

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON ENVIRONMENTAL
PROTECTION

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HELD AT: Committee Room - City Hall

B E F O R E: DONOVAN J. RICHARDS
Chairperson

COUNCIL MEMBERS:
Stephen T. Levin
Costa G. Constantinides
Rory I. Lancman
Eric A. Ulrich

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

Bill Goldstein
Senior Advisor to the Mayor on Recovery,
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Mayor's Office of Long-Term Planning
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Dan Zarrilli, Acting Director
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Emily Dean, Director
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Raya Salter, Senior Utility Advocate
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Susanna Dyen, Organizer
The Alliance for a Greater New York, ALIGN

Gusti Bogok, Co-Chair
Sierra Club Atlantic Chapter

Gas Drilling Taskforce

Rick Bell, Executive Director
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New York Chapter, New York City

Catherine McVay Hughes, Chairperson
Manhattan Community Board 1

Daniel Gianfala, President and COO
United Metro Energy Corp. (UMEC)

John Maniscalco, CEO
New York Oil Heating Association (NYOHA)

Dehran Duckworth
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Ryan Baxter, Senior Policy Analysis
Real Estate Board of New York (REBNY)

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Patrick Robbins
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New York City Resident

Alice Slater
Shut Down Indian Point Now and the
New York City Safe Energy Coalition

Buck Moorehead, Architect and Member
Damascus Citizens for Sustainability (DCS)

Marge Schaub Board Member
Damascus Citizens for Sustainability (DCS)
Appearing for Barbara Arrindell, Director
Damascus Citizens for Sustainability (DCS)

Regina Cornwell
Damascus Citizens for Sustainability
Appearing for Attorney Jeff Zimmerman
for Damascus Citizens for Sustainability
(DCS) and NYH20 and Citizens for Water

Madelyn Moorehead, Member

Damascus Citizens for Sustainability (DCS)
and NYH20

Ling Cho, Co-Founder
United for Action

Edie Kantrowitz, Member
United for Action, New York City Friends
for Clean Water, the Coalition Against the
Rockaway Pipeline, and New York City Safe
Energy Coalition

Ya-Ting Liu
New York League of Conservation Voters

Annie Wilson,
New York Environmental Law Justice Project

Philip Kahn, Co-Leader
Manhattan of the Citizen's Climate Lobby

Pamela Drew Gregory
Safe Energy Coalition

Nancy Anderson
Sallan Foundation

Wyldon Fishman
New York Solar Energy Society

Ken Gale
New York Solar Energy Coalition
Eco-Logic (Radio Show) WBAI-FM

Ruth Hardinger
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Patrick Almonrode
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Bob Alpern, Former Senior Advisor to
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Member, New York City Safe Energy
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Resources Planning Council

Frank Eadie, Energy Chair
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Melissa Elstein, Co-Founder
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New York City Coalition of Block and
Community Leaders

Alexia Philco, Member
New York City Safe Energy Coalition

Tom Wysmuller, Meteorologist

Nicole Minitello
Brooklyn Resident

2 CHAIRPERSON RICHARDS: Good afternoon. I
3 am Council Member Donovan Richards, Chair of the
4 Environmental Protection Committee. Today, the
5 Committee will hold a hearing on Intro No. 378-A,
6 Local Law to Amend the Administrative Code of the
7 City of New York in relation to reducing greenhouse
8 gases by 80% by 2050.

9 Energy use is probably the single most
10 important problem facing humanity today. Energy use
11 is primarily responsible for global greenhouse gas
12 emissions. The United States emits 22% of worldwide
13 greenhouse gas emissions greenhouse gas emissions.
14 Within the United States fossil fuel combustion for
15 94% of CO2 emissions in 2005. Since 1990, the total
16 United States greenhouse gas emissions have increased
17 by 16.3%, according to the Environmental Protection
18 Agency. There is a scientific consensus that the
19 global increases in greenhouse gases and the
20 associated current extremes in climate are primarily
21 due to fossil fuel use.

22 As many of you may know, New York City
23 set an ambitious goal for addressing climate change.
24 Local Law 22 of 2008, the New York City Climate
25 Protection Act required New York City to reduce its

2 greenhouse gas emissions due to city operations by 3%
3 per year over ten years, and required the city
4 overall to reduce its greenhouse gas emissions by 1%
5 per year over the next 30 years. However, just six
6 years later, based upon information developed from
7 the Fifth Assessment of the Intergovernmental Panel
8 on Climate Change, this mandate must be strengthened.
9 According to the United Nations, only an aggressive
10 push over the next 15 years will be sufficient to
11 bring greenhouse gas emissions under control. And if
12 greater efforts to cut emissions are not implemented
13 soon, future generations that are seeking to limit or
14 reverse climate change will have to depend on
15 technologies that currently do not exist, in order to
16 permanently remove greenhouse gases from the
17 atmosphere.

18 Unfortunately, until now international
19 efforts and treaties to address climate change have
20 fallen short. Recognizing the need to act locally in
21 2007, New York City embarked on a groundbreaking
22 effort to reduce its emissions on greenhouse gases,
23 and address long-term challenges including projected
24 population growth, climate change, and the involving
25 economy. As noted earlier, the City enacted Local

2 Law 22 of 2008, the New York City Climate Protection
3 Act Climate Protection Act requiring a 30% reduction
4 in city government emissions by the year 2017, below
5 2006 base year levels. And a 30% reduction in
6 citywide greenhouse gas emissions by the year 2030,
7 below 2005 base year levels.

8 Due in large part to New York City
9 initiatives guided by the mandate of Local Law 22,
10 New York City has reduced its greenhouse gas
11 emissions by 19% since 2005. And is almost two-
12 thirds of the way towards achieving a 30% reduction
13 by 2030. Cleaner generation of electricity and steam
14 were responsible for the majority of emissions
15 reductions. And New Yorkers are using electricity
16 and heating fuel more efficiently in buildings

17 Despite New York City's local progress,
18 global greenhouse gas emissions continue to
19 accelerate at a rapid rate. The United Nations
20 Framework Convention on Climate Change set a goal to
21 limit the rise in temperature over the next hundred
22 years to two degrees Celsius in order to prevent
23 dangerous anthropogenic interference with the climate
24 system. Global emissions would have to be cut by at
25 least 50% below 1990 levels by mid-century if we are

2 to achieve this goal. To that end, the European
3 Union and the United States, including California and
4 New York has set targets to cut their emissions 80%
5 by 2050 from 1990 levels. If New York City adopts
6 Intro No. 378, it will become the largest city to
7 commit to reducing its emissions by 80% by 2050. And
8 it will set a path for investment in renewable energy
9 sources, and a transition away from the use of fossil
10 fuels.

11 Now, let's hear from Council Member Costa
12 Constantinides from Queens for his comments on his
13 bill, and after that, we will hear from the
14 Administration. We're going to make history today.
15 [applause]

16 COUNCIL MEMBER CONSTANTINIDES: Thank
17 you, Mr. Chair. Thank you for your strong leadership
18 on the environmental justice issues that face our
19 city and this country. So thank you. Good
20 afternoon, my name is Costa Constantinides. Seven
21 years ago as part of the groundbreaking PlaNYC 2030
22 Plan, the Council passed New York City's Climate
23 Protection Act. The Act offered by former Chair of
24 the Environmental Protection Committee, Council
25 Members James J. Gennaro, mandated that New York City

2 as a whole reduce its common emissions by 30% by 2030
3 relative to a 2005 baseline. This law in conjunction
4 with other initiatives spearheaded by the previous
5 Administration and Council has already had a tangible
6 effect on the health and wellbeing of New Yorkers.

7 In the past several years as buildings
8 have moved away from dirty sulfur laden fuel oil, and
9 homes and businesses have taken advantage of tax
10 incentives that will allow them to invest in
11 renewable energy, we have already made significant
12 progress in reducing our carbon emissions and
13 clearing up New York City's air. Writing the 30 by
14 30 standard into law was a huge step forward. As
15 referenced by our Chair, in order to meet the
16 challenges of the 21st Century, far more must be
17 done.

18 As the Intergovernmental Panel on Climate
19 Change recently made clear, the planet's rising
20 temperature is perilously close to setting in motion
21 the irreversible melting of the Greenland ice sheet.
22 If this happens, New York City as we know it will be
23 deeply changed. Even though it may take many
24 generations to feel the full effects of this melting,
25 the impacts on weather in our society are already

1 here. That's why Intro 378, which requires our city
2 to reduce its carbon emissions 80% by 2050 is so
3 crucial. New York State by executive order of former
4 Governor David Patterson has already set this as a
5 benchmark.
6

7 By enshrining this standard into law
8 locally, it will demonstrate to the nation and to the
9 world that we are truly serious about tackling
10 climate change here in New York. Setting this goal
11 will help spur more innovation in the renewable
12 sector leading to growth in new industries and new
13 green jobs right here. As the largest urban market
14 in the country, we have tremendous influence over how
15 private housing in the energy sector has approached
16 new development. By setting a strong goal, we can
17 help spur the same kinds of public/private
18 partnerships that have been the cornerstone of our
19 city and our country.

20 Detractors can no longer argue that
21 rising to the challenge before us would be an
22 economic burden. Farmers have been severely hit by
23 droughts throughout the country over the past several
24 years, and as a result, food production has
25 decreased. This means that prices will continue to

2 rise placing new strains on working men and women
3 still trying to get out of a hole left by the Great
4 Recession. In New York City, we have homeowners and
5 small business owners in Staten Island and the
6 Rockaways and Brooklyn who were displaced by the
7 devastating blow of Hurricane Sandy.

8 We have residents of NYCHA housing at
9 Coney Island and Red Hook [sic] and elsewhere who are
10 still working to rebuild their lives. Can anyone say
11 that climate change has not impacted them directly?
12 We have a choice before us. Should we commit to
13 ourselves to the task right ahead by reaching 80 by
14 50 or let future generations of New Yorkers be
15 subjected to flooding, coastal erosion, and the loss
16 of large swaths of our city?

17 I want to thank our Speaker Melissa Mark-
18 Viverito for her strong and visionary leadership on
19 this. And to the de Blasio Administration, I want to
20 commend them for taking on this goal. And, of
21 course, thank my staff Nick Rogowski and Charles
22 Sharone [sp?] and all of my staff for all their hard
23 work. Thank you, Mr. Chair.

24 CHAIRPERSON RICHARDS: Thank you.

25 [applause]

2 SERGEANT-AT-ARMS: [off mic] We all need
3 to hear. [sic]

4 CHAIRPERSON RICHARDS: So before we hear
5 testimony from the Administration, I just want to
6 thank the hard-working staff, Samara Swanston for
7 helping us get here. [applause] And our new Policy
8 Analyst, who is coming in at a historic moment. This
9 is huge. Your first one, Mr. Bill Murray.

10 [applause] And I want to thank my staff, Gerald
11 Birney, and Frank Joseph for their hard work on these
12 issues as well.

13 All right, we will have the first panel,
14 and we will hear from first-- And Samara is going to
15 swear you in, but I'll just acknowledge the first
16 panel. Mr. Bill Goldstein, who is the Senior Advisor
17 on Recovery, Resiliency and Infrastructure. We'll
18 also hear from Emily Dean, the Director o Energy
19 Programs. Ms. Osdeen-- Forgive me if I mess your
20 name up totally, or Omektekin, the Deputy
21 Commissioner of Energy Management from DCAS. And Mr.
22 Dan Zarrilli, the Director of the Office of Long-Term
23 Planning and Sustainability. So now, we'll swear you
24 guys in, and then we will hear your testimony.

2 COUNSEL SAMARA SWANSTON: Would you
3 please raise your right hands. Do you affirm to tell
4 the truth, the whole truth, and nothing but the truth
5 today?

6 BILL GOLDSTEIN: Okay. Good afternoon
7 Chairman Richards and members of the Committee on
8 Environmental Protection. My name is Bill Goldstein,
9 and I'm the Senior Advisor to the Mayor on Recovery,
10 Resiliency, and Infrastructure. Joining me today is
11 Dan Zarrilli in his capacity as Acting Director of
12 the Office of Long-Term Planning and Sustainability.
13 Emily Dean, the Directory of Energy Programs and
14 Strategy at DCAS. And Ozgen Omektekin, Deputy
15 Commissioner of Energy Management also at DCAS. I
16 also want to note that also joining us behind us here
17 is John Lee who is the Deputy Director of Green
18 Buildings and their Energy Efficiency at OLTPS.

19 So we're here today to discuss our
20 commitment and leadership in dealing with the causes
21 of climate change. Before I begin, I want to thank
22 you, Chairman Richards, and members of this committee
23 for calling this hearing today to discuss this
24 important issue. I would also like to thank you, the
25 Speaker and Council Members who have kept this

2 priority, and the many public stakeholder and
3 advocates as we can see here today who continue to
4 keep this issue at the forefront. Last month, many
5 of us participated in the March for Climate Change,
6 and the world's eye was placed on New York City. And
7 we demonstrated the type of vision and resolve that
8 makes New York City the best city in the world.

9 Protecting citizens from the impact of
10 climate change including rising sea levels, heat
11 waves, and extreme storms is a fundamental public
12 safety issue, and a core function of government at
13 every level. Since taking office, Mayor de Blasio
14 has already established a track record for leading
15 the fight against climate change. This spring, he
16 announced the most sweeping update to New York City's
17 Air Pollution Control Codes since 1975. And I'd like
18 to acknowledge Chairman Richards for his leadership,
19 and we hope to codify this into law with the New York
20 City Clean Air Act. This administration has also
21 increased municipal organics recycling, significantly
22 scaled up investments in green infrastructure, and is
23 on a pace to expand bike lanes by 58 miles citywide.

24 We also made environmental sustainability
25 a key component of Housing New York, the City's Ten-

1 Year Affordable Housing Plan. And, of course, during
2 Climate Week, the Mayor announced our commitment to
3 reduce citywide greenhouse gas emissions by 80% from
4 2005 levels by 2050 or 80 by 50 as we say. This
5 makes New York City the largest city in the world to
6 make such a public commitment because nothing short
7 of an ambitious effort will be effective in the fight
8 against climate change. Aligned with this goal, the
9 Mayor also announced our commitment to chart a long-
10 term path for a total transition from fossil fuels
11 and invest in renewable sources of energy.

12
13 So we must all work together on this
14 issue because identifying the pathways to reach 80 by
15 50 will be exceptionally difficult, and will require
16 the complete transformation of many areas of work and
17 life in New York City. For this reason, we put
18 forward a plan of action. One city built to last in
19 an unprecedented and detailed plan to address the
20 largest source of greenhouse gas emissions in New
21 York City our buildings. Nearly three-quarters of
22 New York City's greenhouse gas emissions come from
23 the energy used to heat, cool, and power buildings.
24 And, our plan is a road map that outlines how we will
25 make dramatic investments in our public buildings,

2 and make them more efficient and sustainable. Drive
3 a thriving market, private market of building
4 efficiency and renewable energy; craft forward
5 thinking green codes and legislation together with
6 the City Council. And ultimately, make New York the
7 global hub of clean energy technology and innovation.

8 And we're also announcing today-- We're
9 also announcing today that the Administration will be
10 investing \$13 million in energy efficiency upgrades
11 across city agencies as part of One City Built to
12 Last. This represents one-third of the initial \$39
13 million in energy efficiency investments, which are
14 underway as part of the Accelerated Conservation and
15 Efficiency or ACE Program. ACE is a competitive
16 funding program managed by DCAS, the fast track
17 shovel ready energy capital projects and guarantee
18 optimal greenhouse gas reductions and cost savings.

19 Collectively, these projects will result
20 in an annual reduction of the carbon emissions and
21 yield avoided energy costs of \$5.6 million a year. I
22 am now going to turn the testimony over to Dan
23 Zarrilli to provide more detail on this plan. And
24 after his portion of the remarks, we'll answer
25

2 questions that the Council has for us regarding this
3 topic. So Dan.

4 DAN ZARRILLI: Great. Thanks Bill, and
5 thank you, Chairman Richards, and members of the
6 Committee for holding this important hearing today.
7 As you know, New York City is vulnerable to the
8 impacts of severe weather and climate change, and
9 these risks are only expected to grow. During
10 Hurricane Sandy, we saw how exposed we are to the
11 type of damage and loss of light that happen in
12 extreme weather events. Tragically, 44 lives were
13 lost in New York City, and we incurred \$19 billion in
14 damages and lost economic activity.

15 Mayor de Blasio established the Office of
16 Recovery and Resiliency in order to accelerate the
17 city's recovery from Sandy and make investments to
18 prepare for the risks of climate change more broadly.
19 I have worked closely with many of you in capacity as
20 Director of the Office of Recovery and Resiliency,
21 and I know you understand how real this risk is. Our
22 office is tasked with implementing the city's Climate
23 Adaptation and Resiliency Plan, which includes
24 strengthening coastal defenses, upgrading buildings,

2 protecting city infrastructure, and making
3 neighborhoods safe and more vibrant.

4 We've made significant progress over the
5 last year in implementing this plan including
6 millions of cubic yards of sand on our beaches,
7 26,000 linear feet of dunes across the city. We've
8 advanced flood insurance reform to address the
9 impacts of insurance rates, secured millions of
10 dollars in funds for NYCHA upgrades, and completed
11 much more activity as we work to secure and plan for
12 the next round of investments that we are ultimately
13 going to make.

14 The policy and programs being implemented
15 at both OLTPS and NOR to reduce the causes of climate
16 change and adapt to its impact are driven by the best
17 available science. Prior to Hurricane Sandy, the New
18 York City Panel on Climate Change has created a
19 partnership from council leadership. It's comprised
20 of the regions preeminent climate scientists, and was
21 established to make sure that New York City would
22 always have updated, accurate local climate risk
23 information. Now, the Panel recently released
24 initial recommendations in 2009, and was reconvened
25 after Hurricane Sandy to provide the best available

2 projections. Which paint a vivid picture of the
3 risks we can expect into the middle of the century,
4 and even after 2100. For example, high-end estimates
5 put sea level rise at 2-1/2 feet by the 2050s, and as
6 high as 6-1/4 feet by 2100.

7 To put things into further focus, within
8 40 years the population of New Yorkers living in the
9 100-year flood plains is expected to double from
10 almost 400,000 to nearly 800,000 people. And we have
11 to consider an entire range of climate risk beyond
12 coast storms including intense precipitation and heat
13 waves. By the 2050s, high-end projections show the
14 number of days over 90 degrees to go from an average
15 of 18 days per year to almost 60. It's akin to the
16 heat we see in Birmingham, Alabama. Furthermore,
17 it's our most vulnerable senior citizens, the
18 medically infirm and low and middle-income families
19 who will feel these impacts the hardest.

20 In addition to gaining a better
21 understanding of the city's vulnerability, we have
22 invested a lot of efforts to better understand the
23 causes of climate change specific here in New York
24 City. The City of New York released its greenhouse
25 gas inventory-- releases its inventory annually.

2 And we just released the most recent inventory based
3 on data from 2013. We know that we've seen a 19%
4 reduction in citywide GHG emissions since 2005
5 benchmark to 2012. But then we flat lined at the
6 same 19% in 2012 to 2013. There are external factors
7 at play here including weather events like last
8 year's polar vortex. But this is a strong indication
9 that while we've made strong initial gains, we have
10 much work to do if we hope to overcome the normal
11 occurrence of weather. Not only that, much of the
12 gains that we have seen have come about through a
13 long-time switch in the power generation transition
14 from both coal and oil to natural gas. Those gains
15 can't be replicated, which is why we need to be more
16 aggressive in our efforts to reduce our greenhouse
17 gas emissions.

18 The One City Built to Last released in
19 September was a comprehensive plan to fight climate
20 change by reducing greenhouse gas emissions produced
21 by our buildings with a package of policies and
22 programs announced by the Mayor during Climate Week.
23 It calls for direct investments to increase the
24 efficiency of the city's public buildings including
25 schools and public housing. And to spur private

2 building owners to invest in efficiency upgrades that
3 can reduce GHG emissions that contribute to climate
4 change and poor air quality, protect New Yorkers from
5 rising utility bills and stimulate the demand for
6 retrofitting and renewable energy jobs.

7 In the interest of time, I'll provide a
8 brief summary of the plan, but you can review the
9 entire plan at our website at nyc.gov/builttolast.
10 While One City Built to Last has long-term vision,
11 it's based on a ten-year first phase that accelerates
12 the city beyond the previous 30 by 30 goal that had
13 been adopted, which is necessary if we hope to
14 achieve 80 by 50. In the near term, by 2025, this
15 plan will reduce city government GHG emissions by
16 35%, and overall buildings emissions citywide by 30%.
17 And in doing so, establish the aggressive pathway
18 needed to bring about overall GHG emissions down 80%
19 by 2050.

20 Last year's report, New York City's
21 Pathways to Deep Carbon Reductions indicated that as
22 difficult as 80 by 50 will be to achieve, such
23 interim goals as the 35% reduction and 30% reduction
24 overall in our buildings is actually going to get us
25 on that correct pathway over the next ten years.

2 There are four key strategies guiding this plan in
3 how we're going to make this happen.

4 First, the City of New York will lead by
5 example and make public buildings models for
6 sustainability. We're going to invest in high value,
7 efficiency upgrades, and approximately 150 to 200
8 city buildings per year for the next ten years
9 including schools, firehouses, police precincts,
10 libraries and homeless shelters. This will be
11 accomplished through a competitive citywide process
12 that identifies the most effective reduction measures
13 across the public building portfolio. It will
14 upgrade every city-owned building with significant
15 energy uses by 2030. It will perform energy upgrades
16 in 450 schools over the next five years including 325
17 comprehensive lighting upgrades, and 125 boiler
18 replacements to improve efficiency, and improve
19 indoor air quality.

20 We will increase solar and renewable
21 energy deployment on city assets beginning with 24
22 schools and install solar on more than 300 city
23 buildings generating over 100 megawatts of energy
24 over the next decade. We will pilot cutting-edge
25 energy technology from local clean tech start-ups in

2 city buildings. The city will also hire additional
3 operations and maintenance staff, and expand training
4 programs for all the city's building operators to
5 upgrade skills and ensure that equipment is operated
6 efficiently.

7 Finally, we'll partner with HUD to reform
8 the Energy Performance Contract Program to unlock the
9 potential for undertaking large-scale energy
10 efficiency measures at NYCHA that will free up
11 dollars for other critical needs and improve quality
12 of life for its residents. Second, the plan seeks to
13 create a thriving private market for energy
14 efficiency and renewable energy. We will require
15 buildings over 25,000 square feet to measure and
16 disclose energy use annually, conduct energy
17 assessments and upgrade lighting. We will catalyze
18 the retrofitting of about 20,000 private buildings
19 through our Retrofit Accelerator Program making up
20 15% of the city's built square footage. This program
21 aligns building owners with the technical know-how,
22 the incentives and the financing to make these
23 investments happen. Two-thirds of these buildings
24 that we're talking about are multi-family buildings

2 and roughly 40% are government assisted, affordable,
3 or rent stabilized buildings.

4 We will connect New York workers with new
5 jobs and opportunities and energy efficiency and
6 renewable energy with integrated workforce
7 development focused throughout each initiative. We
8 will create a green grant program for affordable
9 housing that will fund efficiency upgrades in
10 exchange for regulatory agreements to preserve
11 affordability. We'll incorporate efficiency measures
12 into all HPD moderate rehabilitation programs
13 requiring that all buildings undergo an energy audit
14 as part of the capital needs assessment process.
15 We'll organize communities to spur energy efficiency
16 retrofits starting with about 900 buildings in
17 Brownsville and East New York.

18 We will challenge the city's largest
19 institutions to commit to deep carbon reductions of
20 30 to 50% over ten years, and fund training in energy
21 efficiency best practices for building staff to save
22 energy and promote skills upgrades. To further the
23 development of more than 250 megawatts of private
24 solar generation across the city in the next decade,
25 a dramatic eightfold increase over current levels.

2 This program will be entirely voluntary for us
3 because we know that these investments make sound
4 economic sense. If we don't see the need and effort
5 to continue along the pathway of reaching these
6 goals, we may need to consider mandatory action in
7 partnership with industry to hold ourselves
8 accountable to meeting these goals.

9 Third, with the leadership of the Council
10 we will develop world-class green building and energy
11 codes. By working together with the industry leaders
12 and City Council, the City will continue to improve
13 standards for energy performance, and sustainable
14 building practices and new construction. Standards
15 will be implemented that raise the bar to better
16 construction practices, higher efficiency equipment,
17 and improved operations and maintenance to improve
18 the quality of building stock, and lower energy costs
19 for residents. Energy performance standards need
20 strong enforcement and education to ensure existing
21 and next standards are met. Which is why we are
22 allocating resources to the Department of Buildings
23 to ensure that these requirements are fulfilled in
24 both the design phase and during construction.

2 Finally, we will promote New York City as
3 a global head for clean energy technology and
4 innovation. We'll explore innovative technology for
5 buildings, and support clean tech businesses seeking
6 to expand in New York City in energy efficiency,
7 energy storage, or renewable energy generation. For
8 example, the Urban Future Lab in Downtown Brooklyn
9 boasts 10,000 square feet of incubator, educational,
10 and demonstration space. It hosts 17 companies, who
11 are not only pushing the edge of innovation in
12 sustainable and resilient urban technology, but
13 cultivating economic development for our emerging
14 tech triangle in Brooklyn. It's exactly these types
15 of technologies that we're going to need in the
16 future in order to fully realize the 80 by 50 goal.

17 It's important to reiterate that while
18 this plan has a long-term perspective, this work
19 begins now, and the impacts will begin immediately
20 and for all New Yorkers. And with aggressive interim
21 goals to get us on track with the 30 by 25 goal and
22 35 by 25. Over the next 20, over the next 10 years,
23 several years, these impacts will be felt
24 environmentally in terms of public health, and
25 economically in terms of green jobs. Specifically,

1 the proposed plan will reduce GHG emissions by 3.4
2 million metric tons per year inside of ten years. By
3 2025, that's 10% reduction in building based
4 emissions, equivalent to taking 715,000 vehicles off
5 the road or decommissioning an entire coal-fired
6 plant. The plan will also generate cost savings of
7 more than \$1.4 billion annually by 2025 for public
8 and private sectors leading to \$8.5 million
9 cumulative of energy costs over ten years. This plan
10 will also create nearly 3,500 new jobs in
11 construction and energy services, and train 7,800
12 workers to upgrade their skills.

14 Already, the City has taken action to
15 install solar panels, securing \$28 million to fund 24
16 installations on city schools as part of the
17 implementation of our plan, tripling the amount of
18 solar currently planned on city-owned buildings.
19 Furthermore, by developing a comprehensive plan to
20 address building efficiency, we are building out an
21 80 by 50 framework that we can apply to other sectors
22 like transportation, energy, and solid waste.
23 Planning for the 2015 PlaNYC update is already
24 underway.

2 I will my remarks by reinforcing the tone
3 that Bill had in the beginning of his remarks. This
4 is a crisis of the century, and nothing short of the
5 full cooperation of every New Yorker from every walk
6 of life will be needed to fight the effects of
7 climate change. In that spirit, we'll work closely
8 with the city's world-class real estate industry,
9 architects, and engineers, labor unions, affordable
10 housing experts, environmental justice leaders, and
11 academics to carry out one City Built to Last in as
12 collaborative way as possible.

13 And make no mistake, we are serious about
14 this goal, and the transformation needed to complete
15 it. We have no illustrations that New York City
16 alone can solve this crisis of global climate change.
17 But what we can do is show other cities how we can
18 take action to reduce these effects while at the same
19 time continuing to pursue an aggressive resiliency
20 plan to address the vulnerabilities we will face into
21 the future. I'm confident that just as New Yorkers
22 have responded to every crisis put in front of them
23 with strength and vision, they will address this
24 great crisis of climate change before us. It's
25 imperative that with City Council's continued

2 cooperation, we provide the direction and leadership
3 necessary for them to do so. Thanks for your time,
4 and we will now be able to address any questions you
5 may have. Thank you.

6 CHAIRPERSON RICHARDS: Thank you so much,
7 Dan. Before we continue I just would like to
8 acknowledge we've been joined by my colleagues Rory
9 Lancman from Queens, Council Member Eric Ulrich from
10 Queens. We have Steve Levin from Brooklyn, and
11 Council Member Brad-- Both Council Members Levin and
12 Lander from Brooklyn. Queens is on one side and
13 Brooklyn is on the other side evidently. There is no
14 divide here on this issue, however.

15 COUNCIL MEMBER: [off mic]

16 CHAIRPERSON RICHARDS: [laughs] So I'll
17 begin by saying by raising some questions. Then
18 we'll hear from my colleagues who have questions as
19 well. In your report, in the Mayor's Office Report
20 on New York City Pathways to Deep Carbon Reductions,
21 you guys mentioned it will be difficult to really
22 achieve 80% by 2050. What I want to know is what do
23 you see the difficulties being, and if you can
24 address any specific areas you think are going to
25 make it hard to achieve this goal?

2 DAN ZARRILLI: Sure. Thanks for the
3 question. 80 by 50 is very much an aggressive
4 target, and I think that's in part why we chose it.
5 We need to be setting aggressive targets to able to
6 catalyze the transformation that we really need.
7 There are technologies that may not exist at this
8 point in order for us to fully achieve. There are
9 major infrastructure changes that we're going to need
10 in order to really chart that long-term path away
11 from fossil fuels. And that's going to take time,
12 and that's going to take investment. I guess the way
13 we look at, it's important to set the long-term
14 vision, but it's also just as important to set
15 interim targets and goals that get us on that
16 pathway. And what we've learned, and what that
17 report shows is that if we were to simply achieve the
18 30 by 30 goal, which absolutely important to set at
19 the time, and we continue to make great process on
20 that. If we simply reached 30 by 30, we will be off
21 the pathway, and achieving 80 by 50 will be
22 incredibly difficult, even more difficult than if we
23 take more aggressive action now. And knowing that
24 buildings make up the key driver of our emissions, it
25 like three-quarters, that's where we chose to start

2 first to make sure that we're putting the right
3 investments in place now, and accelerating that
4 investment to get us on that correct pathway. And
5 holding ourselves accountable to that progress in a
6 much more near-term way.

7 CHAIRPERSON RICHARDS: Okay. So know
8 we've heard in your testimony in particular you spoke
9 a lot about voluntary. Industry being-- having to be
10 able to voluntarily opt into doing some of these
11 things. Do you think that that will help us there.
12 Do you think that there should be more regulations
13 put in place. I understand we want to give people an
14 opportunity to understand the new lay of the land.
15 But when do we say now is the time we need to get
16 more aggressive? Is it two years, five years. Is it
17 eight years.

18 BILL GOLDSTEIN: I think you're exactly
19 right. We want to give them time to learn-- Get the
20 sense of the lay of the land here. And I can't give
21 you an exact timeframe, but we're willing. What
22 we've committed to do is to meet with a technical
23 group that represents various folks in the real
24 estate industry, and the environmental community.
25 Meet with them to identify triggers that would give

2 us some sense of if they're not being met, when we
3 would come back to the City Council and talk about
4 mandatory goals. Exactly, we'll be back to you as we
5 start those meetings up, and get a better sense of
6 what the time frame will be.

7 CHAIRPERSON RICHARDS: Okay. I would
8 just hope that we're going to really move fast on
9 this because there are communities as we know with
10 the anticipated sea level rise predictions that won't
11 exist if we take our time here. So, yes we do want
12 to give people an opportunity to get this right, but
13 we should not wait too long before we get there.

14 I wanted to speak on-- So next year I
15 wanted to speak on queen heat for a second. So next
16 year I know everyone is pretty much supposed to phase
17 up with No. 6 oils. Do you foresee us meeting that
18 particular goal next year, or mandate rather? Not
19 goal, mandate. And how are we going to ensure that
20 enforcement in particular in environmental justice
21 communities are really taking place for us to meet
22 that mandate?

23 DAN ZARRILLI: Yeah, absolutely and the
24 clean heat has actually been a really important model
25 as we think about the retrofit accelerator, and it's

2 been really phenomenally successful. We have the
3 cleanest air in the last 50 years in the city. The
4 particulate matters are significantly reduced, and
5 we've reached many of our goals. As we head towards
6 that mandate coming into effect next summer, as of
7 September this year, we've already achieved 75 or a
8 little over 75% of the No. 6 phase goal. And we're
9 seeing and we're hearing from Con Ed as well that
10 there's a significant increase in folks that are
11 actually making these transitions. Everyone knows
12 what the law is. They are making significant
13 progress towards that goal, and we expect to them
14 achieving that goal.

15 CHAIRPERSON RICHARDS: So there are
16 communities particularly in the South Bronx,
17 Brooklyn, and East Harlem that we have not seen as
18 much progress as we would like to see. And, so I
19 would want to know is there going to be more
20 enforcement agents out there to ensure that these
21 people are converting? Because these are the
22 particular communities that have not seen the
23 conversions go as fast as we would like them.

24 DAN ZARRILLI: So we've taken significant
25 action to make sure that people are aware of the

2 mandate, and the deadlines that are coming. There
3 have been enforcement actions that have been
4 successful in helping spur a number of the
5 conversions. So we're going to continue that effort,
6 and get us on track to meeting that goal.

7 CHAIRPERSON RICHARDS: Do you thin that
8 we can-- Because I know that we're trying to move
9 people from six to four, but how soon do you think we
10 can move people from four to at least two?

11 DAN ZARRILLI: You know, that's a great
12 question. I could probably-- We're at right now at
13 32 or almost 33% on that goal, and, of course, that's
14 not part of next year's mandate. But we're going to
15 continue to make significant progress to clean the
16 source of fuel that we are using in the city.

17 CHAIRPERSON RICHARDS: You spoke of some
18 resilient measures that have taken place, and in
19 particular I know that the sand being pumped on
20 Rockaway Beach and in other parts of the city. Is
21 there any particular plan to be deal with the bay,
22 any protection along the bay?

23 DAN ZARRILLI: There are a number of
24 things that are happening on the bay side in the
25 Rockaways. There have been some investment along

2 Beach Channel Drive. As you know, there were some
3 upgrades that happened. There was an existing
4 bulkhead project, and we upgraded it after Sandy to
5 make it even more resilient, and close off some of
6 the pathways for flooding. We are working with the
7 Army Corps. pretty extensively on a major study and
8 authorization that they have for additional
9 protections in Jamaica Bay. And we've highlighted
10 for them very specifically where we think the
11 vulnerabilities are including in the back and the
12 East End of the bay. You know, all the vulnerable
13 neighborhoods, those low-lying neighborhoods. We're
14 absolutely committed to finding solutions to this
15 challenge. The Army Corps. provides a pathway to
16 achieving that and has authorized and appropriated
17 dollars for achieving that as well. So this will
18 take a bit of a process to get there, but I think
19 together we can continue to advocate for the right
20 solutions in Jamaica Bay.

21 CHAIRPERSON RICHARDS: There currently
22 are some bulkheads in particular, and since we spoke
23 of the Rockaways, in particular Auburn that have been
24 damaged and there have been no repairs to them, can
25 you speak to is there a plan in place to at least

2 repair the temporary-- The bulkheads that are there
3 temporarily?

4 DAN ZARRILLI: So we released a plan and
5 an RFP I think two weeks ago at this point. We have
6 funds through the Sandy Recovery dollars to pursue
7 repairs to bulkheads, upgrades to bulkheads, raising
8 coastal elevations, and really continuing to
9 strengthen our coastline against long sea level rise
10 and erosion. We're doing an assessment of how to
11 best allocate those dollars. We're absolutely going
12 to be taking a look at Auburn and making sure-- and
13 see what can be done there. And we'll be making
14 assessments on how to allocate those dollars. But we
15 have a program. We're aware of it, and thanks to
16 your office for highlighting some of the incredible
17 challenges we have here. But we are aware of the
18 problem.

19 CHAIRPERSON RICHARDS: I wanted to speak
20 to the Office of Long Term Planning and
21 Sustainability. Any plan to hire, or get a director
22 for that particular office?

23 BILL GOLDSTEIN: We're looking far and
24 wide for a director. We want to hire. I know it's
25 been a long time, but we want to hire the best person

2 possible. However, in the meantime I think it's
3 important to note that Dan is Acting Director with
4 myself as Senior Advisor to the Mayor. We haven't
5 stood still and waited to continue to push forward on
6 all of our initiatives that the office has as well as
7 just last month producing this extensive plan One
8 City Built to Last. So we hope to bring somebody on
9 as soon as possible on a permanent basis, but we're
10 not standing still all along.

11 CHAIRPERSON RICHARDS: Will it be a month
12 or two or when do you anticipate?

13 BILL GOLDSTEIN: As soon as possible.

14 CHAIRPERSON RICHARDS: Okay. We hope
15 very soon. So I know you spoke of energy audits and
16 obviously you require the energy audits in each
17 particular building. But right now the law says I
18 think every ten years they're supposed to report to
19 the city. Is there any plan to cut that time in
20 half? Because if we're going to be aggressive on
21 this particular issue, I don't think we can wait for
22 a decade to find out if people are really making
23 their buildings as energy efficient as we would like
24 them to.

2 DAN ZARRILLI: So the plan that we laid
3 out continues the ten-year cycle for the buildings
4 over 50,000 square feet. But what we've done is
5 accelerate that by providing for audits of over
6 25,000 square feet. So lowering the threshold for
7 buildings that need those energy audits. It's a key
8 part of understanding our energy profile and usage so
9 that we can accelerate to more buildings these types
10 of retrofits.

11 CHAIRPERSON RICHARDS: So I know-- I
12 don't think that. So every ten years now they would
13 have to report to the city on it?

14 DAN ZARRILLI: That's right.

15 CHAIRPERSON RICHARDS: So at any time
16 because if we're going to be aggressive, and really
17 reach this goal I think waiting ten years is a long
18 time. Is the Administration at least rethinking
19 that?

20 DAN ZARRILLI: Not to date. I think
21 we've been, you know, we think this is the cycle that
22 works together to get the information in on a cycle
23 that's manageable and aggressive at the same time.
24 And it certainly doesn't hold up anybody from
25 participating in the retrofit accelerator, and taking

2 advantage of the incentives of the technical know-how
3 and the financing to pursue additional retrofits.
4 That's just the cycle of the way they have to provide
5 the audit information to the City.

6 CHAIRPERSON RICHARDS: All right, I'm
7 going to-- This will be my last question because I
8 know my colleagues that-- My colleagues really want
9 to raise some questions. Enforcement, enforcement,
10 enforcement, enforcement, enforcement, enforcement,
11 enforcement, enforcement is going to be key here.

12 [applause]

13 SERGEANT-AT-ARMS: Everybody, please
14 quiet down. Thank you.

15 CHAIRPERSON RICHARDS: So I think, and
16 you know, we have a new Administration now, and I'm
17 very grateful for the relationship that we have, you
18 have with the Council and all of the work that you
19 guys have done to bring us here to aim to reach this
20 goal. But in the past we've seen inadequate
21 enforcement on just about every issue across the
22 board. And I'm hoping, and the question I want to
23 have is in particular when we speak of clean heat for
24 instance, is DEP going to hire more enforcement
25 agents around this particular issue? Or is there any

2 plan to really ensure that there's an adequate amount
3 of enforcement staffing so that we can really ensure
4 that communities, not just in Manhattan, but the
5 outer boroughs as well. We want Manhattan as well,
6 but that the outer boroughs are reaching these
7 particular goals?

8 DAN ZARRILLI: So we've been aggressive
9 in enforcement on clean heat with DEP. We're also,
10 this plan is getting more resources to the Department
11 of Buildings for enforcement of the Energy Code.
12 This is something that's key in our mind, and we want
13 to make sure that we establish aggressive codes, and
14 we make sure that they're being followed. So that's
15 exactly what we're doing.

16 CHAIRPERSON RICHARDS: Can you speak of
17 the number of staffing you have.

18 DAN ZARRILLI: I think we'd have to get
19 back to you on exact numbers, but we are increasing
20 the staff that's looking at enforcement.

21 CHAIRPERSON RICHARDS: So, if you could
22 get the committee those numbers that would be
23 appreciated. I will stop, and I'll come back for a
24 second round of questions because I have some anxious
25 colleagues. And I will start with the sponsor of

2 this particular bill, Council Member Costa
3 Constantinides.

4 COUNCIL MEMBER CONSTANTINIDES: Good
5 afternoon. Thank you for being here today, and thank
6 you for your good testimony. I have a few questions,
7 one being the aftermath of Sandy, the Panel on
8 Climate Change conducted across benefit analysis of
9 future courses of actions the City might take. And
10 they found that every dollar invested now will save
11 four dollars in the future through reduced damage.
12 Has the Department of Long-Term Planning and
13 Sustainability Conducted analysis on the economic
14 costs of storm damage, negative health effects, and
15 commodity prices that impact New Yorkers if we didn't
16 hit these goals?

17 DAN ZARRILLI: So we did an analysis when
18 we released the plan A Stronger and More Resilient
19 New York. Into that plan, one, we know that Sandy
20 itself was a \$19 billion event in terms of damages of
21 lost economic activity. We did some really
22 interesting modeling with Swiss Global Reinsurance
23 Company that showed that simply on today's city with
24 today's population, today's development, and today's
25 dollars, that simply by changing the variable climate

2 into the 2050s, that \$19 billion event becomes a \$90
3 billion event. So I think we've shown that that's
4 absolutely the trend line that we need to be taking
5 action now. The Sandy Supplemental Appropriation
6 gives us really a unique opportunity to buy down that
7 future risk in advance of another event where we may
8 not have the federal government to rely on for future
9 dollars. But we have that opportunity now to buy
10 down the risk, and avoid that \$90 billion number.
11 And you're right. So the stat on every dollar
12 invested is a four dollar savings in future damages,
13 savings in future damages that comes from FEMA. And
14 that's absolutely part of our thinking that by making
15 the right investments and cost-effective investments
16 that we can buy down that future risk.

17 COUNCIL MEMBER CONSTANTINIDES: About
18 question. EPA has announced that they were going to
19 require existing power plants to reduce their
20 emissions by 30% by 2030. As a resident of Western
21 Queens, I'm very excited to hear about that because
22 we have-- We generate almost half the city, more
23 than half the city's power. However, they are not
24 looking, they're not sort of under the same mandate
25 that we are with four and six oil. They've been very

2 clear with me that they do not have to take that
3 step. What can we do to work with the EPA and our
4 state partners to reduce the emissions from our power
5 plants, and reduce their sort of dependence on four
6 and six oil to make it cleaner for all?

7 DAN ZARRILLI: We've been working closely
8 in our office through the Public Service Commission
9 on a number of the rate case filings. The State has
10 announced its own 80 by 50 goal recently, and I think
11 several years ago. And that's guiding I think some
12 of the work they're doing through the Public Service
13 Commission and how they regulate the energy sector.
14 So we continue to see progress. I think something
15 like 85% of the 19% reduction in emissions that we've
16 seen in the city over the past several years has come
17 from a transition to natural gas from oil and coal.
18 You take a hiss. [laughter] That's a one-time-- I
19 think that's a one-time--

20 COUNCIL MEMBER CONSTANTINIDES:
21 [interposing] I want to be fair. I'm talking about
22 that that gas. [sic] [laughs]

23 DAN ZARRILLI: -- a non-replicable
24 reduction in emissions, which is why we're focusing
25 in the long-term on renewable energy. But I think

2 you're absolutely right, and that's why we're working
3 with the state to continue to advance our emission
4 reductions over the long term.

5 COUNCIL MEMBER CONSTANTINIDES: What's
6 the home heating oil? I know that we are now right
7 now at a B2 mandate for home heating oil. We're
8 looking to move forward. Can you sort of talk about
9 how we can move the ball forward on bio and other
10 ways to reduce-- The opportunity for new bio-energy
11 in our home heating oil?

12 DAN ZARRILLI: I'll probably have to get
13 back to you on that. I didn't quite prep on the bio-
14 heat.

15 COUNCIL MEMBER CONSTANTINIDES: Okay.
16 Just quickly shifting to Vision Zero--

17 DAN ZARRILLI: [interposing]

18 COUNCIL MEMBER CONSTANTINIDES: Sure.

19 DAN ZARRILLI: --our Mayor's-- Council's
20 support throughout this amazing plan. How do you
21 sort of envision the landscape and our streetscape?
22 How is Vision Zero also going to help move the ball
23 forward in the emissions reductions making our
24 streets more livable?

2 BILL GOLDSTEIN: I think that's, you
3 know, certainly a critical issue. I think as you--
4 It's another component of making the city a more
5 livable city that kind of complements everything
6 we've talked about here in One City Built to Last.
7 Making the streets safer, more sustainable design
8 standards that change that I think not only deal with
9 traffic issues. But also have sustainable components
10 with design features such as trees and bioswales and
11 things like that. So it's really a complementary
12 component of everything we're talking about here.

13 COUNCIL MEMBER CONSTANTINIDES: Okay, and
14 lastly, as Chair of the Subcommittee on Libraries,
15 I'd be remiss if I didn't bring up how our libraries
16 can be part of this plan. I'm very excited.
17 [applause]

18 SERGEANT-AT-ARMS: Quiet please.

19 COUNCIL MEMBER CONSTANTINIDES: I was
20 very excited to see in the Mayor's plan about the
21 reduction in city buildings, the investment in solar
22 panels on our schools. Our libraries sort of facing
23 a large capital deficit to begin with, but how do we
24 sort of bring our capital-- How do we sort of get
25 capital to our libraries to sort of make them

2 emission neutral. So they would be prime targets in
3 every community to sort of play a part in this 80 by
4 50 reduction?

5 BILL GOLDSTEIN: [off mic] Take that,
6 please.

7 EMILY DEAN: Yes. So, at DCAS we have
8 multiple programs. One of them is ACE as Dan and
9 Bill mentioned, and that is citywide, and it includes
10 the libraries, all of them, NYPL, PPL, and also
11 Brooklyn Public Library. And most recently we have
12 actually funded projects through-- that are along
13 side of energy efficiency projects with DBC [sic] and
14 also some expense funding for Brooklyn Public
15 Library. So we're looking at. From DCAS we're
16 looking at it as a whole, and we're not dissecting
17 it. It could be libraries. It could be firehouses,
18 any public building we are taking care of it from our
19 side and funding the energy efficiency projects, and
20 making sure that they're getting greenhouse gas
21 emissions expense and capital.

22 COUNCIL MEMBER CONSTANTINIDES: That's
23 great. That's fantastic to hear. I'm glad to hear
24 that. I want to thank you guys for your testimony.

25 DAN ZARRILLI: Thank you.

2 COUNCIL MEMBER CONSTANTINIDES: Thank
3 you, Mr. Chair, for the time to ask questions.

4 CHAIRPERSON RICHARDS: We will now hear
5 from Council Member Steve Levin. Oh, so we'll hear
6 from Lander.

7 COUNCIL MEMBER LANDER: Thank you, Mr.
8 Chairman, and Council Member Constantinides thank you
9 for putting forward this bill, and it's great to have
10 the Administration here, and so aggressively working
11 on this. It's good to march with a couple of you in
12 the climate march. And I appreciate how hard you're
13 working, and how much energy there is. At the same
14 time, I think it's important that we flag just how
15 big a job this is. You have a lot of good things in
16 this testimony. You are working hard, and the
17 challenge before us might be bigger than we are. And
18 I even, I spent some time before the hearing looking
19 at the New York City Pathways to the Carbon
20 Reductions, and it's an honest document that says
21 this is a very serious goal. This isn't one to just
22 say it casually, and I don't think you've said it
23 casually. But I guess I just-- So, I appreciate all
24 we're doing, and I want to keep that sense of urgency
25 that we've got to be doing more. And questions are a

2 little bit in that vain. On large buildings, that
3 report rightly reflects on clean heat as the model
4 for large building energy retrofits, but clean heat
5 relies on mandates and time tables. Help me
6 understand what's different about large building
7 energy retrofits. I appreciate you saying if it
8 doesn't work, we'll move to mandates. You know, my
9 gut is that we will need to get 75% of the buildings
10 retrofit. Is there reason to be optimistic given
11 what we've seen so far that we will achieve what we
12 need to with the voluntary approach as opposed to the
13 mandate model of clean heat?

14 DAN ZARRILLI: Sure. I think the first
15 point on this is that we see a lot of these retrofits
16 make sound economic sense. And so there is a history
17 already in the city buildings that are taking action
18 on this. Our carbon challenge I think is a great
19 example of this where simply by challenging
20 institutions and hospitals and now multi-family
21 buildings to achieve carbon reductions, we're seeing
22 great progress. And some of the partnerships within
23 the carbon challenge have already met their 30% goal
24 early, and are looking to set potentially more
25 aggressive goals. So there are reasons to believe

2 that this because it makes sound economic sense,
3 because we have a track record on the carbon
4 challenge, but there's a voluntary approach here.
5 But we don't have any illusions that-- You know, the
6 goal certainly is not up for debate at this point,
7 and we've set the goal. We're going to track this on
8 a voluntary basis, but if we feel that we're heading
9 down a way where we're not going to be on the
10 pathway, we're going to make sure we're getting
11 ourselves on that pathway.

12 COUNCIL MEMBER LEVIN: And I'd love for
13 it to work in a voluntary way, but I think I share
14 the Chair's concerns that really getting there will
15 take more a more clean heat like approach with those
16 mandates.

17 BILL GOLDSTEIN: I just want to mention.
18 I want to underscore your earlier statement that
19 we're taking on a significant management challenge
20 here. And it's one point that I always try to make
21 when we talk about this. That, yes, doing the
22 outreach that we need to do, doing the work that
23 needs to be done with all the building owners
24 particularly the smaller ones as opposed to the
25 larger ones is going to be a lot of work. And I

2 don't think we've thought that through, and we'll be
3 reporting on this on a regular basis. So you'll be
4 able to see what our progress is.

5 COUNCIL MEMBER LEVIN: And small
6 buildings were my next question. You know, I think
7 that at least on the large building side we've seen
8 some buildings take good significant steps in a
9 voluntary way with some of the existing incentives.
10 So there is a model. I don't know if we've really
11 seen that on the small building side. The uptake of
12 the NYSEDA programs has been paltry. We tried
13 something here with a sort of block-by-block
14 approach, but it's a challenge in those small
15 buildings. So, are you doing-- I don't know if we
16 have the model yet to do an at-scale small building
17 net--

18 BILL GOLDSTEIN: [interposing] I think we
19 will see--

20 COUNCIL MEMBER LEVIN: --network
21 approach.

22 BILL GOLDSTEIN: I mean I talk about
23 outreach, and I talk about technical, getting
24 technical assistance out there, getting assistance
25 about financing. I think it's going to be a question

2 of outreach, and we will see. But I'm confident that
3 we will get more people signing up than we've had in
4 the past.

5 COUNCIL MEMBER LEVIN: Well, I'm just
6 like here-- I feel like that program is still do an
7 audit. Get a big report about your home, and then
8 try to find the resources you need to do the things
9 that audit says. And I'm skeptical that model is
10 going to scale. So whether the model is here are
11 some things everybody has got to do by this date. Or
12 whether that model is like here's the Good Humor
13 truck that shows up on your block with all the things
14 you need to retrofit your home. Some new model is
15 needed to scale the small buildings as opposed to the
16 kind of audit intensive find your own financing. I
17 know there was obviously a whole set of debates
18 around On-Bill or PACE. But I agree we need outreach
19 and technical assistance, but I actually think a new
20 model is needed for small buildings, or we're not
21 going to get the scale we need.

22 DAN ZARRILLI: I think we agree with you,
23 which is why the Retrofit Accelerator is pulling
24 together the technical know-how. You know, we may
25 need to hand hold a bit with some building owners who

2 don't have the capacity to spend the time or think
3 this through, or source out the incentives. We want
4 to make that as easy for people as possible, and the
5 incentives are there. You're right, there's been a
6 slow uptake on those incentives, but that just means
7 we need to be able to get people to them. There is
8 financing that exists, and there's technical know-
9 how, but we need to put that package together for
10 people to enable it to be as easy as possible.

11 COUNCIL MEMBER LEVIN: You speak in your
12 testimony to the need to really push the renewables
13 market forward. And you speak to the New York City's
14 buildings as one model of that. I wonder-- I know
15 that there are some cities looking at setting goals
16 for municipal elimination of carbon purchase. And
17 there's a whole set of people on the investment side
18 as well. I'm sure some of them are here, but you
19 guys aren't the ones that manage the City's money.
20 But you do purchase the City's stuff. And I know
21 that there are some cities around the world that said
22 if we're going to get there by some date, we need to
23 stop buying fossil fuels. With the goal of not only
24 dramatically [applause]--

2 SERGEANT-AT-ARMS: [interposing] Quiet
3 please.

4 COUNCIL MEMBER LEVIN: --reducing fossil
5 fuel productions, but also with the goal of driving a
6 renewables market, but then we'll also be selling
7 those same kinds of renewables to the private sector
8 as well. Are you looking at city procurement, and
9 thinking about a target of this type as both a
10 reduction, a fossil fuel reduction, and a market
11 driver?

12 DAN ZARRILLI: So we're exploring it.
13 What we've done with One City Built to Last is take
14 on the challenge of buildings, which makes up the
15 bulk of our energy uses. But then, there's the
16 underlying energy generation, of course, that comes
17 with that. We'll have more to say on this probably
18 in several months as we begin to look at other
19 sectors through update that we'll see in the spring.
20 You know, we've put a significant effort into the
21 Building Program right now, and we're going to be
22 doing more to continue to make sure that we'll be
23 able to achieve this 80 by 50 pathway.

24 COUNCIL MEMBER LEVIN: Fair enough and I
25 appreciate how much you've moved in a short time on

2 buildings. And obviously, we look forward to the
3 PlaNYC 3.0 revision to get at a lot of these other
4 areas. Just one other place holder I'll put in, and
5 I'm willing to wait until the spring to ask my
6 questions about is transportation. You know, the
7 pathways to deep carbon reduction says to get to 80
8 by 2050 we will need dramatic shifts. I know that
9 we're right that 75% of the city's emissions are
10 buildings, but an equal amount of it is gas burning
11 cars. So, if you don't have more to say on it today,
12 I understand, but I just want to make sure that we're
13 looking at it. And by the time we bring that
14 revision forward we'll also have something that
15 really looks like the model shifts that we need in
16 transportation to achieve this goal. Thank you.
17 Thank you, Mr. Chair.

18 CHAIRPERSON RICHARDS: We'll hear from
19 Council Member Eric Ulrich.

20 COUNCIL MEMBER ULRICH: Thank you,
21 Chairman. I don't have a question. I just want to
22 apologize. I have to skip out and go downstairs. I
23 have a meeting with the Speaker, but I want to
24 commend and join you and the rest of my colleagues
25 commending the excellent, phenomenal work that Bill

2 Goldstein and Dan Zarrilli have done particularly not
3 only in the Rockaways but throughout the city, making
4 our city more resilient. As you know, our districts
5 were impacted by Hurricane Sandy, and they have done
6 a tremendous amount of work trying to make sure that
7 God forbid the next storm comes, and we know that
8 that day may come soon, that we're more prepared,
9 we're stronger. And that we are doing our part as a
10 city to reduce the negative impacts on greenhouse gas
11 emissions. So I want to commend you and thank you
12 for all of your work. And also let you know that I
13 will be signing on as a co-sponsor today to the bill.
14 So the bill will have bi-partisan support. Thank you
15 very much. Thank you. [applause]

16 CHAIRPERSON RICHARDS: Dan Zarrilli
17 slipped something in his water obviously. [laughter]
18 All right, here we have a question from Steve Levin.

19 COUNCIL MEMBER LEVIN: Thank you very
20 much, Mr. Chairman. I want to thank this panel. I
21 wanted to ask I've recently kind of become kind of
22 acquainted with the model of Passive House
23 Technologies that are very widely used by countries
24 in Europe, cities in Europe. There have been 25,000
25 certified Passive Houses, buildings, Passive House

2 buildings in Europe. In the States, we're kind of
3 like in the double digits right now. I think there
4 were like 13 certified Passive Houses in the United
5 States as of last year. This is, for those who don't
6 know, is ultra low carbon emission buildings through
7 a variety of techniques, insulation, triple pane
8 windows, recycling of warm air in the winter and cool
9 air in the summer. Each unit having its own
10 compartment for heating and cooling, and gets to
11 significantly lower standards-- higher standards,
12 lower emissions for buildings. And it seems to be
13 that that's where we ought to be going with new
14 construction. There's been on affordable housing
15 development midsize apartment building in Brooklyn
16 that recently came online, which is exciting. Are we
17 looking-- Two questions around that. Are we looking
18 at ways within the public sector municipal buildings,
19 new schools for example to adhere to those types of
20 standards with new municipal buildings? Is that
21 something that is within our ability as a city?

22 BILL GOLDSTEIN: I'll ask Emily to take
23 that one.

24 EMILY DEAN: Sorry. For the schools
25 there's one school coming up in Staten Island, 62R.

2 That is going to be net zero, and that will be the
3 first. It's not passive, but it is net zero, and
4 it's going to have significant energy reductions and
5 then--

6 CHAIRPERSON RICHARDS: Could you speak a
7 little bit more into the mic?

8 EMILY DEAN: All right. It's going to
9 have significant energy reductions, but just to
10 understand what net zero means is that on an annual
11 basis, it's going to be net zero. So in the summer
12 time it will generate more electricity through solar
13 panels, and probably send it back to the community.
14 But in the wintertime it might buy more from Con Ed
15 because it may not be able to generate as much. That
16 kind of a net zero. So I just want to make sure it's
17 clear--

18 COUNCIL MEMBER LEVIN: [interposing]
19 Right. Okay.

20 EMILY DEAN: --what I mean by that. But
21 in terms of the schools, I think there are
22 opportunity there. But we are not there yet. I
23 think we need a little bit more.

24 COUNCIL MEMBER LEVIN: So that's
25 encouraging and I like that. Can we do that in every

2 school? Can we do that in every new school that's
3 being done?

4 EMILY DEAN: So I think I'm not qualified
5 to answer that for the schools, but it depends on
6 where the school is. So in Staten Island it kind of
7 makes sense because it has a lot of space, and it's
8 lower. It's not as high levels. But let's say in
9 Manhattan when you don't have the space and you have
10 to go up, you don't have enough space for solar
11 panels on top to make up for the net zero or passive.
12 So I think it will depend on where the school is
13 located. And based on the conditions around the
14 neighborhood and the space and the community that I
15 think the School Construction Authority is open. As
16 they showed in Staten Island that when the rental
17 conditions are right, they'll take advantage of it.
18 But it will depend on where it is.

19 COUNCIL MEMBER LEVIN: Okay. What I
20 would like to see is that for each new public
21 building whether it's a school or other building that
22 there be an exhaustive-- that that be the goal. The
23 goal be that either net zero or more, but that there
24 be a framework in place where every avenue towards
25 that is exhausted. So I think that that would be

2 something that would be-- that we would really like
3 to see. And I think honestly should be something
4 that maybe we could look at doing some legislation
5 around in terms of requiring that that type of report
6 be made public then. In terms of private buildings,
7 are we looking at ways to incentivize Passive House
8 Technology in the Building Code. So the City of
9 Brussels, for example, is using the Building Code as
10 a tool to not only incentivize it but in cases
11 require it. Is that something that we're actively
12 looking at changing the Building Code to get there?

13 BILL GOLDSTEIN: So we in the city are
14 all always actively looking at changing the Building
15 Codes to make it better. We're looking around energy
16 conservation as well, and this is something that the
17 City put ourselves on a path to when we joined the
18 International Co-Council Community, which is on a
19 three-year revision cycle. We openly speak about
20 Passive House in our One City Built to Last report as
21 model for the kinds of improvements to the code that
22 we're looking to. We are very much interested in the
23 promise of Passive House, but we cannot necessarily
24 take it wholesale at just face value. It's not so
25 simple. We don't live in a city looks like let's say

2 the hills of Germany. Not every site is particularly
3 oriented and in the ideal condition to take advantage
4 of Passive House. And the solar gains that allow for
5 Passive House construction to work. We will look at
6 it in depth, and it will inform us as to how we will
7 look to our codes and improve on them. And make sure
8 that every building is required to achieve the
9 highest energy efficiency standards.

10 COUNCIL MEMBER LEVIN: Okay. So I
11 represent Downtown Brooklyn. I represent Greenpoint
12 and Williamsburg. So these are areas that are all
13 building right now. Just to be totally frank, a lot
14 of the construction that we've seen over the last 10
15 or 15 years is clearly not up to standards or
16 ambitious standards of energy efficiency. And a lot
17 of those buildings that are happening in my district
18 it's kind of build fast, build cheap. You know a lot
19 of them are condos. They sell them to the condo
20 owner, and then like they're out and made a quick
21 buck. And that's been the reality of what we've seen
22 certainly in my district over the last 10 or 15
23 years. It's been really upsetting because a lot of
24 that represents a missed opportunity in a lot of
25 ways. And so I think that the sooner that we could

2 start to do this, the more we can get new buildings
3 covered under higher energy efficiency codes. I
4 think that that would be a big positive steps I mean
5 just anecdotally. I'm no expert at this stuff, but
6 I've seen an uptick in construction, coming back from
7 the recessions and things like building is happening
8 again in New York City and funders are funding it.
9 And so, I think that we should kind of strike while
10 the iron is hot, as there seems to be more building
11 coming online now. to get a lot of these
12 requirements in sooner rather than later. I think if
13 we wait three years, we'll probably miss another
14 opportunity. [applause]

15 SERGEANT-AT-ARMS: Quiet please.

16 BILL GOLDSTEIN: By the way, that was
17 John Lee, who is the Deputy Director at OLTPS for
18 Green Buildings and Energy Efficiencies.

19 COUNCIL MEMBER LEVIN: And then, I guess
20 my last question would be with regard to city
21 buildings are we looking towards getting-- removing
22 boilers entirely from new city buildings? Is that an
23 achievable thing to do? Can we say that every new
24 city building will be without a traditional boiler?

25 [Pause]

2 EMILY DEAN: [off mic] I don't think I
3 can answer that. I think that he can. [sic]

4 BILL GOLDSTEIN: First, I would like to
5 point out that we issue them as a vilified boiler
6 itself. The boiler is actually a very good
7 instrument for delivering heat, and we have a city
8 that was built on thousands and thousands of boilers.
9 What we're looking to fundamentally transform the
10 future--

11 CHAIRPERSON RICHARDS: [interposing]
12 Speak a little bit more into the mic, please.

13 BILL GOLDSTEIN: What we're looking to
14 fundamentally transform in the future is the fuel
15 sources that power our buildings and provide the
16 heat. That doesn't mean that the boilers are going
17 away. We just need to rethink the way that we
18 deliver fuel, and what fuel we use to source those
19 boilers.

20 COUNCIL MEMBER LEVIN: Okay, so boilers
21 that don't operate on fossil fuels? So do you
22 that's-- Is that possible that we could do in all
23 new city-owned buildings, if it must rely on a boiler
24 that it not be a boiler that operates on fossil
25 fuels? [applause]

2 SERGEANT-AT-ARMS: Quiet please.

3 COUNCIL MEMBER LEVIN: You don't have to
4 clap.

5 EMILY DEAN: Okay, so we all understand I
6 think on the panel that the fossil fuels are an
7 interim way of getting to where we need to go to, but
8 they're not the answer to the ultimate question. But
9 I don't, we don't see that it's going away in the
10 near term. But I think that's a question to the
11 community, and the scientists and technology
12 developers that there's a demand for such boilers
13 that don't use fossil fuels, and that we should be
14 looking forward to that, and investing for that. And
15 making sure we're actually looking for those
16 technologies going into the future. But I think in
17 the short term we are going to have to do the
18 cleanest that we can possibly get there.

19 DAN ZARRILLI: And I guess to add to
20 that, you know, it's why the fourth strategy of the
21 plan is about spurring entrepreneurship and support
22 research into new technologies. We've set interim
23 goals over the next ten years of what we want to
24 achieve to get us on that pathway. We have no
25 illusions that the rest of the pathway is easy, and

2 it's going to need to rely on major infrastructure
3 investments as well as new technologies that may not
4 exist right now. That's what we need to continue to
5 support. So that when we get to the end of our ten-
6 year goal that we don't just say, you know, we can't
7 get any further. We need to continue to support
8 those long-term goals as well.

9 COUNCIL MEMBER LEVIN: Thank you very
10 much, Ms. Dean. Thank you. Thank you, Mr. Chair.

11 CHAIRPERSON RICHARDS: I just want to ask
12 one question on that. So geothermal technology are
13 you guys looking at that? [applause]

14 DAN ZARRILLI: Yes, and in fact, we are
15 conducting in partnership with Local Law-- I forget
16 the number -- passed by the City Council, we are
17 conducting a pretty exhaustive geothermal study.
18 It's something that's important to us, and we want to
19 make sure that we are actively looking at all sorts
20 of renewable sources. And also, I should point out
21 that the Department of Design and Construction has
22 published a fantastic manual on how to best utilize
23 and the possibilities for utilizing geothermal for
24 new construction. And there are some interesting
25 maps that show where in the city it is better used

2 than other places. So it's absolutely on our radar.
3 We're taking steps to strengthen that through this
4 current feasibility study, and we want to see that as
5 part of the mix.

6 CHAIRPERSON RICHARDS: Thank you, but
7 that may be the answer to no boilers. [laughs]

8 EMILY DEAN: [off mic] Yes, you may be.
9 Correct.

10 CHAIRPERSON RICHARDS: We have questions
11 from our Council Member Lancman.

12 COUNCIL MEMBER LANCMAN: Well, thank you,
13 Mr. Chairman, and Costa, thank you for this
14 legislation. This hearing is very important, and I
15 am proud to be a co-sponsor of the legislation. I
16 want to ask a question regarding the fourth prong of
17 the plan promoting New York City as a global hub for
18 clean energy technology, and innovation. Which in
19 your testimony, at least is written only about a
20 paragraph. What specific efforts do you see the City
21 undertaking to promote clean energy technology
22 business in the city? What kind of partnerships
23 might you envision with, for example, the City
24 University of New York, and integrating this
25 collaboration or a collaboration with the Cornell

2 Tech School? And really creating an economy within
3 New York City for green energy and clean technology.

4 DAN ZARRILLI: Sure. I think, as you
5 say, we've made this a key priority of our plan to
6 support entrepreneurship and research, and we really
7 want to be that global hub. We've seen some great
8 progress in the incubator programs that have been run
9 in the city. They are in the Future Lab in downtown
10 Brooklyn. It has, I think, been a great model of
11 that. We're looking to expand that incubator to
12 continue to attract and stimulate local business and
13 really world-class technology to be here in New York
14 City. Another really great example of that is the
15 NYC Rise Competition that's been run recently. That
16 has not been concluded yet, but it was a competition
17 to source the most innovative global technologies for
18 resiliency measures in the city. And what we've
19 gotten is a really interesting selection of
20 technologies for telecommunications for energy, for
21 flood protection. And right now we're pairing them
22 up with small businesses for deployment. And it's
23 \$30 million program that's being deployed to really
24 pilot those technologies all over the City, and show
25 how we can continue to scale those types of

2 technologies up. Supporting incubators and
3 supporting small businesses I think is an incredible
4 important part of this plan.

5 COUNCIL MEMBER LANCMAN: Well, let me ask
6 you about CUNY. Because one of the things that the
7 State is doing, and we don't know if it will be
8 successful, but we think it will be, is looking at
9 universities and colleges across the state as
10 economic engines. As part of your planning, would
11 you commit to meeting with CUNY and industry leaders
12 in determining whether or not the programming, the
13 majors, the minors, the concentrations that currently
14 exist in CUNY are those that best matched and suited
15 toward serving what we hope will be a clean energy
16 industry in New York. And reporting back to their
17 committee for what you found, and whether or not
18 there are things that CUNY says you should do
19 differently?

20 EMILY DEAN: So one thing that I would
21 like to add is that the City is already working with
22 CUNY, and we have developed a training program to
23 train our building operators across the city to be
24 more energy efficient with the operations. Offering
25 certifications like building operators certificates,

2 certified energy management and things like that.
3 And those are all done through like CUNY. So that
4 partnership still exists. And in addition to that,
5 we are also with them in terms of analyzing what we
6 are doing in our programs. To make sure that we keep
7 getting feedback in terms of the success of how we're
8 doing, and where we're going. And getting feedback
9 from them as to what the new technologies are that we
10 could possibly invest. In addition, DCAS has a
11 program called IDEA that invests in new technologies,
12 and we did the first round of testing, and the
13 outcomes of that have not been yet concluded. And
14 that was on building controls, and currently we're
15 going after battery storage. Every year, we'll come
16 out with another round to test different technologies
17 as we need. And we're working with CUNY in our
18 evaluation of those. So in addition to that, I am
19 going to ask Dan to address that at this time.

20 DAN ZARRILLI: Only that I think I didn't
21 address it in your earlier question. The
22 opportunities are coming about through the new
23 campuses and the tenant campuses that are coming to
24 the city. This creates a great opportunity to bring
25

2 more technical know-how, and really support the goal
3 of being that global hub.

4 COUNCIL MEMBER LANCMAN: All right, I
5 would like it, you know, if the City would not merely
6 rely on the increased technical know-how. And really
7 look at the CUNY campuses and the Applied Sciences
8 campus and come up with some specific programs that
9 students can enroll in and graduate with that will
10 enhance their ability, and encourage them to be part
11 of the-- Not just the tech economy, but the green
12 economy. But let me ask you one parochial question,
13 my other hat as I chair the Committee on Courts and
14 Legal Services. People don't realize it, but the
15 City maintains the courthouses. Are the courts part
16 of the greening? Are court buildings going to get
17 greened also?

18 DAN ZARRILLI: Absolutely. Yes.

19 EMILY DEAN: Because they are public
20 buildings as long as they're City owned court
21 buildings, they're part of our inventory [sic] at
22 DCAS along with the libraries and the schools. So we
23 are supporting all of them.

24 COUNCIL MEMBER LANCMAN: Terrific. Well,
25 thank you very much. Thank you, Mr. Chair.

2 CHAIRPERSON RICHARDS: Thank you. Okay,
3 I'll just ask some last questions, and then we'll get
4 to the public testimony. So I just wanted to--
5 Well, one since he just got off of training. I
6 wanted to know-- So I know there's going to be
7 somewhat of a \$10 billion investment towards
8 renewables over the next ten years. I think that's
9 something you guys laid out in your plan. What's the
10 plan to really ensure that local communities, in
11 particular those who might have not went to Yale but
12 went to jail, have an opportunity to be trained in
13 these particular programs? Because [applause]--

14 SERGEANT-AT-ARMS: [interposing] Quiet
15 please. Quiet please.

16 CHAIRPERSON RICHARDS: --because there's
17 an opportunity here obviously for these people. And
18 you don't necessarily have to have the best degree in
19 the world to technically know how to install a solar
20 panel. So what's the plan to ensure that MWBEs and
21 MBEs also-- You know, local people are going to be
22 afforded these hiring opportunities?

23 BILL GOLDSTEIN: I think like every other
24 initiative we're undertaking, whether it's Built It
25 Back or Resilience Work this will have the same set

2 of requirements around it, and goals around workforce
3 and MWBE participation. And as well as we know in
4 this area there's another opportunity, which is the
5 focus on training because there will be new jobs
6 because there will be new jobs. And we'll be working
7 both within the union environment and outside that if
8 necessary. So you have our commitment on that
9 particular set of goals.

10 CHAIRPERSON RICHARDS: And I want to
11 thank you for the job fair, your partnership in the
12 Rockaways the other day. Almost a thousand people
13 showed up. So that showed the need for this
14 particular training, and I definitely want to-- Even
15 as we encourage the unions to be a part of this, also
16 look to ensure that local communities have an
17 opportunity for apprenticeships towards this stuff,
18 but also that there's training outside of that. So I
19 want to ensure that everybody has an opportunity
20 there.

21 The last two questions I guess are
22 related to transportation, and I guess this question
23 is for DCAS. I would love to see more electrical
24 vehicles out on the roads, and more charging stations
25 especially in the City fleet. And I know California

2 has a very ambitious plan, and New York City is the
3 most progressive city in the world, and the greatest
4 city in the world. And I don't think we should be
5 following behind California. I think California
6 should be following behind us. [applause] So I hope
7 I'm invited back to California now. But I'm hoping
8 to hear a plan towards laying out more opportunities
9 especially in the City fleet for electrical vehicles.

10 DAN ZARRILLI: Yes. So I mean we've said
11 before, we've taken the buildings as the first focus
12 of our 80 by 50 goal. We know that we need to come
13 back, and we're doing some thinking already on the
14 transportation sector, the energy, solid waste, other
15 sectors that are going to help us achieve that 80 by
16 50 goal. So nothing necessarily to say today on it,
17 but we are absolutely looking at electric vehicles
18 and the measures that can help us achieve those 80 by
19 50 goals.

20 CHAIRPERSON RICHARDS: And then, my last
21 favorite subject, which is bus rapid transit, and I
22 know that DOT is not here and the MTA. But I'm
23 hoping that a full-fledged BRT system is going to be
24 put in place in New York City. We know buildings are
25 a major emitter. Seventy-five percent of emissions

2 come from buildings, but the idea is to ensure that
3 we are getting people out of their vehicles, and onto
4 mass transit. And more reliable transit obviously
5 will get less people driving into New York City, in
6 particular in Queens where we have some of the
7 longest commutes. So I'm hoping to see and hear that
8 that's going to be a part of a plan to get us to 80
9 by 50.

10 DAN ZARRILLI: Yeah, we're evaluating
11 many different options.

12 BILL GOLDSTEIN: I know DOT is having
13 extensive discussions with MTA.

14 CHAIRPERSON RICHARDS: But I want you to
15 be in that discussion.

16 BILL GOLDSTEIN: Okay.

17 CHAIRPERSON RICHARDS: [laughs] Well, I
18 want to thank you, and thank you for all your hard
19 work on this issue. And I want to thank the Mayor,
20 who did not have to adopt this goal, and saw fit the
21 need. And he was out there during the storm with us,
22 and actually before my capacity as Council Member out
23 there on the ground. And I know that he understands
24 the need. So, first and foremost, I want to thank
25 him, and thank you guys for adopting this goal. We

2 look forward to working with you. We look forward to
3 enforcement. We look forward to continuing to ensure
4 that this city is moving in a way that's going to
5 ensure that our children have an opportunity to grow
6 in a nation, in a city where they won't have to worry
7 if their home will exist or their community will
8 exist with a storm.

9 With that being said, thank you for your
10 testimony. I also want to thank Reggie Thomas I see
11 who's sitting there. Just give him a shout out for
12 all his hard work on this issue as well. And I look
13 forward to spending many, many, many more days with
14 you. God bless you all. Thank you. [applause]

15 DAN ZARRILLI: Thank you, Donovan.

16 [Pause]

17 CHAIRPERSON RICHARDS: All right.

18 SERGEANT-AT-ARMS: [interposing] May we
19 have quiet, please? [sic]

20 CHAIRPERSON RICHARDS: All right, we're
21 going to get to our next panel now. I'll ask Mr.
22 Rick Bell from the American Institute of Architects
23 to come up.

24 SERGEANT-AT-ARMS: Quiet down and please
25 get back to our seats. [sic]

2 CHAIRPERSON RICHARDS: Ms. Catherine
3 Hughes of Community Board 1. Susanna Dyen from
4 ALIGN. Gusti Bogok from the Atlantic Chapter Gas
5 Drilling Taskforce, Sierra Club Atlantic Chapter Gas
6 Drilling Taskforce, and Raya Salter from NRDC.

7 [Pause]

8 CHAIRPERSON RICHARDS: Catherin Hughes,
9 Community Board 1. Rick Bell is there. Raya Salter
10 NRDC; Gusti Bogok from Sierra Club Atlantic Chapter
11 Gas Drilling Taskforce, and Susanna Dyen from ALIGN.

12 [Pause]

13 COUNSEL SAMARA SWANSTON: Would you
14 please raise your right hands. Do you swear or
15 affirm to tell the truth, the whole truth, and
16 nothing but the truth today?

17 [Pause]

18 CHAIRPERSON RICHARDS: You may begin.

19 RAYA SALTER: Hello, Chairman Richards
20 and members of the Committee. My name is Raya
21 Salter, and I'm a Senior Utility Advocate at the
22 Natural Resources Defense Council. Thank you for the
23 opportunity to be here to testify in support of the
24 City's commitment to a 30% reduction in citywide
25 emissions by 2030. And an 80% reduction by calendar

1 year 2050, the 80 by 50 goal NRDC thanks and
2 applauds the City Council for, in partnership with
3 the Mayor, courageously taking national leadership in
4 reducing carbon emissions and addressing climate
5 change. 80 by 50 is recognized by the United Nations
6 as the international standard consistent with
7 avoiding the worst impacts of climate change. It's
8 the right goal. New York City is highly vulnerable
9 to the impacts of climate change.
10

11 In 2013, the New York City Panel on
12 Climate Change projected that by the 2050s, among
13 other things, the city may experience up to 31 inches
14 of sea level rise. That threatens to flood zones
15 across the city. Two years after Sandy caused tragic
16 loss of life and property while ravaging the city's
17 infrastructure; this is an impressive and substantial
18 commitment to create a more stable climate for the
19 future. This landmark legislation is an affirmation
20 that the science is in, the times of debate, the
21 reality of climate change has come and gone. Climate
22 change is here, and New York City is acting now.

23 New York City can achieve 80 by 50. In
24 order to do so, we will need to make large gains in
25 energy efficiency in our buildings. We will need to

2 make clean and renewable generation including solar,
3 and offshore wind into an everyday reality. And, we
4 will need to electrify the transportation sector.

5 Here is where I can begin to deliver the
6 good news. Taking on carbon in New York City is far
7 more than a greenhouse gas reduction strategy.
8 Tackling fossil fuels is also a way to help the city
9 become stronger and more resilient in the face of
10 climate change. Saying no to carbon can also make
11 New York City a cleaner, green city for all New
12 Yorkers. This is a challenge but it's also a major
13 opportunity. The pursuit of 80 by 50 can make the
14 city into a stronger, more affordable, and healthier
15 place. In particular, addressing carbon in the
16 building section, which is responsible for 75% of
17 carbon emissions, can help bring the City's
18 Affordable Housing Plan to fruition while making our
19 communities healthier and wealthier.

20 Home energy costs pose a crushing burden
21 to New York City residents today, particularly for
22 very poor individuals and families. Home energy
23 costs threaten a household's ability to cover
24 expenses for housing, food, medical care, and other
25 essentials. In this way, energy efficiency in

2 buildings can make a positive difference in the
3 health and wealth of our community. Further,
4 integrated strategies to address dirty fuel oil,
5 improve the health of indoor environments-- [bell]
6 I'm out of time, but thank you very much.

7 CHAIRPERSON RICHARDS: Thank you.

8 SUSANNA DYEN: Thank you Council Member
9 Richards for having me speak today, and to the other
10 council members. Oh, sorry. [laughs] Okay, how
11 about now? Thank you for having me. My name is
12 Susanna Dyen, and I'm an organizer at ALIGN, the
13 Alliance for a Greater New York. We are a community
14 labor coalition dedicated to creating good jobs,
15 vibrant communities, and accountable democracy for
16 all New Yorkers. ALIGN also coordinates the Alliance
17 for Just Re-building, a community labor alliance
18 dedicated to ensuring post-Sandy rebuilding is done
19 in a just and equitable way for workers and Sandy
20 impacted communities. We are in support of the
21 proposed 80 by 50 goal, coupled with the interim 30
22 by 30 goal, which is already in place. This is a
23 strong mandate for reducing New York City's
24 contribution to global warming. Our concern is how
25 New York City plans to actually achieve this goal,

2 and whether or not workers will benefit from these
3 investments in reduction of emissions. As some of
4 the questions that have already been asked today,
5 illustrate here a similar alignment in what happens
6 to our buildings, which make up the largest amount of
7 emissions? Additionally, what kind of training and
8 skill shares can be done so that workers can,
9 particularly those that have not always gotten
10 opportunities, can really access opportunities and
11 careers that will be coming from investment in our
12 public sector and from our public sector?

13 New York City's current plan, Greener,
14 Greater Buildings developed by former Mayor Bloomberg
15 requires large buildings to be audited for energy
16 efficiency, to report on energy use, and to retain
17 building equipment. There is no mandate that large
18 buildings actually act on their audits or reduce
19 their energies below current levels. Therefore,
20 we've seen only a fraction of buildings in the city
21 voluntarily conduct retrofits.

22 On the other hand, the Clean Heat
23 Program, which requires buildings to switch to
24 cleaner fuel sources, has resulted in enormous uptick
25 in boiler retrofits, and replacements once the

2 program went into effect. Additionally, most of the
3 emission reductions in building sectors identified in
4 the recent Annual NYC Emissions Benchmarking Report
5 have resulted from this mandatory clean program,
6 clean heat program. Mandates works. So the current
7 proposal by the Mayor and the Speaker would make
8 important contributions towards address climate
9 change. But we believe that a mandatory energy
10 efficiency retrofit is a necessary ingredient to
11 achieving the 80 by 50 goal. We recommend requiring
12 large buildings to reduce their energies by 60% below
13 current levels by 2050.

14 Hurricane Sandy demonstrated that we can
15 no longer wait for those who are most responsible for
16 climate change to act voluntarily. Sure, some
17 buildings have taken up the City's, the Mayor's
18 carbon challenge and made big improvements in their
19 emissions. But these building owners are the
20 exception to the rule. A mandate is essential and
21 should be done immediate, and that mandate should be
22 tied to training, and to job opportunities and making
23 sure that they get into all communities. Thank you
24 for letting me speak.

25 CHAIRPERSON RICHARDS: Thank you.

2 [Pause]

3 GUSTI BOGOK: Good afternoon, and thank
4 you for holding these hearings, and thank you for
5 sponsoring this bill and for this initiative. Given
6 the recent report issued by the Intergovernmental
7 Panel on Climate Change, it is imperative that the
8 Council moves forward with this ambitious initiative.
9 And once again, thank you for your work on this.
10 However, how we achieve these goals is key, and it is
11 important that we avoid the most seductive and
12 glaring pitfalls by employing honesty, vigilance, and
13 scope in our methods. For example, replacing one
14 dirty fuel, i.e., No. 6 oil for an equally dirty or
15 more potent greenhouse gas emitter, i.e, methane, or
16 quote, unquote, "natural gas" as NYC's misnamed clean
17 heat program is currently advocating. It's not a
18 true solution, particularly when lifecycle emissions
19 form shale gas extraction such as through the process
20 of hydraulic fracturing or fracking, through much of
21 our methane gas is derived, and are factored into the
22 equation. The build out of gas infrastructure and
23 dependency locks us into an outmoded dirty fossil
24 fuel economy for years to come. And for those of us
25 who have been studying the grim realities of

2 fracking, it is akin to jumping out of the frying pan
3 into the fire. Indeed a 2011--

4 [applause]

5 SERGEANT-AT-ARMS: There will be no
6 clapping.

7 GUSTI BOGOK: Indeed, a 2011 Cornell
8 University study has shown that the shale gas
9 footprint is 20% greater than that of coal within the
10 first 20 years, and maintains its climate warming
11 supremacy over coal up to and beyond 100 years when
12 the cradle-to-grave process is considered. Neither
13 is the replacement of fossil fuels with nuclear
14 energy a viable option given the catastrophic 2011
15 nuclear disaster in Fukushima, Japan. The reactor's
16 ongoing meltdown issues, and the unsolved problems
17 with nuclear waste disposal, environmental
18 destruction, human health impacts, and the habitat
19 and wildlife threats posed by nuclear energy
20 reactors.

21 Further, as escalating global warming
22 continues to heat our water bodies, the use of water
23 to cool nuclear reactors will become increasingly
24 costly while the growing problems of water scarcity
25 and contamination to make water use for nuclear

2 cooling not only a foolhardy, but dangerous
3 enterprise. Instead, greenhouse gas emission
4 reductions must be achieved through vigorous programs
5 that promote energy efficiency retrofits for all
6 buildings, energy conservation, and energy use
7 reduction measures. And the long overdue shift to
8 renewable energy sources such as for wind, solar,
9 geothermal and gas derived from biological sources
10 such as algae and waste products.

11 GUSTI BOGOK: It is interesting to note
12 here that the Newtown Creek Wastewater Sewage
13 Treatment Plant in Brooklyn was at one time energy
14 self-sufficient generating all of its operational
15 energy needs from the methane contained in the
16 processed waste. Until a misguided change in
17 leadership and policy reversed course, and reverted
18 the plant back to wasteful and costly energy guzzler
19 that it is today. [bell] So can I just finish just
20 two sentences?

21 CHAIRPERSON RICHARDS: Sure. Since they
22 clapped for you and I clapped for you, you get an
23 extra 30 seconds.

24 Pardon.

25

2 CHAIRPERSON RICHARDS: We clapped for you
3 so you get an extra 30 seconds.

4 GUSTI BOGOK: Thank you. Finally, I
5 would like to recommend that the New York City
6 Council implement strong incentives and legally
7 binding guidelines to encourage and ensure that
8 building owners take the urgently needed steps to
9 actually reduce greenhouse gas emissions. Rather
10 than relying on good faith or recommendation
11 initiatives that can easily be dismissed or ignored.
12 Once again, thank you for taking this much-needed
13 initiative.

14 CHAIRPERSON RICHARDS: Thank you. Oh,
15 fracking. That's what it was.

16 GUSTI BOGOK: Oh, I should say my name
17 for the record. It's Gusti Bogok. I'm the Co-Chair
18 of the Sierra Club Atlantic Gas Drilling Taskforce.

19 RICK BELL: And I was going to use a few
20 minutes of my time, too, to plug that statement. My
21 name is Rick Bell. I'm Executive Director of the
22 American Institute of Architects New York Chapter
23 here in New York City. And I'm delighted to be here
24 this afternoon, Chairman Richards and all the members
25 of the committee to offer testimony on Intro 378.

2 This local law to amend the Administrative Code of
3 the City of New York to reduce greenhouse gases by
4 80% by 2050 is maybe the most important thing that we
5 could be talking about.

6 AIA New York and its members are
7 dedicated to the structural integrity and health
8 aspects of buildings to try to protect the health,
9 safety, and welfare of the public through design. We
10 believe that Intro 378 could help advance those
11 goals. Architects will have a key role to play in
12 reducing carbon emissions by 80% by 2050. Owing to
13 the U.N. Climate Summit and Mayor de Blasio's pledge
14 to overhaul the energy efficient standards of all New
15 York City buildings, the New York City public
16 buildings in particular. We have at the Center for
17 Architecture the founder of Architecture 2030, an
18 architect named Ed Mazria [sp?]. He addressed a full
19 house at our space, which Council Member Richards,
20 you know, is heated by what we call veggio [sic]
21 geothermal. And he spoke about an outline, a
22 blueprint really for a carbon-free and just built
23 environment by 2050. He emphasized the critical role
24 that architects and designers must play in securing a
25 livable future for New York City. And the

2 implementation of sustainable design in consort with
3 principles of resilient design is required to
4 effectively address both the causes and the effects
5 of climate change over the long term.

6 Architects and AIA members believe that
7 concerted efforts on the part of the building
8 community can result in a significant impact toward
9 halting the damage of climate change. We cannot
10 overstate the importance of implementing both
11 mitigation policies and adaptation measures.
12 Adaptation alone cannot protect our city's residents
13 from the anticipated effects of climate change.

14 AIA New York commends the City Council's
15 pledge to drastically reduce the city's greenhouse
16 gas emissions by focusing on building design. We've
17 advocated for a long time for local laws and code
18 changes that support energy conservation. Upgrades
19 to public buildings including housing, need to
20 concentrate on renewable energy sources, and
21 innovative design solutions such as geothermal. We
22 think that these will benefit all of New York City
23 residents, and set a powerful example for the private
24 sector, and the rest of the world. And speaking of
25 the rest of the world and thank globally and acting

2 locally, I think here today, we're doing both. We're
3 acting locally and thinking globally are consistent
4 with what we as members of the AIA were able to say
5 and do in South Africa when the International Union
6 of Architects met this past August and voted to adopt
7 many of the same standards that we're debating here
8 that would benefit New York City. Thank you for the
9 opportunity to testify here today.

10 CHAIRPERSON RICHARDS: Thank you and
11 thank you for your work.

12 CATHERINE MCVAY HUGHES: Good afternoon.
13 My name is Catherine McVay Hughes. I am Chair of
14 Manhattan Community Board 1. You are sitting in
15 Community Board 1. Thank you very much for having
16 this hearing. It's very appropriate as we approach
17 the two-year anniversary of Super storm Sandy. I'm
18 sure you all know we had over seven feet of water at
19 South Street Seaport. We're still trying to recover
20 from that. In addition, we had two people drown. We
21 had one person drown in the Financial District, and
22 another one in Tribeca. As you know, Lower Manhattan
23 is bounded by water on three sides, and we're still
24 repairing the underground transit infrastructure from
25 Super Storm Sandy. So you might recall the

2 inconvenience on the R Train and the other subways
3 that are being renovated.

4 As you know, the entire Community Board 1
5 is within the-- The whole area is within the new
6 flood zone area. So we are on the frontlines. We
7 passed a resolution that went before the Executive
8 Committee last week supporting your introduction,
9 your Intro 378, an initiative to reduce greenhouse
10 gases by 80% by 2050. We're also urging that the New
11 York City Administration remain diligent in the
12 implementation and the enforcement of policies
13 relating to this initiative to ensure that the City
14 can meet or exceed the goal of reducing greenhouse
15 gases by 2050.

16 I also just want to make sure that you
17 know that recently we released a report called
18 Community District 1 Green Spaces Profile in
19 September 2014. We've been a long-time advocate of
20 greening and sustainability. The Green Spaces
21 Profile summarizes the transition of green building
22 infrastructures in Community Board 1 including the
23 LEED Rated and Energy Star Certified spaces. We have
24 roughly 60 of them. But all the new buildings that
25 are going up are in alliance with that. So we really

2 need all the help we can get, and thank you so much
3 for everything that you're doing on this issue.

4 CHAIRPERSON RICHARDS: Thank you all for
5 your testimony, and we certainly will be looking at
6 your recommendations and taking them seriously.
7 Thank you so much. Thank you.

8 [Pause]

9 CHAIRPERSON RICHARDS: All right, the
10 next panel Dehran Duckworth from the Tri-State
11 Biodiesel; Daniel Gianfala from the United Metro
12 Energy; Daniel Gianfala. Oh, that's a double. John
13 Maniscalco, New York Oil Heating Association; Ryan
14 Baxter from REBNY.

15 [Pause]

16 COUNSEL SAMARA SWANSTON: Gentlemen, can
17 you please raise your right hands. Do you swear or
18 affirm to tell the truth, the whole truth, and
19 nothing but the truth today?

20 [Pause]

21 CHAIRPERSON RICHARDS: All right, start
22 from my--

23 SERGEANT-AT-ARMS: [interposing] Can you
24 guys please take your seats? [sic]

2 CHAIRPERSON RICHARDS: We'll start with
3 you, sir.

4 [Pause]

5 DANIEL GIANFALA: Good afternoon,
6 Chairman Richards, and members of the Environmental
7 Protection--

8 CHAIRPERSON RICHARDS: Just pull the mic
9 a little closer to you, sir. Thank you.

10 DANIEL GIANFALA: My name is Daniel
11 Gianfala. I'm President and Chief Operating Officer
12 of United Metro Energy Corp.

13 SERGEANT-AT-ARMS: [off mic]

14 DANIEL GIANFALA: My name is Daniel
15 Gianfala, President and Chief Operating Officer of
16 United Metro Energy Corp. UMEC is owned by John
17 Maniscalco. We supply and deliver gasoline, ultra
18 low sulfur diesel, biodiesel, bioheat, heating oil,
19 and natural gas throughout New York's metropolitan
20 area from terminals in Greenpoint, Brooklyn,
21 Riverhead, Long Island, and Calverton, Long Island.

22 Since acquiring Metro's terminals in
23 2013, UMEC is proud to have built upon the pioneering
24 role they have played in the advancement of biofuels
25 in New York City over the last decade. UMEC supports

2 the goals of Intro 378 to reduce greenhouse gases by
3 80% by 2050, as well as the vision laid out in Mayor
4 de Blasio's transformative plan One City Built to
5 Last. The goal of 80% greenhouse gas reduction by
6 2050 cannot be realistically accomplished in New York
7 City without the increased use of bioheat, a blend of
8 biodiesel and heating oil. And UMEC hopes to play a
9 major role in further applying the clean air and
10 environmental benefits of bioheat in New York City.
11 Biodiesel is a biodegradable virtually zero sulfur
12 and totally renewable energy source that is made from
13 plant, vegetable, or animal fat based oils. It is
14 then blended with diesel for use in transportation
15 fleets and with heating oil for use in buildings,
16 also known, as bioheat. Biodiesel reduces
17 particulate matter that causes asthma, carbon
18 emissions that contribute to global warming, and they
19 lower our country's dependence on foreign oil and
20 fossil fuels.

21 According to the American Energy
22 Coalition, B12 bioheat burns cleaner than natural
23 gas. And let me emphasize this point. A B12 blends,
24 which means 12% biodiesel and 88% traditional heating
25 oil, bioheat fuel can produce lower lifetime

2 emissions than natural gas. Last year, UMEC blended
3 four million gallons of biodiesel into our heating
4 oil, and diesel products, eliminating 58 million
5 pounds of carbon, and substantially reducing
6 pollutants in the City of New York. This carbon
7 reduction is the equivalent of removing more than
8 7,000 cars from the road annually. UMEC walks the
9 walk. Our truck fleet of 55 vehicles uses B20 for
10 eight months, and B5 for four months in the winter.
11 By solely using these two grades of biodiesel, United
12 Metro is able to reduce its carbon output by 750,000
13 pounds annually.

14 UMEC has been a vocal advocate for
15 bioheat requirements, and actively supported
16 legislation to phase out Nos. 4 and 6 heating oil.
17 Only three years ago nearly 10,000 buildings in New
18 York City burned No. 4 and 6 heating oil, and through
19 the efforts [bell] of the New York City Clean Heat
20 Program and companies like United Metro, several
21 thousand buildings have converted to cleaner fuels.
22 In recent years, many more are actively pursuing
23 conversions. UMEC has offered incentives to building
24 owners reducing, helping to accelerate conversions to
25 the cleanest heating fuels. As well as educating

2 building owners, real estate managers and tenants on
3 the benefits of bio heat. UMEC is in a period of
4 [bell] substantial growth. Earlier this year, we
5 acquired the expansive heating oil portfolio of Hess
6 Oil Company. This acquisition makes the largest
7 heating oil and biofuel provider in New York City
8 Metropolitan Area.

9 And soon in 2015, we will open one of the
10 largest state-of-the-art advanced biodiesel
11 production facilities in North America to be based
12 right in Greenpoint, Brooklyn. It is designed to
13 produce 50 million gallons per year of biodiesel
14 fuel, and the facility will be the only one of its
15 kind in New York City. It will be capable of
16 accepting multiple feed stocks including recycled
17 restaurant grease, and soy oil processing it into
18 biodiesel for distribution in the New York City
19 region. The maximum output of our processing
20 facility will allow for the offset of 365,000 tons of
21 carbon or 730 million pounds annually. We recently
22 opened the city's first public biodiesel marine
23 fueling dock where we will be loading tugs and barges
24 purchasing biodiesel fuel on the marine waters of our
25 city.

2 UMEC is in support of the goals outlined
3 in Intro 378, and the Mayor's plan to transform
4 buildings for a lower carbon future. We feel
5 strongly about bioheat has an important role to play
6 in the city's energy portfolio, and we are prepared
7 to meet the biodiesel and bioheat demands of the New
8 York Metropolitan area. Thank you.

9 CHAIRPERSON RICHARDS: Thank you.

10 [Pause]

11 Good afternoon, Mr. Chairman and members
12 of the committee. My name is John Maniscalco, and
13 I'm the CEO of the New York Oil Heating Association.
14 It's a 75-year old trade association whose members
15 are large family-own heating oil distributors and
16 terminal operators delivering the country's cleanest
17 heating oil to over 1.8 million housing units
18 throughout the City of New York. And we also employ
19 thousands of New Yorkers directly and indirectly.

20 NYOHA supports the goal of Intro 378 that
21 seeks an 80% carbon emission reduction by 2050, and
22 we commend the Mayor on the One City Built to Last
23 Report focused on improving sustainability in
24 buildings throughout New York. Today, I'm very proud
25 to sit before this committee and confidently assert

2 that New York City has the cleanest heating oil in
3 the United States. This is no accident. New York
4 Oil Heating and its partners and colleagues in the
5 heating oil industry provide diesel industry labor.
6 The Environmental Public Health and Environmental
7 Justice Advocacy Communities have worked very closely
8 to reach this significant achievement. In the last
9 two years alone, NYOHA has proactively sought and
10 achieved sweeping reforms in the heating oil industry
11 including the following:

12 1. The mandating the 15 parts per million
13 ultra-low sulfur heating fuel oil for all No. 2
14 heating oil statewide.

15 2. The City Council's 50% reduction No. 4
16 from 3,000 PPM to 1,500 PPM.

17 3. The phase out of No. 6 oil by 2015 and
18 4 oil by 2030, and

19 4. The City Council's B2 Fuel Mandate for
20 all grades of heating oil, which now has been in
21 effect for two full heating seasons.

22 These truly monumental reforms have
23 already had a tremendous impact on air quality,
24 reduced dependence on fossil fuels, carbon
25 reductions, green local job creation, and job

2 retention. The Bioheat Fuel Mandate alone has
3 already displaced more than 50 million gallons of
4 petroleum since its implementation. Not including
5 voluntary shifts to higher blends, which accounts for
6 millions more offset in gallons and offset in carbon.
7 Bioheat fuel is a blended product of petroleum and
8 100% renewable biodiesel that reduces the dependency
9 on fossil fuels like oil and natural gas. But
10 improves air quality, and reduces our carbon
11 footprint.

12 I would like to make a few statements
13 that I hope resonate with you before I leave. Clean
14 2 oil with bioheat is one of the cleanest heating
15 fuels available. With respect to particular matter
16 2.5, clean 2 with biodiesel is as clean as natural
17 gas. According the New York City Clean Heat Program,
18 and I quote, "Ultra Low-Sulfur 2 has close to zero
19 soot emissions, the lowest of all conventional
20 heating fuels." Many of our companies have been
21 selling B20 Bioheat fuels for years on a voluntary
22 basis. Others sell B10, B5. We all sell B2. B2 is
23 a necessary fuel standard because it allowed for
24 biodiesel to go into the market, and for every
25

2 building in the City of New York to get an experience
3 with the product.

4 And while NYOHA is certainly open to
5 discussing how to achieve citywide standards over
6 time, it is important to [bell] to acknowledge that
7 why we made B2 mandate so successful is that it did
8 not go too far too quickly and considered
9 affordability and supply. We would like to see more
10 focus on bioheat fuel for clean heating, as the City
11 Council contemplates this bill and specific ways to
12 reach important carbon air quality milestones over
13 the years and decades to follow. This kind of saving
14 we're talking about in this bill with Mayor's report
15 are simply not possible without Clean No. with
16 biodiesel. Natural gas is simply not available in
17 all parts of the city, and it is also 100% fossil
18 fuel that is by definition less renewable than
19 biodiesel blends. Thank you for the opportunity to
20 testify, and I'm pleased to take any questions.

21 [Pause]

22 RYAN BAXTER: Good afternoon, Chairperson
23 Richards and the members of the Committee on
24 Environmental Protection. My name is Ryan Baxter.
25 I'm a Senior Policy Analyst for the Real Estate Board

2 of New York. The Real Estate Board of New York
3 representing over 16,000 owners, developers,
4 managers, and brokers of real property in New York
5 City thanks you for the opportunity to testify
6 regarding the proposed changes to the Administrative
7 Code regarding greenhouse gas reductions. We
8 appreciate our continuing dialogue with both the
9 Environmental Protection and the Housing and
10 Buildings Committees where many of the follow-up
11 proposals will likely fall. We thank Chairman
12 Richards and Williams for their leadership, and for
13 continually going out of their way to sit down with
14 the real estate industry.

15 We have been actively engaged in
16 discussions with our membership to help ensure the
17 proposal is not an imposition of undue costs or
18 burdens on building operators while pursuing an
19 aggressive reduction in greenhouse gases to help curb
20 global climate change. We are pleased to report that
21 we support Introduction No. 378. We believe an 80%
22 reduction in greenhouse gases by 2050 to be an
23 ambitious target that will ensure New York City
24 continues to lead the world by example in regards to
25 sustainability. As there are many unknowns to

2 consider, we would like to volunteer ourselves to
3 assist the Council in every fashion we can in order
4 to accomplish this goal Thank you again for the
5 opportunity comment. We look forward to continuing
6 our conversations with the Council to continuing
7 improving sustainability throughout the city for all
8 New Yorkers.

9 [Pause]

10 DEHRAN DUCKWORTH: Good afternoon. Thank
11 you very much for the opportunity to speak this
12 afternoon on this important subject. My name is
13 Dehran Duckworth. I'm with Tri-State Biodiesel. We
14 are a regional producer of biodiesel from recycle
15 cooking oil that we also collect from over 7,000
16 restaurants across the city and the region. I would
17 like to present my testimony at this time.

18 To the esteemed members of the NY Council
19 Committee on Environmental Protection regarding Intro
20 378, I offer this testimony in support of the bill.
21 Tri-State Biodiesel has been on the forefront of the
22 environmental movement here in NYC for ten years
23 operating from the conviction that implementation of
24 biodiesel, the only renewable alternative fuel to
25 achieve the designation of an advanced biofuel by the

2 EPA, which requires 50% or more emissions reductions
3 compared to its fossil fuel equivalent for this
4 designation. It is the most viable and effective
5 means we have immediately available to our community
6 to reduce harmful emissions from diesel and the
7 heating of buildings here in NYC. Which make up 75%
8 or more of the harmful emissions, which have been
9 directly attributed to causing the highest rates of
10 asthma among children in the whole country here in
11 our City. As well as a host of other pressing health
12 and economic issues, that accompany our unnecessary
13 addiction to fossil fuels.

14 Biodiesel has a solid track record of
15 seamless functionality in a host of legacy equipment
16 ranging from the most complicated diesel engines
17 powering generators and heavy duty diesel trucks and
18 equipment to the most basic boiler systems that heat
19 everything from single-family homes up to the largest
20 buildings in the city. At this time, the biodiesel
21 industry has matured to the point where it is able to
22 supply a major portion of the city's fueling needs.
23 In fact, NYC is already the largest purchaser of
24 biodiesel fuel in the country with the Department of
25 Sanitation and New York Parks both wholly embracing

2 the move to B20 and beyond at their own discretion.
3 Miles ahead of local government mandates, which are
4 already in place to bring all municipal fleets up to
5 speed in the coming years. Biodiesel is the safest,
6 cleanest, cheapest, and socially and environmentally
7 responsible heating fuel currently available on the
8 market. Here is why. Safer and cleaner than natural
9 gas. When burned by the end-user, natural gas burns
10 as clean as B11 biodiesel blend, which would be 11%
11 biodiesel and 89% ultra-low sulfur diesel. However,
12 this estimate does not take into account the huge
13 amount of dangerous greenhouse gas emissions released
14 during the extraction and delivery of natural gas.
15 Essentially reversing any emission reductions into
16 the negative.

17 This estimate also does not take into
18 consideration the well documented irreversible
19 damaged caused to the land and communities in areas
20 where fracking for natural gas is rampant. In stark
21 contrast, biodiesel is non HAZMAT, non-toxic,
22 biodegradable. And most importantly, it does not
23 present a public safety issue should it leak for any
24 reason. A risk made blatantly obvious last winter
25 when a gas main in Harlem leaked into the building

2 above and exploded. Which ironically was owned and
3 operated by anti-fracking activists using [bell] 100%
4 B100 bioheat in the building.

5 I have more but I'll leave it there.
6 Thank you so much for the opportunity to speak.

7 CHAIRPERSON RICHARDS: Well, thank you
8 guys for your testimony. I just have a question for
9 John. I don't mean to pick on you John. So I know
10 there is this big push now to move a building from 6
11 to 4. How doable is getting buildings to 2 at least?

12 JOHN MANISCALCO: How doable?

13 CHAIRPERSON RICHARDS: [interposing] How
14 to them from 4 to 2.

15 JOHN MANISCALCO: How to get buildings to
16 do that? Well, I know I heard the testimony earlier
17 by New York City, and I think you hit the nail on the
18 head how to get that done, and to quote you,
19 Chairman, it was enforcement, enforcement,
20 enforcement. I mean that's what it takes. Everybody
21 is well aware that by July of next year, those 6 oil
22 buildings have to go to 4, 2 or, in fact, natural
23 gas. They just need a little push, so to speak. I
24 know my association recently, actually, we sat with
25 DEP Commissioner Lloyd. And we're going to discuss

2 some opportunities about how I could reach out to my
3 companies. And my companies in turn can reach out to
4 these companies who are not, these buildings who are
5 not in compliance. And let them know that
6 enforcement may be very well timed. [sic]

7 CHAIRPERSON RICHARDS: You guys want to
8 chime in and add anything to that?

9 DANIEL GIANFALA: Well, I'd be happy to
10 answer that question. It's a very easy fix to move a
11 number 6 boiler to burning biodiesel up to 100%
12 biodiesel, which is absolutely carbon free, and it's
13 a process that we are involved as well as a number of
14 other specialists in the area on consort with New
15 York City Clean Heat Program, which has been very
16 effective in reducing emissions. We would like to
17 see them begin to focus more on moving toward
18 renewables such as biodiesel, which in this case
19 happens to be the easiest drop in available renewable
20 alternative fuel available at this time.

21 CHAIRPERSON RICHARDS: Mr. Daniel if you
22 can speak to-- So I know you said some of your
23 trucks are going on-- They're doing B20.

24 DANIEL GIANFALA: That's right.

2 CHAIRPERSON RICHARDS: Can you speak of
3 the experience. We--

4 DANIEL GIANFALA: Yes.

5 CHAIRPERSON RICHARDS: To the mic.

6 DANIEL GIANFALA: It's been a very good
7 experience. We have been utilizing a B20 blend for
8 our tractor-trailers, the trailers that you see, the
9 dark green metro with the yellow on the side
10 lettering delivering home heating oil throughout the
11 city. The metropolitan area of Long Island they use
12 B20 for eight months of the year. And during the
13 winter, we switch down to a lower blend. And it's
14 been very successful. It's cleaner burning, cleaner
15 operating. We have less in accountable issues. So
16 we're very excited about that, and we're pushing that
17 wherever we can. Where we can speak to a pending
18 customer.

19 CHAIRPERSON RICHARDS: Thank you. All
20 right, thank you guys for your testimony. Thank you.
21 The next panel Bob Wyman for Self, Kevin Murungi,
22 from Global Kids. Lisa DiCaprio 350NYC and the
23 Sierra Club. Cecil Scheib and Richard Lee from the
24 Urban Green Council. Catherine Skopic from IMAC
25 350NYC and I can't read the last one, or is it We

2 Act. Oh, of course, I can read that one. Denise
3 Katzman from Enviro Enhancement.

4 [Pause]

5 [background discussion]

6 CHAIRPERSON RICHARDS: I just want to
7 acknowledge that we received testimony from
8 Comptroller Scott Stringer in support of this bill as
9 well.

10 COUNSEL SAMARA SWANSTON: So, I'll guess
11 you'll switch the chairs. Can you please raise your
12 right hands. Do you swear or affirm to tell the
13 truth, the whole truth, and nothing but the truth
14 today?

15 PANEL MEMBER: [Chorus of I dos]

16 [Pause]

17 CHAIRPERSON RICHARDS: You may begin.

18 BOB WYMAN. Okay, thank you for the
19 opportunity. My apologies. Given only three
20 minutes, this won't read as great pros. But I would
21 like to say that we very much support the City
22 Council's plan to adopt the 80 by 50 target. I would
23 like to suggest that I think it might actually be not
24 as aggressive as you suggest, and others have
25 suggested. And, in part, that's because it turns out

2 that a very important thing to understand about the
3 clean technologies that we need to switch to in the
4 future in order to meet the carbon pollution
5 standards is that, in fact, we found over and over
6 again that clean technologies are, in fact cheaper
7 technologies, cheaper than fossil fuels. This was,
8 for instances, one of the important things we
9 discovered in the Clean Heat Program. There was a
10 tremendous amount of pressure from the real estate
11 business wanting to avoid the mandate to switch off
12 No. 6. When it was pointed out to them that, in
13 fact, doing would not be an economic hardship,
14 essentially that resistance fell away. And the
15 people who realized that they could actually switch
16 from No. 6 to No. 2, or to other alternatives and
17 save money were, of course, motivated to move
18 quickly.

19 We have a tremendous number of
20 opportunities, in fact, within our city to get
21 cleaner, cheaper, energy by doing fuel switch. For
22 instance, we have two million vehicles that are
23 registered to operate in this city. Virtually
24 everyone of those is a fossil fuel burner. However,
25 we already know that in the electric automobile

2 business some of the automobiles that are being
3 offered on the market now are already cost
4 competitive in terms of total cost of ownership with
5 the internal combustion engine competitors. We can
6 only anticipate that this trend will continue. If
7 after only essentially five or six years of a serious
8 electric vehicle business, we're already cost
9 competitive in many of the classes. We should
10 anticipate that by 2050, and certainly long before
11 2050, there would be no economic argument for
12 continuing to use fossil fuels. People who use
13 fossil fuels will essentially be doing so only
14 because they've been fooled by marketers or they have
15 an ideological problem.

16 We also have one million buildings in our
17 city. Almost everyone of them is burning fossil
18 fuels. However, we have research from Columbia
19 University, Professor Modi's people who have gone and
20 established that we should be able to replace the
21 heating systems in those buildings by ground source
22 heat pumps in 80% of the buildings. So we can have
23 80% of the buildings in this city fossil fuel free
24 using heat pump technology, and we can do it cheaper
25 than fossil fuel today. For instance, if a ground

2 source heat pump replaces a No. 2 fuel oil, the
3 ground source heat pump will have operating costs 50%
4 of the operating costs that it would have if it's
5 burning No. 2 fuel. It will have 51% the cost of a
6 propane system at the moment. And by the way, these
7 costs I'm giving you [bell] are just the cost of a
8 system, which runs at the minimum permitted
9 efficiency according to the EPA for an Energy Star
10 Certification. Actual systems, which run much higher
11 than the minimum would be cost competitive even with
12 natural gas.

13 Point here is, and this is just one of
14 the three points I wanted to make is that we need to
15 understand that cleaner energy is cheaper energy.
16 We've see that consistently. I would like to point
17 out that the moment the PFC and NYSERDA have
18 explicit policies that prevent fuel switching. Even
19 though fuel switching is exactly what we must do as a
20 city and a state and a country in order to address
21 this problem. Yet PFC and NYSERDA have explicit
22 policies discouraging people from doing precisely
23 that. I just have run out of time. Please read the
24 rest of the comments.

2 CHAIRPERSON RICHARDS: You can finish.
3 You can finish up.

4 BOB WYMAN: I can finish? Okay, great.
5 Thanks. I'd like to suggest as well once we accept
6 that the cleaner energy is cheaper energy and that's
7 been proven over and over again, there's another very
8 important factor that we need to consider as we go
9 forward. And this is essentially that we need as a
10 city, as a state, a nation to go through what is
11 essentially the second grade electrification of our
12 nation. The first electrification you'll remember
13 from the history books. That's when Thomas Edison
14 came in, and we essentially brought electricity not
15 only within the cities by throughout our rural
16 communities for primarily lighting, appliances,
17 communications, technologies, including entertainment
18 technologies. But we didn't address transportation,
19 and we didn't address the thermal applications
20 primarily heating of buildings. Today, electricity
21 accounts for only one-third of the delivered energy
22 in this country. One-third, only one-third. The
23 two-thirds, the remaining energy, which is delivered
24 to end-use applications is primarily fossil fuels
25 that are burned at direct point-of-use applications.

2 And those are in our city for instance primarily the
3 two million automobiles and the one million
4 buildings.

5 What we need to do is we need to look as
6 we go forward with this period between now and 2050,
7 we need to understand what that period is about.

8 It's about gas efficiency and things like that, but
9 also the primary goal really needs to be forming the
10 second electrification, moving off of the filthy
11 fossil fuels that we used temporarily, and moving
12 onto the clean electricity, clean electrons and to do
13 it as rapidly as possible. In the process, we will
14 save money. A very important aspect of this
15 situation is something that I couldn't find at all
16 addressed in the plan is the fact that we're going to
17 go through a fundamental shift in the economics of
18 energy.

19 Essentially what is happening if you
20 think about is in the old days what you did is you
21 paid for energy as you used it, as you consumed it.
22 As you used a gallon of gasoline, you've got to
23 replace it. If you were, using logs and you were a
24 caveman you essentially had to go get another log and
25 replace it. But that isn't the way energy works

2 today. Energy today is something like you go get a
3 solar panel. You spend a lot of money. You put it
4 on your house, and essentially, it's free. It has
5 absolutely no cost at that point. You are no paying
6 for consumption. What you're paying for is capacity.
7 You're paying for the opportunity to consume, not for
8 the actual consumption itself. The same thing
9 happened to--

10 CHAIRPERSON RICHARDS: I'll ask you to
11 wrap up.

12 BOB WYMAN: Yeah, okay, so the same thing
13 that happens in almost all of the renewable and all
14 of the clean technologies. They all are primarily
15 questions of upfront capital costs, and with very low
16 maintenance and operating costs over time. So what
17 we need to understand is the way forward is not
18 necessarily what we've done in the past with cash
19 subsidies and stuff. But we really need to focus on
20 financing people's upfront costs, making it possible
21 for them to pay the upfront costs so that they can
22 essentially afford to save money. Because today the
23 only people who can afford to save money in the
24 energy space are the people who are relatively
25 wealthy and have good credit ratings. Poor people

2 can't afford cheap energy. Only wealthy people can
3 afford cheap energy. In order to make it possible
4 for the poor people and the middle-class to afford
5 cheap energy, we have to find ways to help them with
6 their upfront costs. And that's going to be things
7 like loan guarantees, risk assumption by the state,
8 the city, et. cetera. Anyway, thank you very much
9 particularly for allowing me to go over time. My
10 apologies to all.

11 CHAIRPERSON RICHARDS: No problem.

12 KEVIN MURUNGI: Thank you very much. My
13 name is Kevin Murungi. I'm. It's a not-for-profit
14 youth development and global education organization
15 working with young people from under-served
16 communities in New York City and Washington, D.C. I
17 thank you very much for giving me the opportunity to
18 come and speak today on behalf of Global Kids
19 students to support this bill to reduce carbon
20 emissions. And to thank you for the continued
21 support of Global Kids students both of Chairman
22 Richards and Council Member Constantinides who worked
23 with our students on numerous occasions in the last
24 couple of years.

2 Even before Super Storm Sandy, Global
3 Kids students recognized climate change and climate
4 justice as a global emergency. And they've been
5 working to demand action from their peers from the
6 schools, from their government, and from governments
7 around the world. They used the Human Rights Action
8 Project, which is the program that they create
9 campaigns addressing human rights issues to work on a
10 moratorium on fracking in New York State two years
11 ago. Two years ago, they worked on a campaign to
12 install green roofs on New York City public school
13 buildings for all the benefits that we already know
14 about, reducing heating and cooling costs.
15 Addressing storm water mitigation, and actually
16 creating a living lab on top of your school for
17 science class. And they actually managed to install
18 a green roof on one school in Queens, William Cullen
19 Bryant High School.

20 Last year, the worked on a campaign with
21 the invaluable help of both Council Member
22 Constantinides and Chair Richards on a campaign to
23 mandate climate education in all New York public
24 schools. And that is a campaign that's going to
25 continue and push forward this year. The students of

2 Global Kids would like this chamber to know the
3 following:

4 Global Kids Leaders representing schools
5 in all five city boroughs want to see leadership on
6 climate change, and as such enthusiastically support
7 Council Member Constantinides' carbon emissions
8 reduction bill. Many Global Kids leaders were
9 impacted by Super Storm Sandy, and know first hand
10 the devastating impact of climate change. Many
11 Global Kids leaders have roots in countries around
12 the world that are especially vulnerable to climate
13 change like Haiti, Nepal, and Bangladesh, for
14 example. And this issue hits close to home for them
15 on several different fronts. Global Kids leaders as
16 global citizens ultimately want to see world leader's
17 work together to make a binding climate treaty to
18 curb global emissions immediately. The council
19 member's bill is a step in the right direction
20 towards achieving this goal.

21 I will close with a quote from one of the
22 students who lost a family member in Super Storm
23 Sandy, one of the 44 that was lost. "This is the
24 future I want: A country that is better prepared for
25 climate and environment disasters and is working

2 proactively to mitigate global warming. Just like we
3 have fire drills in school, we need to have
4 evacuation plans and disaster preparedness kits. We
5 must rely less on oil, and more on alternative energy
6 and reduce carbon emissions by any means necessary.
7 We cannot continue to provide subsidies to oil and
8 gas company that are wreaking havoc on our earth. We
9 need more preservation of natural resources, and less
10 consumption. Science matters and we must educate the
11 next generation on the realities of climate change so
12 we are all working to promote a better, more
13 sustainable future. I am more committed than ever to
14 work to make this future. I want a reality and
15 Global Kids students remain committed to working with
16 you, Council Member Constantinides, Chairman Richards
17 and the rest of the Council to make that future a
18 reality. Thank you.

19 CHAIRPERSON RICHARDS: Thank you.

20 CECIL SCHEIB: Good afternoon to Chair
21 Richards and also the bill sponsor Costa. Thanks
22 much for having me. My name is Cecil Scheib. I'm
23 from the Urban Green Council, the New York Chapter of
24 the U.S. Green Building Council. I did not bring a
25 working model of a windmill with me here today.

2 Obviously, that's my first mistake [laughter], but I
3 will do my best in the absence.

4 We're here to speak in support of the
5 bill. It's a great bill. It's fantastic that the
6 City is setting both near-term and also long-term
7 goals. If you want to go to Google Maps, and you
8 want to chart out a route, you can't do that unless
9 you know where you're going. And this bill says
10 here's where we're going so that we can start to
11 actually map out a route, and that is very important.
12 We like that number. We think it's in consort with
13 our global science about climate change. So we're
14 very supportive. Of course, you won't be shocked to
15 hear I'm going to quote Urban Green's own report 90
16 by 50, which shows one way that we believe that this
17 goal is technically feasible. In fact, we believe it
18 is feasible with current technology. We don't think
19 we're waiting for anything new that has yet to be
20 invented to get to that goal, and even beyond.

21 Just to touch on a couple of key findings
22 from that report, number one that we can't do it with
23 the presently available labor force, and the
24 technology. Also, there will be a lot of jobs growth
25 from doing this. By making buildings more efficient,

2 that's a lot of work for the city, and that's a lot
3 of jobs. We do believe that the city's building
4 stock can be overall improved in its actual energy
5 efficiency by about 60%. And no matter what you
6 think about different sources of energy, whether you
7 think we should be using wind, solar or whatever
8 sources, if you could have the use in the building,
9 you need less of it. And it gets easier to go to all
10 those sources when you start by just using less in
11 the buildings. So that's the first place to start.
12 Of course, in the end we won't be using fossil fuels
13 because there's no way to get to that very deep goal,
14 and still use fossil fuels in buildings. So there
15 has got to be a route to get there. Buildings will
16 go 100% electric. In our model in the end once you
17 get rid of fossil fuel use, and go 100% electric, we
18 won't use more overall electric power than we do now.
19 The total amount used on an annual basis will be the
20 same as we do. However, the peaks will be different,
21 and so we will need to look at energy storage and
22 overall how the grid works to make that work.

23 We do think that over the cost of doing
24 this for the city it's overall going to be a cost-
25 effective strategy for the city. If you look at the

2 societal cost of the energy versus the savings from
3 what we don't burn, those things are reasonably equal
4 to each other. But it's going to be a long term to
5 figure that out. [bell] Thanks very much for the
6 chance for these comments. I look forward to
7 answering your questions.

8 LISA DICAPRIO: My name is Lisa DiCaprio.
9 I am a Clinical Social Professor of Social Sciences
10 at NYU where I teach courses on sustainability. I am
11 a member of 350NYC and the Energy Committee of the
12 Sierra Club Atlantic Chapter, which advocates for
13 policies to facilitate the transition from fossil
14 fuels to renewable energy in New York State.

15 I am testifying in support of the new
16 local law to achieve an 80% reduction in New York
17 City's greenhouse gas emissions by 2050. This is one
18 of the new environmental initiatives outline in the
19 City Council's comprehensive platform to combat
20 climate change. The proposed law aligns New York
21 City with the greenhouse gas reduction goals adopted
22 by New York State, the U.S. Federal Government,
23 several U.S. cities, and countries that made this
24 pledge at the U.N. Climate Summit. However, the law
25 should also specify that the 80% by 2050 reduction

2 must be met with energy conservation efficiency and
3 renewable forms of energy. Without this requirement,
4 as with the original PlaNYC goal with a 30% reduction
5 by 2030, the new goal of an 80% reduction by 2050
6 could unintentionally provide a rationale for (1)
7 maintaining the nuclear reactors at Indian Point
8 since there are no greenhouse gas emissions for
9 nuclear power, and (2) facilitating an expansion of
10 New York City's natural gas infrastructure. As the
11 EPA's method for calculating greenhouse gas emissions
12 from natural does not take into account fugitive
13 methane emissions throughout the entire life cycle of
14 hydro fracking from extraction to combustion.

15 Currently, two-thirds of electricity
16 consumed in New York City is generated by natural gas
17 plants in the outer boroughs. Here are eight
18 recommendations for how we can achieve the goal of
19 reducing greenhouse gas emissions by 80% by 2050 with
20 energy conservation efficiency and renewable energy.

21 1. Review the February 2013 Urban Green
22 Council Report, which Cecil just mentioned 90 by 50.
23 New York City can reduce its carbon footprint 90% by
24 2050. And the December 2013 report also mentioned
25 earlier today, PlaNYC, New York City's Pathways to

2 Deep Carbon Reductions, which was commissioned by the
3 Bloomberg Administration to explore ways to reduce
4 greenhouse gas emissions by 80% by 2050.

5 2. Mandate a schedule of five-year
6 benchmarks with bi-annual public progress reports
7 that would include information about reductions from
8 specific sources of emissions. For example,
9 buildings and transportation.

10 3. Facilitate the creation of the
11 renewable energy systems web portal, which was
12 mandated by Local Law 12 in 2013, but is still not
13 available to the public. The interactive web portal
14 is to provide information about renewable energy
15 options in New York City [bell] on the website of the
16 New York City Department of Buildings, and other
17 appropriate New York City home pages.

18 4. Explore ways to implement New York
19 City's heating oil rules that do not provide
20 incentives for the conversion of boilers burning No.
21 6 or No. 4 oil to natural gas. In the current phase
22 of this program, no new certificates of operation are
23 being issued for boilers burning No. 6 oil and all
24 boilers burning No. 4 oil must convert to natural
25 gas. No. 2 oil or biodiesel by January 1, 2030.

2 Public education is required to [bell] to inform
3 building owners about the alternatives to natural gas
4 boiler conversions, which all we'll discuss today.
5 These conversions are expanding New York City's
6 natural gas infrastructure in the New York City
7 market for frack gas from the Marcellus Shale in
8 Pennsylvania, which has an especially high uranium
9 and radium content.

10 5. To facilitate the retrofitting of
11 privately owned buildings with less than 25,000
12 square feet, the proposed new threshold for mandatory
13 energy audits call on the New York State Legislature
14 to grant New York City home rule for the purpose of
15 issuing green bonds to subsidize electro fitting of
16 these buildings.

17 6. Mandate the DEP to provide information
18 about energy conservation efficiency and renewable
19 energy in the water bills that are sent to all
20 building owners. This will ensure that all owners
21 are informed about the fossil fuel free options for
22 electricity and heating and cooling.

23 7. Explore ways for the City Council to
24 support statewide policies, which will expand
25 renewable energy in New York City. For example,

2 expanding the current goal of the Renewable Portfolio
3 standard from the current 30% renewable energy goal
4 by 2015 to a new goal of 50% renewable energy by
5 2025, which the Sierra Club is advocating for. In
6 addition, as we know that New York City cannot
7 generate all of its own electricity from within our
8 borders, it is also important to support the New York
9 Wind Initiative launched by the Sierra Club to expand
10 on-shore wind generation as well as new wind farms
11 offshore of New York City.

12 8. And finally, building on the success
13 of the People's Climate March, and the City Council
14 initiative supporting the march. City Council
15 members could include information about energy
16 conservation and efficiency and renewable energy
17 options on the websites and in the newsletters that
18 they send to their constituents. And the City
19 Council could introduce next year a resolution of
20 support for Earth Week 2015 along the lines of the
21 People's Climate March Resolution in which City
22 Council members would encourage their constituents to
23 attend at least one Earth Week event.

24 I would like to conclude with a quote
25 from Rajenda Pachauri, Chairman of the U.N.

2 Intergovernmental Panel on Climate Change. Speaking
3 at the press conference held in Berlin on April 18,
4 2014 to announce the report of Working Group 3. Which
5 provided us with a 15-year opportunity to assume
6 decisive action to reduce greenhouse gas emissions.
7 He stated, quote, "What comes out very clearly from
8 this report is the fact that the high speed
9 mitigation train would need to leave the station
10 soon. And all of global society would have to get on
11 board if we really want to bring about a limitation
12 of temperature increase to no more than two degrees
13 Celsius." end quote. Thank you.

14 CATHERINE SKOPIC: Katherine Skopic, and
15 I'm with iMAC 350NYC, Food and Water Watch, and We
16 Act. Thank you City Council Member Costa
17 Constantinides for introducing this bill to reduce
18 greenhouse gases, and thank you to each of the 38,
19 now 39 members and the Public Advocate who have also
20 signed. I thank you for your comprehensive platform
21 to combat climate change. As we have moved from the
22 geologic age of the holo-gen [sic] to our processing
23 [sic] being manmade, and read reports of the IPCC, as
24 well as experience climate change around us, we
25 recognize the urgency to do all we can to halt global

2 warming. The main cause? Burning fossil fuels.
3 This bill serves to reduce the amount of greenhouse
4 gases, and for this reason is to be applauded. Two
5 significant ways to reduce emissions are (1)
6 efficiency, and (2) transition to renewable energy.
7 I'd like to speak to the second.

8 The City has been working to expand
9 renewables. For example, CUNY led the development of
10 the New York Solar City Map. This map shows that as
11 of April 15th, New York City's installed capacity is
12 39.1 megawatts. Log onto this map. You all should
13 try this. It's really fun. Enter your address and
14 you can see the solar potential for your building. I
15 did this. I discovered that in the building where I
16 live with solar panels installed you could have an
17 annual savings on your electric bill of \$1,632 with
18 as much as 8.95 kilowatts of solar. This would
19 reduce carbon emissions by 6,026 per year, or the
20 equivalent of planting 16 trees. Lincoln Center
21 recently installed solar. Just imagine the reduction
22 and emissions we could have with solar panels on all
23 our buildings, private, municipal, schools,
24 universities, hospitals, museums, stores, garages,
25 warehouses and so forth. And this afternoon we did

2 hear that that \$28 million has been allocated for
3 solar in schools. So that's an excellent beginning.

4 We also could be installing generative
5 wind turbines. For example, like this model of a
6 VAT, a Vertical Active Turbine. [background
7 discussion] And there are many designs of these
8 buildings. There's a building in Brooklyn that's
9 been built with these designed into the building. So
10 these in addition to the regular solar. Regular
11 means they could be installed. Okay, with all this
12 solar and wind electricity generation potentially
13 enabling us to reduce fossil fuel use, I would not be
14 at all surprised that if all segments of our society
15 were to get behind this effort 100%, we would be able
16 to even far exceed the goals we have set for
17 greenhouse gas emissions reductions. In addition to
18 this monumental potential contribution to health and
19 climate change, New York City could set the example
20 for refusing use of natural gas. [audience comments]
21 As fracked gas methane is many times more greenhouse
22 gas producing than the CO2. Fracking also threatens
23 our water and food supply, and with the radon it
24 carries, it negatively impacts our health.

2 Gas pipelines leak and explode, and here
3 I'm just going to take a minute to ask a question.
4 As Robert Howarth has shown, that from extraction to
5 delivery of gas, there is more greenhouse gas
6 produced than is coal. How is that that by
7 transferring to coal to gas, we have reduced by 19%?
8 That doesn't make sense. The only way that it makes
9 sense is that that gas is being extracted outside New
10 York State, which is also causing a problem. So
11 there's a problem there, a big problem.

12 Okay. I ask the City Council to do all it
13 can to prevent use of natural gas, fracked gas and to
14 continue on the path we selected of greenhouse gas
15 emissions reduction and installation of renewable
16 energy. I congratulate the New York City Council for
17 your forward thinking, comprehensive platform of
18 bills to address climate change, and pledge all I can
19 to work with you for that accomplishment. Thank you.

20 DENISE KATZMAN: Good afternoon. Denise
21 Katzman. I am a business manager and climate
22 scientist, analytic and initially, I had some
23 skepticism about number 378 because of that magic
24 illusive word that Chair Richards so vibrantly
25 presented, early enforcement. Any bill, any law, any

2 reso without enforcement doesn't mean a heck of a
3 lot. So, the ability for EP to perform enforcement,
4 for the City Council to perform enforcement where
5 this is concerned is highly beneficial because the
6 benchmarks need to be set, and there must be
7 thresholds for all relevant parties to meet at
8 minimum on a bi-yearly basis, and accomplish the
9 necessary goals. Solar has been talked a lot about
10 on city schools, and throughout the city. We also
11 need to take the viable opportunity for storage of
12 that solar. Because if we miss it this time, it's
13 going to be worse than shameful. The companies are
14 producing it. Schools are working on it. So there
15 is great, great unification on that platform. We all
16 know by now per last year the World Health
17 Organization had declared that the outdoor air is
18 cancerous. And our indoor air quality isn't a heck
19 of a lot better. And by creating the need for, the
20 long overdue need for clean energy jobs. We also
21 bring in the long overdue need for clean energy
22 investment that produces what is known in the finance
23 world as ROI, return on investment. And it's
24 positive return on investment that will benefit

2 shareholders, and allow NYB [laughs] allow NYC to be
3 a vibrantly clean metropolis.

4 The Union of Concerned Scientists in a
5 recent study criticized EPA because they believe that
6 they can utilize and quadruple renewable electricity
7 in the next 15 years by 23% and that's the year 2030.
8 And EPA is looking at an isky-pisky goal of 12%, and
9 they're stating that it's business, and they don't
10 want to abide by it. And they know that they don't
11 have to because we have the platforms out there.

12 And speaking of cities that are getting
13 it done now, and will get it done in two years,
14 Johannesburg is doing it now, and they have declared
15 that in the next two years, they are going to be
16 totally carbon free for all of their public vehicles.
17 And the City can do that also by utilizing an entity
18 called eNow energy in Rhode Island, every single
19 vehicle can have a roof that is a solar micro grid.
20 [bell] It's being done, and it's an opportunity that
21 shouldn't be missed.

22 The Carbon Disclosure Project, 2014 Study
23 is based on the S&P 500 Climate Change Report. There
24 are 767 investors with a total of 92 trillion
25 American Dollars that know that clean energy

2 investment, and climate change risk mitigation are
3 doable here and now because we've wasted way too much
4 time. The city also has to enforce Rebuild By
5 Design. The entities that one, have to be kept
6 schedule and we have to go through with what they're
7 doing because the resilient buffers that are being
8 designed -- bioswale came up and it's one them --
9 need to be put in the city's shoreline. Because the
10 city's shoreline is overburdened with hardscape. And
11 that is what allows climate crisis to become even
12 worse. The city needs to start looking at Cat Bonds,
13 which are Catastrophe Bonds, and there is a way to do
14 that with the Controller and the EP Council should be
15 uniting with the Controller on that platform.

16 And lastly, science has proven that
17 methane is 21 times as powerful in trapping heat with
18 an equal quantity, an equal equation of CO2 over 100-
19 year timeline. And we all know that we can lessen
20 it. We can stop it, and we reign in the runaway
21 greenhouse effect. We have all the necessary
22 resources. We've had them for a long time. So
23 again, thank you very much.

24 CHAIRPERSON RICHARDS: Thank you so much.
25 Thank you for your testimony.

2 [Pause]

3 CHAIRPERSON RICHARDS: All right, we'll
4 have Stephanie Low from New York City Safe Energy
5 Coalition; Wendy Shore, Alice Slater and they are all
6 from the New York City Safe Energy Coalition. And
7 then we'll have Ken Bragette from Sane Energy
8 Project; Patrick Robbin from the Sane Energy Project,
9 and also Pamela Drake-Gregory from the Safe Energy
10 Coalition.

11 [Pause]

12 CHAIRPERSON RICHARDS: And we're really
13 going to hold you to three minutes because we have to
14 get out of here in a timely fashion. So we're going
15 to ask everybody to keep their remarks to three
16 minutes. Thank you.

17 [Pause]

18 MALE SPEAKER: My colleague, Kim, had to
19 step out so I presented her testimony. That will be
20 circulated to you.

21 CHAIRPERSON RICHARDS: So if your
22 colleague is not going to be here, then you should
23 just state your testimony. No problem. Thank you.

24 COUNSEL SAMARA SWANSTON: Can you please
25 raise your right hands. Do you swear or affirm to

2 tell the truth, the whole truth, and nothing but the
3 truth today?

4 STEPHANIE LOW: I do. Good afternoon.
5 My name is Stephanie Low. I'm a volunteer here with
6 the Sierra Club working for the last few years on the
7 Trans-Pacific Partnership Trade Agreement, known as
8 TPP. I'm chair of both the chapter and the New York
9 City TPP taskforces. Before that, I worked as a
10 member of the Gasoline [sic] Taskforce, which focuses
11 on fracking. I'm not an energy expert, and my
12 comment are common sense ones. Some of my concerns
13 have already been voiced by Lisa DiCaprio of the
14 Sierra Club. So I would like to start in the middle
15 so I can get through with this.

16 There are many aspects of emission
17 reductions possible by way of conservation and
18 efficiency, including laws that are already proposed
19 or on the books, such as:

20 The lights of municipal and business
21 offices as well as storefronts should be turned off
22 when those businesses are closed for the day.

23 Waiting vehicles such as school buses,
24 repair and delivery trucks should be required to turn

2 off their motors after their immediate purposes are
3 addressed, and turned on only when ready to move on.

4 Metropolitan buses required to employ air
5 conditioning should be required to employ air
6 conditioning only when outside temperatures reach a
7 level such that the inside temperature would
8 reasonably discomfort the majority of passengers.
9 Somewhere between 70 or 75 degrees Fahrenheit.

10 Street lights should be regulated at half
11 power from a specific night time hour say 2:00 a.m.
12 to daylight. Bike lanes should be expanded
13 throughout more city streets with sufficient
14 protection from vehicular traffic with biking rules
15 posted online and enforced by fines and/or court
16 charges depending on the severity of any accident.
17 We could create a reduce your carbon footprint
18 website so residents can check whatever rules they
19 are expected to follow.

20 Additionally, there are initiatives
21 outside of the purview of the City Council that could
22 nonetheless be supported by the Council such as:

23 1. A Take Your Car off the Road campaign
24 both on and offline to encourage interact a share

2 ride community with multi prizes for most rides
3 logged.

4 2. A monthly public contest for the
5 family that say reduces its electric bill the most in
6 each borough with prizes such as energy-saving
7 appliances.

8 3. A grade school science class
9 competition for the best suggestion to lower New York
10 City's carbon footprint. This could also be proposed
11 to New York City's colleges and universities.

12 The possibilities are endless. Adoption
13 of several initiatives under a general title such as
14 Save Our Species, Lower New York City's Carbon
15 Footprint might ender a huge public support given the
16 400,000 New Yorkers who demonstrated their concern
17 for the climate by marching together last month.
18 Harnessing that concern by putting effective
19 solutions for global warming [bell] on the community
20 radar screen will bypass the two common response
21 that is just too big to deal with, and generate
22 positive enthusiasm for whatever needs to be done.
23 It could also unite the community in unforeseen ways
24 to benefit other aspects of our lives together:
25 Economic, social, and spiritual. Thank you and thank

2 you so much for the opportunity to voice my concerns
3 and my suggestions. Thank you.

4 PATRICK ROBBINS: Hi, good afternoon. My
5 name is Patrick Robbins. I'm the Development and
6 Communications Coordinator for Sane Energy Project.
7 First of all, thank you so much to the Council. Sane
8 Energy Project is happy to see the City Council
9 taking this important step toward meeting New York
10 City's climate change Responsibilities. We want to
11 begin by applauding the Council for targeting the
12 reduction of all greenhouse gases, which must include
13 methane, not just carbon dioxide. We understand that
14 this 80% reduction target is a bold step toward
15 climate action. That said, we remain committed to a
16 New York City that is powered entirely by renewable
17 energy. And we know that this vision of New York is
18 not only possible, but within our grasp.

19 Stanford Engineering Professor Mark
20 Jacobson has outlined how we can get there from here
21 and what his work shows us is that we have a choice
22 to make. We must actively choose a renewable future,
23 or have that choice made for us, and remain locked
24 into an energy system that endangers our health, our
25 security, and our climate. We can begin making this

2 choice through some of the steps that the Council has
3 already identified. There are important gains to be
4 made via efficiency and retrofits, and we applaud
5 that the Council is prioritizing investment in
6 environment justice communities in the creation of
7 green jobs. Further steps can be taken to streamline
8 the permitting process for renewables. In
9 particular, solar this is one of the largest upfront
10 costs, and it is actually something that is city
11 jurisdiction, and that would encourage the deployment
12 and development of renewable energy technology.
13 Which enjoys wide support from the people of New York
14 City.

15 Projects such as the two offshore wind
16 farms positioned off Long Island are a necessary step
17 toward a fully renewable New York City. According to
18 the Jacobson plan to become 100% renewable, New York
19 State must supply 40% of its energy from offshore
20 wind. So we must also speak loudly and clearly when
21 there is an obvious choice between renewables and
22 fossil fuels. Right now, off the coast of the
23 Rockaways in the same location where a wind farm has
24 been proposed there is also a proposal for a
25 liquefied natural gas port. This project called Port

2 Ambrose would present a terrorism risk near the
3 busiest harbor on the East Coast and close to Kennedy
4 Airport.

5 It would increase the burden of energy
6 costs on working families by facilitating exports and
7 driving prices up in an area still reeling from
8 Hurricane Sandy and threatened by sea level rise.
9 Liquid natural gas presents a real climate threat as
10 well releasing 40% more greenhouse gases than even
11 domestic shale gas. This project would further
12 destroy ecosystems and worsen our climate by
13 encouraging the growth of fracking and shale gas
14 infrastructure across the region. As New Yorkers, we
15 have a responsibility to oppose projects such as Port
16 Ambrose whenever they spring up. This is why we
17 encourage the City Council to support a resolution
18 against Port Ambrose and against all new fossil fuel
19 infrastructure. Thank you so much for your time.

20 [Pause]

21 WENDY SHORE: Okay. Hi, my name is Wendy
22 Shore [sic] and as a New York City Resident over the
23 past 11 years having lived in four of the five
24 boroughs, I have a real investment in the future of
25 this city. Activism means fighting for a tangible

2 positive change, which is why this Intro 378 is so
3 encouraging. New York City can and has set the
4 standard for the rest of the nation. However, for
5 this to be implemented effectively it needs more
6 detail and more teeth. Specifically, using PlaNYC
7 alone as a guide for renewable energy is far from
8 adequate. For instance, Milestone No. 15 the 2015
9 Report calls to quote, "Encourage conversion from
10 highly polluting fossil fuels by increasing natural
11 gas transmissions and distribution capacity and
12 improving reliability."

13 The obvious problem is that natural gas
14 is a highly polluting fuel both in extraction
15 increasingly using hydro fracking wells, in burning,
16 and in leakage. Particularly as methane, the primary
17 component of natural gas, is 75 times more powerful a
18 greenhouse gas than is CO2 over a 20-year period.
19 The bottom line is fossil fuel reliance will not lead
20 us to a more stable and livable climate. Instead, to
21 heat our cities buildings and water, we can use a
22 biodiesel source from waste oil, as we've already
23 heard, or we can install new solar thermal heating
24 systems directly on building rooftops. These methods
25 can also be used in tandem. We can also invest in

2 newer technologies such as the absorption chiller
3 that uses evaporative cooling to utilize the energy
4 from hot water from either solar thermal collectors
5 or from waste heat sources for air conditioning and
6 refrigeration systems. We cannot use the same old
7 system to get off greenhouse gases. We need to
8 change the infrastructure.

9 Second, New York City needs to encourage
10 the use of distributed generation that is property
11 owners feeding the electricity to the grid using
12 their own installed solar, wind, or geothermal
13 systems. This is the only way to make renewable
14 energy insulations both affordable to a property
15 owner and accessible to use on a citywide basis. New
16 York City is overdue for a feed-in tariff
17 legislation, and other policies to ensure that
18 renewable energy can achieve price parity with oil,
19 gas, and nuclear sources. And, most importantly, any
20 widespread use of renewable sources has to work in
21 tandem with huge increases in energy efficiency.
22 This city is a massive over-consumer of energy from
23 our buildings' climate control systems, overheating,
24 and overcooling to massive video billboards in
25 Midtown to all manner of interior and exterior lights

2 all running 24/7. But thermostats, timers, and
3 motion centers are pretty simple options to use these
4 kinds of wastes. Upgrading to more efficient LED
5 lighting is a way get more out of less wattage.

6 And I was going to say something about
7 enforcement, but we already said that. So all in
8 all, I'm thrilled to see this legislation being
9 championed by the Mayor and so many members of the
10 City Council. But it needs some essential tweaking
11 to make sure it really works as intended. Two more
12 sentences. We can set the example for New York City
13 to really make sure that our future generations
14 survive this world. To do that, we need to encourage
15 real renewable energy, not methane or nuclear. Get
16 really serious about energy efficiency, and consuming
17 less resources, and enforce this like our life
18 depends on it because it does.

19 [Pause]

20 ALICE SLATER: Good afternoon. I'm Alice
21 Slater. I'm with the Shut Down Indian Point Now, a
22 new organization. And also a new group that formed
23 right after this incredible march, which we're
24 calling the sustainable-- The New York City Safe
25 Energy Coalition. A lot of our people came down

2 today to support you. I don't know what I can say
3 that hasn't been said already. So I'm not going to
4 take up your time except to ask how about 100% by
5 2050? There's a lot of research that says this. I
6 mean we've heard about Mark Jacobson's research, and
7 the CUNY solar panels. But there are a lot. I'll
8 just say that I have some in my footnotes in my
9 paper. I'm not going to go over them, but I just
10 think that would be more inspiring.

11 And it would just be so inspiring and so
12 moved by happened today in the City Council. That
13 new march with us and that 400,000 people marched,
14 and it wasn't just environmentalists. It was labor.
15 It was social justice. It was the peace movement.
16 It was doctors and scientists and City Council people
17 and indigenous people. So we're on a roll, and I
18 think we should go with-- 80% just sounds, it
19 doesn't cut it. You know, let's say 100%, and we can
20 definitely do that, and we can do that just as well
21 as we could do 80. You know, we'll see what we can
22 do, if we really get behind it. But it's definitely
23 possible. There are lots of studies, and there are
24 also studies-- We should really talk this up. We

2 didn't hear enough about this today, about green
3 jobs.

4 Our city is in the toilet with
5 employment, with poverty. I mean I'm just like
6 shocked. The media isn't even covering what's going
7 on here. So we could put everybody back to work with
8 solar panels. I mean we could get people right now.
9 Painting the rooftops white would actually save
10 energy. It sounds like a crazy little thing, but it
11 deflects the sun, and the hot days. And you don't
12 need so much air conditioning if your black tar roof
13 is white. I'm just saying like a stupid-- There
14 are a million little things that we could be doing
15 putting people to work. You know, we could get kids
16 to do that. You know roof painting instead of
17 juvenile delinquency. So let must-- Oh, I also want
18 to talk about something very important.

19 The reason this isn't taking off like
20 wild fire is because there are forces that stopping
21 this, some very power forces. But we are the people,
22 and I know you guys are the people. [laughter] So
23 go to Colorado. Boulder, Colorado took back their
24 utility because they were shoving fossil and nuclear
25 fuel down their throat, and they wanted sun and wind.

2 So they made it public again, and we should look.
3 You should study how is Con Ed blocking it. I know
4 they are. I've seen them at my Bar Association
5 Energy Committee, you know. They're blocking us. So
6 we should get the-- In order to move forward, we
7 also have to look at the blocks, and call on us.
8 We're available. We want to support you. Thank you
9 very much.

10 CHAIRPERSON RICHARDS: Thank you so much.
11 Thank you. Thank you for your testimony. Regina
12 Cornwell from Damascus Citizens; Buck Moorehead,
13 Damascus Citizens for Sustainability, New York
14 Passive House. Marge from DCS and NYH20 as well.

15 MARGE SCHAUB: Madge Schaub. [sp?]

16 CHAIRPERSON RICHARDS: Oh, Marge or
17 Madge. I'm sorry. I know you. Marge of Madge
18 Moorehead of Damascus Citizens for Sustainability,
19 and Ling Cho from United for Action.

20 [Pause]

21 CHAIRPERSON RICHARDS: You may begin,
22 sir. You can't begin.

23 COUNSEL SAMARA SWANSTON: Please raise
24 your right hands. Do you swear or affirm to tell the

2 truth, the whole truth, and nothing but the truth
3 today?

4 [Pause]

5 BUCK MOOREHEAD: Hi, my name is Buck
6 Moorehead. I'm an architect here in the city. I'm
7 also a Board Member of Damascus Citizens NYH20 and
8 I'm a Board Member of the New York Passive House
9 group as well. We really appreciate your patience
10 going through this long hearing, and listening the
11 way that you do. It's really excellent. I'm not
12 going to follow much of what I wrote there. There
13 have been a lot of things said, but I'm going to read
14 a couple quotes and I'm going to follow up on some
15 issues that came up today earlier in the testimony,
16 which I want to elaborate on.

17 There's a quote from Buckminster Fuller:
18 You never change things by fighting the existing
19 reality. To change something, build a new model that
20 makes the existing model obsolete. We applaud Local
21 Law 378 because in its language is the capacity to
22 begin to build a new model that makes the existing
23 model obsolete. Our existing model is a fossil fuel
24 economy. As Al Appleton would say if he was here,
25 we've heard for many years, It's a black economy.

2 And we've had this mission for many years to move to
3 a green economy. So, that's a new paradigm, and this
4 is the beginning step. It feels like the beginning
5 step for moving toward that new paradigm.

6 PlaNYC was a very good beginning, but it
7 didn't change the existing paradigm because it left
8 that fossil fuel dependence embedded within it. So,
9 we are clearly taking a step away from that. I
10 really appreciated hearing the conversation about
11 Passive House in the questioning, and I read it
12 within the plan that's very, very good. A couple of
13 comments I want to make about it were actually to try
14 to clarify some of the issues that came up when the
15 Council people were questioning the administration
16 about Passive House. And more the role of energy
17 conversation within the One City Built to Last
18 program. There really doesn't seem to be an emphasis
19 on energy conservation with respect to the building's
20 thermal envelope. As we've heard today, and I will
21 reinforce, 75% of the energy of the city is used
22 within buildings. And probably about half of that is
23 plug load or power roughly. But the other half is
24 heating and cooling energy. And that heating and
25 cooling energy demand is established by the quality

2 or lack of quality of the building's thermal
3 envelope. So, the first thing you do. Passive House
4 came out of a German Physicist 1990 Building
5 Scientist. He was just looking at energy, and what
6 can we do. He wasn't an architect, he wasn't a
7 politician. He was a guy looking at how these
8 things work, and he decided that the best thing to do
9 was to reduce the energy that you need first and
10 foremost. So there are a lot of things that are
11 really good ideas that are floating around, and solar
12 panels and the wind and this and that. But if you
13 don't do the energy conservation piece really, really
14 well, then you're not getting there. It's plain and
15 simple, and the answer about the school, I will say
16 you can do a net zero school in Staten Island.
17 That's not-- The goal is to reduce-- So you don't
18 need PV panels. Like it's not good that you can put
19 a building on one floor all over a piece of land and
20 throw a million photovoltaic panels on it. Like
21 that's not a good solution. It's easier to do an
22 energy efficient school right here in Brooklyn or in
23 buildings where you can build something that's tall,
24 that's compact that's got other buildings on it's
25 side, you know, on either side of it. That's a very

2 easy Passive House solution to make. So they're
3 doing these Passive House buildings. I talked about
4 it before, and I know I lost my time there. But what
5 they're doing is they're retrofitting.

6 The main other point I wanted to make
7 here. Retrofitting is what we have to do. In 30
8 years, 85% of the buildings that are here now,
9 they're still here. So we can have all kinds of good
10 new building strategies. But if we're not
11 retrofitting aggressively, we're not getting there
12 either. So Passive House it isn't mentioned. They
13 did not-- They reference new construction for
14 Passive House. Retrofitting is available through
15 Passive House as well. It addresses that, and this
16 is happening. I appreciate the Councilman mentioned
17 Brussels. Brussels is a good model for us. It's a
18 smaller city, but within two months they're requiring
19 that all buildings be Passive House. Luxembourg by
20 2017 making the same requirement. The EU by 2020 all
21 new buildings have to be equivalent to Passive House
22 because they want all buildings to be near zero or
23 net zero their new building by 2020. You only get
24 there by doing something like Passive House. So I

2 appreciate the extra-- I'll leave it there, and thank
3 you very much.

4 MARGE SCHAUB: I'm Marge Schaub [sp?],
5 and I'm a board member of DCS, and I'm going to read
6 the comments for Barbara Arrindell, who is our
7 Director for our organization. And thank you for
8 giving Buck the extra time, and for your dedicated
9 listening to all of us. I would like to urge several
10 items to be taken into account when mandating of an
11 80% reduction of citywide greenhouse gas emissions
12 relative to such emission for the base year by the
13 calendar 2050.

14 The first point that the build out of gas
15 infrastructure currently ongoing be paused as quickly
16 as possible. Gas usage actually increases greenhouse
17 emissions. It should be shown that natural gas
18 creates considerably more greenhouse gas emissions
19 along the full path of its production, processing,
20 transport, and distribution than is saved compared to
21 coal or oil at the singular point of its combustion.
22 Gases are over 90% methane, which in near term is
23 more than 85 times more potent than greenhouse gases
24 and CO2. Simply put, the less methane released, the
25 better off we are globally. Additionally, the gas

2 being very much a fossil fuel with profound impacts,
3 it may very well see radical hikes in price. This
4 new administration with better information, and it
5 should chart a new path rather than carry the burden
6 of the failing Bloomberg policies promoting gas
7 usage. So stop the build out is the first point.

8 The second point relates to the first.
9 The planned build out of the infrastructure at NYC
10 has a tremendous cost. Even just looking at the
11 hardware, the cost that would be paid by New York
12 City residents either directly or indirectly these
13 projects are not free. If even the cost of the cost
14 of the build out is not yet built as repurposed for
15 conservation and efficiency work. And bringing
16 online more new renewable energy sources NYC will be
17 in a better long-term position as it achieves its
18 emission goals.

19 The third point. All decisions based on
20 some quantitative number must have these numbers be
21 arrive by actual measuring not guestimates arrived at
22 by modeling by ways of guessing using estimates based
23 on other estimates. That maybe have a few
24 measurements using the outdated equipment. For
25 example, measuring methane to show gas leaks is

2 easily possible today by a relatively new, but
3 thoroughly tested [bell] and vetted instrumentation
4 that is durable, reasonable in price, scientifically
5 robust, easily available and mobile. The same
6 instrumentation cavity bring down-- It said a special
7 thing -- can be also used to measure CO2 as well as
8 methane, carbon monoxide down to the parts per
9 billion on a mobile platform. Actual measurements
10 can be incorporated in a clear environmental scheme
11 without actual measurements for cooling ourselves.
12 So thank you, and I have additional ideas. I'm just
13 submitting it, and thank you for your time, and thank
14 you for the extra few seconds.

15 [Pause]

16 REGINA CORNWELL: Thank you, Chairman
17 Richards, [clears throat] and thank you Council. I
18 am reading the testimony for Jeff Zimmerman who
19 represents-- The attorney who represents Damascus
20 [coughs] Citizens for Sustainability NYH20 and
21 Citizens for Water. And I am also a member of the
22 steering committee of the Damascus Citizens for
23 Sustainability. Thank you for this opportunity to
24 present testimony on behalf of a reduction by 80% by
25 2050. Going back to a comment that Buck just made in

2 the old plan the old NYC plan under Mr. Bloomberg,
3 the cornerstone of the plan was emission reduction
4 strategy placing No. 6 and No. 4 fuel oil, replacing
5 it with natural gas or No. 2 fuel oil.

6 But by and far, by way and far the new
7 choice of fuel has been natural gas due in large
8 measure to aggressive incentive programs by the gas
9 distribution companies, Con Ed of New York, Natural
10 Grid with support from the Mayor's Office and other
11 government participants such as NYSERDA.

12 Unfortunately, the expansion of natural gas usage in
13 new buildings and conversions of existing buildings
14 has only substituted one fossil fuel for another.
15 And in the process, increased the emissions of
16 methane, a far more potent contributor than CO2 to
17 increase greenhouse gas levels.

18 It was reported last month by the U.N.
19 World Meteorologic Organization that atmospheric levels
20 of CO2 have reached 400 parts per million, and
21 continued to increase especially with the more potent
22 compounds such as methane. Rather than contributing
23 more methane on this road to ultimate ruin, it's time
24 for New York City to hit the pause button, and
25

2 rethink the strategy for reducing emissions of
3 greenhouse gases.

4 In June of 2013, President Obama
5 announced the Climate Action Plan to reduce carbon
6 pollution, and also to develop a comprehensive
7 strategy to cut methane emissions. Earlier this
8 year, the White House released its strategy to cut
9 methane emissions. Among the projects included in
10 this strategy is actioned by the EPA to cut methane
11 emissions from oil and gas. If EPA decides to issue
12 new regulations, this strategy requires it to
13 complete these roles by end of 2016.

14 In June of 2014, New York Attorney
15 General Eric Schneiderman and the attorney generals
16 of six other states submitted extensive and detailed
17 comments on the five methane white papers released by
18 the White House. In their comments they noted that
19 the EPA has classified methane as one of six
20 greenhouse gases endangering public health, and the
21 environment. I will rundown and-- I don't have time
22 to go through all of what he is suggestion, but the
23 GA's comments criticized the white papers for
24 excluding the distribution segment from the white
25 papers. The GA stated that we must act to ensure

2 that the global warming benefits of switching from
3 coal to natural gas are not diminished because of the
4 release of methane throughout the natural gas system.
5 It went on to state that if the state's position --
6 it's the State's position that not only is targeting
7 methane emission a necessary component of the
8 assessor's strategy to address global warming, it is
9 required under the Clean Air Act.

10 So, I will just go to the end. It's
11 clear that nothing else has been done by EPA to
12 reduce the methane emission from gas distribution
13 systems. The seven attorney generals will most
14 likely file suit to compete EPA to take action. You
15 haven't heard today, but Damascus Citizens for
16 Sustainability has already documented that there are
17 significant methane leaks throughout Manhattan. And
18 the amount of this leakage will only go up as more
19 natural gas is sent through distribution pipelines to
20 supply gas to all of the buildings throughout this
21 city that have been converted or will be built to use
22 natural gas.

23 So Jeff concludes that the prudent course
24 of action for New York or the Council to take is to
25 halt conversation of more buildings to natural gas,

2 and the use of natural gas in new buildings until the
3 issues related to the regulation of methane emissions
4 from distribution gets clarified. This should occur
5 over the next two or so years. Thank you very much.

6 MADELYN MOOREHEAD: Hi, I'm Madelyn
7 Moorehead, and I'm with NYH20 as well as with DCS,
8 our sister organizations. While other cities and
9 countries around the globe with current achievements
10 that have reached the 100% renewable goal, there are
11 other cities that have a goal of achieve 100%
12 renewable in the near future. The goal for New York
13 City to reach 80% by 2050 should actually be 100% way
14 before that date. There are many models by other
15 cold weather cities and countries that can be
16 researched and emulated. There are multiple
17 strategies that are available for conservation as
18 well as custom pathways for renewables that could be
19 applied to New York City. Recognition of the
20 necessity of removing the New York City fossil fuel
21 certainly including natural gas entrenched utility
22 model coupled with political will and serious
23 commitment can surely step up the timeline on
24 renewable capabilities to the achievement of 100%
25 before 2050.

2 We must keep step with the utter
3 necessity t step up to the plate and take every
4 possible action to implement substantial change right
5 now. My written testimony today includes practical
6 conservation solutions to add in the reducing of
7 greenhouse gas of which many could be implemented
8 right now. In addition, further, my testimony
9 includes a list of cities and countries that have
10 achieved 100% renewables, including Ithaca, New York,
11 Evanston, Illinois as well as Oak Park, Illinois. A
12 lit of renewable goals that have been established. A
13 lot of green and carbon neutral cities within the
14 coming decade plus a list of plans to build renewable
15 cities around the world.

16 My testimony also includes a
17 recapitulation of the informative new film, the film
18 of the future of energy highlighting quotes from the
19 pertinent individuals and their agencies and
20 companies driving the renewable actions that have
21 already been completed. And those that are in
22 progress serving as models for renewable projects
23 moving forward. I have those. I have given you a
24 lot of testimony there. So I'm just going to try to
25 make it smaller here. Yeah.

2 A conservative use would be practical
3 conservation solutions that could be practical
4 conservation solution that could be implemented into
5 mandates. Conservation constituting mandates for New
6 York City buildings to provide uniform heat to all
7 buildings through use of conforming valves to no
8 higher than an agreed upon temperature relieving our
9 existing gross over-heating that exists in so many
10 New York City residential and commercial buildings.
11 Installing electric trees in all city-owned parking
12 lots and other city locations to facilitate electric
13 car charging. A community choice aggregation model
14 should be explored for New York City. The actual
15 definition would be [bell]-- All right, it would be
16 to institute a mandate where office buildings turn
17 off lights after a certain hour unless in direct use
18 eliminating obvious unnecessary waste.

19 As part of the European policy that
20 currently exists, 24-hour hall lighting is minimized.
21 Motion sensors are implemented for efficiency and
22 energy conservation to control hall lights when not
23 in use, eliminating obvious waste. Mandate building
24 retrofit upgrades to include upgrading insulation and
25 increasing barrier-- increasing air barrier. We

2 need to retrain the Con Edison workforce to be able
3 to do these jobs. Direct building owners through a
4 mailing campaign with definitive steps to be taken
5 regarding real conservation efforts. This could be
6 accomplished with a menu of choices that would be
7 phased in within a certain timeframe. For example, a
8 list of ten choices on a conservation checklist of at
9 least three of the choices by each landlord to be
10 implemented within a year.

11 And progressing on to accomplish
12 additional choices each year. Owners need a step-by-
13 step model to move to renewables, and to allow them
14 to take steps to accomplish these goals. A landlord
15 reward system for accomplishing their conservation
16 goals could be achieved with a corresponding
17 percentage reduction of real estate taxes for every
18 choice on the conservation menu checklist. Not to
19 mention a built-in reduction of yearly NOI expenses,
20 always a tried and true incentive. Fines for non-
21 compliance. I have here-- As you'll see in the
22 testimony, I've given to you many lists, and I'll
23 shorten them here. Cities that have achieved 100%
24 renewables, and that's right now.

2 Palo Alto, California, Greensburg,
3 Kansas, Evanston, Illinois, Oak Park, Illinois,
4 Ithaca, New York and there are 23 in all. Renewable
5 goals established. These are cities that have
6 established renewable goals. There are 24 of them.
7 Their goals are 100% with the exception of Germany,
8 80%. We've got Marin, California, San Francisco,
9 Google, USA, Lancaster, California, Ipswich,
10 Massachusetts, Aruba, Stockholm, Denmark, Frankfurt,
11 Munich, Germany is only 80%; Rotterdam, Fukushima,
12 Japan. These are all 100%. Another list of green
13 and carbon neutral cities, which are 13 of them.
14 Vancouver, Seattle, Toronto, London, Paris, Berlin
15 and Amsterdam. These are a list of carbon neutral
16 cities that are there right not.

17 There are plans to build 100% renewable
18 cities across the globe. There are four of them at
19 present. The community choice aggregation is really
20 an important step that New York City could take, but
21 I'll leave it right there. You have the rest of my
22 testimony, including a copy of the Future of Energy,
23 which gives a rundown of a lot of the points that I
24 have made here.

25 CHAIRPERSON RICHARDS: Thank you.

2 LING CHO: My name is Ling Cho. I'm a
3 co-founder of United for Action, an anti-fracking,
4 pro renewables crisis group in New York City. We
5 commend the City Council for this bill Intro 378.
6 While this bill sets out a goal for reducing
7 greenhouse gases, it does not specify how the city
8 plans to achieve this goal. We wish to see New York
9 City achieve its greenhouse gases reduction goal
10 through energy efficiency, conservation, and
11 investment in building of renewable energy
12 infrastructure like solar, wind, and geothermal, and
13 not through increased uses of natural gas or nuclear
14 energy. Natural gas is not a green energy nor is it
15 a transitional fuel. Under the Bloomberg
16 Administration, the city was building or converting
17 coal fire power plants to natural gas fuel plants.
18 This is not sound policy, which should be
19 discontinued. While burning natural gas may be
20 cleaner than burning coal, this does not take into
21 account of the methane leakage in the extraction,
22 production, and pipeline transportation of natural
23 gas. Methane is a potent greenhouse gas. According
24 to data from IPCC on global warning potentials,
25

2 methane is 85 times more potent than carbon dioxide
3 when measured over a 20-year timeframe.

4 Bloomberg's Administration was also
5 aggressively pushing for the conversion of boilers in
6 New York City buildings from No. 6 heating oil to
7 natural gas. While we agree that No. 6 heating oil
8 is very dirty, conversion to natural gas is not the
9 answer. We call on the City to advocate for more
10 boiler efficiency, and conversion of No. 6 heating
11 oil to low sulfur No. 2 heating oil, which creates
12 less particulate matter than natural gas or
13 biodiesel, which creates near zero particulate
14 matter. These alternatives are less costly to
15 convert, and will result in better air impacts and
16 higher efficiency. Increased natural gas usage, an
17 expansion of natural gas and liquefied natural gas,
18 L&G infrastructure will lead to more fracking, and
19 greenhouse gas emissions, and exacerbate climate
20 change.

21 Nuclear energy is not clean with its
22 radioactive and toxic waste. With energy efficiency
23 and conservation, New York City does not need Indian
24 Point Nuclear Plant, which should be shut down
25 immediately. This bill does not specify how the City

2 plans to monitor and report the reduction of the
3 greenhouse gas emissions. Nor, does it specify how
4 the City plans to enforce rules to achieve these
5 reductions. Without regular monitoring and reporting
6 procedures, especially with our legally binding
7 enforcement measures with substantial fines for non-
8 compliance, these reduction goals will just be words
9 written a piece of paper without meaning and
10 substance. Climate change is the most critical issue
11 of our generation. We need to take bold actions
12 before it's too late. [bell] New York City can be
13 the leader and set an example for this country and
14 the whole world. Thank you very much.

15 [Pause]

16 [background discussions]

17 CHAIRPERSON RICHARDS: All right, next
18 panel. Ya-Ting Liu, New York League of Conservation
19 Voters. Justin Green, Build it Green; Edie
20 Kantrowitz from UFA, NYCFC, NY-- A lot of hats.
21 Annie Wilson, the Justice Project NYC, and Ann Law
22 [sic] New York City Clean Energy Coalition. Philip
23 Con, Citizens Climate Lobby.

24 [Pause]

25 [background conversation]

2 COUNSEL SAMARA SWANSTON: Please raise
3 your right hands. Do you swear or affirm to tell the
4 truth, the whole truth, and nothing but the truth
5 today?

6 [Pause]

7 CHAIRPERSON RICHARDS: You may begin.

8 [Pause]

9 EDIE KANTROWITZ: Okay. Okay, good. My
10 name is Edie Kantrowitz. I'm affiliated with United
11 for Action, New York City Friends for Clean Water,
12 the Coalition Against the Rockaway Pipeline, and the
13 New York City Safe Energy Coalition. But I'm
14 speaking as an individual today. And I would like
15 first of all to thank both the City Council and the
16 Mayor's Office for the tremendous leadership they
17 have shown in recent months towards our shared goals
18 of reducing emissions and addressing climate change.
19 Four hundred thousand people marched in the streets
20 of Manhattan in September to demand a sustainable
21 future, and this bill Intro 378 is a beautiful start
22 towards making New York City a leader in climate
23 progress. However, it still does not go far enough.

24 The bill must make it explicit that shale
25 gas, nuclear power, and large-scale hydroelectric

2 dams are not the power sources we must turn to in
3 order to reduce emissions. Too many time and in too
4 many ways we have heard that shale gas is a bridge
5 fuel that will save us from CO2 emissions. But
6 methane aside from all of the public health,
7 economic, and environmental harm caused by fracking,
8 is 86 times more potent than CO2 as a greenhouse gas
9 over the 20-year period. And a recent study has show
10 that 40% of U.S. carbon emission reductions since
11 2007 can be attributed to renewables while only 30%
12 can be attributed to the growth of shale gas. So
13 even looking simply at the standard effectiveness, we
14 see that shale gas should have no place in our energy
15 future, none whatsoever.

16 Nuclear power is simply cancer waiting to
17 happen, and large hydroelectric dams are echo systems
18 disrupters. So, it's impossible with all good
19 conscience to wholeheartedly support Intro 378.
20 Although I very much support the measures that we're
21 talking about today. But we must make clear that our
22 emission reduction goals are to be met only by power
23 sources that are truly clean, green, and sustainable
24 such as solar, wind, geothermal, tidal power,
25 biodiesel, and small scale hydroelectric.

2 Conservation and efficiency, of course, must be given
3 an ever larger role in meeting our emission reduction
4 goals.

5 This is a low hanging fruit that we must
6 not ignore, and that I know you are not ignoring,
7 which I tremendously appreciate. Americans waste a
8 tremendous amount of energy, and New York City can
9 and should set a positive example by becoming the
10 leader in implementing energy saving attitudes and
11 technologies. The plan needs strong enforcement
12 measures, which it currently lacks. And it needs to
13 have more clearly delineated policies and procedures
14 for meeting the 80% by 2050 goal including annual
15 targets, and report backs on whether these targets
16 are being met. The agencies responsible for managing
17 new programs should be clearly identified and there
18 should be mechanisms in place for establishing an
19 advisory committee of scientists and citizens to
20 allow for continuing public input. In conclusion,
21 let's ask ourselves a really daring question. Why
22 only 80% by 2050? Why not 80% 2030? Why can we not
23 challenge ourselves to 100% by 2030? New Yorkers can
24 do anything, right? For the sake of future
25 generations, we should settle for nothing less.

2 YA-TING LIU: Thank you Chair Richards.

3 I'm Ya-Ting Liu with the New York League of
4 Conservation Voters. We have over 25,000 members in
5 New York City that want what we want, which is to
6 keep New York City a leader in sustainability. I'm
7 not going to read my testimony verbatim. I think I
8 just want to sort of get to the heart of our
9 suggestions for the Council for this Committee to
10 consider in terms of specific milestones that can
11 pave the way to get us to 80 by 50. So the first one
12 is in order to provide further guidance, this bill
13 could suggest intervals of five to ten years or so.
14 So that future council could monitor the progress
15 towards those milestones, and ensure that the
16 programs are on target. And that project to achieve
17 these goals are working well.

18 And the second recommendation is that the
19 Mayor's Management Report, and the PlaNYC inventory
20 of New York City greenhouse gas emissions provide
21 published reports on greenhouse gas emissions, and
22 have been useful tools to evaluate the City's
23 efforts. So in order to meet these more ambitious
24 reductions, which is the goal of this bill, we
25 suggest that legislation should require an expanded

2 annual progress report. Perhaps looking at a
3 breakdown of greenhouse gas emissions by industry
4 sector, building type, geographic region such as zip
5 codes, transportation sectors and more. The Council
6 then would be able to evaluate the success or failure
7 of the programs sort of designated by the energy
8 consumer.

9 We were proud to be part of the 400,000
10 people in that march, and not only is this bill
11 ambitious, it's very clear from that moment that it's
12 necessary. And the truth is the hard work begins
13 now, right. Because to get us there, the road is
14 going to not be-- It's not going to be fast, easy,
15 or cheap. Which essentially then requires a
16 sustained political will. And we really applaud you
17 Chair Richards, and the City Council for really
18 comprehensive and for your leadership to set the mark
19 and set the goal and being ready to take New York
20 City there.

21 We heard from your line of questioning
22 with the City in terms of specifics, implementation,
23 and time line. And all of the details that we know
24 the City is working on, but it's really important to
25 hold the City's feet to the fire to make sure that we

2 are actually meeting all of these near-term
3 milestones to get us there. So we really applaud
4 your efforts, and we look forward to working with
5 you, and the Administration to make this a reality.
6 Thank you.

7 [Pause]

8 ANNIE WILSON: Good afternoon, Chair
9 Donovan Richards, Council and the Committee members
10 left. I'm Annie Wilson. I work for the New York
11 Environmental Law Justice Project, and I did a review
12 and I have some suggestions that I would like to add
13 in addition to what has been stated today relating to
14 the implementation of this 80% of greenhouse gas of
15 2050 as Intro 378. Well, we could include all the
16 greenhouse gases. There are others. The goal to be
17 met by 2030 is 30%, and the benchmark of the 1990
18 levels has now been bumped up to 2005. So
19 ultimately, what I'm trying to say is that we are now
20 looking at 2005 levels whereas we used to look at
21 1990 levels. So maybe there could be a
22 reconsideration.

23 In any case, the target and time frame
24 could possibly be improved, and if there is a good
25 implementation we might get there before 2050. And,

2 that will require extensive public education,
3 particular on consumption reduction, and relating to
4 the administration of the process through developing
5 city agencies, the question is which will be lead
6 agency? Will there be a taskforce? Who is going to
7 enforce it? Will it be DP? Will the Mayor's Office
8 of Long-Term Planning and Sustainability be expanded?
9 And if there was to be a taskforce as a coordinating
10 role, how would that taskforce interact with the
11 agencies and how would it be implemented and/or
12 supported? It should be made of experts and
13 stakeholders.

14 Relating to the four-year cycle of
15 PlaNYC, the vision. Possibly there could be a
16 scattered review period like two years for some of
17 the issues, and two years for others. However you're
18 going to be able to implement this. And I suggest
19 that there would be serious studies somehow provided
20 and funded by the City to best determine the course
21 towards the reductions as a goal for this Intro.
22 There would also be serious modeling scenarios of
23 various combinations that could be looking at various
24 factors, whether it be the full cost accounting of
25 choices, the greenhouse gas footprint in a full

2 cycle. For example, not just the fraction, but the
3 milling, and the -- [bell] I'm already there. I'm
4 going to wrap it up.

5 And looking at the other factors, and
6 variables through efficiency of building designs,
7 conservation measures, including the transportation
8 sector. And encouraging and making the public aware
9 of the greenhouse gas emissions related to the
10 consumption of animal products, which is so often
11 overlooked and taboo. Given that that's 51% of the
12 greenhouse gas worldwide, it's very important to have
13 that in the conversation. One could also consider
14 creating and proposing municipal utilities for the
15 larger project in addition to the distributed
16 projects. And maybe considering how transition
17 works, and the public's interest within the
18 transmission systems that we have, which are
19 currently hurdles to the deployment of distributing
20 renewable energy. Also, with the economic and health
21 impacts, these variables would certainly create many,
22 many scenarios that could help determine the best
23 course.

24 And I will close with the transitional
25 fuel supply issue, and that we don't have time to

1 transition. We need to go straight to where we have
2 to go. Reduction in demand and distributed renewable
3 energy, and also I caution you on the solution for
4 pollution trading, and carbon offsets, which displace
5 problems. They don't resolve them. So thank you
6 very much, and I'll close with power for the people
7 and power to the people. Thank you very much.

9 PHILIP KAHN: Hello. My name is Philip
10 Kahn and I'm Co-Leader of the Manhattan of the
11 Citizen's Climate Lobby. Thank you for giving me an
12 opportunity to speak on behalf of my organization in
13 support of Local Law 378. CCL wholehearted supports
14 passage of Local Law 378. This law will put New York
15 City in the vanguard of actions to save our city, our
16 nation, and our planet from the worst effects of
17 climate change brought about by greenhouse gas
18 pollution. CCL's primary policy goal is a national
19 price on carbon emissions that will allow businesses
20 and consumers to choose their methods of
21 decarbonization. And we fully recognize the value of
22 setting ambitious goals such as those in Local Law
23 378 and the Mayor's recent proposals for mitigating
24 the effects of climate change in New York City. We
25 applaud the leadership that New York City is showing

1 on this extremely important issue. But we also wish
2 to highlight that without a national price on carbon
3 pollution the chief way that New York City will be
4 able to significantly reduce emissions is through
5 regulation namely through strengthening enforcement
6 of its building codes, as several others have said.

8 I want to briefly summarize the CCL
9 Policy Proposal, and tell you how it can help assure
10 that we meet the 80% reduction by 2050 in both New
11 York City and our nation. Citizens Climate Lobby is
12 a grassroots organization dedicated to the national
13 action that will lessen climate change through market
14 forces rather than regulation. Our main efforts
15 involve engage Congress to enact a revenue fee on
16 carbon contents of fossil fuels as they enter the
17 national economy. This fee would start at a modest
18 level of \$15 for a ton of CO2 emissions, and steadily
19 rise by \$10 per ton of emissions per year. This
20 proposal would refund all proceeds collected to the
21 American people on an equal basis. And its
22 provisions to help American businesses to help
23 compete with firms in countries without such carbon
24 fess.

1 A recent study of the impact on the U.S.
2 economy of a proposal similar to ours was performed
3 by regional economic modeling. The study modeled the
4 greenhouse gas emissions, employment, and economic
5 activity through 2035 compared to baseline
6 predictions of those parameters without the tax and
7 policy. Key results compared to baseline case with
8 no carbon fee are after 10 years, CO2 emissions
9 declined by 33% and by 52% after 20 years. 13,000
10 lives are saved annually after ten years, primarily
11 due to the reduced burning of coal with an
12 accumulative 227,000 American lives saved over 20
13 years. 2.1 million jobs are gained in the first ten
14 years, rising to 2.8 million in 20 years. And by
15 2020, the annual GDP increases by 70 to 85 billion.
16 And this is with the Revenue-Neutral Carbon Tax, with
17 an cumulative increase of national GDP due to
18 Revenue-Neutral Carbon Tax of \$1.3 trillion. [bell]

19 A national price on carbon pollution with
20 the proceeds equally returned to citizens will
21 especially benefit New Yorkers. We have the lowest
22 per capita carbon emissions of any large city,
23 resulting in more funds being refunded to New Yorkers
24 than they would pay under carbon fess. This would
25

2 help finance some of the investments required to meet
3 the goals of Local Law 378. Thank you very much for
4 inviting our testimony on this most important matter.
5 Thank you.

6 CHAIRPERSON RICHARDS: Thank you all for
7 your testimony. It is certainly important. A carbon
8 tax would be great, and also benchmarks, and that's
9 something that we're certainly going to be looking
10 at. Thank you.

11 [Pause]

12 CHAIRPERSON RICHARDS: Okay, Pamela Drew
13 Gregory, Safe Energy Coalition; Nancy Anderson, the
14 Sallan Foundation; Wyldon Fishman, New York Solar
15 Energy Society; Ken Gale the New York--

16 KEN GALE: New York Safe Energy
17 Coalition.

18 CHAIRPERSON RICHARDS: Oh, yes. I didn't
19 hear. So Ken Gale, New York City Safe Energy
20 Coalition, Eco-Logic WBAI. That's the march that you
21 guys-- Ruth Hardinger, the Damascus Citizens for
22 Sustainability. Patrick Almonrode from 350NYC.

23 [Pause]

24 CHAIRPERSON RICHARDS: You may begin
25 after you're sworn in.

2 COUNSEL SAMARA SWANSTON: Please raise
3 your right hands. Do you swear or affirm to tell the
4 truth, the whole truth, and nothing but the truth
5 today?

6 PANEL MEMBERS: Yes.

7 CHAIRPERSON RICHARDS: You may begin.
8 Speak into the mic. Make sure it's lit up, the
9 button is-- There you go.

10 PAMELA DREW: Good afternoon, Chairman
11 Richards, Committee Council. Thank you for convening
12 this panel to speak in favor of 378 and thank you for
13 your Herculean patience in listening to all our
14 testimony today. My concerns about the bill concern
15 not only the content and impact of the bill. Not
16 merely its content and coverage, but also the issues
17 inherent in the bill's oversight and implementation.
18 To put the bill into effect in a manner that will
19 carry the most impact would logically require a vast
20 amount of oversight. It might potentially require a
21 taskforce assembled for the purpose for following up
22 with landlords, co-op, and condo board, building
23 manager, and even superintendents. To ensure that
24 the procedures necessitated by the bill are being
25 implemented fully, and effectively. To perform less

2 than supervisory measures after the bill's passage
3 would be almost a guarantee of failure to perform the
4 tasks necessitated by Local Law 378. It would be all
5 too easy for those who must make urgently needed
6 changes in the form and deployment of energy in their
7 buildings to rest on their laurels. This could be
8 minimized or eliminated entirely by supervision that
9 would demand they build and maintain the required
10 infrastructure by a date certain, or they receive
11 city penalties. This taskforce, of course, could be
12 organized under and should be answerable to the
13 Department of Environmental Protection, DEP, as the
14 most appropriate agency to implement the bill with
15 cooperation from other New York City agencies
16 required. The fire department to ensure code
17 adherence in building modifications, for example.

18 It is, therefore, my opinion that the
19 City Council of the City of New York should consider
20 appropriate legislation following the passage of 378
21 to create a 2050 taskforce answerable to the DEP for
22 the direct supervision of modifications to city
23 buildings to ensure adherence to the requirements of
24 the bill. Thank you.

2 CHAIRPERSON RICHARDS: Thank you so much,
3 and you saved time. That's leadership there.

4 [laughter] Thank you so much.

5 Good afternoon, Chairman Richards, and
6 staff. My name is Nancy Anderson. I'm the Executive
7 Director of the Sallan Foundation. Sallan is a New
8 York City based independent non-partisan, non-profit
9 organization dedicated to advancing useful knowledge
10 for the inner cities. I am so pleased to testify
11 here today, and to offer strong support for Intro No.
12 378, a bill that builds on and extends the goal of
13 the City's Climate Protection Act, Local Law 22 of
14 2008.

15 It is clear that we must do more. We can
16 do more starting today to be climate action leaders.
17 It is also clear that much of the real hands-on
18 innovation will arise at the urban scale, and we are
19 up to the task. In order to act in the best interest
20 of the city to provide for an increase in future
21 reductions in citywide greenhouse gas emissions, I
22 offer five recommendations for City Council action.

23 First, companion legislation should be
24 drafted to establish binding intermediary greenhouse
25 gas reductions. This is an idea that has been

2 mentioned on numerous occasions today. Intermediary
3 targets would foster and guide future City Council
4 oversight hearings on the progress being made towards
5 meeting the 80 by 50 goals. And would also inform
6 the Council's budget proposals and approvals.

7 Second, legislation should also require
8 the Mayor's Office to produce an annual progress
9 report in detail on how the city is advancing and the
10 efforts to meet the 80 by 50 goal.

11 Third, the Council must ensure that the
12 staffing needed for needed for detailed 80 by 50
13 policy making, implementation, relevant permit
14 reviews and enforcement is made possible by annual
15 adequate funding. This should start with the Fiscal
16 Year 16 Annual Budget, which will be just coming up
17 shortly.

18 Fourth, everyone wants to be a winner.
19 The Council should establish an energy reduction race
20 and use annual energy benchmarking data required by
21 Local Law 84 to award buildings that makes the
22 biggest cuts in their energy consumption. The energy
23 reduction race would be a great way to spotlight the
24 importance of the city's benchmarking law and
25

2 elevated above just paperwork. Philadelphia is
3 already doing this and New York should, too.

4 Fifth and finally, the Council should
5 facilitate creation of a special 80 by 30 districts.
6 These pioneers will need the commitment, the capacity
7 for nimbly taking advantage of the City and State
8 energy efficiency and clean energy programs to cut
9 greenhouse gas emissions by improving the energy
10 performance of their buildings. These pioneers will
11 offer us replicable energy efficiency projects and be
12 a test bed at the community scale for cutting
13 greenhouse gas emissions.

14 By volunteering to lead the way, 80 by 30
15 districts will show all New Yorkers how to do it, and
16 with that, I thank you so much for the opportunity to
17 testify today.

18 WYLDON FISHMAN: Wyldon Fishman, New York
19 Solar Energy Society, and I've submitted to you ways
20 to go green, 101 ways to be more energy efficient.
21 Therefore, to lower your carbon footprint. And we
22 are an educational organization. We raise money in
23 order to educate K through 12, professionals. Our
24 ranks are filled with architects and engineers, some
25 solar installers, and our courses today we have the

2 approval of three new courses by the AIA for
3 continuing education credits. And the three are:
4 Ground Source Heat Transfer, which is we call Geo--
5 Geothermal. Ground Source Heat Transfer, Solar
6 Thermal, and Passive Active Building Science. I've
7 been using those terms so that we aren't reliant upon
8 Passive House. We can say Passive Active Building
9 Science just for something new.

10 So that's about how I wanted to conclude
11 except also to add that Albany will be difficult to
12 deal with in the sense of feed-in tariffs. Today, we
13 don't say feed-in tariff. We prefer to say the value
14 of solar. Because when you decentralize your
15 generation, you get rid of the need for more
16 transmission lines, so solar becomes a way to defray
17 the cost of building out transmission lines. So
18 value of solar. The other was time of day metering
19 would really help us out and, of course, a carbon
20 tax. \$15 a ton would be fantastic. Thank you very
21 much for your time.

22 [Pause]

23 KEN GALE: Thank you for holding this
24 hearing and for the opportunity to speak. I'm Ken
25 Gale, and since 2002 the host and producer of the

2 environmental radio show Eco-Logic on WBAI-FM here in
3 New York City, and I'm the founder of the New York
4 City Safe Energy Coalition, NYCSEC. I absolutely
5 support reducing greenhouse gas emissions by 80%.
6 The sooner the better. I also thank you for saying
7 greenhouse gas emissions instead of carbon since
8 replacing one fossil fuel with another is foolhardy.
9 And don't let anyone in the nuclear industry make you
10 believe that nuclear power doesn't have a fossil fuel
11 footprint. It's so dangerous that the pumps, relays,
12 safety equipment, and cooling systems must use fossil
13 fuels or outside electricity. The environmental
14 racism and fossil fuel footprint of the uranium
15 mining and millions alone must use fossil fuel or
16 outside electricity. The environmental racism and
17 fossil fuel footprint of uranium and milling alone
18 should keep nuclear power from being considered. And
19 the increased cancer rates of the people living near
20 nukes who get exposed to routine emissions of
21 radiation everyday. That's the benign name they
22 have, routine emissions.

23 Look up radiation.org. But NYCSEC was
24 created not just to shut down Indian Point but to
25 help with energy solutions with accent on our

2 buildings as the cause of most of our greenhouse
3 gases. Other sources of energy such as rooftop
4 solar, ground source heat pumps, and tidal are
5 important and need to be promoted. But I especially
6 want to emphasize the efficiency. Using less energy
7 means we won't burn as much fossil fuel or radiate
8 anyone. Buildings are built to code and no better.
9 So our building codes must take energy use into
10 account. Just as many people buy cars with the
11 mileage in mind, choosing energy efficient cars, so,
12 too should buildings be made and bought with their
13 efficiency in mind.

14 Passive House techniques have been around
15 since the '70s and have been perfected to use less
16 than one-tenth the energy of what is usually called
17 the conventional building. New York City Architect
18 Chris Benedict has shown that they don't have to cost
19 cent more to build either. The easiest, fastest, and
20 cheapest solutions are better windows, better window
21 frames, and better or more insulation. Most of our
22 buildings were not built with efficiency in mind. So
23 they must be retrofitted. It will pay for itself in
24 a few years, much less time than the life of a

2 building. This benefits landlords, tenants and
3 homeowners. I suggest loans not grants.

4 The New York Green Bank won't help
5 homeowners being geared toward large projects. Con
6 Ed won't participate in on-bill financing. So the
7 City must help homeowners who want to lower their
8 monthly energy costs to connect with financial
9 institutions to understand the low risks of such
10 loans. With lower monthly energy bills, the borrower
11 will find it easier paying for efficiency loans than
12 probably any other type of home improvement. [bell]
13 Solar installers tell me there is still a lot of
14 banks that don't recognize efficiency or solar as a
15 good investment despite their amazing track record.
16 Solar panels increase property values sometimes by
17 more than the cost of the panels. So no solar
18 installer should ever have financing problems. Solar
19 panels, insulation, and better windows cannot be
20 installed from overseas. They mean local jobs.
21 Let's stop burning our money or sending it Texas and
22 the Mid East, and spend it at home. When the air and
23 water are clean, thank an environmentalist. If not,
24 become one. Enough said. Thank you.

25 [Pause]

2 RUTH HARDINGER: I'm Ruth Hardinger
3 working with Damascus Citizens for Sustainability. I
4 want to thank you so much for your new important goal
5 and initiatives to address climate change. I'm going
6 to list some things that would help reduce some of
7 the city emissions. But I also want to really
8 present new information on timeframes for the short-
9 lived climate force in gases. There's been a lot of
10 talk about buildings. So I'm just going to suggest
11 there are also-- Back in the '80s and '70s or '90s,
12 there were tax abatements like the J-51, and after
13 9/11 there were some tax abatements that happened
14 that might be beneficial for converting to renewable
15 energies.

16 This seems to be in the New York City
17 timeframe to upgrade as water pipelines and gas lines
18 are being replaced and expanded all over time.
19 That's not good news for reducing emissions short and
20 long-term because these constructions are cause more
21 dust, asphalt emissions and odors and particulates.
22 Plus, the crusty-rusty old pipeline replacements are
23 adding more greenhouse gases because the pipeline
24 valves are turned off. And then, the remaining gas
25 in the lines is just emitted into the air. This has

2 not been addressed or measured, but definitely adds
3 to methane's climate contribution. This
4 infrastructure development is only supporting the use
5 of more fossil fuel.

6 In the Damascus Citizens for
7 Sustainability Fugitive Emissions Report that was
8 done in 2012 and 2013, at least 5% of the gas
9 distributed in New York City is leaked from
10 pipelines, 8.6 billion cubic feet per year, or about
11 2.8%-- 8.6% of the 300 billion cubic feet of gas
12 handled in the entire Con Ed system each year. It's
13 important to understand that promotion natural gas as
14 clean is based only, only on having one-half of the
15 emissions of coal or oil when burned yet that does
16 not even have a positive effect on reducing its
17 greenhouse gas. The fine particulate emissions are
18 either not accounted for or are deliberately ignored.

19 Though particular emissions are about 10%
20 of those that are produced by coal power, the U.S.
21 Environmental Protection Agency estimates that 77% of
22 the particulates from natural gas plants are
23 dangerously small. These fine particulates have the
24 greatest impact on human health because they bypass
25 our bodies, and natural respiratory filters, and end

2 up deep in the lungs. In fact, these studies have
3 been found to have no safe limit [bell] for exposure
4 to these substances.

5 What are really-- I want to add. This
6 is also they're connected to ozone, and ozone is one
7 of the causes for asthma for children. What are our
8 real carbon levels. CO₂, the well known carbon
9 dioxide is the strongest greenhouse gas contributor
10 on the 100-year time frame. And now, CO₂ levels are
11 approximately 400 parts per million. Yet, there are
12 other sources of greenhouse gases that participate in
13 escalating climate change that raise the greenhouse
14 gas levels much higher. The Intergovernmental Panel
15 for Climate Change in 2014, it was an April, 2014
16 report, says the Fifth Assessment Report of the IPCC
17 provides the latest comprehensive evaluation of
18 factors driving climate change.

19 What this means is that methane and
20 aerosol levels are higher now than last year. This
21 report then changes the names of these radioactive
22 forces from short-lived climate pollutants to near-
23 terms climate forcers because the chemistry and the
24 degradation of these gases vary depending up their
25 concentration, their chemical activity, and the time

2 frame you are considering. The IPP states that, It
3 is not appropriate to compare carbon dioxide with
4 these near-term climate forcers. And the IPCC
5 discourages the use of carbon dioxide equivalents
6 because these gases have an array of life cycles.
7 That being said, the NTCP have strong impacts
8 upfront. This is an important reason along with
9 numerous other reasons why natural gas is escalating
10 climate change. It is not a benefit to the
11 environment, and New York City should stop the build
12 out of gas infrastructure, push the pause button on
13 more gas infrastructure, and emphasize conservation,
14 efficiency, and renewable energy.

15 My understanding of our current
16 greenhouse gas levels is that we are probably way
17 close to the tipping point, as was stated by Bryce
18 Pane, Ph.D. on September 20th. We may well be at 450
19 to 480 parts per million if these near-term climate
20 forces are added to the carbon dioxide levels. So
21 carbon dioxide being 400 parts per million. You add
22 on 50, 80, or whatever is coming out from those
23 short-term gases, and we've got a very higher number
24 here. Most scientists agree that 500 parts per
25 million is the point of no return. We have five or

2 ten years to turn off the fossil fuel spigot, not 25
3 or 35 years.

4 I urge that this information affects your
5 decisions for actions to update how the plan in New
6 York City is implemented. I suggest that you have
7 meetings with independent specialists in pipelines
8 and gas such as Gas Safety, Inc., and also with those
9 who know cutting usage through conservation, about
10 encouraging building efficiency and renewable energy
11 use. I want the New York City Administration to be
12 so successful, and to really put real progress on
13 soon enough based on real facts so that we do not
14 have to go to that point of no return.

15 CHAIRPERSON RICHARDS: Thank you so much.
16 Thank you all for your testimony. Thank you.

17 PATRICK ALMONRODE: Chairman.

18 CHAIRPERSON RICHARDS: Oh, one more?

19 PATRICK ALMONRODE: Yeah.

20 CHAIRPERSON RICHARDS: Oh, sorry.

21 PATRICK ALMONRODE: This is the second
22 time you've done this to me, by the way. [laughs]

23 CHAIRPERSON RICHARDS: Well, I go this
24 way. So wait. So you were missing in action.

2 PATRICK ALMONRODE: Yes, I know. I'm
3 sorry. I understand. Yeah, you can stay or not.
4 [laughs] [sic] Chairman Richards, Ms. Swanston and
5 Mr. Murray, good afternoon. My name is Pat
6 Almonrode, and I am here today as a member of 350NYC
7 and I've marked up my testimony over the course of
8 this very long hearing. And so, I apologize in
9 advance for the stumbles. I'd like to begin by
10 commending this committee, its Chair and this Council
11 for the extraordinary work you've all done. It is I
12 think a great and hopeful time to be a New Yorker,
13 and a large part of that is due to your work. It's
14 wonderful not to have to fight city hall, but just to
15 have to sort of urge you along.

16 As for Intro 378, I'm very happy that you
17 see the need to set a goal for the reduction of
18 citywide emissions of greenhouse gases more ambitious
19 than was originally set in PlaNYC. As Chairman
20 Richards noted in his opening remarks, the reduction
21 of greenhouse gases and the stabilization of the
22 atmosphere is the more important, and the most urgent
23 challenge that humanity has ever faced. New York
24 City has already made significant reductions, but we
25 must do more. In fact, we must do even more than

2 this bill proposes. I urge that this bill be
3 rewritten so that it requires an 80% reduction not by
4 2050, but by 2030. And further, so that it requires
5 a 100% reduction that is an emission-free New York by
6 2050. As Professor Mark Jacobson and others have
7 shown, these goals are achievable, and importantly
8 such ambitious goals would jump start our local
9 economy, and create significant energy cost-savings
10 on thousands of good jobs and would do so faster than
11 the current proposal.

12 Whether or not these goals are seen as
13 possible, I also urge that the bill add language to
14 the code specifying that these emission reductions
15 must be achieved through conservation and efficiency
16 measures and through increased reliance on renewable
17 energy sources. And not by increased reliance on
18 natural gas and/or nuclear, both of which would be
19 exactly the wrong way to go, as many others have said
20 already this afternoon.

21 Mr. Chairman, I know that you're aware of
22 just how wrong it would be to increase our reliance
23 on natural gas. You recently toured the fracking
24 fields of Pennsylvania and saw that devastation first
25 hand. As you well know, now days natural gas is

2 fracked gas. Reducing New York's emissions by
3 increasing our use of natural gas would only increase
4 the pressure to bring fracking's devastation to our
5 state. Moreover, as many have already mentioned,
6 while natural gas may burn cleaner than other fossil
7 fuels, it has a greater climate impact than those
8 other fuels when the whole extraction to combustion
9 cycle is considered.

10 Mr. Chairman, given the strong words of
11 your recent op-ed in the Daily News, we expect you to
12 be particularly vigilant to making sure that emission
13 reduction plans don't become a back door to fracking
14 and to increased reliance on natural gas. [bell] The
15 same for nuclear, which is too costly, too dangerous,
16 too polluting, and which will take far too long to
17 build to be part of any serious emission reduction
18 plan.

19 Again, on behalf of 350NYC, I commend you
20 for your work so far, and I urge you to make that
21 work even stronger by setting more ambitious goals
22 and by requiring that those goals be met through
23 efficiency, conservation, and renewables and not
24 through natural gas or nuclear. 350NYC stands ready
25

2 to work with you to make New York a world leader in
3 the fight against climate change. Thank you.

4 CHAIRPERSON RICHARDS: Well, said. Thank
5 you. Thank you all. All right, the next-- It's the
6 next to the last panel. We're almost to the promise
7 land. Martha Cameron, Robert Alpern, Alec Freud
8 [sp?], Melissa Alstein, and Ms. R. Frank-- I can't.

9 MS. R. FRANK-EADIE: Eadie.

10 CHAIRPERSON RICHARDS: I think Eadie.
11 Yes.

12 MS. R. FRANK-EADIE: Frank-Eadie. The
13 New York Group of the Sierra Club.

14 MALE SPEAKER: [off mic] Do you take any
15 conversations do you have copies of statements for
16 making remarks? [sic]

17 CHAIRPERSON RICHARDS: No. I ask you to
18 keep your remarks to thee minutes.

19 [Pause]

20 CHAIRPERSON RICHARDS: All right,

21 COUNSEL SAMARA SWANSTON: Please raise
22 your right hands. You, too, Frank Eadie.

23 [Pause]

24

25

2 COUNCIL SAMARA SWANSTON: Do you swear or
3 affirm to tell the truth, the whole truth, and
4 nothing but the truth today?

5 PANEL: Yes.

6 MARTHA CAMERON: My name is Martha
7 Cameron. I've rewritten my remarks so many times I
8 have absolutely no idea what I'm going to say. I'm
9 speaking as a concerned citizen, as a grandmother, as
10 an anti-war and climate activist. I'm also speaking
11 as a small landlord. I have solar panels on my
12 building. I was the first person on my block to get
13 solar panels. There are now four others because they
14 saw that the solar panels worked. That said, I'd
15 also like to say I'm very, very grateful to have you
16 as our Chair of the Environmental Committee, and I'm
17 thrilled that you are doing these hearings.

18 Others have already made all the factual
19 points that I could possibly make today. So, I'm
20 going to skip over all of that except to say we have
21 to get rid of fossil fuels. We have to get rid of
22 nuclear. We can't go with big dams. I'm not so sure
23 about this biodiesel. And I do applaud you for
24 emphasizing the need for mandates, and enforcement,
25 and I'm saying this as a landlord. We need mandates,

2 and we need enforcement. We need laws. Don't go
3 with voluntary. It won't work. I'd also just like
4 to reiterate what one of the previous panelists said
5 about the 1990 levels versus the 2005 levels. I
6 think we increased our greenhouse gas emissions by
7 something like 10 billion metric tons between 1990
8 and 2005. The Obama Administration is moving the
9 goal post because he's now talking about 2005 levels
10 for carbon emissions from coal fired plants. I'm
11 very upset to see the 2005 level being used. I think
12 we need to go to 1990. 1987 was the last time that
13 we were below 350 parts per million, and that's the
14 goal that we need to achieve.

15 The IPCC, which is as you know, a very
16 conservative international body of scientists who
17 says we have 15 years before climate change becomes
18 irreversible. Irreversible means just that. We
19 can't go back. By 2030, we're going to be in
20 uncharted waters. We will have triggered trip wires
21 and set in motion feedback loops all over the planet
22 that will forever alter the world we have known for
23 all of human civilization. So while reducing
24 emissions by 80% from 2005 levels by 2050 is an
25 admirable goal, it's time to cut to the chase. We

2 must strive for 100% reduction of GHG below 1990
3 levels by 2030. Nothing less will do. We must go
4 from 100 to zero in 15 years, or it's all over for
5 the planet, and it's that simple.

6 For the sake of the planet, and for the
7 sake of the people of New York, and for the sake of
8 my grandchildren and your children and grandchildren,
9 and for all the children to be born to quote Reggie
10 DeBray [sp?] we ask that you step beyond what is
11 possible and strive to achieve what is necessary.
12 Thank you.

13 BOB ALPERN: My name is Bob Alpern. I've
14 been active in developing environmental policy at the
15 city and state level for upwards of 40 years. I was
16 Senior Advisor to Al Appleton when he was
17 Commissioner of Environmental Protection. I serve
18 still as a public member of the New York State Water
19 Resources Planning Council. I am also an active
20 citizen activist, and one of my involvements there
21 has been to the Jamaica Bay Taskforce, which should
22 be of some interest to the Chair. And I'm also very
23 recently now a member of the New York City Safe
24 Energy Coalition.

2 I want to just to budge from the remarks
3 a little bit, and talk about the role of the City
4 Council. The City Council it's a very special role
5 with regard to budget because it controls staffing,
6 consultant contracting, and enforcement. It seems to
7 me that, in fact, there's a need for more action by
8 the City Council with regard to those budgets. I was
9 pleased by the questioning of city reps regarding the
10 capacity of the city for enforcement for policy
11 making and for monitoring. Those are important
12 questions. My understanding is right now the Office
13 of Long-Term Planning and Sustainability is not well
14 staffed for policy making and, in fact, is as you
15 know seeking a new director. That's important, but
16 also important are the other agencies including my
17 old agency, the Department of Environmental
18 Protection. All that can be-- you can influence
19 through the budget process.

20 Similarly, you can do a lot through
21 oversight. Right now, Intro 378 really introduces
22 oversight only if there's a finding by the
23 responsible agency that the goal is infeasible.
24 Right now you don't have any criteria for that, and
25 you don't have any dates for it. You don't have any

2 review process for it. That should be changed. It's
3 a very important role of oversight on an annual basis
4 for a report that should be developed by counsel.

5 I just want to finally say that there's
6 an interesting proposal, which is being considered by
7 the New York City Safe Energy Coalition, which
8 relates to the Chair's area of the city. That is to
9 create a sustainability zone for the Rockaways and
10 Coney Island. I think we'll be working on that as
11 the New York City SEC, but I think we should be
12 working on it with you and other members of the
13 Council. The idea of a sustainability zone that
14 would demonstrate how to do the right thing both in
15 the goals of this proposed legislation and in
16 resiliency in general would dramatize and highlight
17 the issues in a way in which other initiatives
18 probably can't. Some of the things I've just said
19 are not in my written statement. I'll try and
20 produce some additional stuff and submit it to the
21 Council.

22 CHAIRPERSON RICHARDS: Thank you.

23 [Pause]

24 FRANK EADIE: Hi, my name is Frank Eadie.
25 I'm the Energy Chair for the New York City Sierra

2 Club Organization of which there are 14,000 members,
3 and all of the concerned with this kind of issue, and
4 many issues more, of course. We are very much
5 involved with this whole process, and we are really
6 grateful that the current Chair and his assistants
7 have take the initiatives that he has. It is
8 fabulous that we're really making process here in a
9 place where I've spent 25 years probably, and kind of
10 testify and get things done. And often with very
11 little positive results.

12 I also would like to have my testimony
13 reflect the concern that we have with getting the
14 emissions down. That's so critically important. The
15 future of the planet definitely rests on what's
16 happening. And it can be done. It's not an
17 impossibility at all. It may not be easy. It may be
18 expensive and some immediate effects, but I think
19 we've had a pretty impressive evening. As you can
20 see, we, the New York City group of the Sierra Club
21 isn't agreeing totally with the chapter which is New
22 York State in terms of the level of reduction of
23 emissions that should be achieved between now and
24 2050. But only by about 10%. But we also want to
25 see at least 50% by 2030. That's a minimal issue.

2 Really it needs to be done sooner. We just can't put
3 off these things because everyday that we do, there's
4 more CO2 in the atmosphere threatening the
5 atmosphere. The impacts are accumulating, and it
6 doesn't go away. [bell] So, you're building and
7 building and building. So thank you again. We'll be
8 in contact. We're also working at this point trying
9 to work with Council Member Kallos on getting a trial
10 operation with one of the large residential
11 buildings, NYCHA buildings in his district. To get
12 the people, appropriate evaluations of those
13 buildings, or one of their buildings at least. And
14 getting the testing of the waters working with HUD
15 and the NYCHA process to actually get a whole
16 building gone through from basement to roof. And do
17 and optimize the rebuilding of the building to see if
18 we can't get to zero energy--

19 CHAIRPERSON RICHARDS: [interposing]

20 Great. Thank you so much.

21 FRANK EADIE: --I think within two or
22 three years.

23 CHAIRPERSON RICHARDS: Great, great.

24 Thank you.

2 MELISSA ELSTEIN: Hello, my name is
3 Melissa Elstein. I'm a New York City resident and a
4 co-founding member of the West 80s Neighborhood
5 Association and the New York City Coalition of Block
6 and Community Leaders. Though I'm speaking today
7 personally as a concerned resident and not
8 representing either group. Thank you for this
9 opportunity to speak. Thank you for your
10 acknowledgement of climate change, it's causes and
11 ramifications. The need to address and counter it,
12 and your introduction of this local law. And I also
13 thank those of you who did march at the Historic
14 People's Planet March this September.

15 Upon reading the proposed law with a 10-
16 page memo attached to it, and Press Release No. 112-
17 2014 dated September 19th of this year here are my
18 comments and concerns in the order of the press
19 release. Of course, I think a lot has already been
20 said that I agree with. So I will try not to be
21 repetitive. Just I do agree that, in fact, natural
22 gas is not the way to go. And, of course, that means
23 not rolling out more infrastructure, and not
24 promoting the gas clusters through Con Ed giving
25 buildings alternatives and incentives. So I have

2 some attachments here from Renew New York and a news
3 article with regard to alternative energies. I've
4 attached the Professor Mark Jacobson Report as well
5 as the Solutions Project: A New York Diagram. SO
6 you can look at that. From a moral perspective, I
7 don't see how New Yorkers can seek a ban on fracking
8 in our state, and yet seek and demand the use of
9 natural gas from our neighboring states. And
10 basically be a participant and they're suffering
11 physically and emotionally. Of course, we want to
12 protect our precious air, land, and water, and our
13 farms and our agriculture.

14 I think enough has been said regarding
15 high radon levels. I attached a summary of my State
16 Assembly Member Linda Rosenthal's Proposed Bill.
17 Maybe we need a New York City version of that bill
18 because I think there's a lot more action that takes
19 place these days on the local level. As opposed to
20 going up towards a state and federal. So that's
21 attached here as well.

22 Regarding the next topic, City Purchases
23 of Fossil Fuels, about city owned vehicles being
24 changed to hybrid electric and are biofuel. How that
25 legislation required an investment from the City

2 Pension Fund from the fossil fuel industry. And
3 here's one little pet peeve, Can we eliminate the use
4 of gas powered leaf blowers in the parks, which also
5 contributes to noise pollution. With regard to
6 reducing waste, there is a section in the Public
7 Housing can we expand and not be limited just to
8 public housing. Recycling is great but even better
9 is a commitment to not using throw away one-time use
10 containers in the first place. We need better
11 outreach throughout the city to businesses and
12 consumers to encourage the avoidance of single-use
13 plastics with, and ban plastic bags or plastic
14 bottles like San Francisco coffee cups with plastic
15 lids. Plastic, of course, also being a petroleum bi-
16 product. Here are some alternative, reusable forks.
17 We need basically a shift in consciousness around our
18 waste and overuse and our throw-away disposable
19 culture. So there are some sources in here. Also,
20 of course, we do say use, reduces the use for
21 sanitation vehicles reducing the costs of fuel and
22 also lowering pollution. So it's all connected.

23 Finally, energy conservation. Everyone
24 has talked about that. I know we're a city that
25 doesn't sleep, but why when we look out do we have to

2 see office buildings still aglow in the middle of the
3 night and extremely light, bright terrace lights on
4 all the time. And hot temperatures outside, why are
5 women putting on shawls and sweaters inside to work
6 to go to the office? This seems to be regulated.
7 White roofs in order to reduce the heat island
8 effect. Should every building have a white roof, a
9 light roof, if not greener solar paneled. Again the
10 heat island effect. How about more street bioswales,
11 larger tree beds that are systematically cultivated
12 tracked and the replacing of dead trees from the
13 Million Trees Project with effective street tree
14 outreach carrying oversight rather than just letting
15 them die and who knows what happens to them.

16 Finally, with the last subtitle of the
17 memo, New York City Clean Air Act. Is there going to
18 be legislation regulating and eliminating the smoke
19 and soot that fills our air from what seems like the
20 ever-growing number of hot food street vendors.
21 Often, New York City streets are filled for hours
22 with black smoke, and thank you for this opportunity.
23 And all of the attachments are here. Thank you.

24

25

2 CHAIRPERSON RICHARDS: Thank you so much.
3 Thank you. That was very good, very good. I thank
4 you all for your testimony.

5 FRANK EADIE: Thank you for your
6 patience.

7 MELISSA ELSTEIN: Thank you. Can we clap
8 now. [applause]

9 CHAIRPERSON RICHARDS: Now, we're onto
10 our last panel. Maybe Samara will testify after
11 everyone is finished. This is the last one. Alexia
12 Philco from New York City SEC, Gene Bergman or John
13 Bergman, Tom Wismuller; Nicole Minisello, Menitsulo,
14 Minitello. Did I get it right, Minicaro.

15 NICOLE MINICARO: Anyway you want to say
16 it.

17 CHAIRPERSON RICHARDS: All right, got it.
18 Thank you guys.

19 [Pause]

20 CHAIRPERSON RICHARDS: All right, you're
21 going to be sworn in, and then you can begin.

22 COUNSEL SAMARA SWANSTON: Please raise
23 your right hands. Do you swear or affirm to tell the
24 truth, the whole truth, and nothing but the truth
25 today?

2 ALEXIA PHILCO: All right, good evening.

3 My name is Alexia Philco. I'm an undergraduate at
4 CUNY Hunter College, and I'm a member of the recently
5 constructed New York City Safe Energy Coalition. And
6 you guys are tired. We're all tired. I just want to
7 emphasize the points that are the most pertinent to
8 my life, and I'm sure to everyone in this chamber.
9 This plan will not please include fracked gas,
10 nuclear, or hydro-- or energy from hydroelectric
11 bands. The man will include conservation efforts as
12 a critical part of how New York will get to 80%. And
13 that these efforts be backed by mandates so that
14 energy is not needlessly wasted. Compost in every
15 school, residential building, and supermarket. A
16 push for plant-based bags in the schools and at home.
17 Let's make sure the plant has regulations on
18 corporations that have a history of violating and
19 polluting. Annual reporting and as Honorable
20 Richards had put out, enforcement, enforcement,
21 enforcement, enforcement. Obviously, that's just
22 something New York City can't afford. We ware in a
23 police state. We should be policing this as well.

24 [laughter]

25 SERGEANT-AT-ARMS: Quiet please.

2 ALEXIA PHILCO: Plastics if we're not
3 going to get rid of them, let's make them another
4 thing to regulate. Styrofoam let's get it out
5 completely. Recycling bins on every corner of New
6 York City. And the most important to me coming as a
7 student, I love where we're moving, but there's needs
8 to be extensive research on the dangers of renewables
9 as well. For example, solar panels have a cost, and
10 I'm not talking about monetary. I'm talking about
11 their construction leads to-- They have a carbon
12 footprint as well, and the people creating them are
13 they are suffering from pollutants and particulate
14 matter.

15 CHAIRPERSON RICHARDS: Really?

16 ALEXIA PHILCO: That's right. They have a
17 poison with them. So I thank you for the time to
18 emphasize the things that I know you've heard a
19 thousand times already. And I really do applaud the
20 effort of the de Blasio Administration, the Council
21 Members and every person in this chamber. So, thank
22 you so much.

23 TOM WYSMULLER: My name is Tom Wysmuller.
24 I'm a meteorologist. Every year I give an annual
25 winter forecast for New York City ahead of the

2 winter. And this year it's going to be delivered on
3 the 25th of November on WBAI-99.5 FM. I do a lot of
4 other things, but I'm going to skip that. I really
5 appreciated hearing from the City of New York, and
6 describing their plans because each of those four
7 initiatives are spot on, need to happen, and are
8 really, really good for city. Unfortunately, they
9 all cost money, or require grants. That's up to you
10 folks to do, or maybe pick and choose among the ones
11 that work the best. My real grief is the choice of
12 measure, and you have chosen CO2 as a success
13 measure. I would rather you used things like
14 millions of metric tons of fracked gas, not used as a
15 measure of success. Or megawatts saved or BTUs not
16 used. CO2 is a secondary measure. The bill proposed
17 that it will help cure climate. You're going to see
18 in a minute why I believe that's not going to happen.
19 But the other measures are important, and maybe
20 because I'm kind of last on the agenda or next to
21 last you can change the bill to put measures in that
22 make sense.

23 There's a Department of Energy Chart on
24 the next page. I'm going to skip the math because
25 it's in your hand-out, but the fact is I expect the

2 bill to be passed. I expect the amendment to become
3 law, and if it does, it will save 76.8 million metric
4 tons of CO2 that won't be added to the atmosphere.
5 However, that amount though fantastically laudable,
6 and it's huge is one-ten thousandths of the total CO2
7 in the atmosphere. The impact of that on climate is
8 not measurable by any instrument available today. If
9 you look at the blue and red charts on the second
10 page, there's a green line that represents CO2. The
11 reduction that the bill will accomplish fits within
12 that green line of CO2. It is that difficult to
13 measure it on climate.

14 What I would like you to do is focus on
15 energy saving, energy conservation. Use measures
16 that really count in that. Forget CO2. It's a red
17 herring. [bell] The impact on climate is not even
18 measurable for New York City, but the impact on
19 energy is spectacular. So go to it.

20 CHAIRPERSON RICHARDS: Thank you.

21 [Pause]

22 NICOLE MINITELLO: Hello, my name is
23 Nicole Minitello, and I really appreciate you guys
24 staying and listening to each and every one of us.
25 It's so kind of you because I imagine you are very

2 tired, and very hungry. [laughs] And desperate to
3 stop hearing all of the things that have been said
4 again and again, which were so important, and which
5 we all feel are so important. Councilman Richards, I
6 met you at the Rising Sea Summit and it's so good to
7 see you again. Thank you so much for being here and
8 leading us.

9 I hail from Bedford, Brooklyn, but I am a
10 lover of Queens as well and have some friends there.
11 So definitely I was born and raised in Brooklyn, and
12 father and my aunt had gone through some of the
13 effects of Sandy, as we are in the Manhattan Beach
14 and Sheepshead Bay Area. There are three things that
15 I want to say about this bill specifically. First,
16 is that it's not specific. We've talked about that
17 before. How are the goals going to be achieved? We
18 have to make sure, as people have said, there is no
19 reliance on fracked gas. We also have to make sure
20 that there is no reliance on nuclear power. Nuclear
21 power and fracked gas are not clean at all. They are
22 dirty, dangerous, and disgusting.

23 Two, is that the legislation has no
24 teeth. As you've said yourself Councilman Richards
25 as you were talking to the gentleman who was first

2 testifying, we need teeth in this legislation. We
3 can't wait for five or ten years to kind of see if
4 things will pop in and see if people play along. We
5 need action today, and we need the City Council and
6 its members to ensure that this legislation has those
7 teeth. So that starting from the immediate passage
8 of the legislation things are put into action very
9 quickly.

10 I myself don't have children currently,
11 and one of my most major concerns about having
12 children is the state of the world that they will
13 grow up in the next 20, 30, and 40 years. This is
14 not a problem, as you know, for the distant future.
15 It's a problem of today, and if we don't put teeth
16 into our legislation, then we will not have something
17 that is able to impact things quickly enough.

18 The third thing is conservation, and
19 Melissa Elstein talked a bunch about different things
20 that could be done in terms of conservation. We are
21 very abusive of our resources. Lights on in how many
22 buildings that you walk by at night that are empty
23 yet filled with lights? How many social functions do
24 you go to where there are tons of plates, cups, or
25 papers just thrown away that are not necessary.

2 [bell] We really need to focus on all different
3 sorts of conservation because whether it's our
4 plastic plate, cup usage, plastic bag usage that is
5 from petroleum. That is using resources. Whether
6 it's our light usage, our energy usage. The heat
7 being high in the winter and the air conditioning
8 being so cold in the summer. It doesn't make sense
9 to waste, and that's huge thing that this bill needs
10 to have in it. Conservation. If we don't conserve,
11 it won't matter what else we do, we're never going to
12 get to where we want to be.

13 I so appreciate you staying and listening
14 to my testimony. Please make sure there's
15 conservation in the bill. Please make sure there's
16 no fracked gas, no nuclear, and no large hydro. And
17 please make sure the bill has teeth. Thank you again
18 very much.

19 CHAIRPERSON RICHARDS: Well, thank you
20 and I want to thank everyone who came out and
21 testified. [applause] I think there is something we
22 can all take out of this, and I think that, you know,
23 listening. I've certainly made it clear to the
24 Administration that as we move towards this goal,
25 mandates are going to be important for me. And

2 whether that means we need to take legislative action
3 to make it happen, we're willing to do that.

4 I also want to speak of enforcement and
5 just reiterate that. I will be looking for
6 enforcement, and looking for staffing levels. That
7 is my big push for this session. Last year it was
8 infrastructure money, which we will always look for,
9 but enforcement is going to be key in achieving this
10 goal. And we understand that here in Council. If
11 we're going get there, mandates and enforcement are
12 critical components of this.

13 I also have a bill that is being drafted
14 to turn the lights off in a lot of these buildings.
15 So I can't wait to [applause] introduce that one,
16 and there are a lot of other things that we have that
17 were spoken of today. I think we're on the cusp of
18 making history here, and by and large. I attended
19 the United Nations Climate Summit, and got to speak
20 to leaders from all around the world. And they
21 really are looking to what New York City is doing.
22 From Africa to Malaysia to every country you can
23 think of is looking to what we're going to accomplish
24 here, and they thought our goal was very ambitious.

2 We can get there, and I think the biggest
3 thing is the people in this room, the people part of
4 this movement. We will all have to be together and
5 stick together to make sure that this happens. And,
6 if we stick together and we're strong and continue
7 push, this is achievable. This goal is more than
8 achievable. I think we do have to move towards 100%
9 renewable energy. [applause] And there are other
10 countries doing this, and I want to speak. I just
11 came back from Paris, and it's amazing to see some of
12 the things that they're doing in particular in Paris
13 like turning their lights off at night. And it's
14 something that we should try to do here in New York
15 City.

16 As we approach it, next week is going to
17 be the second anniversary of Hurricane Sandy, and I
18 represent as a representative of the Eastern Portion
19 of the Rockaways and Rosedale and portions of JFK,
20 which were certainly hit very hard by the storm. I
21 understand that if we don't get serious about this in
22 2050, and I've looked at the predictions, and what
23 they would do my particular community. There are
24 parts of the Rockaways, if not the whole peninsula,
25 that will not exist. There are parts of Manhattan

2 that will be under water if we do not get serious
3 before 2050.

4 So with that being said, I want to thank
5 everybody who contributed to this dialogue today, to
6 this conversation who came out and spent around four
7 or five hours with us. We are taking this serious.
8 We look forward to marching on to make sure that this
9 goal is achieved and beyond. Most importantly, we're
10 setting framework to make sure that even beyond this
11 we're taking measures to ensure that we are moving
12 from carbon loving. We're divorcing fossil fuels,
13 and I think marrying renewable energies, and I think
14 that's what we need to do.

15 With that being said, this historic
16 hearing-- Congratulations to my friend Bill Murray on
17 his first hearing here, and I want to thank you for
18 your work and Samara Swanston [applause] who has
19 always been great on these issues for making this day
20 possible. With that being said, we are now finished.
21 [gavel]

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION

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C E R T I F I C A T E

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



Date October 26, 2014