 with green roofs and green walls. So it's very,
21 very important that there is a designated person.
22 I prefer again GRP, Green Roof Professional, that
23 will be talking to the DOB about this item number
24 348 in terms of detailing vegetated green roof
25

1
2 installation. And that's all I have. Thank you
3 very much.

4 CHAIRPERSON DILAN: Okay great.
5 Thank you. Thank you again of all for your time
6 and testimony. And we have a question from
7 Council Member Jumaane Williams.

8 COUNCIL MEMBER WILLIAMS: Thank you
9 for the testimony. Thank you Mr. Chair. Two
10 questions. One, what is a peakest plant?

11 MR. GOTLA: Peaker plant.

12 COUNCIL MEMBER WILLIAMS: Peaker
13 plant.

14 CHAIRPERSON DILAN: Yeah, into the
15 mic, please.

16 MR. GOTLA: A peaker plant is when
17 the--is designed to meet energy demand when the
18 base load of our current energy facilities is
19 overwhelmed by demand. So during summer months
20 and I'm not an expert on this I'd be happy to
21 refer you to someone who is but my understanding
22 the peaker plants, during the summer once energy
23 consumption is extraordinarily high, when
24 everyone's using air conditioners, you know,
25 during business hours and basically things are--

1
2 our energy plants are already running at full
3 capacity, there's an excess demand. So in order
4 to meet that demand there are these peaker plants
5 that only run during those times--

6 COUNCIL MEMBER WILLIAMS:

7 [Interposing] Where are they?

8 MR. GOTLA: --to meet those
9 demands. They're spread throughout the entire--
10 more are in the outer Boroughs in Queens, in the
11 Bronx. And I can get you more specific locations
12 but they tend to be located in the outer Boroughs.
13 I know that in areas in the Bronx. Some of these
14 peaker plants are actually run, are pretty
15 efficient and they're kind of new and updated and
16 run on natural gas. Others of them run on coal
17 which is the dirtiest fossil fuel we have. And
18 they do incredible damage to air quality, really
19 undermine human health, and of course the Bronx
20 has one of the highest asthma rates in the
21 country, so it's problematic for air quality for
22 health issues. And the only, I think one of the
23 advantages to solar is that we'll be producing
24 lots of solar during the hot summer months when
25 energy demand is extraordinarily high. And it

1
2 would reduce our reliance on these dirty burning
3 kinds of backup coal facilities.

4 COUNCIL MEMBER WILLIAMS: All
5 right. Thank you. And then I'd asked Laurie Kerr
6 earlier about why they were opposing the solar
7 bills. And I think it was you had mentioned
8 something about 25% payback. That was one of the
9 reasons why they were opposed to some of them
10 because they said it was a 25% payback and they
11 had other issues, they had other projects that
12 were less. So for everyone, is it accurate that
13 it is a 25-year payback? And are there other
14 things that they can legitimately do that have
15 less? So that's my question.

16 CHAIRPERSON DILAN: Concise answer
17 please, we are up against time.

18 MR. GOTLA: I know that Shawn
19 Chapman from Vote Solar and the other gentleman
20 who was speaking here are familiar with
21 alternative funding mechanisms that would help
22 overcome some of those upfront barriers. And I'd
23 be happy to..

24 COUNCIL MEMBER WILLIAMS: Is it
25 accurate though, the years that she gave, is it

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accurate?

MR. GOTLA: 20--

COUNCIL MEMBER WILLIAMS:

[Interposing] No. Okay.

CHAIRPERSON DILAN: All right.

MR. GOTLA: Sorry.

CHAIRPERSON DILAN: Thank you all very much. Mr. Pereira. Is that correct? All right, thank you all very much. You have one minute.

MR. PEREIRA: Yeah I got it.

CHAIRPERSON DILAN: All right.

[Laughter]

MR. PEREIRA: Thank you for this opportunity folks. My name is Anthony Pereira; I'm President and CEO of Alt Power which is a local renewable energy firm that was founded in 1998. We're responsible for all the projects in Battery Park City, Rockefeller Center's PV array, the solar arrays in New York Hall of Science, Queens Botanical Garden, Bronx High School of Science and multiple arrays. We have significant market share in New York City.

I was formerly the President of the

1
2 New York Solar Energy Industries Association and
3 was on the board for eight years. Also sat on the
4 local USGVC's Green Building Council's local
5 chapter. And I am currently on the Building
6 Sustainability Board for the Department of
7 Buildings and also sit on the Electrical Code
8 Review and Interpretation Committee.

9 So these bills generally I don't
10 support simply because I don't think--I think
11 there's redundancy there and a lot of the issues
12 that they're covering especially on attachments of
13 PV systems is very complex, issues about
14 engineering and design, for instance. Any systems
15 put above 20 stories need to be considered that
16 solar panels can't work above that height because
17 they simply don't have wind load ratings that
18 provides really a life-safety, danger issue. So
19 they need to be evaluated. We often put mockups
20 in wind tunnels and build custom glass that's
21 thicker when we go above 20 stories it's a huge
22 issue. And the Building Department I think is on
23 top of it.

24 It's also not really magic. You
25 know, the things that we use to attach solar

1
2 panels to buildings are just bolts and screws and
3 steel and aluminum and Uni-strut and basic things
4 that construction folk all over the world use on
5 an everyday basis. So not that complex, not an
6 issue actually.

7 The crane fee issue is great
8 because the big problem for solar is that we don't
9 have any incentives in this state. And it makes
10 the market tiny, really minuscule and nonexistent.
11 Even though New York City is a better solar city
12 than Los Angeles, San Diego, Phoenix, Albuquerque,
13 you name it, New York City is much better because
14 our peak demand occurs when the peaker plants
15 work. Our cost for electricity is very high and
16 we have huge social issues behind our energy
17 policy here.

18 I'd like to also push for the City
19 Council to pass the current electrical code
20 because the 2008 code hasn't been adopted yet--

21 CHAIRPERSON DILAN: [Interposing]
22 Well I need to keep you--

23 MR. PEREIRA: [Interposing] Okay.

24 CHAIRPERSON DILAN: --on today's
25 agenda.

2 MR. PEREIRA: It really would help
3 solar though. It's important for you guys to know
4 that. And in conclusion I'd like to say that
5 today there is a Feeding Tariffs [phonetic]
6 Conference occurring at the Museum of Jewish
7 Heritage. It is the best method for incentivizing
8 solar in any place in the world, New York, we've
9 had legislation before the State Senate and the
10 City council should also try to promote a bill for
11 supporting Feeding Tariffs in New York City.
12 Thank you.

13 CHAIRPERSON DILAN: Okay. So I
14 just want to make sure I'm clear on your
15 objections. Are you opposed to the entire
16 package? Are you opposed just to the wind energy
17 portion of the package?

18 MR. PEREIRA: The wind energy
19 portion of the package, the Building - - Building
20 Board has already resolved that issue actually.
21 And we are going to adopt the standard,
22 International Electrical Technical Commission
23 standard which is all you need really anywhere in
24 the world.

25 CHAIRPERSON DILAN: Okay I know

1
2 you've come and you've testified and you've stated
3 your objection verbally.

4 MR. PEREIRA: Um-hum.

5 CHAIRPERSON DILAN: I'd just like
6 to personally request that maybe you submit your
7 objections to me--

8 MR. PEREIRA: [Interposing] Well do
9 sir.

10 CHAIRPERSON DILAN: --in writing.

11 MR. PEREIRA: Yes Sir.

12 CHAIRPERSON DILAN: Okay. Thank
13 you. thank you very much for your time and
14 testimony. I do have two entities to acknowledge
15 in terms of their testimony being submitted for
16 the record. We have testimony from the New York
17 City Plumbing Foundation and their testimony's on...
18 Yeah, Intros 351 and 352, just let the record
19 reflect that they need to be--the Intro numbers
20 need to be corrected on their written testimony
21 but I think it's 351 and 352. And testimony from
22 Good Green and their testimony will also be
23 entered into the record. Okay at this time all
24 items before the Committee will be laid aside and
25 that will conclude this hearing.

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[Gavel banging]

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[END Housing__Buildings_10-20-

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C E R T I F I C A T E

I, Laura L. Springate certify that the foregoing transcript is a true and accurate record of the proceedings. I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

A handwritten signature in cursive script that reads "Laura L. Springate". The signature is written in black ink on a light-colored background.

Signature _____Laura L. Springate_____

Date _____October 31, 2010_____