

**TESTIMONY OF THE MAYOR'S OFFICE
BEFORE THE NEW YORK CITY COUNCIL
COMMITTEE ON
ENVIRONMENTAL PROTECTION**

June 12, 2019

I. OVERVIEW

Good afternoon. My name is Mark Chambers and I am the Director of the Mayor's Office of Sustainability (MOS). I want to thank Chairperson Constantinides and members of the committee for this opportunity to testify on behalf of the de Blasio Administration on Introduction 1399 related to the creation of a department of sustainability and climate change and Introductions 272 and 1055 related to methane leaks.

This is the first time I have had the opportunity to testify in front of this Committee since the Council passed the landmark Climate Mobilization Act. I would like to thank the Speaker, the Chair and all the staff for their dedication, leadership, and partnership with the Administration on creating a new and innovative legal regime to fight climate change. From mandating carbon emission reductions in existing buildings to requiring solar panels and green roofs on new buildings to enabling the financing to get this necessary work done, what we did together was nothing short of setting a new national standard for fighting climate change and creating jobs. What we did together proves the Green New Deal can be done.

II. A TRACK RECORD OF CLIMATE ACTION

In October 2012, the impacts of Hurricane Sandy brought home the reality that climate risks were much more urgent than many had thought. In the aftermath of the storm, the Administration not only focused on the immediate task of rebuilding and getting New Yorkers back into their homes, but we also concentrated on putting the structures and systems in place to prepare the city and our residents for the new realities of climate change.

In 2014, Mayor de Blasio created the Mayor's Office of Sustainability (MOS) and the Mayor's Office of Recovery and Resiliency (ORR), which is now the Mayor's Office of Resiliency (MOR), out of what was previously known as the Office of Long-term Planning and Sustainability (OLTPS), to ensure the city had the dedicated resources and expertise to both reduce our contribution to climate change by dramatically cutting carbon emissions, and to strengthen our resiliency and reduce our vulnerability to the inevitable impacts of climate change. And in 2016, Mayor de Blasio created the Office of Climate Policy and Programs (CPP) to lead the City's global climate partnerships, to take the fight straight to the fossil fuel industry, and to manage OneNYC, the City's Green New Deal.

With direct reporting to the First Deputy Mayor, these three offices are leading the Administration's efforts to institutionalize our climate work across city agencies and operations, and to fill the void of leadership left by the current Federal government. Our offices work with all city agencies and in close collaboration with all Deputy Mayors. This structure is delivering results for New Yorkers. Here are just some of the highlights:

- We have committed to the goals of the Paris Climate Agreement and taken bold steps to reduce greenhouse gas emissions from every sector. We're on the path to achieve carbon neutrality by 2050 and 100% clean electricity by 2040.
- We're rapidly expanding renewable energy. Since the beginning of 2014, installed solar capacity has increased sevenfold, and we now have enough solar installed across the city to meet the needs of nearly 50,000 households. We're also pursuing a deal to power 100% of City operations with clean electricity sources.
- We are implementing a \$20 billion resiliency strategy to protect our city and residents from the impacts of climate change that includes implementing complex coastal protection projects, mitigating extreme heat, hardening critical infrastructure, helping communities and small businesses prepare for climate change, and much more.
- We are holding accountable the companies that caused this climate crisis in the first place by suing the five investor-owned fossil fuel companies most responsible for climate change. We're divesting \$5 billion from city pensions and doubling our investments in climate change solutions to \$4 billion.
- We just issued OneNYC 2050, the City's Green New Deal, in April, setting forth additional bold actions to confront our climate crisis, achieve equity, and strengthen our democracy. And all of our climate actions will create tens-of-thousands of good-paying jobs for New Yorkers.
- We are also creating a culture of sustainability and resiliency across all agencies. While it's not our individual offices' role to build schools and parks and roads, we are embedding climate-smart thinking across the City government. This means that when we plan and when we build, we're doing it with sustainability and resiliency considerations factored in from the very beginning.

All of this work has been supported and augmented by our partnership with the City Council, advocates and stakeholders. At every step – from policy, program, and project design to implementation and construction – we prioritize public input to ensure that each climate action we're taking not only meaningfully addresses the climate crisis but also addresses inequity.

This progress not only benefits New Yorkers - it also serves as a model to other cities around the nation and the world. In 2015, New York City became the first city in the world to release a comprehensive resiliency strategy, and in 2017 we became the first city in the world to align our sustainability efforts with the Paris Climate Agreement and its goal to limit global temperature rise to 1.5 degrees Celsius. Both of these steps, along with many of New York City's other resiliency and sustainability initiatives, were groundbreaking at the time. Now, they have been emulated all over the world. Through networks such as the C40 Climate Leadership Group, Carbon Neutral Cities Alliance, 100 Resilient Cities, the ICLEI network, and others, we are working with other cities to scale up effective solutions.

III. INTRODUCTION 1399

If there's anything like a silver lining to fighting climate change, it is that the Administration and the City Council are in lock-step when it comes to assessing the severity of the crisis facing our city and the urgency with which we must act. That's precisely why the Administration has vested responsibility with leading the City's climate action in mayoral offices. Climate change is a cross-cutting issue, requiring the specialized expertise of almost every city agency. By giving MOS, MOR, and CPP the power to coordinate agency efforts, we are able act with the urgency our residents demand.

Having said that, while the Administration believes that our current climate teams are structured appropriately to meet the challenge, New York City residents need every tool at our disposal in this fight. We share the goals you put

forward in Intro 1399 – to prepare New York for the impacts of climate change, build a more sustainable city, and effectively respond to, and recover from climate emergencies. In the coming months, we look forward to discussing strategies for effectively meeting these goals together.

IV. INTRODUCTION 272 & 1055

I would now like to discuss two bills related to methane leaks being heard today. I want to emphasize at the outset that the Administration strongly supports identifying and repairing methane leaks for environmental and safety reasons. We are pleased to have worked with the Council in 2016 on passing a series laws to better protect our residents from gas leaks.

Introduction 272

Introduction 272 requires the Department of Environmental Protection (DEP) to inspect, identify, and report on all methane leaks in City buildings. Methane in and around buildings is most likely from natural gas that is used for heating, cooking or hot water production in the building. Natural gas is hazardous in buildings because it is flammable and because it could displace oxygen in a confined space. Natural gas utilities add an artificial scent to natural gas, so that people can smell it indoors and know that there is a health risk. In instances where smell is detected, people should call the gas company or 911 immediately.

As for the work in city buildings, individual agencies are in charge of managing and maintaining their own buildings, and a centralized process with one department in charge will not necessarily lead to efficiencies or added safety. We understand that identifying and repairing natural gas leaks is critical both for safety and sustainability reasons, and we look forward to working with the City Council on amendments that ensure the appropriate agencies are responsible for checking and preventing gas leaks.

Introduction 1055

Although the Public Service Commission governs how the utilities respond to methane leaks, we continue to push strongly at the State for stronger procedures for the utilities to detect and promptly repair methane leaks. For instance, through the Con Edison rate case currently underway, the Administration has submitted public testimony to the PSC stating that the utility must take a more proactive and timely approach to repairing all types of methane leaks, not just the large volumetric leaks as identified in Introduction 1055. And here in New York City we are also actively supporting the utilities to improve their methane leak detection capabilities. Both gas utilities serving New York City are piloting approaches to integrate advanced leak detection technologies, as well as surveying and mapping leaks and making that information publicly available on their websites.

V. CONCLUSION

I would like to thank the Committee for this opportunity to discuss our work to address the climate crisis. We look forward to your questions.

Thank you.

Gas Safety Inc.
16 Brook Lane
Southborough, Massachusetts
GasSafetyUSA.com

Protecting Your Environment

Concerns

Safety

Climate

Health

Trees

Int. No. 1055

By Council Member Constantinides

A Local Law to amend the administrative code of the city of New York, in relation to the examination, survey and mapping of all methane leaks in New York City

Be it enacted by the Council as follows:

Section 1. Section 24-424 of title 24 of the administrative code of the city of New York is amended by adding a new subdivision (d) to read as follows:

(d) An office or agency designated by the mayor shall examine, survey and map all methane leaks, both hazardous and nonhazardous annually within the city. The mayor shall also provide written notification to any relevant gas utility of the city's intent or the city's grant of consent, to any other entity to open the ground on any public way for any nonemergency purpose including to survey

Traditional Gas Detecting Equipment

Flame Ionization Detectors

Infrared Technology

OMD

Combustible Gas Indicators

Soap

Cavity Ringdown Spectrometer Technology

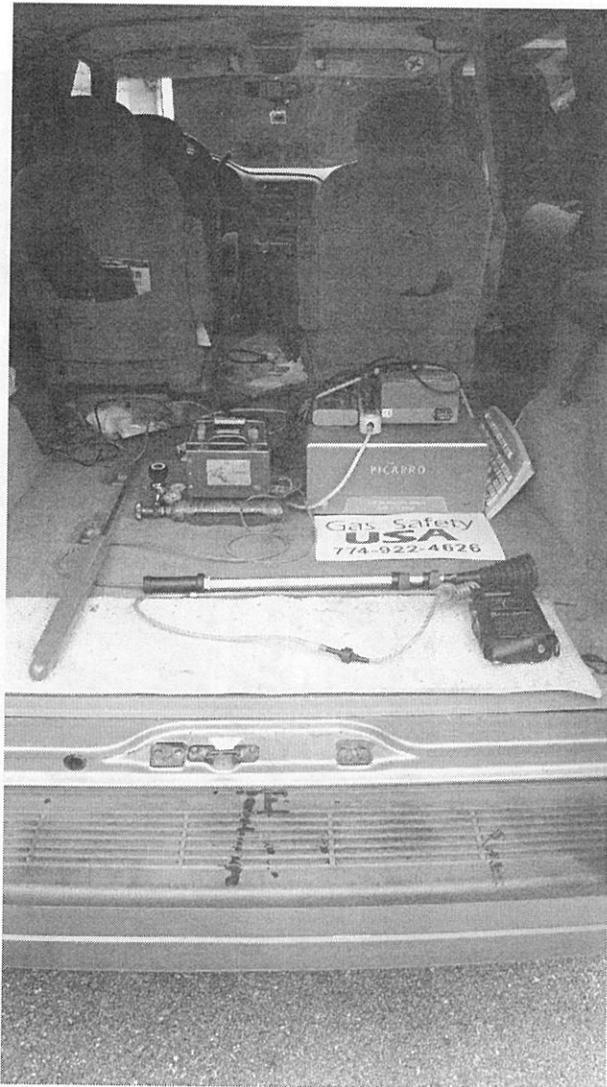
PPB (Parts Per Billion) sensitivity

Records CH₄ levels each second

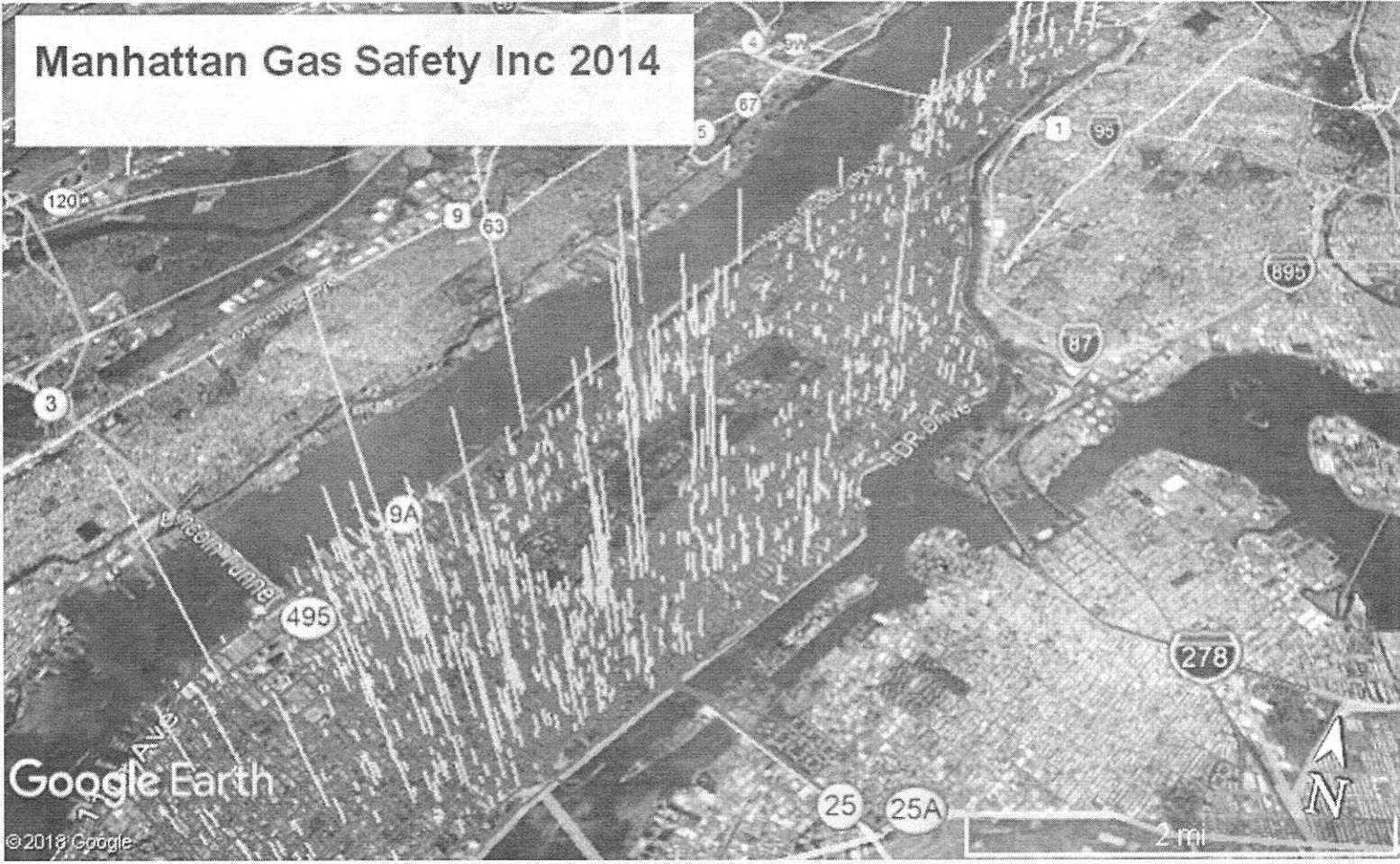
Tags each CH₄ reading with GPS coordinate

Enables GIS mapping of all readings





Manhattan Gas Safety Inc 2014



ConEd Mains Reported to PHMSA 12.31.2018

822 Miles Bare Steel

1003 Miles Cast Iron

4371 Total Main Miles

42% Leak Prone Pipe compared with 1.8% Nationally

ConEd Services reported to PHMSA 12.31.2018

59987 Bare Steel Services

375898 Total Services

16% Leak Prone Service Pipes compared to 2.1% Nationally

ConEd Services reported to PHMSA 12.31.2018

Boston Paper

Mapping urban pipeline leaks: methane leaks across Boston. *Environmental Pollution* 173:1-4,

785 Miles of streets surveyed

37% Leak Prone Mains

2.50 ppm Threshold for Leaks

3356 Leaks

4.3 Leaks Per Mile

Washington DC Paper

Natural gas pipeline leaks across Washington, D.C. *Environmental Science &*

Technology 48:2051-2058

1500 Miles Surveyed

43% leak Prone Mains

2.50 PPM Threshold for Leaks

5893 Leaks

3.93 Leaks per Mile

Cincinnati

Environ. Sci. Technol. Lett. 2015210286-291

750 Miles Surveyed

2% Leak Prone Mains

2.5 ppm Threshold

351 leaks

.46 Leaks per mile

Durham

Environ. Sci. Technol. Lett. 2015210286-291

2.5 PPM Threshold

0% Leak Prone Mains

595 Miles

132 Leaks

.22 leaks per mile

ConEd Leaks 6.10.2019

Mains Reported to PHMSA 12.31.2018

4371 miles

52% Leak Prone Mains

No PPM Threshold

846 Leaks

.19 Leaks per mile

Con Ed leads the nation... or does it?

Boston	Washington DC	Cincinnati	Durham	NY City 2019	NY City 2014
37% Leakprone	43% Leakprone	2% Leakprone	0% Leakprone	~50% Leakprone	52% Leakprone
4.3 Leaks/Mile	3.93 Leaks/Mile	0.46 Leaks/Mile	0.22 Leaks/Mile	0.19 Leaks/Mile	4.25 Leaks/Mile

Manhattan Study

Environ. Sci. Technol. Lett. 2015210286-291

247 Miles Surveyed

2.5 PPM Threshold

1050 Leaks

4.25 Leaks per Mile

ConEd

Highest Percentage Leak Prone Pipe

Highest study level leak rate 4 Leaks Per Mile

Industry reported lowest rate .19 leak per mile

NGRID

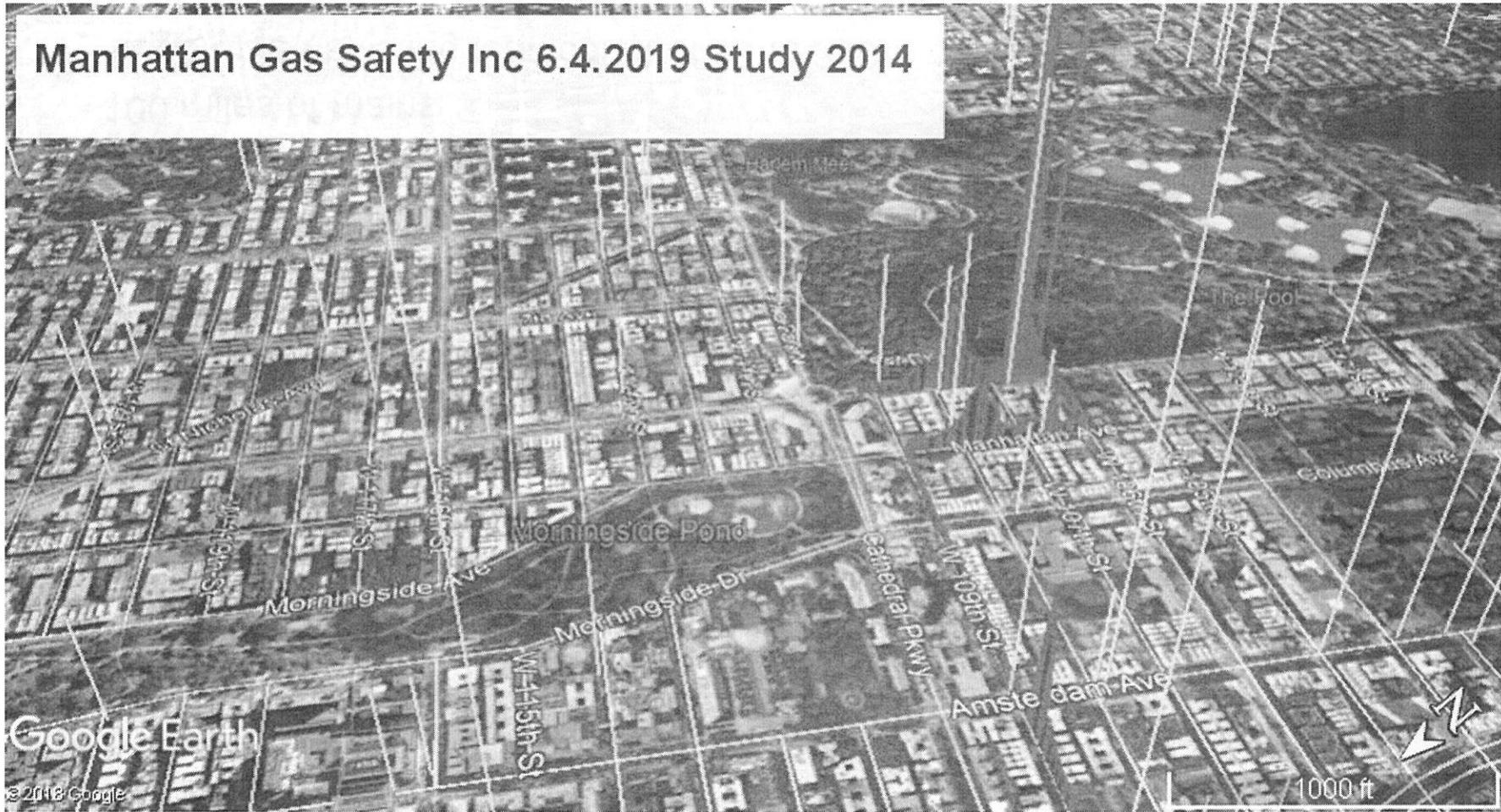
2669 Leaks in NYC on 6/10/2019

Less than 1 leak per mile

Upper Broadway Gas Safety Inc 2014, 6.4.2019



Manhattan Gas Safety Inc 6.4.2019 Study 2014



Gas Safety Inc Comprehensive Audits

Weston Massachusetts - ongoing near completion

100 miles of main

Added over 130 leaks to existing 150 leak count

Acton Massachusetts 2017

95 miles of main

Doubled Leak Count from 115 -230 leaks 2017

Fitchburg Ma 2015 PHMSA TAG Grant

100 miles of mains

Quadrupled existing leak count of 50 to 230

Why These Leaks Matter

Building Explosion

Manhole Explosion

Climate

Health

Natural Gas Manhole Explosions

The majority of manhole covers across NYC have been drilled with holes to allow leaking gas to escape. When fires start, the leaked gas is drawn into the manhole by the fire and can reach explosive limit. Winter exacerbates the problem with snow and ice cover that both closes the vent holes and also leads to more water and salt infiltration into electric manholes that cause the corrosion of the wires... read this article:

<https://www.nytimes.com/2019/02/21/nyregion/winter-weather-manholes-pipes.html>

“To alleviate the threat, the officials said, the utility switched most of its manhole covers to vented ones that allow gases to escape, “so they cannot form a combustible amount,” Mr. McHugh said.

“It also lets smoke escape, which can tip off the public to notify the authorities,” he added.

Winter can also bring an increase in gas-line breakages. Con Edison, which maintains 4,300 miles of gas mains in and around New York City, records about 500 leaks — most of them nonemergencies — in a typical month, but many more in winter.”

Park Slope Manhole Explosion

<https://newyork.cbslocal.com/video/3664755-manhole-explosion-rocks-park-slope-brooklyn/>

Manhole fires explosions across NYC:

<https://newyork.cbslocal.com/2019/03/02/brooklyn-manhole-fire-east-flatbush/>

Climate

Super Emitters

By eliminating the top 7 per cent emitting leaks in any given distribution system we can save 50% of the total emissions.

Leak Extent

By measuring any given leak's "migration area" or "leak extent" studies have determined that the larger the leak extent the higher the emission.

Health

Recent studies have determined that natural gas contains carcinogens like benzene, toluene and xylene along with over 100 other volatile organic compounds.

Anyone breathing natural gas is also inhaling these carcinogenic toxins.

Trees

Leaking natural gas kills grass, shrubs and trees.

Before instrumentation, gas leaks were detected by observing vegetation abnormalities.

Trees impact our health and the climate

Conclusion

ConEd and NGRID may be vastly under reporting, and or not detecting thousands of gas leaks across NYC

ConEd and NGRID are fully aware of the CRDS technology and have resisted the equipment due to the number of leak investigations and subsequent leaks the equipment documents

GSI is fully capable to identify all leaks in NYC or any location

By identifying and requiring repair of these leaks we will greatly enhance the public safety, reduce greenhouse gas, improve public health and protect property from leaking natural gas.

Thomas E. Bennett
VP, Gas Asset Management
National Grid
25 Hub Drive
Melville, NY 11747

June 12, 2019

Ms. Samara Swanston
Legislative Counsel
New York City Council
Committee on Environmental Protection
City Hall
New York, NY 10007

Re: Int 272 - In relation to reducing methane emissions
Int 1055 - In relation to the examination, survey and mapping of all
methane leaks in New York City

Dear Madams and Sirs:

National Grid appreciates the opportunity to submit the following comments regarding Int 272 and Int 1055 for your consideration.

National Grid's gas distribution utilities operating in the City of New York, The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY") serving Brooklyn and Queens, and KeySpan Gas East Corporation d/b/a National Grid ("KEDLI"), serving the Rockaways, (collectively, "National Grid" or "Companies") are focused on reducing methane emissions and methane leak identification, mapping, and repair.

Regarding methane emission reduction, National Grid continues its commitment to replace aging infrastructure that is the main source of new leaks. Between 2014 and 2018, KEDNY replaced approximately 250 miles of leak-prone pipe ("LPP"), preventing approximately 276 metric tons of methane or 7000 metric tons of carbon dioxide equivalent emissions over that period. Currently, KEDNY is spending approximately \$500M increasing to \$730M by 2023 to replace 85 miles a year of LPP, seal large diameter cast iron pipe, line large diameter LPP, and replace associated services. Additionally, through commitments made in rate-setting proceedings, KEDNY has reduced its leak backlog by 40% since 2013. KEDNY has consistently met and

exceeded leak reduction targets, has committed to keep reducing the leak backlog further in future years, and is subject to penalties for failing to reach targets.

Additionally, as part of National Grid's ongoing effort to reduce its carbon footprint and sharpen our focus on natural gas safety, the Companies worked with the New York State Public Service Commission (PSC), New York City, and the Environmental Defense Fund to develop a program to identify and reduce emissions from large volume, non-hazardous leaks of methane gas. This effort is not mandated by regulations. The program occurred primarily in KEDLI's service territory, but also included limited participation in KEDNY's service territory. Both KEDNY and KEDLI have proposed to continue this work in the Companies' current rate filing.

The Companies also:

- Provide an online map of leaks available at: <https://www.nationalgridus.com/NY-Home/Natural-Gas-Safety/Gas-Leak-Map>
- Perform an annual gas leak survey of our entire gas distribution system that exceeds federal and state requirements
- Work closely with the Fire Department of New York to respond to gas odor calls
- Respond to all natural gas odor calls, on average, within 30 minutes to make the area safe and investigate the source of the leak
- Work closely with the New York City Department of Buildings to establish requirements and protocols related to gas pipe inspections in buildings and the mandated use of residential methane detectors
- Evaluate new advanced leak detection technologies including a partnership with the non-profit Environmental Defense Fund, Google Earth Outreach and the Colorado State University, to use Google Street View mapping cars specially equipped with methane sensors for use in prioritizing leak repairs and the repair and replacement of LPP
- Participate in the "Smell Gas, Act Fast" campaign, a comprehensive, multi-channel and multilingual campaign to educate customers and the public at large about gas safety and the urgency of reporting gas leaks
- Distribute free residential methane detection devices (similar to smoke and carbon monoxide detectors) to customers

The Companies current rate filing features comprehensive proposals of programs further supporting methane reductions and the decarbonization of supply.

Regarding the proposed bills, Int 272 and Int 1055, National Grid believes the proposals are generally duplicative of the Companies' methane reduction programs and mandated programs including leak surveys and inspections that gas utilities are required to perform. National Grid is concerned that these proposals may result in resource constraints of skilled professionals to perform both required work by utilities and the City's proposed programs for inspecting the same facilities, as well as higher costs to customers and City residents, without significant incremental benefits.

In particular, National Grid is concerned that new requirements for additional third-party leakage surveys will divert the already constrained resources for utility repair of leaks. Moreover, Int 1055 would seem to require the City of New York to perform survey work on utility gas systems that the utilities already survey annually. This essentially results in city residents paying twice – once through utility rates for the utility survey, and again through the City tax for the City survey. It is also unclear how such coordination would occur for the City to access utility facilities and how the City would ensure 3rd party contractor compliance with State and Federal laws requiring operator qualified, specially trained personnel to perform work on utility gas facilities.

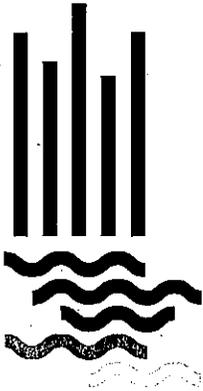
In short, National Grid supports methane emission reduction efforts; however, assessing methane leaks should be left to the utilities, the owners responsible for operating the system. Significant efforts to reduce methane emissions and detect and repair leaks are already in place by the utilities. Additional, duplicative inspection and mapping efforts may add significant costs to NYC citizens without apparent substantial benefits. National Grid looks forward to working with the City to continue to improve and collaborate on methane emission reduction.

Sincerely,

/s/ Thomas E. Bennett

Thomas E. Bennett

VP, Gas Asset Management

FOR THE RECORD**Public Testimony****June 12, 2019****New York City Council Committee on Environmental Protection****Re: Int 1399-2019****Creation of a department of sustainability and climate change and repealing section 20 of chapter 1 of the New York city charter.****Submitted by Roland Lewis, President and CEO
Waterfront Alliance**

Waterfront Alliance is a non-profit civic organization and coalition of more than 1,000 community and recreational groups, educational institutions, businesses, and other stakeholders. Our mission is to inspire and enable resilient, revitalized and accessible coastlines for all communities.

The transition to a low carbon economy, and strategies for much needed resiliency and adaptation infrastructure, should go hand in hand. There is much to do to get us to 80 x 2050 and to prepare our city for sea level rise and coastal storms, and it makes sense to have a clear and consolidated hub for these efforts.

That is why the Department of Sustainability and Climate Change is a welcome approach. **Waterfront Alliance's resiliency task force, a group of more than 100 local stakeholders and experts, has been exploring these very issues. In this forum, governance reform is routinely cited as central to safeguarding the City from the climate challenges before us. We need accountability for climate change and resiliency issues that lasts beyond electoral cycles.** Our current structure of Mayoral Offices is too easy to dismiss or change with a changing administration, and a Department would ensure a longer-term focus on these issues.

Further, **integrating climate change and sustainability comprehensively into how we plan, track, regulate, prioritize, incentivize and build will reap efficiencies to meeting multiple goals (for example, combining energy retrofits and flood resiliency retrofits).** We need to fundamentally adapt and build resilience into every aspect of land use and vulnerable infrastructure in the coastal zone, from district-scale resiliency measures to retrofits to the planning and building of sewers, buildings, and more. This will require **balancing priorities and sometimes competing interests:** green and grey infrastructure, natural landscape features, and elevation, or even relocation and safe quality housing options in areas of highest flood risk.

These measures, **designed well and with the input of community leaders**, can improve the lives of our residents, the health of our infrastructure, the safety of our jobs and businesses, and our recreation options and environmental health.

Further, the proposed specificity in the legislation around **tracking and reporting** on milestones and progress towards goals is an important inclusion.

One of key questions we pose with respect to this legislation is **having a clear understanding of how this Department would relate to existing agencies and initiatives and whether there are redundancies that need to be examined**. We know for example that 14 different City, State and Federal agencies are involved with waterfront decision-making in New York City ranging from New York City Planning (specifically the Office of Waterfront & Open Space) to NYC Parks to HPD and the US Army Corps. This list expands when considering the many additional agencies managing infrastructure or services within areas of flood risk.

In addition, there is pending legislation to establish a Mayor's Office of the Waterfront which also aims to establish a **holistic approach by integrating capital projects, resiliency plans and waterfront management under one roof, instead of through a siloed approach, which not only helps with resiliency projects but with the operations of maritime industries across the City**.

Similarly, the proposed legislation should be carefully developed to ensure we are thinking about sustainability and resiliency in a truly integrated way. For example the "Interagency Green Team" is a great opportunity to develop a team that is tasked with coordinating across agencies to make sure that they are tracking and meeting progress towards all city-wide sustainability and resiliency goals.

The **key functions and powers** of this new department could use additional clarification in the following regard:

- **Comprehensive resiliency communication, planning and integration with DCP:** Currently waterfront planning resides within the Department of City Planning's Office of Waterfronts and Open Space. And yet, this function should be critically integrated into the way that we plan for, design, and implement coastal resiliency projects and programs. How would this new Department ensure that integration?

- **Many agencies at the City, State and Federal level are involved in flood risk reduction measures: Currently, there is no continuous responsible party for how we adapt our city to sea level rise and climate change.** Leadership and decision-making authority are needed in relation to the planning, design, financing, construction, and maintenance of district-scale flood risk reduction measures. Will this Department be given clear lead management responsibility or decision-making authority in relation to the many other agencies involved in these projects. How might this Department structure ensure that?
- **Budget, funding, and financing:** Building resilience to climate change and increasing sustainability may require increases in up-front investments, but will save money for the city and taxpayers in the long-term. How might this department serve as a vehicle to ensure that the financing and funding of resiliency and sustainability projects meet citywide goals and are executed with an equitable approach?

Thank you for the opportunity to comment today.

N Y L P I

**JUSTICE THROUGH
COMMUNITY POWER**

**Testimony of Asha Brundage-Moore, New York Lawyers for the Public Interest - Environmental
Justice Program Summer Legal Intern, New York City Council Committee on Environmental
Protection regarding Introduction No. 1399
June 12, 2019**

Thank you, Chair Constantinides and members of the committee, for the opportunity to speak with you today. My name is Asha Brundage-Moore and I am a student at NYU Law and summer intern at New York Lawyers for Interest. I am here today to speak in support of Introduction 1399. New York City – and the Council Members here in particular – is a leader in addressing climate change. To continue this progress, the city must not only continue to pass groundbreaking legislation, but must also ensure there is accountability, enforcement and follow through by the City.

As we all know, creating a greener, more sustainable city in the face of climate change is a complex, multi-dimensional problem that demands a coordinated response. At New York Lawyers for the Public Interest, we have worked for three decades to advocate for low-income communities and communities of color in the New York City area that face disproportionate environmental hazards. The impacts of climate change and unsustainable practices like fossil fuel dependence and poor solid management fall hardest on the communities we partner with. We support Introduction 1399 because it would enable our big city to better address the complex problem of climate change and sustainability by coordinating the City's sustainability strategies, increasing oversight, and bringing City organization in line with peer cities.

2019 has been a busy year in the fight against climate change, with legislation on reducing building emissions, green roofs, and bag fees all passing in the first six months of the year. The implementation of each of these laws will be overseen by different city departments. Many different sectors, like buildings, vehicles, and power plants contribute to climate change, and the consequences of climate change, like rising sea levels, impact many parts of the City's infrastructure. Introduction 1399 would

help coordinate sustainability initiatives across sectors so that New York City residents could have a central clearinghouse for information about energy efficiency, local composting and installing rooftop solar. This would help the new Department achieve its goal of educating the public on climate change and sustainability initiatives. A single Department of Sustainability and Climate Change would also help facilitate effective communication between other relevant agencies.

Introduction 1399 advances the City's climate change goals by ensuring continuity and oversight of the City's sustainability efforts. Transitioning to a more sustainable city is an important long-term goal and moving oversight of sustainability and climate change policy out of the Mayor's office reduces the fluctuations that can come from changing administrations. It also allows for real oversight from the City Council, who can call hearings and request testimony from the new Commissioner, to ensure the Department is doing everything necessary to achieve its goals.

Many other US cities at the forefront of the fight against climate change including Seattle, Denver and Miami use a Department of Sustainability as a hub for all sustainability related initiatives.

Introduction 1399 is a sensible way to move forward addressing not just the issue of climate change but also resiliency and civic engagement. We look forward to continuing to work with the Council to advance this issue.

Thank you.

Asha Brundage-Moore, Environmental Justice Summer Legal Intern
New York Lawyers for the Public Interest
151 West 30th Street, 11th floor
New York, NY 10001
rspector@nylpi.org
(212) 244-4664

FOR THE RECORD

Philip H. Kahn
phkahn@hotmail.com
New York City Chapter
Citizens' Climate Lobby
June 12, 2019

Committee on Environmental Protection, New York City Council

**Hearing on June 12, 2019 Concerning Proposed Legislation: Int 1399-2019; Int
1055-2019;
and Int 0272-2018**

Thank you very much for the opportunity to comment on the proposed legislation that is the subject of this hearing. I am Co-Leader of the New York City Chapter of Citizens' Climate Lobby, a national organization of local chapters of volunteer citizens dedicated to socially just action to mitigate climate change. We strongly support the City Council's and City Administration's efforts to proactively address climate change, including the recently based Climate Mobilization Act. This battle must be fought on all fronts, federal, state and local.

Comments on Int. No. 1399

We strongly support elevating the office of sustainability to a City Department. As the impacts of climate change continue to increase, this department should take on an ever-expanding role in city governance, especially in city planning, infrastructure, and transportation. We applaud the proposed legislation mandating that the department shall develop and help implement a long-term sustainability plan for the city that includes reducing the city's greenhouse gas emissions; promoting the generation of carbon emissions free electricity within the city, protecting city infrastructure and coastal neighborhoods from sea level rise and storm surge; reducing its solid waste footprint; and protecting the quality of its parks and open space and coastlines.

Comments on Int. No. 1055 and Int. No. 0272

As methane is a very potent greenhouse gas leading to climate change, we support legislation mandating city oversight of: a) leaks from the distribution of natural gas in the city by gas utilities; and b) the levels of methane in city owned buildings and the rest of the city's buildings. Considering the potential cost and complexity of this effort, we advise that the city commission an independent study to devise practical ways to implement such oversight, and to estimate the quantitative benefits and costs of such oversight. Since it is in the gas utilities' interests to minimize leaks for cost and liability reasons, as part of the study, the city should dialogue with the gas utilities to determine exactly what procedures the utilities use to monitor their distribution systems. The city's program should build on what the utilities are doing now.

The accurate measurement of methane in buildings is not a trivial exercise. Safety considerations motivate building management to locate and repair all methane leaks in the buildings they manage. Considering how rare gas explosions are in the city, large leaks in buildings are largely being handled. The opportunity that this legislation raises is the elimination of chronic lower level leaks that may persist for a very long time.

We recommend that a public awareness and education component be added to this legislation, as the benefits of limiting leaks of methane include the safety of our buildings, the health of our buildings' occupants, and the mitigation of climate change. Such an education component should include guidelines for building operators as well building occupants who utilize devices that consume natural gas.

FOR THE RECORD

Thank you to the City Council's leadership on climate change. The world is looking at NYC as both a leader in addressing the two existential threats of climate change and a presidential administration hell-bent on destroying our values and future. We must be bold and fast if we want to make real progress.

I applaud the development of a NYC Department of Sustainability but with some clear provisos.

1. The new department must be well-funded so that it can do its muscular job. A poorly funded department will be a sham.
2. It must engage communities, especially communities most affected by climate change and inequality with real power and participation in decision making. We cannot have a corporate-heavy advisory board and decision-makers or we run the risk of serving profits rather than the people of NYC and the future of our planet.
3. The new department must create a clear plan with specific goals, timelines, processes, oversight, measurements and enforcements to assess continued progress. This plan needs to create a model for overall city centralized planning with strong input from communities to ensure that we get what we need for our city and the many subsets within it.
4. Finally, we need a plan that will prioritize the development of publicly-owned and governed renewable energy. Trade Unions for Energy Democracy, a global organization of over 50 unions, mostly in Europe, Africa, Asia and Latin America, including my union, has had extensive experience watching private capital investing in renewable energy and then pulling out because renewables are just not immediately profitable, and capital requires returns on its investments on a quarterly basis. CUNY's International Program for Labor, Climate and Environment, in concert with TUED, has done extensive research on this dearth of capital investment in renewables and concludes that only public investment, ownership and governance can stay the long-term course to produce the renewable energy we need. Eventually these enterprises can break even.

I implore you to have as a bedrock of the new Dept of Sustainability, a plan to develop renewable energy such as off-shore wind, solar, geo-thermal, that is owned by the City of New York. Bonds could be floated to support this effort with guaranteed returns on a long-term basis, once these renewables develop and can charge customers reasonable rates for our energy. These bonds could be purchased as a solid long-term investment by individuals, pension funds and others with an eye toward safe and responsible investments. These new enterprises will create tens of thousands of good union jobs. We cannot make the same mistake as the health care system, the mistake of allowing profits to be extracted from a service and basic need. We will need all the resources we can get to survive the climate crisis and perhaps thrive in a climate changed environment.

NYC can lead the way with a strong, well-funded, citizen-supported, public-serving Dept of Sustainability. We applaud City Council's effort to move on this critical issue.

Nancy Romer, Ph.D.

Professor Emerita, Brooklyn College

Professional Staff Congress of CUNY, Environmental Justice Working Group

Administrative Team, Peoples Climate Movement-NY

Lisa DiCaprio, Sierra Club Statement for June 12, 2019 City Council Committee on Environmental Protection hearing in support of Int. 1055-2018 Int. 0272-2018 and Int. 1399-2019 [4 pages]

My name is Lisa DiCaprio. I am a professor of Social Sciences at NYU where I teach courses on sustainability. I am also the Conservation Chair of the Sierra Club NYC Group and am speaking today on behalf of the Sierra Club to express our support for Int. 1055-2018, Int. 0272-2018, and Int. 1399-2019.

These bills are especially important given the Fall 2018 UN Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5° C and the U.S. National Climate Assessment, the 2019 NYC Panel on Climate Change report and, most recently, the May 2019 UN report on Biodiversity and Ecosystem Services.¹

I will begin with Int. 272-2018, introduced by Council Member Donovan Richards, which focuses on identifying and repairing methane leaks within buildings, and Int. 1055-2018, introduced by Council Member Costa Constantinides, which relates to “the examination, survey and mapping of all methane leaks in New York City.”

These two bills address the public health risks from dangerous gas leaks and complement the measurement of methane emissions in NYC’s annual, mandated Inventory of Greenhouse Gas Emissions.

NYC’s methane footprint actually begins in the shale gas fields of states like Pennsylvania and includes the hundreds of miles of pipelines, such as the Spectra Pipeline, that transport fracked gas to NYC. Within NYC, we have a vast natural gas infrastructure that comprises the gas mains in the streets, the service lines that bring gas from streets to buildings, and all the gas pipes within buildings for gas boilers, gas washers and dryers, and gas stoves.

An accurate measurement of methane emissions within NYC is crucial as, over a 20-year period, methane is 86 times more effective than carbon dioxide in trapping heat in our atmosphere.

Almost six years ago, Anthony R. Ingraffea, a professor of civil and environmental engineering at Cornell University, highlighted the importance of reducing methane emissions in a July 29, 2013 New York Times OpEd. “Gangplank to a Warm Future.” As he wrote, “When burned, natural gas emits half the carbon dioxide of coal, but methane leakage eviscerates this advantage because of its heat-trapping power... Because of leaks of methane, the main component of natural gas, the gas extracted from shale deposits is not a ‘bridge’ to a renewable energy future — it’s a gangplank to more warming and away from clean energy investments.”²

To protect public safety and facilitate the reduction of methane emissions, we recommend new legislation in the near future mandating the installation in all new buildings of electric or electromagnetic stoves, electric washers and dryers, and heating and cooling systems that do not require fossil fuels.

By 2030, 70% of the electricity distributed by New York State utilities must be obtained from renewable sources. As our grid becomes greener so, too, will the buildings that rely on electricity instead of oil or natural gas.

The Sierra Club also supports Int. 1399-2019 introduced by Council Member Constantinides, which would replace the existing Office of Sustainability with a new Department of Sustainability and Climate Change.

The provisions of this bill include a mandated identification and assessment of sustainability indicators that not only reduce our negative impact on the environment, but also contribute to the vibrancy of ecosystem services in NYC. The positive indicators include "prevention of biodiversity loss," "increasing the number and quality of trees in the city urban forest," "increases in renewable energy generation," and "air quality improvements."

In an interview entitled "Redesigning Cities with Nature's Technology," Janine Benyus, a biologist and pioneer of biomimicry (innovations inspired by nature), explains the concept of ecological performance standards for cities, which are comparable to these positive sustainability indicators. Instead of degrading nature with greenhouse gas emissions, air and water pollution, impermeable surfaces, and increased temperatures (i.e. the urban heat island effect), cities must produce ecological services, such as filtering air and water, storing water and releasing it slowly, sequestering carbon, replenishing soil, and supporting pollinators.³

We must protect our trees, as they provide a multiplicity of ecosystem services (carbon storage, shading, stormwater retention, air filtration, and habitat for birds and insects, etc.). The current, summer 2019 issue of Nature, the publication of the Nature Conservancy, highlights the importance of trees with a special focus on NYC's tree canopy. As related in the article, "Urban Roots," NYC trees on our streets and in our parks and forests, "store approximately 1.2 million tons of carbon. Each year, these trees remove an additional 51,000 tons of carbon and 1.100 tons of pollutants from the air." NYC's 234 species of street trees "soak up rainwater, helping to prevent flash flooding and reducing stormwater runoff by approximately 69 million cubic feet per year."⁴

The biannual report issued by the proposed Department of Sustainability and Climate Change can also measure the ecosystem services provided by our salt marshes, freshwater wetlands, old-growth forests, and meadows. NYC now has 51 Forever Wild Nature Preserves that protect animal and plant biodiversity and exist in every borough.⁵

With regard to the proposed Sustainability Advisory Board, this board should include Passive House certified architects, as Passive House is an international building efficiency standard that saves up to 90% of the energy required for heating and cooling conventional buildings and 75% of all energy usage when electricity is included in the total. On November 1, 2017, the Passive House Institute certified the 26-story Passive House residential building on the Cornell Tech campus on Roosevelt Island, which is now the largest and tallest Passive House building in the world. NYC is now leading in high-rise Passive House design and construction and we can also lead in all aspects of urban sustainability and resiliency.⁶

Finally, as the first report of the new Department of Sustainability and Climate Change is to be submitted by April 22, 2020, the Sierra Club recommends the introduction of a City Council resolution in commemoration of the fifty-year anniversary of the first Earth Day on April 22, 1970.⁷ This could be modeled on the Council's resolution and hearing in support of the September 21, 2014 People's Climate March in which over 400,000 people from throughout the world participated, including several Council members and staff and environmental activists attending today's hearing. This resolution's hearing will provide an opportunity to assess our achievements and failures since Earth Day 1970 and to outline future initiatives for preventing catastrophic climate change – an environmental challenge that was unimaginable in 1970.

NOTES:

¹ The UN Report on Biodiversity and Ecosystem Services concluded that one million plant and animal species face extinction as a result of our human activities, and warned that the degradation of all four categories of ecosystem services (regulatory, provisioning, support, and cultural) is accelerating throughout the world. See: Brad Plumer, "Humans Are Speeding Extinction and Altering the Natural World at an 'Unprecedented' Pace," New York Times, May 6, 2019: <https://www.nytimes.com/2019/05/06/climate/biodiversity-extinction-united-nations.html> On May 22, the International Day for Biodiversity, UN Secretary-General Antonio Guterres released a statement in which he emphasized, "We need healthy ecosystems to achieve the Sustainable Development Goals and to address climate change: they can provide 37% of the mitigation needed to limit global temperature rise." See: "Healthy Ecosystems are 37% of the Climate Solution," <https://unfccc.int/news/antonio-guterres-healthy-ecosystems-are-37-of-the-climate-solution>

² Anthony R. Ingraffea, "Gangplank to a Warm Future," The New York Times, July 29, 2013: <https://www.nytimes.com/2013/07/29/opinion/gangplank-to-a-warm-future.html? r=0>

³ See, Jared Green, "Interview with Janine Benyus, How to Design Like Nature, American Society of Landscape Architects, April 4, 2015, <https://dirt.asla.org/2015/11/04/interview-with-janine-benyus-on-how-to-design-like-nature> See also this July 2, 2018 video in which Benyus explains ecological performance standards, "Cities that Function Like Forests: Biomimicry Maps A Sustainable Future": <https://asknature.org/resource/cities-that-function-like-forests-biomimicry-maps-a-sustainable-future/#.XAmhDPZFzct>

⁴ Jenny Rogers, "Urban Roots," Nature, Summer 2019, pgs. 45 and 47.

⁵ For more information on the Forever Wild Nature Preserves, see: www.nyc.gov/foreverwild The Natural Resources Group (NRG) of the NYC Department of Parks & Recreation is responsible for managing and restoring NYC's native ecosystems.

⁶ See NY Passive House: www.nypassivehouse.org and my article, Lisa DiCaprio, "High-rise Passive House in NYC," Sierra Atlantic, Fall 2017: <https://atlantic2.sierraclub.org/content/high-rise-passive-house-nyc>

⁷ See the website for the Earth Day Initiative: <http://www.earthdayinitiative.org> and its plans for the fifty-year anniversary of Earth Day in 1970: www.earthdayinitiative.org/2019-events

June 12th 2019

Written testimony for Committee on Environmental Protection, Int 1055 - In relation to the examination, survey and mapping of all methane leaks in New York City,

Thank you very kindly for the opportunity to testify about Introduction Number 1055.

My name is Dominic Nicholas and a few years ago I was so concerned about the climate crisis that I decided to completely change my career from engineering, and focus on taking action to stop climate change. I joined HEET - a 10-year-old climate-focused nonprofit - and plunged into the world of gas leaks. Today I run the large volume leaks program at HEET, and do gas-related research at Boston University. I'm relatively new to the gas world, and I want to share some of the things I've learned so far.

Natural gas has been sold to us as a green, clean and cheap bridge fuel. I've learned that actually none of these things are true. Gas is not green and not clean. Gas is mostly methane which is 86 times more potent than CO₂ for the first 20 years in the atmosphere. The Massachusetts gas system is very old and leak-prone with approximately 40,000 leaks a year, and approximately 16,000 left unrepaired at the end of each year. The estimated total leaked gas in Massachusetts is about 3% of all gas coming in to the state. This unburnt leaked methane makes gas the climate impact equivalent of coal. All parts of the gas system leak, from extraction, to pipelines, compressor stations and gas mains that supply our homes. We're now starting to find it's leaking in our homes too. The health risks of this are not yet fully understood. An increasing amount of gas is produced by fracking, a process that uses a variety of chemicals, some of which are undisclosed and may pose health risks.

Gas is not cheap. Leaking infrastructure can either be replaced, or repaired, but both are costly. Replacing pipes in Massachusetts is estimated to cost \$9b over the next 40 years. As we move away from gas to reach our state's emissions goals by 2050, these new pipes will become stranded assets. A recent economic analysis found that it costs approximately \$4000 to repair a single leak on average in Massachusetts; the cost in New York is higher. Multiply that by the total number of leaks, and significant costs add up quickly, costs that are paid for by ratepayers. In addition to pipe replacement and repair costs, there are the costs of impact on human health from gas, disaster recovery costs from gas explosions, and the harder to quantify cost of climate change impacts.

Gas has been sold as a bridge fuel spanning the gap between coal and a greener energy economy. This bridge is unnecessary as we can go directly to renewables *today*. Are we going to invest in this so called bridge, or invest in a renewable energy infrastructure that we want for future generations that doesn't damage the climate ?

For these reasons, we need to move beyond gas, and we need to do it urgently.

I believe the work in Massachusetts around reducing gas leaks can potentially be used as an inspiring model for New York and other states. Research and community action has helped get legislation passed, which in turn has made more information about gas leaks transparent. That information has been used for more research, and more community action, and perpetuated a

positive cycle of increasing emissions reductions. In 2013, all of the gas leak emissions in Boston were mapped. This map was published on the front of the Boston Globe. Public concern and reaction to this resulted in legislation getting passed that requires gas utilities report their leaks, including their location, discovery and repair dates, and to fix the hazardous and potentially hazardous leaks. In 2015, HEET used this reported data to map the locations of approximately 20,000 leaks. This also made the front page of the Boston Globe. Mothers Out Front stepped in and used these maps in grassroots activism to put pressure on utilities to get the leaks fixed. In 2016, research found that just 7% of all of the leaks were responsible for about half of all of the emissions. The Gas Leak Allies and HEET helped get legislation passed requiring that these large volume leaks, not just the hazardous or potentially hazardous leaks, be fixed. In 2017, further research set out to assess leak size measurement methods used to identify large volume leaks. This work included creating an impressive network of stakeholders, including the gas utilities (Eversource, National Grid, and Columbia Gas), who agreed to a 5 year shared action plan. This plan included using a scientifically proven identification method, and an agreement to repair the large volume leaks. Last year was a successful pilot year of this plan, and the work continues. This pattern of research, community action, collaboration and legislation has led to this opportunity to cut methane emissions in half in Massachusetts. Today HEET continues its research and collaboration in the large volume leaks shared action plan, is researching the health impacts of gas and creating legislation that includes a transition pathway for gas utilities by allowing them to sell energy rather than gas. HEET is also piloting a new energy transition model, through its innovative geothermal microdistrict concept, to move us beyond gas completely.

I strongly and urgently support 1055. A central government office/function focused on surveying and mapping all gas leaks can provide critical independent and transparent oversight of gas utilities, putting the public and the environment first. Similar to Massachusetts, much of New York's gas pipe is very old and leak prone. Taking the opportunity to proactively prevent or repair leaks as cost effectively as possible, such as when the ground is already open for other work, is just common sense. Addressing leaking gas is urgent. Large volume leaks should be repaired quickly, rather than being left to leak for years. Quick repairs are critical to reducing climate damage and public safety risks.

Research in 2018 ranked New York City as having the 3rd largest carbon footprint of all cities *worldwide*. Bill 1055 can help reduce this footprint through finding and repairing gas leaks quickly, whilst contributing to a healthier and safer community. Leaking gas is part of a larger problem spanning the broader United States. I hope and encourage New York to join Massachusetts in leading nationally with legislation like this.

Thank you for your consideration.

Dominic Nicholas, HEET, heetma.org
dominic.nicholas@heetma.org

June 12, 2019



**Green Map
System**

292 East Third St, #1A
New York, NY 10009 USA
Tel: +1 212 674 1631

Wendy E Brawer
Director
web@greenmap.org

GreenMap.org
Think Global, Map Local!

We certainly need a Department of Sustainability and Climate Change! I'm Wendy Brawer, director of Green Map System and a sustainability and climate change design professional with 30 years of experience.

I'm a longtime Lower East Side resident who has volunteered on waterfront planning even prior to Sandy. I have watched as the innovative plan for the Big U morphed from a community- engaged natural systems-based design that made room for the water into a process and untested plan that pits neighbors against one another, sows mistrust of all the agencies involved and destroys the 58 acre park for 27 years of protection. Some years from now, the restored 1930's East River Park will have abundant concrete and turf fields, but 7% less room for nature, skinny trees that can't absorb much stormwater or pollutants, ringed by the congestion pricing free zone on the uncapped FDR Drive, burdening the most vulnerable residents who are already stressed out by the thought of another Sandy during the unprotected years of construction...

As a case in point for needing a **Department of Sustainability and Climate Change that oversees the NYC Department of City Planning**, this winter I wrote about the city's uncoordinated approach in a blog for the EastRiverAlliance.org website - it's in this handout. The lack of systems thinking and tested planning means we won't get much for the \$1.5 billion, when there are a multitude of issues and conditions that could be addressed with a world class plan.

Last night I testified at CB3 ULURP hearing and you can see my handout at <http://bit.ly/ESCRmiti> - this includes a chart comparing 4 informed perspectives along with a draft CB3 resolution.

In February I requested and CB3 resolved to support the LES Street Tree Canopy, an immediate commencement of planting and stewardship programming, and while Parks promised 1,000 street trees, nothing has happened and they never mention stewardship when they point to this promise. They don't understand the role of social resiliency and how it was proven by Sandy and many other disruptions that communities that trust each other and already work together on gardens, in parks etc. bounce back faster. So disdainful of community participation, Parks doesn't even mention Lower East Side Ecology Center on their signage despite it being there 20 years, turning food waste into healthy soil and managing stewardship in East River Park.

This is but one small example of why we need a high level, transparent Department to help us navigate the uncharted waters ahead.

Wendy Brawer, Director, Green Map System

The Rivers Beneath the Streets

I am haunted by the underground rivers I see in historical maps of Manhattan.

I'm especially drawn to the mythic maze of subterranean streams under the East Village. These are left off the City's public visualizations of the East Side Coastal Resiliency project (ESCR) project that is meant to protect our community from flooding. This is a potentially disastrous oversight that will affect my neighborhood as the sea level rises and climate change delivers increasingly intense storms.

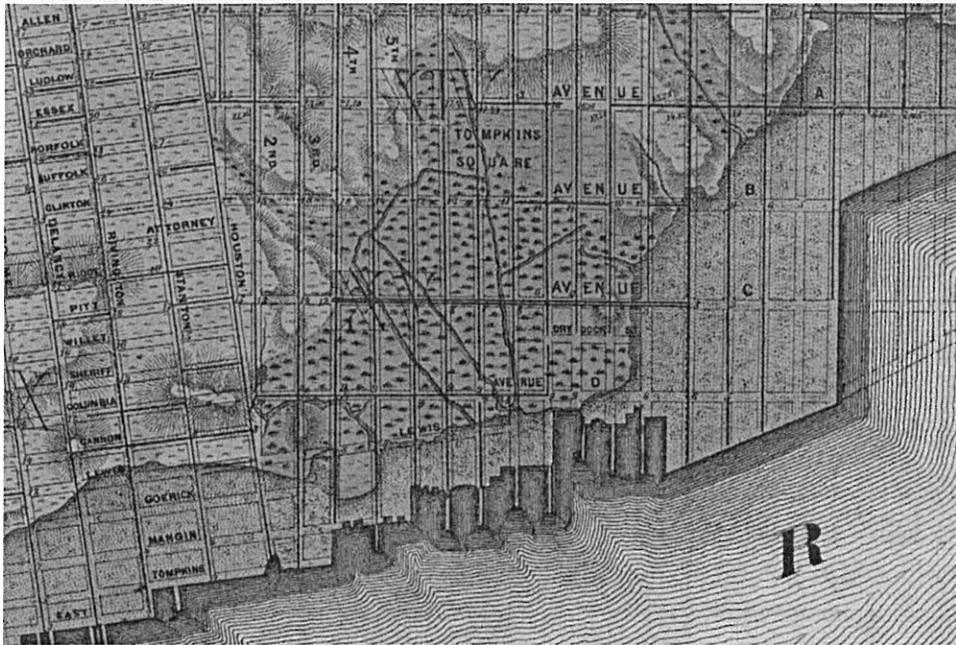
Responding to my questions at public meetings, the Department of Environmental Protection says these subterranean streams are not under their jurisdiction, and they don't know where they are. Why doesn't the City have a Deputy Mayor for Infrastructure so agencies, adjacent projects and geography can be coordinated?

Look at some of the maps I've collected as background and inspiration for my work over the last 25 years. I map sustainable living resources including community gardens, greenmarkets, bicycling and solar sites. Since 2001, I've often included Manhattan's historic shoreline to highlight how humans have impacted this "small island nation" and to foreshadow changes to come.

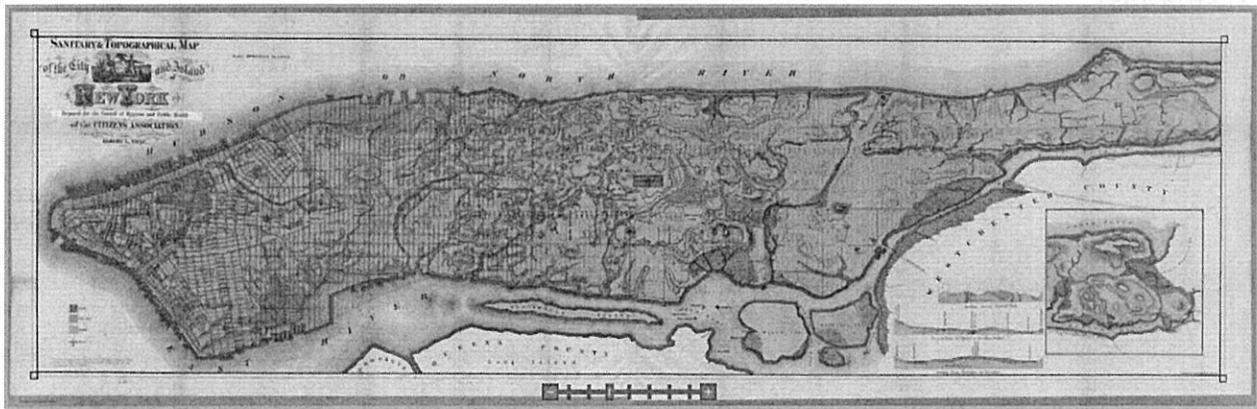
Townsend MacCoun's map of Manhattan "at the time of its discovery" includes Native American villages (in red) and topography from 1609 with water-courses, marshes and shore line, overlaid with the 1867 street grid and harbor. Full of surprises, it was made for underpinning engineers, and still provides crucial knowledge for erecting new buildings and infrastructure.



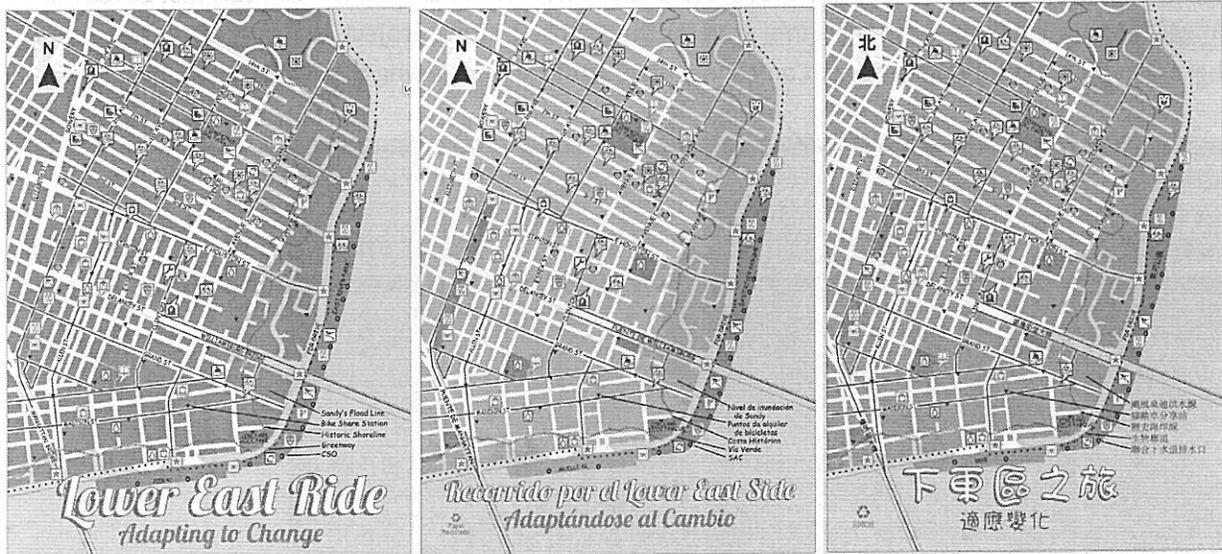
In this map, the East Village looked especially vulnerable, with subterranean rivers and tidal salt marshes extending nearly to 1st Avenue. The book “The Archaeology of Home” tells how the land was extended and filled in, and how docks and shipyards soon ringed the shore. Even today, people in the community know that willow trees are indicators that these ancient waterways still flow. This year, test bores for rain gardens are being made in the same area for the Gardens Rising project, and there are reports on progress mapping the underground. Can’t these shed light for developing the ESCR, too?



Check out the Viele Map <http://bit.ly/vielemap> - dated 1865, you can zoom in to see amazing detail of the land under and around the 58 acres of today’s East River Park. The orange is landfill and piers, with the green being the extent of the original shoreline. Land and water continually transform one another. Climate change is accelerating that evolution. No one really knows what’s coming, or when. It’s clear though, that these maps provide information critical to the planning of the ESCR.



The Viele Map is properly known as the Sanitary & Topographical Map of the City and Island of New York. Use the slider at bottom center to zoom in and lay bare geographical vulnerabilities.



As a 30 year resident and as an individual active with the East River Alliance, I'm also sharing an example from my professional work with Green Map System. This post-Sandy view is the Adapting to Change, Lower East Side edition. Produced in Spanish, Chinese and English in 2013, this small map promotes bicycling as an everyday climate change countermeasure. It includes both the super storm's high water mark and the original shoreline, as well as the combined sewer outfalls in East River Park, the then new bike share stations, bike lane network, etc.

The next map I make will include the subterranean streams that still run under the community. As major changes to the geography are being prepared, I ask the City, will your ESCR plans include them, as well?

Wendy Brawer
212 674 1631

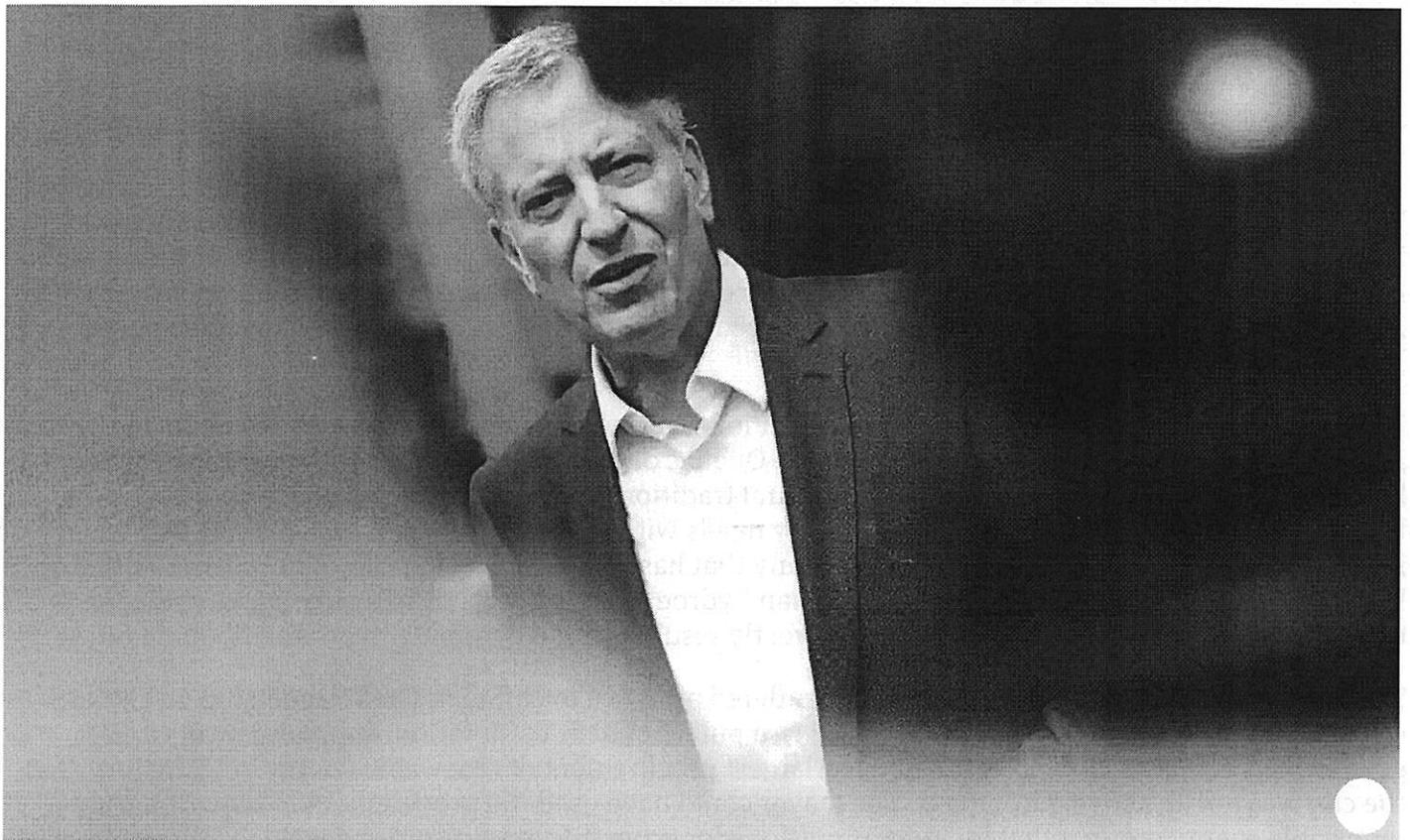
The Guardian

Bill de Blasio's energy plan isn't as green as it looks

Last week, New York's mayor unveiled a big new energy plan. Unfortunately, it represents a squandered a chance to be bold on climate change

Kartik Amarnath, Ashley Dawson and Shay O'Reilly

Mon 20 May 2019 10.29 EDT



New York prides itself on being a green city. It is often ranked as the most sustainable city in the US: as a result of its density and its admirable (if financially challenged) public transit system, New Yorkers have extremely low carbon emissions per capita. Adding to its green laurels, the city council's recent Climate Mobilization Act requires pollution-cutting retrofits on big dirty buildings - which are responsible for nearly 70% of the city's carbon emissions.

But NYC could be doing a lot more to go green - and fight extreme economic inequality at the same time. Room for progress is most evident in the energy sector. NYC's electric grid is polluting and inefficient, relying heavily on fossil fuels and ageing infrastructure. With the state's oldest and dirtiest power plants concentrated in New York City's low-income communities and communities of color, it is no surprise that each year more New Yorkers are killed by pollution from electricity generation than in any other major city in America. The system is also economically unjust: with some of the highest electricity rates in the nation, New York City saw more than two million shut-off notices in 2018 alone, and almost half a million families pay more than they can afford in energy costs.

Mayor Bill de Blasio just announced an energy plan that would potentially move New York City a big step in the wrong direction. In a little-discussed provision of the city's latest OneNYC sustainability plan, Mayor de Blasio commits to powering 100% of City government operations with "clean" hydroelectric power from Canadian state company Hydro-Québec. According to the mayor, this would help the city move away from coal and gas, in the process cutting emissions by 40% over the next decade. What's not to like?

The mayor's proposal calls for construction of a 330-mile-long underground high-voltage transmission cable, called the Champlain-Hudson Power Express (CHPE), to bring power from Canada down to NYC. The project, which is slated to cost nearly \$20bn, would lock NYC into dependence on Canadian hydropower long-term, while diminishing the ability for local offshore wind, solar and other renewable industries to thrive.

Furthermore, there is nothing "clean" about hydropower. Building the CHPE would require excavating a trench down the spine of the Hudson Valley, a costly and environmentally disruptive enterprise. Construction could potentially stir up long-buried carcinogenic PCBs in the Hudson River, the nation's largest superfund site, threatening a recovery process championed by advocates for decades. And the dams that would generate power for NYC have flooded hundreds of miles of boreal forest, annihilating watershed ecosystems and agricultural potential across the north-eastern US.

There are also serious questions about how affordable and reliable the CHPE project will be. In April Hydro-Québec's own managing director admitted to millions in losses from power failures attributed to climate change. With the inevitability of more extreme weather events, city government operations in America's largest metropolis should not be powered by imported electricity from vulnerable sources hundreds of miles away.

Politically, Hydro-Québec's projects undermine First Nations sovereignty in Canada. Members of the Pessamit Innu First Nation have accused Hydro-Québec of "cultural genocide" for the damage to rivers that have been vital to their economy and cultural traditions for generations. Although Hydro-Québec has promised to supply NYC's municipal energy needs without building new dams, the city will nonetheless be investing long-term in a company that has been building a series of new dams since the late 2000s. Ninety percent of proposed Canadian hydroelectric projects threaten to expose indigenous communities to poisonous methylmercury directly resulting from damming rivers and flooding forests.

This is not the first time Mayor de Blasio squandered a chance to command bold leadership on climate change. The New York Power Authority (NYPA), a public-benefit corporation, supplies power to city government. NYPA recently coordinated the largest procurement of renewable energy in US history, and the city was not an active participant. The mayor could have used the procurement to request a truly renewable energy product that includes provisions for economic opportunities developed in partnership with historically burdened communities. He would have made strides in the city's climate targets while establishing NYC as a hub for the clean energy industry, benefiting communities bearing the brunt of rising inequality and environmental pollution.

There are still paths for New York City to transition to renewable energy. The mayor can still request a renewable energy product that requires local economic development commitments and does not depend on foreign hydropower. While technologies like offshore wind currently cost more, evidence shows that upfront government support for nascent renewable industries leads to competitive pricing long-term. Additionally, the city could democratize the energy system by devoting more resources to grassroots-led and locally owned clean energy projects in underserved communities, and facilitate direct community investment in new infrastructure. Such initiatives would guarantee far reaching economic returns and reduced energy bills, offsetting regressive impacts from rising living costs and the steep hike proposed for energy consumers.

The stakes have never been higher for America's largest city to transition to renewable energy. With the limited time we have left, the mayor needs to rethink his commitment to Canadian hydropower, instead investing in energy initiatives that truly empower New Yorkers in an era of growing inequality and climate change.

Kartik Amarnath is the former energy planner for the New York City Environmental Justice Alliance; Ashley Dawson, a professor at City University of New York, is the author of a forthcoming book on energy transition and Shay O'Reilly is the New York City organizing representative for the Sierra Club

As the crisis escalates...

... in our natural world, we refuse to turn away from the climate catastrophe and species extinction. For The Guardian, reporting on the environment is a priority. We give reporting on climate, nature and pollution the prominence it deserves, stories which often go unreported by others in the media. At this pivotal time for our species and our planet, we are determined to inform readers about threats, consequences and solutions based on scientific facts, not political prejudice or business interests.

More people are reading and supporting our independent, investigative reporting than ever before. And unlike many news organisations, we have chosen an approach that allows us to keep our journalism accessible to all, regardless of where they live or what they can afford.

The Guardian is editorially independent, meaning we set our own agenda. Our journalism is free from commercial bias and not influenced by billionaire owners, politicians or shareholders. No one edits our editor. No one steers our opinion. This is important as it enables us to give a voice to those less heard, challenge the powerful and hold them to account. It's what makes us different to so many others in the media, at a time when factual, honest reporting is critical.

Every contribution we receive from readers like you, big or small, goes directly into funding our journalism. This support enables us to keep working as we do - but we must maintain and build on it for every year to come. **Support The Guardian from as little as \$1 - and it only takes a minute. Thank you.**

Support The Guardian

VISA



AMERICAN EXPRESS

PayPal

Topics

- Climate change
- Opinion
- comment

Testimony from Lee Ziesche, Sane Energy Project organizer and documentary filmmaker

At a time when we need to be drastically reducing our greenhouse gas emissions, I appreciate the City Council showing necessary climate leadership to address methane leakage. Since 2007 we've seen an alarming increase in global methane emissions and in the past four years alone, from 2014 to 2018, the amount of methane in the atmosphere increased at nearly double the rate observed since 2007.

Methane, the main component of fracked gas, is 84-106 times more potent a greenhouse gas than CO₂ for the first 20 years its in the atmosphere. While most of the climate crisis discussion has focused on CO₂, limiting methane emissions will define whether or not New York meets its climate goals over the next decade.

We know NYC is contributing to the problem through many gas leaks from aging pipes so of course we must be at the forefront of reducing methane leakage and I support the intentions of the laws proposed to limit greenhouse gas emission.

But more importantly we must prioritize transitioning our city off of gas use entirely. Ripping up streets to replace aging, leaking pipelines greatly inconveniences communities and is costly to ratepayers when done by corporate utilities.

As New York City makes the inevitable transition to renewable energy, investments in replacing leaking pipelines that have been neglected by the corporate utilities will soon become stranded assets that we ratepayers will be stuck paying for for decades after they are abandoned.

Whenever possible aging, leaking pipelines should be replaced with renewable energy technology like heat pumps.

We must also be vigilant to ensure that utilities don't use pipeline repair as an excuse to expand pipeline capacity. Con Edison is currently proposing to raise our monthly bills to spend \$200 million dollars expanding pipelines in Queens and Manhattan and has been advocating along side National Grid for the \$1 billion dollar Williams Pipeline.

Despite false claims about gas being clean, we know these proposed pipeline expansions would increase demand for fracking and related upstream methane leakage from well heads and interstate pipelines while also increasing methane leaks locally by increasing the amount of gas flowing through aging pipes.

If large leaks cannot be immediate replaced with renewables, we must ensure that necessary pipeline repairs are paid for by the companies responsible from their outrageous profits, not on the back of ratepayers across the city struggling to pay already high energy bills.

In order to make the massive transition to renewable heating at the quick pace climate science demands, New York City needs a strong, well-funded Department of Sustainably and Climate Change.

In this very room at a hearing on the Williams Pipeline the Mayor's office testified to a false choice between gas and oil, a narrative the fossil fuel industry and the utilities are pushing to hold our energy rights hostage and lock us into decades of fracked gas use.

New York City needs a plan to get off gas and I believe the proposed department along with the climate leadership of city council and the increasingly active public must work together to ensure this transition happens in the timeframe science demands.

We will not make the transition to renewable energy fast enough if it is dependent on Con Edison and National Grid shareholders making millions of dollars of profits. That is what has defined our energy use for decades and why we are facing a climate crisis and major methane leakage problem currently.

Our city is a crossroads and every dollar invested is either one that continues to take us down the path of more fracked gas use or one that takes us down the path of renewable energy. I appreciate the City Council addressing the climate crisis with the urgency needed and recognizing the need stop the expansion of fracked gas and methane leakage in any plan for our future.



Direct testimony by Kim Fraczek, Director, Sane Energy Project
kim@saneenergy.org 646-387-3180

Wednesday, June 12, 2019 1:00 PM Committee Room - City Hall

RE: Int 0272-2018 A Local Law to amend the administrative code of the city of New York, in relation to reducing methane emissions

RE: Int 1055-2018 A Local Law to amend the administrative code of the city of New York, in relation to the examination, survey and mapping of all methane leaks in New York City

RE: Int 1399-2019 A Local Law to amend the New York city charter and the administrative code, in relation to creation of a department of sustainability and climate change and repealing section 20 of chapter 1 of the New York city charter.

My name is Kim Fraczek, director of Sane Energy Project that represents over 7,500 New Yorkers working for the past decade toward halting fossil fuels and moving our economy to 100% community owned and led renewables.

It is such a pleasure to work with such a forward thinking City Council, and I thank you for your valiant efforts to address climate change as the crisis *that it is* in our beloved waterfront city.

We support the intro bills proposed today that will give additional solid infrastructure for a desperately needed clear plan to 100% renewable energy for New York City.

We know that we cannot rely on the corporate utilities to be an honest voice in this renewable transition as we heard in this very room on April 15, 2019 in the hearing to pass a resolution to oppose the Williams NESE Pipeline by Consolidated Edison representatives, Ivan Kimball, the VP of Energy Management and Kyle Kimball, VP of Government, Regional and Community Affairs, claiming methane gas supply constraints in New York City to justify building a heinous pipeline in order to bring profit to none other than Williams, Con Edison and National Grid shareholders and stick all of us footing the bill. Their testimony was counter to a report issued by Suzanne Mattei, Former DEC Regional Director, that we do not need more gas supply. Further, they continued to say that “fracked gas” was “renewable gas” several times in their testimony, and that they had no plan for renewables other than waiting for the market to work first when asked by Speaker Johnson.

There are four proposed methane projects in the City of New York right now I would like to highlight to create the sense of urgency needed to make this legislation happen as soon as possible in order to shut down any further expansion or repowering of gas: 1. \$200 million from Con Edison rate-payers to expand, not replace, pipelines in their network 2. A proposed LNG storage expansion in Astoria, Queens, and 3. The repowering of Astoria Generating Station in Sunset Park, and 4. The re-application of the Williams NESE pipeline

The legislation proposed to reduce methane emissions and to survey and map emissions is one of the most important things that we can do today. Additionally, changing our city charter to create a Department of Sustainability and Climate Change is something we should have done long ago, and because we are not truly addressing climate change unless we are addressing the inequitable economic model for which fossil fuels thrive. **I would recommend that we have strong environmental justice standards for this proposed Department's goals**, by taking direction from communities and organizations already doing this work.

To be honest, I see that our state and city administrations are making choices that are front-facing, but prevent genuine renewable and economic implementation. We heard from Jainey Bavishi, in the aforementioned hearing, Mayor DeBlasio's Director of Recovery and Resiliency that natural/methane gas is clean and needed. And we've now seen the Mayor announced a deal with Canadian hydropower in lieu of fighting for Offshore Wind right in our backyard. This is the wrong direction¹ for our renewable future. We even heard Governor Cuomo say on the Brian Lehrer radio show² that the Climate & Community Protection Act is a "political placebo" and "that we can't" do it. **What kind of climate leadership is that? Where is the democracy if both the State Senate and Assembly want to enact this policy?** We don't have anymore time to wait, and what we do here in New York this year can set off a domino effect of national climate action.

We look forward to continue working with the NYC Council on helping to develop any plans on halting climate disaster methane, and replacing it with clean heat solutions, available now at NYSERDA if we stick together and get the funding to make renewable heat now happen for every resident of New York City.

¹ <https://www.theguardian.com/commentisfree/2019/may/20/bill-de-blasio-energy-plan-green>

² Starting at 12:47

https://www.wnyc.org/story/governor-cuomo-end-session-wish-list/?link_id=6&can_id=3b9c24023faca0ba25eaa42cda54ce8c&source=email-action-needed-this-week-2&email_referrer=&email_subject=action-needed-this-week



June 12, 2019

The Honorable Bill de Blasio
New York City Mayor
City Hall
New York, NY 10007

Dear Mayor de Blasio:

We are writing to support Int. No. 1399, important legislation calling for the formation of a Department of Sustainability and Climate Change, a central agency to educate, measure, coordinate, and implement policies on climate change. Gowanus Canal Conservancy (GCC) believes it is critical to develop and coordinate the implementation of policies, programs, and actions to meet the long-term needs of the City, with respect to its infrastructure, environment, climate, and overall sustainability citywide.

GCC is dedicated to facilitating the development of a resilient, vibrant, open space network centered on the Gowanus Canal through activating and empowering community stewardship of the Gowanus Watershed. Since 2006, we have served as the environmental steward for the neighborhood through leading volunteer projects; educating students on environmental issues; and working with agencies, elected officials, and the community to advocate for, build, and maintain innovative green infrastructure around the Gowanus Canal. Over the past three years we have been developing the Gowanus Lowlands Master Plan, which builds on the confluence of the Superfund clean-up, related clean-ups at city level, and the Gowanus Rezoning. Through close collaboration with the community, landowners, elected officials, and agency representatives, the Gowanus Lowlands envisions a clean and thriving waterway of aquatic habitat, community activity, and bustling industry.

In Gowanus, we see first-hand the effects of climate change on our City—coastal flooding, rising groundwater, and heat island impacts, as well as increased precipitation causing more sewage overflow into the Canal. We fully support the formation of a Department of Sustainability and Climate Change to govern other agencies and create a holistic approach to combat climate change in order to achieve coordinated efforts to promote environmental sustainability and adapt to our changing climate.

At the same time, a Department of Sustainability and Climate Change cannot reduce responsibility from other agencies, including the Department of Environmental Protection, Department of Buildings, Department of City Planning, Mayor's Office of Environmental Remediation, Office of Recovery & Resiliency, Department of Parks and Recreation, Mayor's Office of Sustainability, Department of Sanitation, Department of Transportation, Water Board, and the NYC Municipal Water Finance Authority. **A Department of Sustainability and Climate Change must be given the authority and the funding to govern the work of other agencies and coordinate policies and programs of other agencies in order to turn our City into an example for the rest of the country and the world.**

We often experience the limitations of existing City agency silos and disinclination to innovate locally in addressing site specific climate issues. We struggle to get innovative street tree design, rain gardens, and wet swales installed that are designed to Gowanus-specific specifications and account for neighborhood flooding, our high-water table, and industrial landscape. Our Gowanus urban forest is sparse and young, leaving residents vulnerable to rising temperatures and inundating UV rays. The Gowanus Canal is continually polluted

with sewage from our combined sewer system—increased rainfall and rising groundwater, coupled with a growing population, will exacerbate this issue. Due to our unique location at the bottom of a topographic bowl, vertical protection, including raising the shoreline and installing a tide gate at the mouth of the Canal, will worsen inland flooding and make the Canal even more stagnant and toxic. **A Department of Sustainability and Climate Change must be able to plan comprehensively and think beyond formulaic solutions in order to look carefully at site-specific impacts and solutions throughout the five boroughs.**

Time and time again, we have seen environmental injustices in our neighborhood affecting the most vulnerable populations. Though capital investment in resilient infrastructure is critical, there must also be investment in social resilience. **A Department of Sustainability and Climate Change must have a focus on equity, and invest in emergency preparedness, racial equity analysis, and workforce training, as essential elements of adapting our city to the changes ahead.**

GCC fully supports the formation of a Department of Climate Change—it is important to the future of Gowanus and New York City.

Thank you for supporting the future of our City.

Sincerely,



Andrea Parker
Executive Director

Testimony at NYC Council on Methane Bills - June 12, 2019

Good afternoon

My name is Vincent Brancato - I am the co-chair of the Environmental Stewardship Committee of the New York Society for Ethical Culture here in New York.

I am retired from a career in the industrial sector - mostly steel - and have been active in trying to protect our natural assets for many years. I am also an Al Gore trained Climate Reality Leader in his Climate Reality Project.

Thank you for this opportunity to give you some input on this critical issue.

Carbon dioxide is the big green house gas 82% of US greenhouse gas emitted in the US - Methane is only 10% however these gases have different lifespans and different potencies. Methane is more than 25 times more potent than CO2 for the first 100 years after emission.

CO2 is generated when we burn the fossil fuel - be it coal, gas, gasoline, oil etc.

Methane is the actual natural gas, shale gas if mined by hydrofracking, that is the fossil fuel before we burn it. This methane is not like coal or oil or gasoline fossil fuel waiting to be burned - methane is constantly waiting to escape from tanks, pipelines or compression stations to become the greenhouse gas hazard it can be. This is at all stages of it's existence during mining and refining and transport and storage until it is burned - making CO2 or escapes before burning as methane.

The first of the three bills I would like to address is 272 - the proposal that the DEP inspects and surveys for leaks of methane within all city owned buildings - and that this should be done every five years and it calls for repair of the leaks found. I applaud this proposal and think it is a necessary step to fight climate change. However I would suggest that three modifications to this proposal be made. First is that the first survey should be completed for all buildings in the first twelve months after the law takes effect. The second is that the found leaks should have to be repaired within 30 days of discovery unless they are more urgent. The final one is that the gas line connection to the building from the main gas lines be also inspected and verified as not leaking when the building is checked.

As this law also indicates that every building in the city be surveyed for methane leaks I would suggest for privately owned buildings the surveys be completed within six months from passage for initial inspection and the review again every five years. The additional requirement of each rental unit be surveyed again upon vacancy for methane leaks should be imposed on all units be they publicly or privately owned.

The second bill, number 1055, is a critical partner to no. 272. Requiring surveying and mapping of all methane leaks in the city is the way to close the biggest possible source of leakage and dangers of fires and explosions. I would suggest however some changes to this bill. First if a large leak is found it should have to be repaired **within 45 days - not 90 days - maybe 90 days for less critical leaks.** Also as the utility provider is going to save to the extend that gas leaks repaired save the utility money I think the involved utility or provider should have to compensate the City for the cost of finding such leaks. If one of the city's designated agencies should have to make the repair they should seek cost recovery from the utility plus an additional percentage as a punitive incentive to the offender. Such designated agencies should be authorized to subcontract repairs to facilitate prompt correction of such leaks.

The final bill I would like to address today is no. 1399 the proposal to replace the existing office of sustainability with a new, more empowered, Department of Sustainability and Climate Change. In this time of climate crisis threatening our sustainability I have to fully support this plan to make a long term and empowered department to plan for and implement necessary steps to try to make our path through the coming decades smoother and help protect and improve the quality of life for all our citizens.

We at the New York Society for Ethical Culture are thankful for this opportunity to present our views. Since our founding in 1876 the Society has participated in working for the public good from our participation in the starting of the settlement house movement, the Visiting Nurse Service, in supporting the ACLU and NAACP as they were founded. This opportunity to participate in this hearing is very much appreciated.

**Comment from Damascus Citizens
for [Sustainability.org](https://www.sustainability.org) Comment delivered by Ruth
Hardinger.**

Methane, CH₄, is a colorless, odorless gas with a wide distribution in nature. The "CH₄" name describes the atoms in the methane molecule - one carbon and four hydrogen atoms.

Methane is a powerful greenhouse gas. It degrades over its initial half-life time of 8 to 12 years in the atmosphere, as it converts into carbon dioxide (CO₂). However it has a much higher global warming potential than CO₂. There are three different sources of methane gas including thermogenic (from deep geology), anthropogenic (from human activities) or biogenic (from living organisms) methane. "Natural" gas is composed of 90 to 99% methane, mostly thermogenic methane as it is delivered to end users which contains contains other chemicals including radioactive radon.

The global warming potential of CH₄ has been upgraded by the IPCC to at least 86 to 105 times stronger than CO₂ (carbon dioxide) during a 20 year time frame of this gas in the atmosphere. Methane, grouped with other near-term climate forcers such as black carbon, hydrofluorocarbon and aerosols, is the most likely greenhouse gas escalating the planetary heat now, because there is so much of it being released. There have been few measurements of gas leakage from wells and pipelines. The measurements that have been made have found substantial concentrations of methane in the atmosphere from these leaks. Further, the EPA comparison of methane to CO₂ (carbon dioxide) on the 100

year time frame claims methane is only 34 times stronger than CO₂, hiding the real impact of CH₄'s near-term presence. Simply, the 100 year time frame does not acknowledge methane's half-life impact.[1]

"Characterization of Methane Plumes Downwind of Natural Gas Compressor Stations in Pennsylvania and New York" is a peer reviewed paper that used actual measurements of methane (as a proxy for natural gas which is a mixture) to look at the emissions from natural gas compressors that push the gas through pipelines and the negative air quality impacts of those emissions.[2]

The Abstract of that paper is:

The extraction of unconventional oil and natural gas from shale energy reservoirs has raised concerns regarding upstream and midstream activities and their potential impacts on air quality. Here we present in situ measurements of ambient methane concentrations near multiple natural gas compressor stations in New York and Pennsylvania using cavity ring-down laser spectrometry coupled with global positioning system technology. These data reveal discernible methane plumes located proximally to compressor stations, which exhibit high variability in their methane emissions depending on the weather conditions and on-site activities. During atmospheric temperature inversions, when near-ground mixing of the atmosphere is limited or does not occur, residents and properties located within 1 mile of a compressor station can be exposed to rogue methane from these point sources.

[1] see scientists COP21 letter

<https://www.damascuscitizensforsustainability.org/2015/12/11/letter-to-president-obama-on-methane-emissions/>

[2] see Compressor emissions/plumes paper

<https://www.damascuscitizensforsustainability.org/2017/01/26/methane-plumes-downwind-natural-gas-compressor-stations/>



My name is Margaret Perkins and I am testifying on behalf of the local climate group 350NYC.org. We are a grass roots organization that depends on volunteers to advocate for political and social solutions to drastically reduce greenhouse gas emissions caused by burning fossil fuels.

We are here to support **Intro 1055** (introduced by Costa G. Constantinides, Donovan J. Richards, Robert F. Holden, Helen K. Rosenthal and **Intro 272** (Introduced by Donovan J. Richards, Justin L. Brannan, Helen K. Rosenthal) to survey, map and mandate repairs of methane leaks in the natural gas infrastructure and city owned buildings of New York City. Also, to support Int 1399 (Constantinides) that will establish a new city Department of Sustainability and Climate Change.

Background:

Why are we here today; we are here because NYC, still uses more natural gas than any other city in North America: 600 trillion BTU per year and burning this, either thru direct use or in power plants and this results in 23 million metric tons of CO₂ equivalents, 45% of the city's total emissions.

New York City Greenhouse Gas Inventory of 2017

https://www1.nyc.gov/assets/sustainability/downloads/pdf/GHG_Inventory_2017.pdf estimates that CO₂ equivalent emissions from direct use of Natural gas is 17.7million metric tons, about a third of total city emissions and that fugitive emissions within the city gates are about 0.5Mtons CO₂ equivalent or account for 1% of total city emissions.

Methane leaks from local infrastructures may represent a small percent of GHGs in the grand scheme of GHG emissions from the city, but taken together with the larger leaks of uncombusted CH₄ upstream, the GHG reductions as a result of switching to Nat Gas in the last 14 years has virtually been lost.

[Two recent studies (Lamb et al 2015 and Alvarez et al, 2018) estimated that between 0.1% and .25% of total gas consumed leaks as uncombusted methane from the local distribution infrastructure, from the city gates to the consumer meter. Based on their

results, .018 Million metric tons methane are leaked within the city converts about .54Mmtons of CO2 equivalent or 1.2% of GHG emissions for NYC. These calculations do not take into account the much greater rate of fugitive CH4 leaks during production and transport (Alvarez et al 2018) which represent 95% of uncombusted CH4 released into the atmosphere].

In addition, minor components of uncombusted natural gas contain other volatile organic compounds, VOCs, are building blocks in the formation of ground level ozone. Ozone and other pollutants derived from oil and gas combustion contribute to asthma and other respiratory conditions.<https://www.nrdc.org/experts/vijay-limaye/methane-leaks-oil-gas-exploration-health-nightmare>

Very few states have regulations on methane leak reduction and in production wells and pipelines. Nationally, the 2016 Obama EPA ruling on venting, leak detection and repair (EPA 40 CFR Part 6) was expected to achieve this. In September 2018 the current EPA as part of its pollution increase agenda, published a ruling to weaken those inspection schedules. The revision proposes that production well sites will be inspected every year as opposed to 6 months. And compressor stations annually as opposed to every 3 months in the 2016 regulations. This weakening will result in the equivalent to a 4 to 5 percent increase in total industry methane emissions (based on EPA [data](#) from 2016). Numerous studies, even by industry insiders, have shown that leak detection and repair (LDAR) is cost effective and can save the industry millions of dollars.

Two suggestions on the bills before the council. Intro 1055 could be strengthened; the bill requests that all buildings be surveyed for leaks annually and that large leaks and repairs be reported to the relevant agencies within 90 days. This seems unduly long, the utility companies should have the capacity to fix leaks in days, not months. Certain old, at risk buildings should be surveyed first. In relation to Intro 272, which relates to city owned buildings, the leak survey of all buildings will be done every 5 years. Older buildings identified at risk for leaks should be surveyed more frequently, every 2 years.

Lastly, we strongly support the creation of a new city Department of Sustainability and Climate Change with an increased budget and capacity to enforce the ambitious NYC energy and climate bills that have been enacted as a result of CM Constantinides persistence in April 2019.

Margaret Perkins, PhD. And 350NYC.org steering committee

Lyndsey Cooper

Lyndsey.cooper@mothersoutfront.org

I'd like to invite you to imagine yourself in the shoes of Michelle, a mother of 2, Chris and Sean. Both children are energetic and talented and they run track. But not without difficulty, because they both suffer from asthma due to poor air quality in their low-income community. Michelle worries constantly that her children will suffer a severe asthma attack. This spring, Chris, in the middle of a track meet, suffered an attack and was rushed to the hospital. Michelle left work early to meet him, causing her to lose wages and take on expensive hospital bills and prescriptions. Michelle and her husband, John, each work multiple jobs to support their family. Still, they struggle to make ends meet, and live in a constant state of fear for their children's lives, while feeling like the problem itself is in the very air they breathe.

An energy system based on gas is not clean, safe, or efficient. There are leaks, at every single stage of the system--from fracking fields to the compressor stations, to transmission pipelines, to our homes, places of work, grocery stores, and schools. Methane leaks put communities at risk, both indoors and outdoors. Leaks can happen in any building in any community. They can even lead to lethal explosions like the one in Merrimack Valley, Massachusetts. An explosion in a dense city like New York would be an especially devastating loss of property, life, and culture.

These leaks also accelerate climate change to an alarming degree, as methane is 86x more potent than CO₂ in its first 20 years in the atmosphere. Knowing where these leaks are, and repairing the underlying infrastructure, is an environmental justice issue.

Michelle's story is not unique -- it is the story of countless mothers across New York. We at Mothers Out Front want to amplify their voices. The oil and gas industry has caused enough devastation across the U.S., and disproportionately so in African American and low-income communities. Environmental hazards are most often placed in African American communities, and the impacts have sometimes lethal consequences. Too many people are denied access to livable wages, healthcare, childcare and other vital resources. Some communities have the resources to recover. But communities like Michelle's, which are already suffering from toxic environmental issues on top of socioeconomic ones, are most vulnerable.

Michelle and her family have no control over environmental issues that impact their family's health--but you, city council members, do. I urge you to support these bills to protect low-income families by using appropriate, sensitive equipment to find methane leaks and by fixing crack-prone pipes. And of course, by continuing to doing your part to transition to clean, renewable energy to ensure the safety of all communities. Thank you for your time.

Good afternoon. My husband Sam and I live on the Upper West Side with our son Sebastian who just graduated high school. Our other sons Calvin and Jasper are now living on their own, one is in college, and the other is a farmer and about to become a parent himself. My name is Sidsel and I am here today as a concerned mother, soon to be grandmother and fellow New Yorker.

Last year I had the opportunity through Mothers out Front to go on a gas leak safari with Bob Ackley of Gas Safety Inc. As someone who is both passionate about science and the environment, this seemed like an incredibly interesting and fun way to spend a day. What I did not anticipate was how disturbed I was at the end of it.

Bob picked us up in his van which was tricked out with gadgets for measuring gas leaks. He explained how everything worked, and we then set out from Riverside Drive at 80th street. We drove uptown, and got out on Manhattan Avenue where his equipment was showing a significant leak. This is where I learned that those little blue caps you see all over the pavement are actually places where previous gas leaks have been fixed. Have any of you noticed these caps in the pavement? They are everywhere! Bob measured the leak, and since it was not listed on their map, he reported it to ConEd. I was really surprised at how little smell there was in relation to how much gas was coming out.

We ended the trip with a drive up along West End Avenue where we passed by my building. West End Avenue seemed to have the worst leaks, which opened my eyes and showed me just how much my neighborhood and family are susceptible to the hazards of gas leaks. None of these leaks were listed on the ConEd map either.

This is where my family and I walk around every day. It is an area of the city which is always very well kept, with clean sidewalks and beautiful flower beds with trees. Considering most of the buildings are pre-war, it makes sense that there are issues with aging infrastructure, but I had just assumed that everything there is so well kept that there would be no leaks. My son Sebastian has asthma and as a mother, this adds another layer of concern about the quality of the air that we all breathe. In a few cases the leaks seemed so big I wonder if it was even safe to walk there. This past November there was a big explosion at 91st and Broadway and sadly I was not surprised. Now I walk past those blue caps where the explosion was and wonder when the next explosion will happen and if some family will get hurt.

We have been releasing toxic things into the oceans and air, thinking that whatever it is will just dissolve because we cannot see it, but I think we all know that is not actually the case. If you need a visual, just keep an eye out for those blue caps and you will start to see just how big of an issue this is.

FOR THE RECORD

NY City Council Testimony on Behalf of Bill 1399 6/12/2019

Good afternoon esteemed members of the City Council, my name is Molly Ornati and I am with 350Brooklyn, one of more than 170 local chapters of the international climate change organization 350.org, with a membership of 2,200 people. Thank you for listening to my testimony in support of Intro 1399. I also fully support the passage of Intro 1055 and 272 but will leave it to others to provide that testimony.

We know that climate change is a crisis whose dimension and proportion has never been previously encountered by human civilization. It will strike every aspect of our lives, from shelter, energy and infrastructure to food supply and health. Massive dislocation and suffering is predictable, human survival is not. This international city of 8 million people and great cultural, financial and historic importance has no centralized plan. While there have been a number of goals set to improve sustainability and the transition to renewable energy there remains a large gaps between goals and implementation.

The proposed Dept of Sustainability and Climate Change, a full-fledged city agency with a budget, commissioner, advisory board and oversight process is crucial for the massive organization, integration of labor, academic disciplines and technology to create a plan and coordinate with all other city agencies. As the bill states, it's purview will include reducing ghgs, addressing sea level rise, protecting vulnerable populations, prevention of biodiversity loss, waste in landfills, etc. Given the real challenges in providing basic shelter for all city residents, the need to begin to create a city department to address these enormous and complex problems cannot be overstated.

I commend the City Council for its recent passage of The Climate Mobilization Act. The bill calls for retrofitting 5,000 buildings a year, but there are more than one million structures in NYC and we need to accelerate the process. Without sufficient funding, capacity and oversight, any laws that are passed will be meaningless if their aren't the resources, both human and financial, for implementation.

As citizens we implore the government to find the moral vision and courage to prioritize the survival of our citizens and our city, take action and move forward. We are behind you, ready to mobilize, able to sacrifice and eager to get to work.

6/12/2019

Testimony submitted by
Marion Yuen, GRP, LEED Green Associate
The MYA Group
901 Ave H #1N, Brooklyn, NY 11230
E: myuen@mya-group.com
C: 917-609-5402

Good day, Mr. Constantinides and Members of the Committee on Environmental Protection.

I want to speak in support of Int. 1399-2019 to amend the New York City Charter and the administrative code. I also want to express my gratitude for the proposed Res. 0864-2019.

As you know, the staff report of the Charter Review Commission does not mention the biggest “elephant in the room” – the massive environmental degradation and global climate crisis we live in.

Late last year, I submitted to the Commission a proposal to establish an agency that champions and grows a healthy, ongoing and dynamic relationship of our City with Nature.

That is why I am so glad to see Int. 1399, and I sincerely trust that you will secure adequate funding to implement it.

New Yorkers need to understand our Common Reality that we, humans, are part of Nature and that the natural elements (land, water, air, fire/energy) are on loan to us on a planet that we co-habitat with many other species and forms of life.

In support of Int. 1399, I want to offer the following to strengthen your intention.

The text of the proposed Charter Chapter 76 reads: “The commissioner shall ... be responsible for all matters pertaining to **recovery and resilience and sustainability.**”

Even though these words are now commonly used, I looked up the dictionary definitions of:

- Resilience – a) the capacity to recover quickly from difficulties; toughness. b) the ability of a substance or object to spring back into shape; elasticity.
- Sustainability – a) the ability to be maintained at a certain rate or level. b) avoidance of the depletion of natural resources in order to maintain an ecological balance.

Surely, you must not mean returning to the status quo – given the massive environmental degradation and changes already precipitated by the climate crisis.

As we approach the irreversible thresholds that scientists tell us about, we will find that more and more aspects of our lives are affected by the rapid changes – including public health, increasing inequity, and conflict. So, it is impossible to pre-define which and how municipal services would be impacted.

I strongly recommend that you include language on:

- **Just Transition** – We must recognize that burden and benefits of the changes fall unequally on New Yorkers. Will our City's response take us to a healthier, more equitable, and more meaningful democracy?
- **Direction of the Long-term Plan** – This plan must take us to a regenerative society where there is a partnership between Nature and Humanity, where 21st-century technology helps us benefit from Nature's gifts and renewable resources.

We can and must tap into Nature's regenerative systems and her power.

Humans cannot do it alone. But humans must get the implementation of this bill funded.

Nature will be our friend and partner if we let her.

FOR THE RECORD

June 12 , 2019

To: Council Members Van Bramer, Constantinides, Richards, Brannan, and Rosenthal

From: Dr. Eileen Moran

Re: Int 1399 Establishing a Department of Sustainability Climate Change and Int 272 to get methane leaks repaired quickly.

I am co-chair of the Professional Staff Congress's Environmental Justice Working Group, but today I speak to you as a Queens resident.

First, I applaud the measure to insure timely repair of methane leaks in city properties and hope that such repairs will be completed by NYC employees rather than outsourced. This must be an ongoing issue given the city's aging properties. The legislation must also press Con Ed and other utilities to more quickly repair and replace their leaks, and on their own dime. Avoiding appropriate maintenance, including replacing aging parts, must remain the utilities' responsibility and requires enforcement.

I strongly recognize the urgency of addressing climate change and the city's sustainability but I do not believe adding another Mayoral Department and Commissioner, essentially adding to the city's bureaucracy, will achieve that purpose. By my count, there are already 6-9 mayoral departments already charged with sustainability and the consequences of climate change. There are also 6 Council Committees devoted directly and indirectly with these issues and I am confident that the Council, including its leadership and Environmental Protection Committee Chair, can effectively educate the public and get everyone to understand that sustainability and resiliency must be addressed in every agency.

The City University and its faculty can be a tremendous resource to the city in achieving its sustainability goals, including the research of the Trade Unions for Energy Democracy (TUED), at the CUNY School of Labor and Urban Education and Brooklyn College Professor Mike Menser's work on environmental sustainability.

Instead of the lackluster performance of the city's attempt to put solar onto school buildings, NYC would have been far better off to fund this capital improvement

itself, through bonds if needed, since the solar would pay for itself over time. TUED's research has demonstrated that to reach renewable energy targets government direct support will be required given the failures or limitations of public private partnerships to date.

Mostly what's required to attain sustainability and resiliency goals quickly is political will, and I worry that's what's missing at the mayoral level. A new department will not fix that.

Thank you.

I can be reached at eileenmoran7@gmail.com

Ashley Dawson
Testimony on Intro 1399

It's an honor to testify in this hearing on Intro 1399, a measure that proposes to create a City Department of Sustainability and Climate Change. I am a professor at the City University of New York studying the intersection of climate change and urban society. To the extent that the creation of such a department would focus and empower efforts to make NYC sustainable, I am in favor of this measure.

We all know that the city and the world face a climate emergency. In their report on warming of 1.5°C last October, the UN's IPCC warned that the world will hurtle past the 1.5°C target agreement by 2050 unless we engage in a sweeping transformation of energy, land, infrastructure, and manufacturing. The authors of the report argued that saving the planet from climate breakdown will involve "systems transitions" for which there is "no documented historic precedent." And, according to the IPCC, we only have about a decade to make these radical cuts. NYC must act quickly and decisively.

The city has taken some important and historic steps in recent years to cope with the unfolding climate emergency. All too often, though, these successes have taken far too long to push through. For example, Mayor De Blasio initially announced a program to encourage landlords to voluntarily cut emissions from their buildings in 2015, but it wasn't until this past April that the Climate Mobilization Act made such cuts mandatory. That's four precious years wasted. And the measure contains a provision that will allow owners to buy renewable energy credits in order to offset their continuing use of fossil-based energy. Environmental justice organizations in the city and around the world have been strongly opposed to such offsetting programs since they allow wealthy landlords not just to continue polluting but to avoid upgrading their buildings, thereby stripping to promise of good green jobs out of the bill.

We are still waiting for some other ambitious promises from the mayor to become reality. During his first electoral campaign, for instance, Mr. de Blasio declared that he would set the city on a path to "zero waste," ensuring that 90% of city refuse would be diverted from landfills by 2030. This initiative is way behind schedule. Organic waste accounts for 1/3rd of the city's waste stream – that's an estimated 1 million tons of compostable material being sent to landfills annually instead of turned into good soil. I personally compost, but to do so I have to put food scraps in my freezer for the week and then schlep them to my local farmer's market every Sunday morning – not an arrangement conducive to dedicated waste recycling in a city with some of the lowest rates of recycling in the country.

In sum, New York City desperately needs a powerful, centralized agency to coordinate efforts to improve sustainability and resilience. The city needs an agency and a commissioner to prioritize the fight against climate breakdown and to coordinate the overlapping and at times contradictory goals of the multiple municipal offices charged with implementing the City's climate goals. In addition to creating such a centralized agency, Intro 1399 also establishes much-needed public oversight of the City's bureaucracy through the creation of a board of experts, advocates, academics, and industry experts that will hold the newly created agency and commissioner accountable.

The science has told us that there's no time to waste in addressing the climate emergency. Let's make NYC an example of how it is possible to move forward with unity and determination in the face of this existential threat to global civilization. Thank you.

I am Gustavo Gordillo, and I am a member of the New York City chapter of the Democratic Socialists of America, the largest socialist organization in the United States. I am speaking on behalf of our Ecosocialist Working Group.

I applaud your effort to reduce methane emissions, which are 86x more potent than CO2. However, I believe the city must do more to address the root cause behind the relentless expansion of fracked gas infrastructure and methane leaks in our community.

This legislation is an attempt to address grid neglect, and is needed because of the private utilities' coordinated resistance to abandon deadly gas infrastructure.

Con Edison and National Grid are investor-owned utilities whose primary goal is to maximize shareholder profits at the expense of workers, communities, and the environment. The City should not need to inform Con Ed and National Grid of where upgrade and repair efforts should be made - that should be their responsibility. It's going to be incredibly cost-intensive, and this is just one more way that Con Ed and National Grid will externalize the costs of fossil fuels onto us.

The city's limited resources would be better spent addressing Con Ed and National Grid's consistent ability to act as a barrier to the transition to renewable energy.

We should make Con Ed and National Grid public utilities, and focus our efforts on replacing crumbling fossil fuel infrastructure with renewables instead of using public money to clean up their mess.

The risks of private utilities are currently socialized, while their profits are privatized. As we have seen with PG&E in California, in our existing system, when a private utility neglects the grid and causes loss of life, we - the public - pay the costs and utility investors are ultimately bailed out by ratepayers and taxpayers.

If we socialized the profits of Con Ed, we would have over \$1B more each year to spend on renewable energy infrastructure, not to mention the \$9.5M CEO salaries, \$1.6M strike contingency fund, and money spent on lobbyists.

In 2018, Con Ed Inc. paid \$889,000,000 in dividends to stockholders and National Grid USA paid \$549,000,000 in dividends to stockholders. These dividends were paid on the backs of ratepayers and amount to a massive wealth transfer from ordinary New Yorkers to the wealthiest members of society who make up these investors.

This is where money should be coming from to abandon gas and build renewables.

A public distribution utility could be achieved by either municipalizing the grid, as over 2,000 U.S. cities have already done, or by working with the state to expand the New York Power Authority's ability to purchase new energy generation and add new customers.

Studies have shown that on average, publicly owned utilities are more affordable, safer, and have a greater share of renewable energy than investor-owned utilities.

Hello my name is Saheedah Majolagbe and I'm a 15 young old high school students who cares for the environment.

I have spent quite some time fighting in order to have action being taken in order to better the climate in any way some would for something they care about. I have been rallied, talked to legislative to help get them on broad to legislation to help bring light on the climate crisis and I have educated everyone that would listen by telling them how important is for my future that they give me a chance to let them.

And we do need to react to attacks on nature and the future of the planet, but it is time for planning action that puts the systems to work on our side, to make the fight against climate change on the good side of the law, a law that is created to protect and do the hard thing. We need a group of well informed, experienced, educated people working together to get behind this.

We need to be making plans for a future that will promote positive change. My generation is begging for action and solutions for us to continue the task, but there is no time to spare. We need to act now, we need to be accountable. As damage is continuing to be expanded and hurt the planet we need to stop this climate disaster and make sure that we don't only stop polluting but also start reversing the effects of that pollution NOW.

Thank you for the opportunity to speak to the Council on three important initiatives. But first, I want to personally say how grateful I am to Speaker Johnson and all the Council members for taking the lead in aggressively addressing this climate crisis that we are now ensconced in.

In regard to the first initiative, No. 1055, I believe this amendment is necessary in order to locate and recognize where all methane leaks occur, or are likely to occur. Half of gas distribution pipelines under NYC streets are 50 years old or more; 25% of them are made of cast iron or other corrosive- or leak-prone materials. A 2014 study “conservatively” estimated that 1,000 tons of methane leaks per year occur from the natural gas distribution system on Staten Island alone. [Read about the study here:<https://www.edf.org/climate/methanemaps>.]

Regarding the second initiative No. 272.

Cleaning one’s own house and setting an example for all buildings in the city would be an important part of leading our state in the fight against climate change. I believe buildings should be surveyed more than the initiative’s call for “at least once every five years” to, perhaps annually. Where reports to relevant agencies and departments indicate that these leaks have not been repaired, the city must step in immediately to make the repairs. Perhaps a Department of Greenhouse Gas Leaks Repair that deals solely with methane and any other greenhouse gas leaks can be created so that these leaks can be dealt with within a reasonable time after they are detected, and at the same time create new jobs.

The third initiative No. 1399

This Council has shown it has the will to address the climate crisis, by putting forth such initiatives as these we are addressing today, as well as enacting laws such as the so-called Dirty Buildings Bill. Now the city has to budget for all of this including clean energy, accelerating the retrofit program, new technologies, training, expertise, on and on. There must be a centralized agency to coordinate efforts and prioritize sustainability and the mitigation of climate change rather than any individual agencies short-term budgetary priorities or constraints. This new Department must have all the tools and authority needed to oversee this massive overhaul, with complete oversight over all agencies. Having a Commissioner and Advisory Board should ensure that the Department is inclusive and represents all communities.

In short, a clear plan is needed to put all the pieces in place. Utilities have shown us that they cannot be trusted to oversee themselves. We need a renewable energy grid for NYC, owned and operated by the city and state. Environmental justice, new jobs, citizen involvement, budgeting, abandoning all fossil fuels and ensuring that no pipelines come in to our city are all essential to making the kind of impact that our city can and must do. Now.

Jackie Weisberg
Jackieweisberg@gmail.com
350BK.org



N.Y.C. Council Hearing, 6/12/19 Int. No. 1399 - Department of Sustainability & Climate Change
Comments of Catherine F. Skopic; Board, Interfaith Moral Action on Climate (IMAC)

Congratulations on responding to the urgency of our climate crisis with this legislation to create a Department of Sustainability and Climate Change. Please consider these suggestions:

3151. b. 1. (Page 2) Include: **“permanent preservation of Community Gardens, green spaces, green roofs where structurally feasible”**

33-102. (Page 3) Sustainability Indicators: add **“coordination with transportation;”**
renewable energy from offshore wind.

33-104. (Page 4) Add phrases: The city will seek to implement or undertake to achieve each interim goal by no later than April 22, 2030 and **encourage achievement by the date of 2025** and long-term goals that the city will seek to implement or undertake to achieve each goal by no later than April 22, 2050 **and encourage achievement by 2040.**

33-104. (Page 5) Add on line 14, include **brief description on type/s of “public input”**

33-107. (Page 6) include innovative technologies, **passive house for all new building hi-rise construction; install vertical axis wind turbines (VAT’s) where feasible.**

Int. No. 1055 Methane Leak Mapping Int. No. 272 Reducing Methane Emissions

As these bills relate to methane emissions and methane leaks, I would like to emphasize our need to eliminate methane usage and not add any more methane infrastructure. When work is being done taking up streets for construction, repair of water, electric, power or gas lines, we can use these opportunities to install geothermal and/or heat pumps to supply neighboring buildings with these sources of renewable energy as well as use these opportunities to install solar panels and/or vertical axis wind turbines (VAT’s) to power street lights and electric vehicle charging stations.



THE RRH COMMITTEE IS MADE UP OF CONCERNED RESIDENTS WORKING TOGETHER TO STEER THE FUTURE OF RED HOOK.

Empowered by the spirit of unity that helped the Red Hook community survive Hurricane/Superstorm Sandy, our vision for a resilient and thriving future is to work as a holistic community to strengthen Red Hook by minimizing differences and maximizing cooperation among all who live and work here.

Mindful of the growing climate-related risks to our beloved low-lying community and the immediate need for improved emergency preparedness measures, our actions will serve to help to develop measures that will protect our neighborhood from flood inundation, increase the safety of our citizens, and move towards a resilient community. We are committed to maintaining and expanding affordable housing, environmental justice, and increased economic activity with an emphasis on local job development, recognizing the importance of their interdependence.

Our re-building efforts will require substantial improvement to our long-neglected infrastructure including sewers, transportation, communications, power and energy provision, and education.

We the members of Resilient Red Hook want all sustainability and climate related resiliency agencies to be better coordinated, flexible and informed.

This would include all agencies that deal with Climate Policy and Programs, Environmental Coordination, Environmental Remediation, Recovery and Resilience, Sustainability.

We demand an agency made up of all the above-mentioned agencies with policy making representation from NYCDEP, NYC DOB, NYC OEM, NYCDCP, NYC Dept of Parks, NYCDDC so that we can mitigate and adapt to climate change and sea level rise. We also demand Public health analysis and ongoing surveys related to urban heat island effects and rising temperatures, increased particle matter from ozone related issues and the impacts climate change will have on epidemiology which is the study of the distribution of infectious diseases as it relates to the urban built environment including areas like Red Hook and Gowanus.

We want assurance that the city's engineering and planning entities will be brought to the table and forced to comply with decisions made by the New Department of Sustainability. We want real accountability.

We want an opportunity to create specific plans and solutions for our neighborhood that can be enforced and monitored by our team of community experts and we want our entire neighborhood whether living in public housing or market rate units to have a voice and continued opportunities to advance our resiliency efforts through community decision making and social cohesion and education around our common needs in regards to community emergency preparedness and climate adaptation.

For questions or comments, please email us @Resilientredhook@gmail.com



**Hearing on Int 1399-2019 sponsored by NYC Councilmembers Costa G. Constantinides,
Helen Rosenthal, and Mark Levine**

June 12, 2019
City Hall, NY

My name is Kyle Jeremiah and I am the Communications and Community Engagement Manager at Energy Vision, a New York City-based national environmental 501(c)(3) organization. Since our founding in 2007, we have been promoting clean, renewable and low-carbon energy and fuel solutions through research, education and partnerships. I'd like to thank the Chairman for this opportunity to testify on the proposed legislation.

Given concerns about the City's ability to achieve its ambitious goal of reducing greenhouse gas emissions 80% by 2050, it is critical to have legislation that enhances institutional capacity to address this existential challenge. As such, Energy Vision fully supports the creation of a Department of Sustainability and Climate Change to replace the existing Office of Sustainability to deal with matters relating to the resiliency of critical infrastructure, the built environment, coastal protection, coastal communities, and climate change.

Energy Vision also supports empowering the proposed department to develop and coordinate policies and strategies to meet the long-term climate and environmental needs of the City. We believe an interagency green team would help to facilitate and advance the implementation of innovative technologies and strategies that have significant environmental and sustainability benefits.

Having spent more than a decade looking at proven but under-deployed clean energy solutions, we would encourage the proposed Department of Sustainability and Climate Change to explore the suite of all potential solutions toward achieving our critical climate goals. One such strategy, addressing both waste disposal and clean energy, is the "co-digestion" of commercial food scraps— a major climate and solid waste liability— in the existing anaerobic digesters at many of the City's 14 wastewater treatment plants.

The biogases captured from these decomposing organic wastes—sewage and food waste—could then be upgraded to net-carbon-neutral biomethane, and used to power these same facilities, fuel vehicles, or heat NYC buildings. This particular example would be a bold, important initiative for the proposed department, as it both captures potent methane gases from organic waste that would otherwise escape into the atmosphere and creates a flexible source of baseload renewable energy.

The proposal calling for the creation of a sustainability advisory board with representatives from environmental and other groups is equally essential, given the various types and levels of expertise required for us to rise to the challenge of addressing our climate change and related public health obstacles. If our environmental goals are to be met, we need a well-informed, fully-empowered agency to help guide the various approaches that can help decarbonize various sectors, while improving air, water and soil quality, public health, and the economy.

Thank you for your time and consideration.

Kyle Jeremiah
Communications and Community Engagement



Sara Roosevelt Park Community Coalition
<http://sdrpc.mkgarden.org/>

June 12, 2019

To: NY City Council Committee on Environmental Protection

We are in full support of City Council Chair Costa Constantinides and the New York City Council Committee on Environmental Protection proposal to create a Department of Sustainability and Climate Change, to be part of the City Council, as well as in support of amending the city code on the mapping of methane leaks and reducing methane emissions.

A committee devoted to taking a stand to reverse the effects of climate change and to reimagine city life through the lens of protecting and enhancing our precious resources is vital and timely. We fully support Council Member Constantinides statement: "This is a battle New York City must wage for generations. Our citizens deserve a full agency dedicated to a sustainable, resilient, and greener future — one that's adaptive, with the intellectual and budgetary power to make real change. I look forward to seeing this department created so we can continue to rebuild our five boroughs for the future."

We have long believed that the NYC Parks Department should be a model of sustainable practice. Parks, as one of the last democratic meeting spaces in our increasingly wealth stratified city could be a conduit for engaging our communities on climate change, sustainability and resiliency. We need a strong policy and practice focused entity to be a source of creative and science-based resources that would enable all our city agencies with their myriad other responsibilities, to play a proactive role in the crucial issue of our time.

"With an absence of federal leadership on climate change, it's on New York City to craft sensible environmental policies. The Department of Sustainability would execute those policies as the coordinator between various city agencies responsible for resiliency, recovery, and other measures. DOS would also set interim and long-term goals by 2050 on sustainability measures such as greenhouse gas emissions, sea level rise, tree populations, and renewable energy generation."

We heartily agree.

Best regards,

K Webster
President
Sara Roosevelt Park Coalition
<http://sdrpc.mkgarden.org/>



The North Shore Waterfront Conservancy of Staten Island, Inc.
P.O. Box 140502
Staten Island, New York 10314

June 10, 2019.

To: Chairman, Costas Constantinides, Councilmember Rosenthal, Councilmember Levine and the NYC Council Environmental Protection Committee Members.

Reference: Int. No. 1399, Chapter 76, Department of Sustainability and Climate Change.

On behalf of the North Shore Waterfront Conservancy of Staten Island, Inc., (NSWCSI or NSWC) and the Environmental Justice Communities and Waterfront Communities on Staten Island's North Shore that we advocate on behalf of.

We are in favor of Int. No. 1399; however, with a stipulation that a resiliency plan as well as resiliency work must be implemented within a year of the establishment of this department for the Environmental Justice and Waterfront Communities on Staten Island's North and Western shores.

Throughout this document sustainability is mentioned, however, we would like to see sustainability being used into making our current/existing Environmental Justice Waterfront communities resilient to Climate Change by installing removable temporary barriers at our waterfront and requiring all existing waterfront properties (City, State, Federal and privately owned) to take on this action. We need a congruent buffer that can connect to adjacent waterfront properties on a short-term basis, and that will provide protection from storm surges and flooding from our nearby rivers and bays. It will give residents living in lowline areas the 15 to 20 minutes that can allow them to get uphill if need be in order to save themselves.

<https://www.awmawatercontrol.com.au/flood-barriers/>

<http://www.floodcontrolinternational.com/PRODUCTS/FLOOD-BARRIERS/demountable.php>

We would like to see the implementation now of natural underwater barriers to slow down the motion of the wakes and tides along the Narrows, Kill Van Kull, Lower Newark Bay and the Arthur Kill also known as commercial shipping channels. Waterways that have been allowed to dangerously erode our shorelines over the course of several decades. We would also like to see the replenishment of shorelines on the North and Western shores of Staten Island with soft natural resiliency buffers and the bolstering of tidal wetlands in these areas. As for man made structures such as docks, riprap, bulkheads, etc., we would like to see these altered so that they are better equipped at providing Climate Change protection for not only the shore-line but for the communities that are adjacent to them. We would like to see a moratorium on all proposed

development of fresh water wetlands including Vernal wetlands and forests.

<https://www.rasmith.com/seasonal-wetlands-provide-habitat/>. Wetlands and forest are essential in urban areas in helping us to protect our Environmental Justice communities from the harsh effects of Climate Change.

We would also like to see air pollution monitoring and controls to reduce and eliminate obnoxious chemical odors and greenhouse gases. In order to meet these goals, it will require NYC and NYS working directly with New Jersey's Department of Environmental Protection as Staten Island borders New Jersey's industrial waterfront.

In order to protect older Environmental Justice Waterfront Communities from contaminants and chemicals from industrial properties (abandoned or otherwise) contaminants and chemicals that can easily migrate off these sites during sea level rise, storm surges and flooding. We would like to see all contaminated properties (Brownfields) immediately remediated. As we notified the City, State and Federal Government of these properties and the contaminants that exist on them back in 2008 in our Environmental Justice booklet "Staten Island's Gold Coast: 5.2 miles from St. George to Arlington." We then followed up with our resiliency booklet notifying the same government of the lack of resiliency buffers on the North Shore of Staten Island in 2015 with our Environmental Justice booklet "Shore Up Community Resilience Adaptation Project for the North Shore of Staten Island."

We have been waiting for the past 7 years Post Hurricane Sandy and 8 years Post Hurricane Irene for our government to take the appropriate actions in making our Environmental Justice communities and waterfront safe and keeping our existing communities and people out of harm's way. Therefore, to us sustainability and resiliency in the face of Climate Change starts at ground zero which is where we are - right now. For our survival in reference to the effects of Climate Change, it's has never been a matter of - if it happens, it has always been a matter of - when we were going to get hit. We have known this since 2005 when Hurricane Katrina hit New Orleans that our time was coming.

SI North Shore Resilience Website, watch the video.

<http://www.sinorthshoresilience.org>

We are in favor of Int. No. 1055 and Int. No. 272; however, we also ask that methane gas studies, maps and any corrective actions include landfills even those are now defunct and acting as NYC Park's properties. We are specifically speaking about Fresh Kills, 2,200 acres of non-recyclable garbage from all 5 boroughs that accumulated over a course of almost 50 years of legal dumping into a tidal wetland on the Western shore of Staten Island.

https://en.wikipedia.org/wiki/Fresh_Kills_Landfill

Thank you for your time and consideration.

Sincerely,

Beryl A. Thurman, Executive Director/President
NSWCSI, *Creating Livable Communities*

My name is Nathan Phillips; I'm a professor in the Department of Earth and Environment at Boston University. In this testimony I would like to review three studies I've been involved in regarding the problem of urban natural gas leaks and how these studies have shaped my perspective on policy to address the gas leaks problem.

Methane, the main constituent of natural gas, is a powerful greenhouse gas, dozens of times more powerful than carbon dioxide, and which has been increasing faster in relative terms than carbon dioxide over the past several decades. Gas leaks also kill trees by displacing oxygen in the root zone, degrade air quality, pose explosion risks, and are an economic waste of energy.

In 2013, with Bob Ackley of Gas Safety USA and others, we published the first study of its kind that mapped 3,356 gas leaks from the distribution pipeline system in Boston. Until that time, no one but the utilities and regulators knew the scope of the gas leaks problem in Boston. Our study made the scope of the problem visible to the public. Subsequently, our published research in Washington, DC, New York City, Durham North Carolina and elsewhere has shown that the distribution gas leaks problem is widespread across the eastern seaboard. It's not a mystery why; old east coast cities have a large percentage of old, leak prone pipe, dating back many decades and even over a century. In Boston today, 43% of the pipeline inventory is classified as leak-prone, while state-wide, about a third, or 7,000 miles of distribution pipeline is leak prone.

Our 2013 research begged the question, what do all these leaks amount to, in terms of the volume of lost gas, greenhouse warming impact, and money. Answering this question is not easy. There are two main approaches: the bottom-up and the top-down approaches. The bottom up approach requires laborious on-the-ground work revisiting the thousands of leaks we detected and meticulously using chambers to measure the volume flow rate coming out of the ground. Instead, we employed a top down approach, published in 2015, which utilized the integrating power of the atmosphere by placing a network of methane sensors on rooftops and measuring the buildup of methane from gas leaks into the well-mixed urban atmosphere. We were able to distinguish the buildup of methane in the urban atmosphere due to natural gas leaks, called thermogenic methane, as opposed to biogenic sources of methanes, such as wetlands or landfills, because thermogenic methane is accompanied in natural gas by other hydrocarbons including ethane, which, if also tracked, serve as "mass balance tracers".

Using this approach we estimated that 2.7% of the natural gas delivered to the greater Boston metropolitan area was leaked to the atmosphere. Although this may not seem to be a large loss rate, because of the large greenhouse warming potential of methane, the 2.7% leak rate translated into about 10% of Massachusetts' entire greenhouse gas emissions inventory from all sectors, a climate change contributor that until our study had not been on the books in many municipal greenhouse gas emissions inventories, including Boston's. The 2.7% leak rate, extrapolated state-wide, resulted in \$90M in annual lost value of gas at the going retail rate.

After this second study established the greenhouse and economic impact of the gas leaks we pivoted toward understanding how to prioritize fixing the leaks. To do so we needed to know more about the nature of individual leaks and how the population of leaks was distributed in size classes. Were leaks distributed as a bell-shaped curve, with an average leak size, with some larger and some smaller? We suspected not, based on research in the upstream sector of the gas supply chain, which found that a relatively small number of leaks, so-called super-emitters, were responsible for a disproportionately large percent of leaked gas. To assess this in the Boston distribution pipeline system, BU PhD student Margaret Hendrick, working with Bob Ackley, did the meticulous chamber measurements on 100 of the 3,356 leaks we mapped in our 2013 study, and found that 7% of the leaks accounted for 50% of the leaked gas. This result, published in 2016, immediately suggested a cost-effective policy of prioritizing finding and fixing the largest leaks.

Until the 2016 publication by Margaret Hendrick, my policy perspective on fixing gas leaks was conflicted: I advocated for what I thought was the lasting solution of replacing, rather than simply patching, leaking pipes, but advocating for pipeline replacement is advocating for 50-60 years of new fossil fuel infrastructure when municipal climate action plans like New York's have set aggressive targets for moving off fossil fuels altogether within a few decades. With our finding that relatively few leaks account for a large fraction of the lost gas, a different policy approach emerged: triage and transition. We can cost effectively find and fix the largest leaks, triaging a large portion of the total leaked gas, while opportunistically decommissioning leak-prone pipes, which in Massachusetts would cost ratepayers \$1.7M-\$1.9M per mile to replace. Instead of pipeline replacement we can transition to cleaner, safer, and ultimately more cost effective electric heating solutions based on heat pump technology and renewable energy.

I am excited to be working with my colleagues testifying here today on finding and fixing gas leaks and the transition to a fully decarbonized building heating sector in Massachusetts, New York, which, as is pointed out in other testimony, has additional benefits to indoor air quality, health and safety.

References:

Phillips N, Ackley B, Crosson E, Down A, Hutyra L, Brondfield M, Karr J, Zhao K, Jackson R (2013) Mapping urban methane pipeline leaks: methane leaks across Boston. *Environmental Pollution* 173:1-4. doi:10.1016/j.envpol.2012.11.003

McKain K, Down A, Raciti SM, Budney J, Hutyra LR, Floerchinger C, Herndon S, Nehrkorn T, Zahniser M, Jackson RB, Phillips N, Wofsy SC (2015) Methane Emissions from Natural Gas Infrastructure and Use in the Urban Region of Boston, Massachusetts. *Proceedings of the National Academy of Sciences* 112:1941-1946. doi: 10.7910/DVN/28530

Hendrick, M. F.* , Ackley, R., Sanaie-Movahed, B.* , Tang, X.* , and Phillips, N. (2016). Methane emissions from leak-prone natural gas distribution infrastructure in urban environments. *Environmental Pollution*, Vol. 213: 710-716. doi: 10.1016/j.envpol.2016.01.094

June 12, 2019 City Council Hearing Testimony

Amber Ruther - NYC Democratic Socialists of America Ecosocialist Working Group

Int. 1399

Thank you, Councilmember Constantinides, for your leadership on climate justice.

I believe that the Department of Sustainability and Climate Change is greatly needed.

Addressing the climate crisis at the scope and speed necessary while ensuring equity and a just transition will be no easy feat. It will require massive levels of coordination among every agency from the Department of Buildings to DCAS. Methods of delivering services that have been in place for decades will need to be carefully re-thought, according to ecological and environmental justice principles, and in many cases, completely overhauled.

As an auditor for the City, I have found that the largest challenges that City agencies face in achieving their goals are often a lack of resources, oversight, coordination with other City agencies, and enforcement mechanisms. This department would remedy many of those challenges.

However, I am concerned that there don't appear to be any enforcement mechanisms if agencies fail to meet their stated goals.

I am also concerned that the members of the Sustainability Advisory Board are all appointed, not elected, and they are not required to seek input from the communities their decisions will impact.

Despite best intentions, they may be unaware of the challenges and tradeoffs certain communities face, and as a result, their decisions may have unintended consequences.

Especially when it comes to disaster relief and resiliency, input from frontline communities is critical. Resiliency plans cannot be designed to serve only the rich and powerful, but should center and prioritize the needs of the most vulnerable New Yorkers.

The Advisory Board could hold regular town halls publicized by the Civic Engagement Commission, or provide an opportunity for online input, perhaps in conjunction with the participatory budgeting platform. This would not only allow the Advisory Board to receive input from the community, but to get buy-in and address any concerns that arise.

It would also reduce the amount of planning they will need to do from scratch, as many communities and grassroots organizations have been developing policy ideas, 197-a plans, and resiliency plans for decades, which simply need to be implemented, funded, and expanded.

For instance, UPROSE's community-owned solar co-operative in Sunset Park would provide the City with an excellent model of how to expand access to solar in a way that is affordable for all and centers frontline communities. They hope to turn the waterfront into a manufacturing hub for wind turbines to combat gentrification.

Furthermore, advocates have requested that the City retrofit NYCHA by involving, training, and hiring NYCHA residents instead of relying on public-private partnerships.

A just transition must be frontline and grassroots-led. These communities already have solutions - what they need most is for their input to be listened to and prioritized.

Int 272 & Int 1055

I support the City's efforts to identify and repair methane leaks. However, I would like to echo Bob Wyman's request to amend Intro 1055 to encourage the abandonment of leaking gas infrastructure, and not only its repair. On average, the cost to replace a leaky pipe is \$26,675. In cases where total pipe replacement is needed, the City should mandate that Con Ed abandon the pipe and replace it with a heat pump, and place a moratorium on new fossil fuel infrastructure with an estimated useful life of over 10 years.

It makes no sense to invest in new fossil fuel infrastructure that will last for 65-85 years when climate science dictates that we must reduce emissions as quickly as possible, nor does it align with New York's goal to reduce emissions 40% by 2030 and 80% by 2050. Yet, Con Ed is basing their current depreciation schedules on a future where we are still using the gas pipes they repair in 2085 and 2105. Their entire business model is based on investing in assets that will either become stranded or create a future that will be unlivable for most New Yorkers.

As we have heard in earlier testimony, Con Ed has a policy of "FANA" - Fix Absolutely Nothing Anytime, unless it's about to explode. Instead of paying to find and fix gas leaks, they simply drill holes in manhole covers so they don't explode and let methane leak into the atmosphere indefinitely. Then they manipulate the data to make it seem like less of a problem than it really is. They should be required to pay to find and repair leaks, which are a risk to our health and our planet, not the City.

Even when gas explosions do cause occur and cause injury or loss of death, Con Ed is rarely held accountable. For example, after the Floral Park explosion killed a mother of 3 in Queens, the Public Service Commission was hesitant to fine them \$1 million for safety violations because they would simply pass the costs onto ratepayers, and requested that they [earmark the funds](#) for safety training instead. However, since then, there have been [many similar explosions that](#) have killed people and little evidence that safety measures have improved. Con Ed has been accused of [tampering with evidence](#) to avoid blame, and was found guilty of bribing regulatory officials.

Con Ed also has one of the highest methane leakage rates in the country, and each year, more New Yorkers die from pollution related to electricity generation than anywhere else in the U.S. Yet, Con Ed charges the second highest residential rates of any major utility in the country - 25 cents/kWh, nearly double the national average.

Ultimately, Con Ed has proven that it cannot be trusted with the critical task of providing safe, reliable, and affordable energy to New Yorkers, let alone to facilitate the transition to renewable energy with the speed needed. Time and again, it has exploited every regulatory loophole possible. It has lured people into kangaroo courts to terminate their electric and gas service, [locked out nearly 9,000 workers](#) and hired scabs when it cut their healthcare and pension benefits, failed to respond promptly to outages, and used lobbyists and [scare tactics such as unfounded](#) gas moratoriums to get fossil fuel infrastructure approved.

None of this should come as a surprise. Con Ed and National Grid are investor-owned utilities whose primary goal is to maximize shareholder value at the expense of workers, communities, and the environment. They are natural monopolies with very little risk, yet they are guaranteed a rate of return. Con Ed's is 9%, and they are asking for a 9.75% rate of return in the current rate case. This incentivizes them to invest in fossil fuel infrastructure that is not needed to inflate the base of their capital investment. They are also incentivized to maximize energy consumption at a time when we need to be reducing emissions as quickly as possible. Regulators have attempted to work around this by allowing them to charge consumers a fixed rate, but that [regressive fixed rate](#) now disincentivizes consumers from energy conservation and solar ownership. It's a Catch-22.

The profit motive in utilities makes no sense, and is incentivizing them to kill us and our planet. The City and State are wasting a tremendous amount of resources trying to force private utilities with an inherent conflict of interest to place people and planet over profit. Instead, the City should make Con Ed and National Grid publicly owned and democratically controlled. This [could be done](#) by expanding NYPA or [municipalizing](#) the grid, as over [2,000 cities](#) in the [U.S.](#) have [already done](#). Like clean water, clean energy is essential and should be guaranteed as a right, regardless of how profitable it is to provide.

On average, publicly owned utilities are [15% more affordable](#), more [reliable](#) with outage durations less than half the national average, greener, and safer than privately owned utilities. Public utilities' contributions to state and local governments are, on average, [33% higher](#) than those of investor-owned utilities. For these reasons, I recommend amending these bills or introducing new legislation that would create a feasibility study to determine whether NYC would save a significant amount of money with publicly owned utilities.

Con Ed and National Grid have long socialized the costs of their outdated and dangerous business model. It's time that we also socialize the rewards, and use the billions in annual profits to help fund the transition to clean, renewable energy.



NEW YORK CITY AUDUBON

Comments to
NEW YORK CITY COUNCIL COMMITTEE ON ENVIRONMENTAL PROTECTION
Regarding the proposal of
The New York City Department of Sustainability
Molly Adams
Advocacy and Outreach Manager, New York City Audubon
June 12, 2019

Council Member Costa Constantinides, and distinguished members of the New York City Council, thank you for granting New York City Audubon the opportunity to offer testimony on the proposal to form the New York City Department of Sustainability. I am Molly Adams, and I serve as the Advocacy and Outreach Manager for New York City Audubon.

We are a science-based conservation organization whose mission is to protect the 350-plus bird species—almost a third of all the species in North America—amounting to millions of individual birds that live in or pass through New York City each year. Some forty percent of these birds are species of conservation need. Protecting these birds and their habitats also improves the quality of life for all New Yorkers.

In the absence of federal action, we are grateful for your leadership and commitment to addressing climate change with the urgency that it requires. If ignored, the impacts of climate change will put New York City's birds, people, and habitats at risk within our lifetimes.

The stark facts presented in the report from the Intergovernmental Panel for Biodiversity and Ecosystem Services and National Audubon's Climate Change and Birds Report all demonstrate that we need to develop a comprehensive mitigation strategy for reducing our carbon emissions and a robust adaptation

strategy that reduce the effects of climate change that we are already seeing in the natural world. One way that this can be enacted is by creating a Department of Sustainability.

We are pleased to hear that a Department of Sustainability would set interim and long-term goals by 2050 on sustainability measures such as greenhouse gas emissions, sea level rise, tree populations, and renewable energy generation. We hope that a Department of Sustainability would also consider the safety of bird populations throughout the city that are threatened by sea level rise, development of shorelines and glass buildings, and lack of well-maintained green spaces.

If created, we hope that a Department of Sustainability would wholistically consider what it means to create a sustainable New York City by looking to the Natural Areas Conservancy's NYC Nature Goals 2050. As a bird conservation organization, passing Int. No. 1482-2019 to amend the NYC building code to require 90% of glass up to 75 feet on all new buildings to use bird-friendly glass or design is also a very important bill that needs to be passed in order for the city to truly be sustainable.

In addition, we are a member of the New Yorkers for Parks' Play Fair Coalition and ask that 0.1% of the city budget can be invested in NYC Parks to help maintain our green spaces as habitat for birds, community centers for humans, and tools to reduce the heat island effect in our city. A Department of Sustainability would help ensure that our green spaces are prioritized, as well as help facilitate the creation of new ones on rooftops now that Introduction 0276-2018 has passed. We hope that Assembly Bill A4740A will be passed to ensure the proper resources to create these integral urban natural spaces.

Thank you again for the opportunity to share this testimony, and should you need any additional information, please contact me at (212)691-7483 madams@nycaudubon.org.

Kathryn Heintz
Executive Director

Susan Elbin
Director of Conservation

Molly Adams
Advocacy and Outreach
Manager

New York City Audubon
71 West 23rd Street, Suite 1523
New York, NY 10010-4198

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Saheedah Majolagbe

Address: _____

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Cait LaMorte

Address: _____

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Cristian Cruz

Address: _____

I represent: _____

Address: _____

▶ Please complete this card and return to the Sergeant-at-Arms ◀

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 0272, 1055 Res. No. _____

in favor in opposition

Date: 6-12-2019

(PLEASE PRINT)

Name: Gustavo Gordillo
Address: 345 Decatur St Brooklyn 11233
I represent: NYC Democratic Socialists of America
Address: Ecosocialist Working Group

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: Amber Ruther
Address: 214 6th Ave, Apt. #2D
I represent: NYC Democratic Socialists of America Ecosocialist
Address: Working Group

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 0272 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: KIM FRACZEK
Address: 232 E 11TH ST. NYC
I represent: SANE ENERGY PROJECT
Address: 250 MOORE ST BK NY 11206

Please complete this card and return to the Sergeant-at-Arms

3/11

THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Gregory Schwedock

Address: 141 East 13th St. Apt. R3B

I represent: The Climate Mobilization NYC

Address: _____

THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. ^{272,1055}1349 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: Jackie Weisberg

Address: 1 JOHN ST # 9D BILLYN 11201

I represent: 350BK.ORG

Address: _____

THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. ^{in relation}1399-2019 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Ari Lieberman

Address: 1007 Atlantic Ave, Brooklyn NY 11238

I represent: 350Brooklyn

Address: _____

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. ¹³⁹⁹ 272 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Nathan Phillips

Address: 93 Charles St. Arborndale MA 02466

I represent: Boston University

Address: 675 Commonwealth Ave. Boston MA 02215

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1055 & 27 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: ZEYNEB MAGAVI

Address: 612 HURON AVE, CAMBRIDGE, MA

I represent: HEET

Address: 21 ACORN ST., CAMBRIDGE, MA

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1055 Res. No. _____

in favor in opposition

Date: 06/12/19

(PLEASE PRINT)

Name: Lyndsey Cooper

Address: 2727 Crescent Street, Astoria, NY 11102

I represent: Mothers Out Front

Address: N/A

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1055 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: _____

Address: _____

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: ROBERT HUBB

Address: SENIORS CODE Development Architect

I represent: DEPARTMENT OF BUILDINGS

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1055 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: DOMINIC NICHOLAS

Address: 21 ACORN ST, CAMBRIDGE, MA

I represent: MEET

Address: 21 ACORN ST, CAMBRIDGE MA

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: _____

(PLEASE PRINT)
Name: Mark Chambers
Address: Director MOS

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 252 Res. No. _____
 in favor in opposition

Date: _____

(PLEASE PRINT)
Name: Michael DeLuca
Address: Dep Comm, DEP

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____
 in favor in opposition

Date: 6/12/19

(PLEASE PRINT)
Name: Anthony Fiore
Address: DCHS

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: BOB WACKLEY

Address: 16 BROOK LANE

I represent: GAS SAFETY INC

Address: 16 BROOK LN SOUTH BORO MA

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: ASHLEY DAWSON

Address: 3550 77TH ST #42 JACKSON HTS. NY 11372

I represent: 350.ORG

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 272 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Margaret Perkins

Address: 180 West End Ave 27F

I represent: 350 NYC.org

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Catherine Skopic

Address: 140 West Broadway, NYC, 10013

I represent: Interfaith Moral Action on Climate

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 272, 1055, 1399 Res. No. _____

in favor in opposition

Date: 12 June 2019

(PLEASE PRINT)

Name: VINCENT BRANCATI PERKINS

Address: 1111 SE 8TH AVE NYC 10127

I represent: NEW YORK SOCIETY FOR ETHNIC CULTURE

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/2019

(PLEASE PRINT)

Name: Marion Chen

Address: 901 Ave H # 1N Bklyn 11230

I represent: Myself

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 272 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Ruth Hardinger

Address: 20 N Moore St New York NY

I represent: SSC NYC-019

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Roland Lewis

Address: 20 Stephen Court Brooklyn NY

I represent: Waterfall Alliance

Address: 217 Water Street NY NY

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: Asha Brundage-Moore

Address: _____

I represent: New York Lawyers for the Public Interest

Address: _____

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

[]

I intend to appear and speak on Int. No. 272 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Assistant Chief David Morkal

Address: 9 Metrotech Dr

I represent: FDNY

Address: 9 Metrotech Dr

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

[]

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: Lisa DiCarrio

Address: 325 West 93rd Street, NY, NY 10025

I represent: SIERRA CLUB

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

[]

I intend to appear and speak on Int. No. 1399 Res. No. 1399

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: WENDY BRAWLER

Address: 175 Rivington #1D 10002

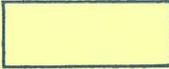
I represent: Green MAP + LES READY

Address: 292 E 3rd #1A 10009

need to leave
by 2:50 p.m

THE COUNCIL THE CITY OF NEW YORK

Appearance Card



I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Nancy Romer

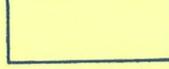
Address: 445 6th St

I represent: Professional Staff Congress-CUNY AFT 2334

Address: Peoples Climate Movement - NY
445 6th St Bklyn NY 11215

THE COUNCIL THE CITY OF NEW YORK

Appearance Card



I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: Molly Drwati

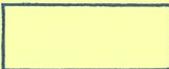
Address: 746 Union Street, Brooklyn NY 11215

I represent: 350 Brooklyn

Address: 350 Brooklyn.org

THE COUNCIL THE CITY OF NEW YORK

Appearance Card



I intend to appear and speak on Int. No. 10550 1399 Res. No. _____

in favor in opposition

Date: 12 June 2019

(PLEASE PRINT)

Name: Bob Wymann

Address: 203 W 85th Apt PH2, NY, NY 10024

I represent: Self

Address: _____

Need to test by
3:15pm

THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 272, 1055, 1399 Res. No. _____

in favor in opposition

Date: 6/12/2019

(PLEASE PRINT)

Name: Lee Ziesche

Address: 219 Quince St, Apt 11 Brooklyn NY 11216

I represent: Solar Energy Project

Address: 232 E 11th Street New York NY

Int 1399
Int. 1055
Int. 0272

THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: June 12, 2019

(PLEASE PRINT)

Name: Philip H. Kahn

Address: 120 East End Ave. Apt 9C

I represent: Citizens Climate Lobby

Address: NYC Chapter

THE COUNCIL THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: 6/12/2019

(PLEASE PRINT)

Name: KYLE JEREMIAH

Address: 138 E 13TH ST NY, NY 10003

I represent: ENERGY VISION

Address: 138 E 13TH ST. NY, NY 10003

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

with reservation

I intend to appear and speak on Int. No. 1399 Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Karen Blonde

Address: 621 Degraw St

I represent: Resilient Red Hook / T3 Turn

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. 272/1399 Res. No. _____

in favor in opposition

Date: 6/12

(PLEASE PRINT)

Name: Eileen Moran

Address: 4718 213 St.

I represent: myself, UNION COMM.

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

272

I intend to appear and speak on Int. No. 272 Res. No. _____

in favor in opposition

Date: 6/12/19

(PLEASE PRINT)

Name: Richenda Kramer

Address: 350 Richmond Terrace, 4R, SI

I represent: Action Corps NYS

Address: _____