

CITY COUNCIL  
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON ENVIRONMENTAL PROTECTION

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December 4, 2015  
Start: 11:56 a.m.  
Recess: 12:08 p.m.

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

B E F O R E:

COSTA G. CONSTANTINIDES  
Chairperson

COUNCIL MEMBERS:

Stephen T. Levin  
Rory I. Lancman  
Donovan J. Richards  
Eric A. Ulrich

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

Bob Wyman  
Resident  
Upper West Side

[gavel]

CHAIRPERSON CONSTANTINIDES: Alright, good afternoon; I think we're one minute into the afternoon, but good afternoon and welcome. I am Council Member Costa Constantinides, Chair of the Committee on Environmental Protection. Today the committee will hear and vote on Intro. 0609-A of 2015, a local law to amend the Administrative Code of the City of New York in relation to the use of geothermal energy in New York City.

President Obama acknowledged this week in Paris that the United States, which has 5% of the world's population, currently ranks second in emitting the most greenhouse gases. Historically, our contribution has been significantly higher than China, India and all other nations. There is a scientific consensus that global increases in greenhouse gases and the associated current extremes in climate are primarily due to fossil fuel use.

New York City set an ambitious goal for addressing climate change in 2008, Local Law 22 of 2008, the New York City Climate Protection Act, required New York City to reduce its greenhouse gas emissions due to city operations by 3% per year over

2 10 years from a baseline of 2005 and required the  
3 City to reduce overall citywide greenhouse gas  
4 emissions by 1% per year over the next 30 years.  
5 However, just 6 years later, based upon information  
6 developed from the fifth assessment of the  
7 Intergovernmental Panel on Climate Change, it was  
8 clear that the mandate had to be strengthened. To  
9 strengthen that mandate New York City passed Local  
10 Law 66 of 2014, which requires the City to reduce  
11 citywide greenhouse gas emissions by 80% by 2050.

12 Buildings, through the use of heating  
13 fuel, natural gas, electricity, steam and biofuel,  
14 are responsible for over 70% of citywide emissions.  
15 Given this and the fact that the vast majority of  
16 existing buildings are expected to remain well beyond  
17 2050, the City stock of one million buildings  
18 represents the greatest potential source of citywide  
19 greenhouse gas emission reduction; it is therefore  
20 necessary for the City to reduce emissions from the  
21 building sector in order to comply with Local Law 66.

22 Renewable energy can be utilized to  
23 reduce emissions from buildings by increasing  
24 reliance on renewable energy technology on-site  
25 within buildings to supplant the current role fossil

1 fuels are playing in heating, cooling, hot water and  
2 cooking.

3  
4 A study issued by the Mayor's Office of  
5 Long-Term Planning and Sustainability in 2013  
6 concluded that the use of solar hot water heating  
7 systems have potential to reduce citywide emissions  
8 by 2.8%, based on the 2005 base year level by 2050.  
9 Air source heat pumps have potential to reduce  
10 citywide emissions by 4.8% and geothermal heat pumps  
11 have potential to reduce citywide emissions 2.6%.

12 Reducing the city's reliance on fossil  
13 fuel based energy sources in favor of renewable  
14 energy sources, particularly in buildings, is  
15 critical to achieving the City's goal to reduce  
16 greenhouse gas emissions 80% by 2050. In a  
17 metropolitan area average below ground temperatures  
18 are moderate to stable 50-65 °F. The City can take  
19 advantage of geothermal energy through smaller scale  
20 applications, such as the use of geothermal space  
21 conditioning and heating and cooling systems within  
22 individual buildings or groups of buildings. Ground  
23 source heating or cooling can be effective almost  
24 anywhere in the United States using a geothermal heat  
25 pump, a highly efficient renewable energy technology.

2 New York City already has buildings either using or  
3 planning to use geothermal energy with ground source  
4 heat pumps, including the Weeksville Heritage Center,  
5 the Brooklyn Children Museum; the Bronx Lion House.

6 In addition, geothermal heating and cooling with  
7 ground source heat pumps is currently being installed  
8 at St. Patrick's Cathedral. All these advantages  
9 help make these systems easy and cheap to maintain  
10 and will contribute to their long-life expectancy.

11 One final and critical advantage that  
12 these systems are better for the environment than  
13 other similarly purposed systems, all the advantages  
14 above; less equipment, efficient movement of energy  
15 and the like, directly lead to a lower pollution  
16 footprint.

17 In addition, the small amount of  
18 electricity needed to operate the system is located  
19 at a power plant and not on-site where the scrubber  
20 [sic] and other technology will reduce pollution.  
21 All these traits add to make geothermal heating and  
22 cooling the best technology in terms of greenhouse  
23 gas emissions.

24 Intro. 0609-A, as revised, calls the City  
25 to develop and to make publicly available online a

1 screening tool that can be used to determine whether  
2 installation of a geothermal system would be cost-  
3 effective for a particular building; this is required  
4 by February 1st of 2017. Starting in 2017, the City  
5 would be required to use this screening tool whenever  
6 it constructs or retrofits a city-owned building. If  
7 the tool determines that a geothermal system may be  
8 cost-effective, then a more thorough engineering  
9 analysis must be done to balance the real costs, such  
10 as systems vs. other alternatives, taking into  
11 account not only the cost of installation, but the  
12 expected utility bill savings and the social costs,  
13 such as the benefits of reduced greenhouse gas  
14 emissions. If this engineering analysis shows that a  
15 geothermal system is the most cost-effective option,  
16 it must be installed.

18 Where the use of geothermal energy is  
19 cost-effective, the analysis must also consider the  
20 option of utilizing affordable tag system coupled  
21 with a geothermal system. When coupled, use of both  
22 systems would result in construction or retrofitting  
23 into a zero carbon building.

24 Within 18 months of enactment it will  
25 also require the administration to send the City

1 Council recommendations for: 1. standards for  
2 installation and geothermal systems; 2.  
3 qualifications for system installers; 3. maintaining  
4 a public registry of qualified installers; 4.  
5 informing property owners and geothermal system  
6 installers of the benefit of coupling such systems  
7 with solar power systems, and 5. the feasibility of  
8 installing geothermal systems on the waterfront by  
9 suspending coils in surface water.  
10

11 This legislation is the best and most  
12 progressive step New York City has taken towards a  
13 more sustainable energy future that does not create  
14 greenhouse gases and does not damage the environment  
15 in the process of reducing energy. [sic] And I  
16 believe this is the... this is the first time a large  
17 city like ours has taken on using the social costs of  
18 carbon as a metric for the installation of an  
19 environmental system, so we really are making history  
20 today.

21 New York City will lead by example by  
22 building and retrofitting green and zero carbon  
23 buildings in to the future; I recommend a yes vote on  
24 the legislation. We do have someone from the public  
25 to testify; I'm gonna put them on the clock for two



1 minutes. So sir, if you'd like to quickly give your  
2 testimony. [background comment] Yeah, please step  
3 to the table there.  
4

5 And I do recommend a less [sic] vote when  
6 you call the roll. Please give your name before you...

7 BOB WYMAN: My name is Bob Wyman, Upper  
8 West Side resident.

9 I would like to strongly encourage you to  
10 vote in support of this bill, which I think is a very  
11 historic one, not only one of the, if not the first,  
12 but one of the first uses of the social cost of  
13 carbon for municipal regulations, but also I think  
14 the first time that a major city in the country has  
15 required the use of geothermal when it's cost-  
16 effective. We'll not only be reducing emissions, but  
17 also saving our taxpayers money in the future as a  
18 result of this.

19 I think it's important to look forward to  
20 say 2050 and to recognize that by then it is  
21 inevitable that the combustion of fossil fuel will  
22 not be the dominant form of heating in our cities;  
23 that we will be using things like heat pumps. It is  
24 important that we begin now the long-term process of  
25 beginning to get our real estate assets off of fossil

1 fuel consumption and onto the more sustainable site-  
2 sourced renewable energy sources like geothermal. I  
3 am very thankful to live in New York City, a city  
4 that has leaders like yourselves that can take this  
5 sort of action. Thank you very much and I hope you  
6 do support this bill.  
7

8 CHAIRPERSON CONSTANTINIDES: Thank you,  
9 Mr. Wyman for your testimony. And before we call the  
10 roll, you know President Obama said something that  
11 resonated with me; he said we're the first generation  
12 to feel the effects of climate change and the last  
13 generation that will have the opportunity to do  
14 something about it. So this is a good step forward.  
15 I wanna make sure we thank the staff; for her great  
16 work, Samara Swanston; thank you, Samara for all of  
17 your leadership, and Bill Murray as well, our Policy  
18 Analyst, thank you both. I wanna thank my  
19 legislative staff, Nick Widzowski and my Chief of  
20 Staff Nick Roloson; Shachar Sharon. With that, I  
21 recommend a yes vote. And oh, I wanna recognize both  
22 Rory Lancman from Queens and Steve Levin from  
23 Brooklyn; thank you both for being here and for your  
24 leadership as well.  
25

2 COMMITTEE CLERK: William Martin,  
3 Committee Clerk, roll call vote, Committee on  
4 Environmental Protection, Introduction 0609-A. Chair  
5 Constantinides.

6 CHAIRPERSON CONSTANTINIDES: I vote aye.

7 COMMITTEE CLERK: Levin.

8 COUNCIL MEMBER LEVIN: I vote aye; I  
9 wanna congratulate Chair Constantinides on this very  
10 important piece of legislation and I enthusiastically  
11 wanna add my name to the list of sponsors, and with  
12 that I vote aye. Thank you very much.

13 COMMITTEE CLERK: Lancman.

14 COUNCIL MEMBER LANCMAN: Aye.

15 COMMITTEE CLERK: By a vote of 3 in the  
16 affirmative, 0 in the negative and no abstentions,  
17 item has been adopted.

18 CHAIRPERSON CONSTANTINIDES: We'll leave  
19 the vote open for half-an-hour. I wanna wish my  
20 colleague Steve Levin a happy birthday, [background  
21 comment] belated birthday, so thank you, sir. And  
22 we'll leave it open for half-an-hour. Thank you.

23 [gavel]

24 Rory, thank you. [background comments]  
25 [pause] We're gonna gavel this closed; we don't have

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any other council members who are on the way, so we  
are gonna gavel this closed. Thank you.

[gavel]

C E R T I F I C A T E

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



Date December 9, 2015