



**TESTIMONY OF THE CHIEF CLIMATE OFFICER BEFORE THE NEW YORK CITY  
COUNCIL COMMITTEES ON CIVIL SERVICE AND LABOR; HOUSING AND  
BUILDINGS; AND ENVIRONMENTAL PROTECTION.**

*June 27, 2022*

Good morning. My name is Rohit T. Aggarwala, and I am the Chief Climate Officer of New York City and the Commissioner of the Department of Environmental Protection. I would like to thank Chairs De La Rosa, Sanchez and Gennaro, and the members of the Civil Service and Labor, Housing and Buildings, and Environmental Protection Committees for the opportunity to testify today. I am excited to work with you all as we implement this critical climate legislation.

I would like to acknowledge my colleagues, Gina Bocra, Chief Sustainability Officer at the Department of Buildings, and Jamie Horton, Director of Special Projects at the New York City Economic Development Corporation, who will join me in answering your questions today. In addition, Anthony Fiore, Chief Decarbonization Officer at the Department of Citywide Administrative Services, will be joining us virtually to answer questions. He is unable to attend in person due to a positive COVID diagnosis.

It is only two months since I last testified before the Council on the topic of Local Law 97. I'd like to say at the outset that we are proceeding apace along precisely the lines I described at that time. We are focusing on the fact that Local Law 97 was titled the Climate Mobilization Act. Our goal is to get every covered building mobilized to reduce emissions and reach their targets under the law. It is through that mobilization that jobs are being created, and more will be. Our first step to do that is the internal work necessary to get the rules written. At the same time, we are working to spread the word that the Adams Administration fully intends to implement Local Law 97 and that all covered buildings need to get mobilized if they are not already. Also as I mentioned in April, we are particularly focused right now on the buildings that will need to take action for the 2024 compliance period. Happily, this is a relatively small group of buildings, probably fewer than 3,000. The much more aggressive limits established for 2030 will be the major source of job creation from LL97. For that much larger group of buildings, early mobilization will be critical, which is entirely consistent with the way we plan to implement this law.

Mayor Adams and this administration have recognized the job-creation potential of Local Law 97 from the beginning. This is why we have made the green economy a central pillar of its economic

development strategy, as laid out in *Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery*.

### **Green Workforce Development**

Decarbonizing our private buildings and making them more energy efficient will help to drive our economic recovery in a more inclusive way. Energy efficiency creates 20 jobs per million dollars of investment a year. Today, 61,000 people are employed in the energy efficiency industry across all five boroughs, which accounts for most energy employment in the city (43%). The Blueprint calls for accelerating the electrification of our buildings and transportation systems, driving the building energy efficiency and retrofit markets, and scaling emerging models to electrify trucking and commercial fleets.

A critical part of implementing Local Law 97 and ensuring that the associated economic benefits are distributed to all New Yorkers, which is why the Blueprint for Economic Recovery calls for an interagency working group to coordinate with industry on a green jobs workforce effort. In addition to the interagency working group, the City will also undertake a study to understand the size, impact, and opportunities of the green economy in the short and long term with a focus on workforce development and how to get New Yorkers into these jobs.

All of this work will build on several green industry and green jobs initiatives already underway across the City. I would like to highlight a few of these:

- The recently announced \$191 million investment in Offshore Wind, which we expect to create over 13,000 jobs and generate \$1.3 billion in annual investment. There are requirements that 40% of the City's investment be directed toward women, minorities, and EJ communities. EDC is leading this work which will establish an offshore wind hub at the City-owned South Brooklyn Marine Terminal as well as investments Citywide in workforce and research and innovation in the offshore wind industry. In addition, the City secured a \$5 million investment from project partner Equinor to ensure low-income New Yorkers and communities of color can participate in the industry.
- In addition to assisting building stakeholders with energy improvement projects, the NYC Accelerator offers the NYC Accelerator Learning as a free training resource for NYC residents. The Learning Center currently has a catalog of 30+ courses which include trainings on new technologies, building practices, and soft skill trainings for building professionals working on both new and existing buildings. The Accelerator also runs an internship program, which provides CUNY students with 35 hours of training on energy efficiency basics before pairing them with a host organization and providing mentorship along the way.

- EDC’s PropTech Piloting Program which is identifying leading building and real estate technologies to deploy on the over 490 million square feet of City-owned real estate across DCAS, NYCHA, HPD. This program will pilot the most advanced technologies that have usually been reserved for class A office space on City properties serving everyday New Yorkers. In addition to identifying opportunities to improve building efficiency and operations, these pilots are also designed to offer workforce training opportunities for low-income New Yorkers and NYCHA residents.
- The NYC Green Jobs Corps includes four City funded pre-apprenticeship training programs that link graduates to interviews with the building and construction trade unions. Targeted recruitment for these programs in the high need neighborhoods served by the SBS Workforce 1 centers ensures there is a steady stream of low-income workers entering the trades as apprentices. The programs that make up the NYC Green Jobs Corp also do tremendous work to recruit, train and place women, returning citizens, and students from CTE high school in the trades. These apprenticeship opportunities provide workers paid on-the-job and in-classroom training for three to five years. The extensive benefits and prevailing wages earned through a union career provide a clear path towards economic security for the hardest hit New Yorkers. Union jobs created by LL97 increase the need for union workers throughout the City and the need for more apprenticeship openings for the low-income workers trained through the corps.

In addition to these larger initiatives there are numerous campaigns across City agencies to grow the green economy and get New Yorkers connected to those jobs. I am happy for my team to provide follow-up information.

### **City Buildings**

As I reported on two months ago, the City is leading by example in the efforts to reduce carbon emissions and associated criteria pollutants. To date, the City has invested approximately \$900 million in reducing energy use and emissions from government operations. This has resulted in the reduction of 2.9 million MMBTUs of energy use or the equivalent of 200,000 NYC residencies and a 27% decrease in greenhouse gas emissions. This work has created or retained 4,000 good paying jobs.

While much work has been completed much more remains to be done. It is expected that the City will need to nearly triple the amount of work it has historically completed on average. As I mentioned in April, we are very seriously focused on achieving the City’s 2025 target of a 40 percent reduction over 2005, but it is a significant challenge and there continues to be a high level of risk to our achievement of that target.

It is not for lack of trying. This administration has taken action in its first 100 days to unbottle this work. We are adding nearly 200 employees to our carbon reduction efforts across the agencies to help identify additional opportunities and manage the work. Since I last testified, we have accelerated the addition of staff at key authorizing agencies including the Office of Management and Budget, the Law Department and the Mayor's Office of Contracts to speed procurements and project delivery. As I mentioned last time, the Administration made a major push with the State legislature to extend its Design-Build project delivery authority to projects intended to reduce energy and greenhouse gas emissions. Unfortunately, we found out after my testimony the law the state legislature passed only covered projects above \$10 million, so we are working to see how much of our LL97 compliance work can qualify. We are optimistic that LL97 compliance projects will also benefit from work that the Administration is undertaking broadly to accelerate City capital projects, such as the task force that First Deputy Mayor Lorraine Grillo is leading, with the participation of the Comptroller, the private sector, union leaders, and multiple agencies. As you know, the Adams Administration also prioritized making the case to the NYS Public Service Commission for its approval of the two Tier 4 projects that will deliver clean and renewable energy from upstate New York and Canada into New York City. When it approved those projects, several commissioners noted that New York City's commitment to purchase that electricity was critical to making those projects work.

The City has worked to ensure that its greening efforts create good jobs. We have partnered with the City University of New York to create an Energy Management Institute to upskill city workers in the latest energy efficiency and clean energy technologies and best management practices in building operations and maintenance. To date, more than 1,700 employees across 40 different agencies have participated in these training opportunities and over 1,100 professional certifications have been awarded.

The City has also taken action to train the next generation of green workforce. DCAS and DOE have partnered to provide energy management and sustainability training to more than 1,000 k-12 teachers reaching over 2,000 students. In addition, a solar training curriculum has been developed for the Career and Technical Education Schools. This prepares students matriculating out of CTE to directly enter the solar installation and maintenance industries. 1,500 students have participated in this training.

Finally, DCAS and DOC's Re-entry Program Division have partnered to develop a solar installation and maintenance training class for incarcerated individuals on Riker's Island. Since 2018, over 180 individuals were trained in basics of renewable energy, electrical theory, and solar PV technology and design. In partnership with SBS, Solar One, the Fortune Society, and local solar developers and unions, the program has supported employment of more than 20 individuals into the construction, facilities management, and energy efficiency industries

## **Local Law 97**

At a hearing this past April, I spoke in detail about the Adams Administration’s approach to implementing Local Law 97 and our commitment to ensuring that the law is enforced in a way to drive retrofits and create jobs. We are still working through the details of what this will look like, so I do not have much more to say on this topic than I did in April. All of the rules that will govern compliance, including a definition of what we believe should constitute a “good faith effort”, will be subject to public notice and comment under the CAPA rulemaking process. I am looking forward to updating these Committees as soon as we have details to share, and of course both you and all New Yorkers have the opportunity to provide input during the rulemaking.

As I’ve expressed, we are focusing on the “mobilization” in the Climate Mobilization Act. We want building owners to act as soon as they can to decarbonize and retrofit their buildings to operate more efficiently. Mobilizing building owners to reduce greenhouse gas emissions inherently means that we are also mobilizing the people who work on buildings. We want to see these jobs be good-paying and local, to the greatest extent possible.

For the 2024 compliance period, we expect that approximately 2,700 buildings will need to make changes to their buildings to comply with the law. Some of these will be relatively minor operation and maintenance updates, and some will require retrofits. We expect many more building owners will need to retrofit their buildings to comply with the 2030 building emissions limits. This is when we will likely see the workforce expand to meet that need.

### **Conclusion**

In conclusion, we are excited about the opportunity that decarbonizing our private buildings and making them more energy efficient provides for an inclusive economic recovery. Additionally, the Adams Administration is committed to achieving the greenhouse gas emissions limits established in Local Law 97. The climate fight is about mobilization and we know that workers will be leading the charge.



**Submitted Testimony to the City Council  
Committee on Environmental Protection, Committee on Civil Service and Labor,  
and the Committee on Housing and Buildings  
re: Local Law 97 Green Workforce Pipeline  
June 27, 2022**

- *Con Edison is committed to climate action and to leading the orderly transition to the clean energy future that our customers deserve and expect.*
- *The decarbonization of buildings is a unique opportunity to provide good-paying jobs that can boost economic recovery, particularly in disadvantaged communities.*
- *A robust public policy response is necessary to meet the future need for green jobs.*

Con Edison serves 3.5 million electric customers, 1.1 million gas customers, and 1,560 steam customers, and employs more than 12,500 talented, diverse, and dedicated people, of whom 55% are union members. Utilities are major drivers of infrastructure investment in the local economy, supporting good-paying, middle-class jobs. Utilities in New York City are expected to invest more than \$14 billion from 2020 to 2023 and projected to support the creation and retention of 80,000 to 100,000 jobs. This includes an aggressive investment of more than \$8 billion budgeted in 2022 from New York City's tristate metropolitan region utilities and authorities for energy efficiency, renewable energy, battery storage and grid modernization, creating and supporting an estimated 50,000 jobs.<sup>1</sup>

Our recently expanded [Clean Energy Commitment](#) sets forth how we will lead the transition to a net zero economy by 2050 and help the State and City meet their climate goals. An important part of our commitment is to enhance our collaboration with customers and stakeholders to improve the quality of life in the neighborhoods we serve and live in, focusing on disadvantaged communities. Put simply, no one entity can create our clean energy future by itself. We need to work together to find solutions that provide multiple societal benefits, including green jobs. And we need to make sure the energy transition works for all.

The Pathways to Carbon Neutral study that the Mayor's Office and utilities conducted makes it clear that we need to close a deficit in the skills the city's workforce needs for us to decarbonize our buildings<sup>2</sup>. An increased focus on workforce training in clean energy jobs will be essential to our transition off fossil fuels. With our energy efficiency programs, grid investments and support for electrification, Con Edison will continue to play an important role in supporting the workforce of the future. As a member and active participant in the [Local Law 97 Advisory Board](#) we recognize we are embarking on the mobilization phase of the law and now is the time to identify future workforce needs.

The company fosters green jobs through several channels. Here are some examples:

*Support for organizations*

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<sup>1</sup> <https://pfnyc.org/research/a-guide-to-green-infrastructure-funding/>

<sup>2</sup> <https://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/Carbon-Neutral-NYC.pdf>



Through our charitable giving program, Con Edison supports more than 50 organizations across New York City and Westchester County addressing workforce development and green jobs training to build STEM career pathways. In 2021, we were proud to provide more than \$12.6 million to support more than 600 nonprofits in New York City, Westchester, and Orange and Rockland counties as part of our commitment to strong communities and a clean energy future. One example is our creation and support for Energy Tech High School, in Queens, which prepares students for careers in engineering and technology.

Our [Smart Kids Energy Efficiency Program](#) for 5<sup>th</sup> graders and high school students is another example of how we engage youths. The program helps students learn about the clean energy future and seeks to spark their interest in the topic with a kit of fun materials, workbooks, and program guides. The program team has delivered approximately more than 47,000 kits to students and teachers this year.

### *Company decarbonization programs*

Our energy efficiency programs provide major opportunities to support a green workforce. The [Clean Energy Academy](#) provides a pipeline of skilled workers for our energy efficiency programs and implementation contractors. More than 290 participants have received training from this partnership between NYSERDA, Willdan Energy Solutions, and Con Edison. More than half were recruited from priority populations, including but not limited to: veterans, 18- to 24-year-olds, previously incarcerated individuals, and individuals living in under-resourced communities.

By being creative, we can maximize the benefits of the shift toward renewables and make sure it is inclusive. Our [Community Power Program](#) installed 1.2 megawatts of solar generation atop 40 buildings, across three New York City Housing Authority (NYCHA) developments. Our partners, including Green City Force and Solar One recruited, trained and hired underemployed NYCHA residents to install the solar panels. Through our program, these residents received a living wage and gained hands-on experience working in the clean energy economy. Using revenues from the rooftop solar production, we will provide bill discounts to more than 450 customers from low-and-moderate income households that enrolled in the program.

### Going Forward

As with the programs mentioned above, we must scale existing green jobs programs to meet future needs. We will need an organized effort identifying and matching the future workforce to the need. At Con Edison, we're providing our workers with new skills as we transition to a clean energy economy---we did this with meter readers as part of our move smart meters. But how can we work together, regionwide, with all stakeholders, to transition jobs that get us to a net zero economy?

We see an opportunity for state and city officials to convene interested stakeholders on this topic. A gap analysis followed by a focused public policy response with significant resources to enable this outcome is necessary to reach the scale we need. We welcome that discussion and look forward to working with the Council, the administration, and all other stakeholders to seize this opportunity.



**TESTIMONY  
OF THE  
NEW YORK PUBLIC INTEREST RESEARCH GROUP  
BEFORE THE  
NEW YORK CITY COUNCIL  
COMMITTEES ON CIVIL SERVICE AND LABOR,  
ENVIRONMENTAL PROTECTION, & HOUSING AND BUILDINGS  
June 27, 2022  
New York, N.Y.**

Good afternoon. My name is Megan Ahearn, and I am the Program Director for NYPIRG, the New York Public Interest Research Group. NYPIRG is a non-partisan, not-for-profit research and advocacy organization. Environmental protection, public health, consumer protection, higher education equity, and civic empowerment are our principal areas of concern.

Thank you, Committee Chairs De La Rosa, Gennaro, and Sanchez, and members of the Committees on Civil Service and Labor, Environmental Protection, and Housing and Buildings, for the opportunity to testify in support of Local Law 97.

NYPIRG works with students at college campuses across New York, including 10 here in New York City. Generational climate justice is an issue that's front and center for the students we work with. Today's college students are seeing more severe storms and flash floods, they are reading dire climate reports from the UN's IPCC, and grappling with what their future will look like.

There is hope too. Local Law 97 is one of the best tools NYC has to combat the climate crisis, and for the future of our city, we need it to remain strong and implemented fully. 70% of New York City's climate-heating pollution comes from buildings, with the majority of that pollution coming from large buildings (over 25,000 square feet). By requiring owners to reduce their building's emissions, and upgrade their energy efficiency, Local Law 97 will be creating tens of thousands of good, green jobs, improving local air quality, and cutting utility bills and operating costs.

Urban Green Council (UGC) estimates that the building energy improvements mandated by Local Law 97 have the potential to create 141,000 jobs by 2030 in the NYC metro area.<sup>1</sup> Architects, engineers, sustainability consultants, building tradespeople and HVAC professionals will all see direct industry growth from the needed planning, efficiency, and infrastructure enhancements.

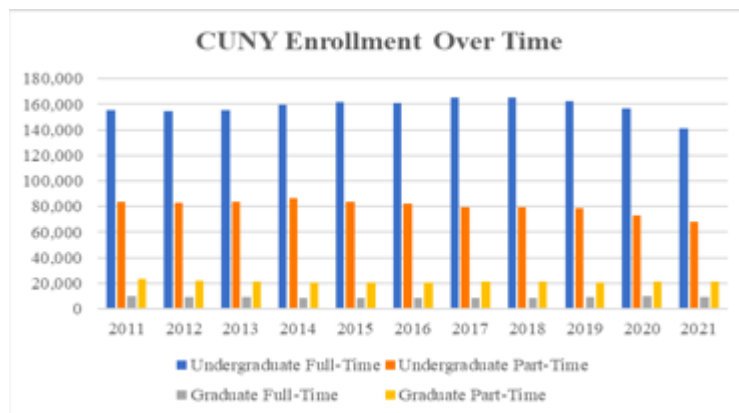
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<sup>1</sup>Urban Green Council, Retrofit Market Analysis, June 18, 2019,  
[https://www.urbangreencouncil.org/sites/default/files/urban\\_green\\_retrofit\\_market\\_analysis.pdf](https://www.urbangreencouncil.org/sites/default/files/urban_green_retrofit_market_analysis.pdf).



Another benefit of the jobs growth associated with Local Law 97 is the potential to bolster relevant programs at CUNY. UGC estimates that Local Law 97 could trigger an over \$20 billion energy retrofit market in New York City, if buildings choose efficiency to meet emissions standards.<sup>2</sup>

A growing industry in energy design, construction, and renovation is just what CUNY needs to attract new enrollment amid a recent enrollment slump. During the Fall 2011 through Fall 2019 pre-pandemic period, Bronx Community College (5% reduction), the College of Staten Island (5%), Hostos Community College (10%), Kingsborough Community College (32%), LaGuardia Community College (4%), Medgar Evers College (10%), and Queensborough Community College (12%), saw reductions in full-time enrollments. Consistent with national data, community colleges have been hit harder and longer by enrollment losses. Then as the pandemic hit, CUNY enrollment saw nearly across the board enrollment dips. The pandemic triggered enrollment losses at CUNY that exceeded 21,000 full-time undergraduate students when comparing Fall 2019 and Fall 2021.



Information obtained from the City University of New York, Office of Institutional Research, <https://www.cuny.edu/about/administration/offices/oira/institutional/data/>. Recent information obtained upon request. Data for the AY2022 is preliminary and subject to change.

Programs that could benefit from such a substantial increase in the building efficiency market include Building Trades or Industrial and Skilled Trades at Bronx Community College; Construction or Building Management & Sustainability at Laguardia Community College; A list of programs at New York City College of Technology including Construction, Architecture, Building Trades, or Construction Management and Civil Engineering (CMCE) Technology; Sustainability or the Spitzer School of Architecture at City College; Construction and Trades at Kingsborough Community College; Building Trades at Hunter College; Construction at Baruch College; and more. CUNY City Tech has even been added to a list of 2022 Top Colleges for Building and Construction Trades in New York.<sup>3</sup>

<sup>2</sup> Urban Green Council, Retrofit Market Analysis, June 18, 2019, [https://www.urbangreencouncil.org/sites/default/files/urban\\_green\\_retrofit\\_market\\_analysis.pdf](https://www.urbangreencouncil.org/sites/default/files/urban_green_retrofit_market_analysis.pdf).

<sup>3</sup>Niche.com, <https://www.niche.com/colleges/search/best-colleges-for-building-and-construction/s/new-york/>.

With such an infusion in these professions, students can feel good about their job prospects post-graduation, and they can feel good about having a career that is a climate solution, one that will improve the health of their loved ones and the vitality and resiliency of their communities.

However, along with a robust coalition of organizations and community members, we are concerned that the Administration may be looking to remove or reduce penalties or otherwise delay full implementation. If the law's implementation and enforcement are weakened, that will drive down jobs – including good paying, union jobs. Not only that, but weakened enforcement will drive up pollution rates.

Local Law 97 sets climate pollution limits on very large buildings, with the first benchmark for emissions starting in 2024 at a high level. Only the most polluting buildings - about one fifth of large buildings - exceed these 2024-2029 thresholds. The law's 2030 limits are much tighter. Currently, about three-quarters of large buildings exceed the 2030 limit.

As the pollution reduction benchmarks approach, buildings – first just the dirtiest – will have to make efficiency upgrades. That can include better insulation and ventilation, tighter air sealing, upgrades to HVAC systems, installation of electric heat pumps, and green roofs. An added benefit to these upgrades, is that most buildings will save money through lower utility bills and operating costs. Cutting energy waste is good for the environment, public health, and your wallet.

For building owners who do not cut pollution below the corresponding 2024 and 2030 limits will break the law and pay penalties. The more the building pollutes over its cap, the higher the penalty. Because of this, the real estate industry has opposed the law.

The industry tactic to delay climate action is an old story – fossil fuel and real estate interests work together to push flashy misinformation campaigns to slow down reforms. And the public pays for it with respiratory disease and narrowing windows to avoid climate devastation.

How else does the public pay for it? By footing the bill for disaster clean-ups. The National Oceanic and Atmospheric Administration (NOAA) has tallied the cost of New York's climate-fueled storms from 2000 and 2021; \$50 to \$100 billion dollars.<sup>4</sup> Superstorm Sandy caused \$19 billion in damages in New York City.<sup>5</sup> After Hurricane Ida, the MTA alone estimated up to \$100 million in damages from the storm, according to MTA Acting Chair Janno Lieber.

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<sup>4</sup> NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2022). <https://www.ncei.noaa.gov/access/monitoring/billions/>, DOI: 10.25921/stkw-7w73.

<sup>5</sup> *2014 New York Hazard Mitigation Plan*, New York State Division of Homeland Security and Emergency Services (January 4, 2014) at 3.12-12. Accessed at [www.dhSES.ny.gov/oem/mitigation/documents/2014-shmp/Section-3-12-Hurricane.pdf](http://www.dhSES.ny.gov/oem/mitigation/documents/2014-shmp/Section-3-12-Hurricane.pdf).

For the young people that NYPIRG works with, there is no time to wait, or to move backwards. Local Law 97 must be fully implemented by maintaining its pollution reduction benchmarks and penalties. Specifically, we recommend that the City Council work to ensure that the Adams Administration:

1. **Makes a clear statement: the city will fully implement and enforce the law, including assessing penalties for violations as set by the law's formula.** The city - and state - have created many helpful programs for building owners to comply. However, compliance and therefore job creation and pollution reductions will be achieved only if property owners understand that they will be fined as under the formula in the law if they break it by exceeding the pollution caps. Local Law 97 will fail if it becomes another housing law that isn't enforced. Landlords know they can flout laws that don't have any teeth. In fact, they routinely break such laws. The law's penalties will drive compliance; wrist slaps won't. The Administration cannot be allowed to create some phony, easy-to-game compliance program that enables building owners to evade the law. For example, a terrible system that would gut the law would allow a building owner to hire consultants to make some attestations that the owner made a "good faith" effort but cannot comply, and then the owner would get a delayed, waived or weakened requirement/penalties.
2. **Tightly limits Renewable Energy Credits (RECs).** With CHPE and Clean Path likely to proceed in 2025 and the later 2020s, there will be a flood of RECs available in Zone J, the city's electrical grid zone. We are glad these transmission projects are moving forward because they will green the grid. However: Unless the Administration sets rules for owners use of RECs that tightly limit REC use as a vehicle for Local Law 97 compliance, the volume of RECs available will become a huge loophole in the law allowing landlords to "buy out" of upgrading their buildings on-site. If building owners can buy cheap RECs instead of upgrading their buildings, New York City will lose thousands of jobs and air pollution will be higher in our neighborhoods. We urge the Administration to limit RECs to only a. electricity use and b. up to a maximum of 10% of a building's pollution reduction requirement. The law needs proper regulation in this area to maximize jobs and pollution cuts.
3. **Sets rules and regulations properly to maximize local jobs and pollution reductions via energy efficiency upgrades to buildings.** For example, as the Department of Buildings proceeds as directed under the law with a finer categorization of buildings to specific requirements, it must set requirements correctly. In particular, the 2030 requirements should mandate about 75% of covered buildings to undertake emissions reductions, as intended by the law and its drafters. Experts agree that finely-tailored requirements at that level are aggressive and achievable. Such levels maximize pollution reductions and therefore job creation. Failing to set such levels would gut the law, leaving NYC's requirements weaker than other cities which have followed the city's lead and enacted laws to reduce pollution from their largest buildings.
4. **Continues to appropriately fund OBEEP.** We commend the Council for insisting on proper staffing and funding in this year's budget and the Mayor for agreeing. These are tiny, but critical allocations that will need to grow in future years to properly implement the law. The department will have the staff and outside-expert resources needed for proper basic implementation.

5. **Funds NYCHA properly**, especially since the federal and state governments are continuing to disinvest. Local Law 97 compliance by NYCHA is only possible if the buildings are properly maintained and in a state of good repair. The same applies to schools and other public buildings, but NYCHA should be prioritized for the vast budgets it needs.
6. **Does not allow carbon trading** (at least not anytime soon). We commend the Administration for acknowledging at the Council's previous oversight hearing that carbon trading should not move forward as of now. Creating a workable, fair system that advances pollution cuts, job creation and environmental justice is, at best, an enormous technical challenge. That is especially true as the law's regulations are not yet set into place, and therefore putting together a carbon trading system on top of the law's requirements is far too complex to create at this time. We are deeply skeptical that a workable system that is fair and equitable can be created.
7. **Creates a roughly \$100 million per year grant fund restricted to support for upgrades in low and low-middle income multi-family housing (and tie these funds to labor standards to maximize high-quality, union labor)**. Affluent building owners should not be subsidized to do the right thing. Moreover, many or even most owners will save money on utility bills and operating costs over and above their costs of financing by complying with Local Law 97. Nonetheless, the city ought to provide a generous subsidy to working class owners to help defray up-front costs. Any new program should be limited to low-income and lower-middle class owners. No program should be another giveaway to any affluent owners. It is absolutely appropriate for the city to require property owners to follow minimum standards on air pollution to prevent the planet from heating and improve local air quality, as set by Local Law 97, in the same manner property owners are expected to pay for basic fire safety standards, proper treatment of sewage, basic upkeep of sidewalks, building code etc.

Thank you.

REBNY Testimony | June 27, 2022

## The Real Estate Board of New York to The Committees on Environmental Protection, Civil Service and Labor, and Housing and Buildings on Oversight – Local Law 97 Green Workforce Pipeline

The Real Estate Board of New York (REBNY) is the City's leading real estate trade association representing commercial, residential, and institutional property owners, builders, managers, investors, brokers, salespeople, and other organizations and individuals active in New York City real estate. REBNY thanks the Committees for the opportunity to testify on the potential workforce impacts of Local Law 97.

REBNY members are eager to help usher in a greener future for New York. The built environment is the largest contributor to carbon emissions in New York City, accounting for about [70](#) percent of carbon emissions per year. New York is also uniquely poised to bear some of the worst effects of climate change, with the city facing a 2-foot sea-level rise, higher storm surges and more frequent storms, and more intense heat waves, all by 2055. For these reasons, leaders in the real estate industry are committed to building a greener, more resilient city.

This commitment can be seen throughout the city's built environment. For instance, at [Hudson Square](#), Hines and Trinity Church Wall Street are developing LEED Platinum buildings that utilize innovative green technology that will exceed New York's 2030 carbon emissions targets by 46%. This project is [laying the groundwork](#) for wider adoption of high performing, electric buildings in New York City and has been recognized by NYSERDA through the [Empire Building Challenge](#) program.

The Hudson Square project is just one example of the success of leading real estate owners and developers in supporting a greener New York. Our members are participants in several leading programs including NYSERDA's Empire Building Challenge is a 50-million-dollar initiative that seeks to demonstrate novel approaches to transforming how New York is retrofitting buildings. Many of the key lessons of this initiative were recently unveiled as part of [Empire Building Playbook](#) initiative, which is based on the successful efforts of companies including Empire Realty Trust, the Durst Organization, Vornado Realty Trust, and Hudson Square Properties.

Further, NYSERDA also holds a 40-million-dollar competition, Buildings of Excellence, that monetarily rewards those organizations that build for a greener future through constructing carbon-neutral ready multifamily buildings. Past winners have included REBNY members like Jonathan Rose Companies, who has committed to cutting their Sendero Verde Building's carbon emissions by achieving Passive

House Certification. This project, located in Harlem, will make affordable housing for the area's residents more sustainable and energy-efficient. Other winners of this competition include the Hudson Companies – who previously partnered with the Related Companies to build the world's largest passive house building at the time of completion on Roosevelt Island – for its leading work in this area.

Owners and developers are also working closely with their tenants by incorporating green principles into their leases. Members, like Empire State Realty Trust and Tishman Speyer, have been named Green Lease Leaders. Green Lease Leaders is a national program launched in 2014 by the US Department of Energy's Better Building Alliance and recognizes landlords and tenants who demonstrate industry-leading efforts in creating more sustainable and efficient buildings.

To be competitive in the ecosystem of investors, our members are often eager to be at the forefront of climate technology. For years, companies like [Rudin Management](#) have been integrating technology into their buildings, which has helped lead to a 44 percent reduction in the firm's carbon emissions since 2005. This support also enables members to experiment with new methods for reaching sustainability goals through capital. For instance, earlier this year REBNY's annual Prop Tech Challenge focused exclusively on new technologies that can help decarbonize the building stock.

The industry is also leading the way to ensure that New York City is powered by renewable electricity so that we can replace the polluting fleet of power plants that for too long have harmed the communities in which they are located. Indeed, Related Companies and Blackstone are directly investing in the [transmission projects](#) needed to bring zero-emissions power into New York City and many industry peers are [exploring purchases](#) of renewable energy credits from these projects to ensure that their buildings decarbonize and the full cost of these projects is not borne by ratepayers. Beyond that, at [One Manhattan West](#), Brookfield Properties is directly purchasing renewable power for the building to drive down emission at the property.

Collectively, these efforts illustrate just some examples of how real estate leaders are taking aggressive steps to reduce emissions, create green jobs, and build a better city. REBNY looks forward to continuing to work with the City Council and other stakeholders to ensure that State and local laws continue to encourage these kinds of investments and reward those who continue to make meaningful tangible progress in reducing emissions.

Thank you for the opportunity to submit testimony.



**Testimony of Urban Green Council  
Before the New York City Council Committees on Civil Service and  
Labor, Housing and Buildings, and Environmental Protection**

**Re: Local Law 97 Green Workforce Pipeline**

June 27, 2022

Dear Chairs De La Rosa, Sanchez and Gennaro, and members of the Committees:

My name is Danielle Manley and I am Policy Manager at Urban Green Council, an environmental nonprofit focused on reducing the carbon footprint of New York City buildings.

Local Law 97 is a transformational law and the centerpiece of New York City's climate strategy for buildings, which make up two-thirds of citywide GHG emissions. It is also a leading model for many other cities seeking to enact policies to decarbonize the building sector.

Urban Green thanks the City Council and staff for continued focus on climate progress. We also appreciate the commitment of the Administration's leadership and staff, including Commissioner Aggarwala and the teams at the Department of Buildings and the Mayor's Office of Climate and Environmental Justice, to full and effective implementation of Local Law 97 and to ensuring we achieve the law's intended mobilization of NYC's retrofit market. Mobilization is key to the action we need. Market confusion and delay will forgo the carbon savings we need and only logjam compliance, which will drive up costs.

Local Law 97 is the leading edge of an enormous transition for New York City's workforce in buildings. Today I'd like to share with you Urban Green's analysis of the potential retrofit market Local Law 97 is creating, as well as some recommendations for realizing that potential.

**A. Local Law 97 has enormous potential to drive unprecedented growth in NYC's green workforce.**

Shortly after Local Law 97 passed, Urban Green conducted a [Retrofit Market Analysis](#) to help quantify this potential. We found that if all buildings choose efficiency retrofits to meet carbon caps, the law could drive as much as \$20 billion of investment in buildings and create over 140,000 jobs by 2030 (see Appendix A attached to our written testimony).

Our analysis is not a cost-benefit projection because it does not assess the very significant savings from retrofits. Neither is it a prediction because it assumes all buildings comply with energy efficiency alone when in reality many will choose a variety of compliance options.

Instead, our analysis shows the potential market and workforce opportunity to drive this transition. Local Law 97 compliance through direct investment in energy efficiency and fuel switching in buildings will realize enormous carbon savings and create tens of thousands of local jobs in NYC buildings.

**B. Swift implementation, prioritizing investments in buildings, and leading by example with public buildings can help realize the green workforce potential.**

To realize Local Law 97’s green workforce potential, we offer the following recommendations:

1. Send a strong signal to the market by finalizing details for the first compliance period as soon as possible.

With Local Law 97 carbon limits starting in less than two years, finalizing the law’s details for the first compliance period must be an immediate priority. The market needs certainty to plan and execute compliance strategies, including operational improvements, capital upgrades and alternate compliance options. Armed with significant input from the Advisory Board process, rulemaking should proceed as soon as possible to provide clarity on outstanding questions, including additional property types, details of the metric and criteria for deductions. Delayed action could lead to labor and equipment shortages, and higher costs as a result, if all buildings seek to take action on the eve of compliance deadlines.

Additionally, building owners – particularly those with smaller buildings and fewer resources – need help navigating and financing this transition. We credit the City’s efforts to increase support through the NYC Accelerator and PACE financing, and we also urge a significant expansion and outreach about these efforts to reach and catalyze action in the tens of thousands of buildings covered by this law.

2. Maximize new workforce opportunities by ensuring that the law’s compliance options prioritize investments in NYC buildings.

To save the most carbon, create the most jobs and lower pollution, the law’s structure must encourage building energy efficiency and electrification as much as possible. While compliance options like renewable energy credits can provide building owners with flexibility to make cost-effective upgrades over time, reasonable limitations on their use will help ensure the law ultimately drives investments and jobs in buildings, which we need to meet renewable grid capacity goals.

To that end, Urban Green strongly supports adding a new compliance option to Local Law 97 – with appropriate guardrails – that would allow building owners to pay into an “Equitable



Buildings Fund" to pay for energy efficiency and electrification upgrades in affordable housing. This compliance option would be similar to one available under Boston's building performance law, and it would help address the significant challenges of financing decarbonization in the affordable housing sector, while also diverting dollars to building retrofit work instead of penalties. We are excited to hear Commissioner Aggarwala's support for exploring this option.

3. Bolster the green workforce pipeline with more resources for training and by jumpstarting decarbonization in the City's own buildings to meet Local Law 97.

Electrification of the building stock means ushering in new technologies and practices across the building trades. It will require education for new workers and retraining for incumbent workers so that we have a knowledgeable and ready workforce to deliver on this charge. For example, Urban Green is creating a new training for plumbers with Local Union 1 on heat pump water heaters, a newer technology to efficiently electrify hot water systems. With thousands of new jobs and job functions in the next decade, we urge the city to support qualified organizations that can develop targeted training to support and advance the Local Law 97 workforce.

The city can also prime the workforce pipeline by focusing on operations improvements and retrofits in public buildings. It is crucial that the city lead by example with energy efficiency and electrification to meet its own Local Law 97 targets, which include reducing emissions from government operations 40 percent by 2025 and 50 percent by 2030. Achieving those targets will help scale workforce knowledge, expertise and experience for the broader retrofit market.

Thank you for the opportunity to comment at this hearing. Urban Green looks forward to continuing our work with the Council and the Administration and to supporting and mobilizing NYC's important and growing green workforce.

**CONTACT:**

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# Appendix A

Retrofit Market Analysis  
June 18, 2019

Urban Green Council



# RETROFIT MARKET ANALYSIS

June 18, 2019

## RETROFIT MARKET VALUE AND GROWTH

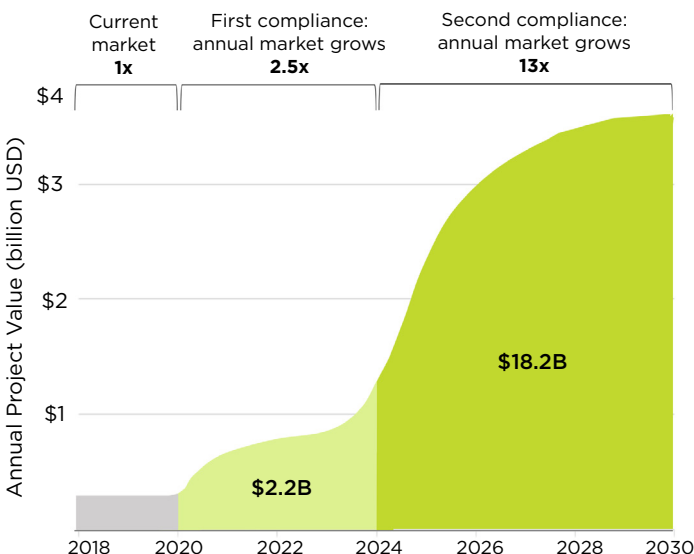
New York City's building emissions law, Local Law 97 of 2019, is arguably the largest disruption of the NYC real estate industry. In order to meet the challenges ahead, we must do retrofits differently, and at scale. New technologies and new business models will be needed, and labor and professional services must significantly ramp up. Many changes lay ahead, but there's also an enormous opportunity for market growth if we invest now.

If all buildings choose efficiency to meet the carbon caps, our 2030 forecast shows a \$16.6B to \$24.3B energy retrofit market opportunity in New York City. In 2018, just \$235M was spent on building improvements to save energy. The new law could trigger a 13-fold increase over today's annual market depending on how soon owners begin investing in their properties.

These are big numbers with a wide range of uncertainty with regard to timing and carbon reduction costs. Early changes will enable a smoother growth trajectory and less costly retrofits, while reducing the global warming impact of building emissions. There may also be opportunities to incorporate these costs into capital investments that are already planned.

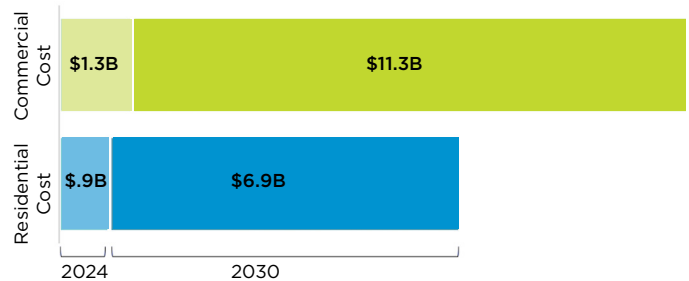
### FIGURE 1 The Market Must Grow

The first compliance period will need the retrofit market to at least double in annual investment, and the second compliance period will require over \$3B in annual investment.



### FIGURE 2 Costs for Commercial and Residential Buildings

Residential buildings account for more square footage, but commercial buildings have more complicated systems and requirements that will likely result in higher retrofit costs.



## WORKFORCE GROWTH

According to David Hsu from MIT, the demand for building energy improvements has the potential to create 15,000 jobs by 2024 and an additional 126,000 jobs by 2030 in the NYC metro area. These estimates were made using the U.S. Bureau of Economic Analysis's economic impact model (RIMS II).<sup>1</sup>

These jobs include architects, engineers, sustainability consultants, building tradespeople and HVAC professionals. It will also include jobs in other industries such as retail, food services and product manufacturing needed to meet the demand created by industry growth.<sup>2,3</sup>

But timing is critical. If building owners and contractors wait until just before each compliance deadline to retrofit their buildings, then the skilled labor necessary to support their projects may not exist.

The mid-range estimate of market opportunity **\$20B**

The annual retrofit market will expand by **13x**

Number of jobs created across the NYC metro area by 2030 **141K**

## METHODOLOGY

Urban Green assessed the size of today’s energy retrofit market and compared it to the work required by Local Law 97 of 2019 (LL97). The current retrofit market was estimated based on Local Law 87 audit work, Carbon Challenge data, and mechanical and plumbing permits from the NYC Department of Buildings.<sup>4, 5, 6</sup>

To estimate the cost of retrofits, we convened a group of advisors to approximate the cost per square foot of various levels of energy efficiency retrofits (Table 1). Each sector has a low and high retrofit cost estimate due to the wide range of building types, vintages and systems across the city.

We assigned retrofit costs to residential and commercial areas based on the city’s energy benchmarking information and the breakdown of LL97 covered buildings. Roughly 58 percent of citywide building area is covered by LL97, and nearly 80 percent of that area will need to make improvements by 2030. This includes 1.4B SF of residential area and 1.1B SF of commercial area.<sup>7</sup>

The first compliance period will require an investment of \$1.75B to \$2.7B, primarily in operational and control changes that could yield big savings without huge costs. The second compliance period will impact more properties and require larger investments, costing between \$14.8B and \$21.6B.

**TABLE 1**  
**Retrofit Cost Ranges**

Retrofit Size	Residential		Commercial	
	Low (USD/SF)	High (USD/SF)	Low (USD/SF)	High (USD/SF)
Operational (<5% saved)	\$0.20	\$0.20	\$0.50	\$0.50
Light (5%-15% saved)	\$1.00	\$2.25	\$1.50	\$4.00
Medium (15%-25% saved)	\$2.50	\$3.75	\$4.50	\$8.50
Heavy (25%-35% saved)	\$4.00	\$6.00	\$10.00	\$13.00
Deep (>35% saved)	\$7.00	\$12.00	\$15.00	\$18.00

## ASSUMPTIONS

- Every covered property will comply with LL97 exclusively through energy efficiency. Renewable energy, efficiency trading, carbon offsets and fines have not been included in this analysis.
- Proportional carbon reductions will be met by equivalent proportional energy reductions (e.g. a 5 percent energy cut results in a 5 percent carbon cut).
- Planned equipment replacement may already be included in a long-term capital investment plans.

- Affordable housing retrofits will yield the same carbon savings and costs as market rate properties.
- Office energy use, emissions and retrofit costs are representative of all commercial properties.
- Building owners will begin making changes to lower emissions in 2020 and the retrofits will continue at a steady pace until 2030.
- Jobs in the energy efficiency sector will expand similarly to the process outlined in the 2010 LBNL study.

## SOURCES

1. Jobs analysis provided by Dr. David Hsu of MIT. These estimates were made using the U.S. Bureau of Economic Analysis’s economic impact model ([RIMS II](#)).
2. [2016 County Business Patterns](#), US Bureau of Economic Analysis for NY-NJ-PA-CT Combined Statistical Area.
3. “[Energy Efficiency Services Sector: Workforce Size and Expectations for Growth](#).” Berkeley, CA: Lawrence Berkeley National Laboratory. A 2010 study of energy efficiency services sector found these jobs are 2 percent of economy.
4. [The NYC Building Congress Construction Outlook 2018-2020](#).
5. Data from LL87 audits and the [Carbon Challenge Progress Report 2018](#).
6. The [DOB’s Permit Issuance](#) data on plumbing, mechanical, boiler and fuel combustion equipment work - efficiency was assumed to be a small portion (-6 percent) of these totals.
7. Both the 2016 LL84 benchmarked energy data and [LL97 coefficients](#) for oil, gas, steam and electricity were used to determine building emissions and required reductions.

## ADVISORY COMMITTEE

Jeffrey Carleton, Carleton Energy Consulting  
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June 27, 2022

**Testimony of Henry Garrido, Executive Director, District Council 37, AFSCME  
Before the New York City Council Committee on Civil Service and Labor, Jointly with the  
Committee on Environmental Protection and the Committee on Housing and Buildings**

Good morning, Chair De La Rosa, Chair Gennaro, Chair Sanchez and members of the committees. I'm Henry Garrido, Executive Director of District Council 37, AFSCME, and I testify before you today on behalf of the city's largest municipal employee union. We represent 150,000 members and 89,000 retirees across every city agency— our workers are the backbone of New York's infrastructure. District Council 37 supports the swift and equitable implementation of Local Law 97, which is not only the best defense our city has against climate change, but a significant opportunity to create new jobs for those in our community who lost employment during the pandemic.

The City of New York must follow through on its commitment to reducing greenhouse gas emissions that contribute to climate change. Not taking this aggressive action will continue to reap devastating consequences for all New Yorkers, but especially for those low-income communities who bear the brunt of these more frequent climate-related disasters above all others.

There is urgency to ensure these newly created positions are union-affiliated, which has proven successful through other once-in-a-lifetime workforce development opportunities. When the city launched the Build It Back program after Hurricane Sandy, the community hiring program created more than 13,000 direct jobs by focusing on union apprenticeships and job placements, exceeding the 20% local hiring goal and directly benefiting New York City residents.

As we navigate the economic fallout of the pandemic and a staggering unemployment rate, the city should target those workers who lost employment over the past two years and connect them to these opportunities. Researchers project that Local Law 97 has the potential of creating more than 140,000 new jobs by 2030. Workforce development coupled with project labor agreements and

community hiring, will expand opportunities for those New Yorkers traditionally underrepresented in green industries, including women, immigrants and people of color. Creating these green jobs will improve the lives of the working class that needs them most.

Please add my testimony to the record of today's hearing.



# **BUILDING & CONSTRUCTION TRADES COUNCIL OF GREATER NEW YORK**

**GARY LaBARBERA**  
PRESIDENT

—  
AFFILIATED WITH THE  
BUILDING CONSTRUCTION TRADES DEPARTMENT  
OF WASHINGTON, DC  
—  
BUILDING AND CONSTRUCTION TRADES COUNCIL  
OF NEW YORK STATE  
—  
AMERICAN FEDERATION OF LABOR OF CONGRESS  
OF INDUSTRIAL ORGANIZATION

## TESTIMONY

On behalf

### **BUILDING AND CONSTRUCTION TRADES COUNCIL OF GREATER NEW YORK AND VICINITY**

Testimony Regarding Local Law 97 Green Workforce Pipeline  
June 27, 2022

Good morning. I am Santos Rodriguez and I am here to testify on behalf of Gary LaBarbera, President of the Building and Construction Trades Council of Greater New York & Vicinity regarding Local Law 97 Green Workforce Pipeline.

The Building and Construction Trades Council is an organization of local building and construction trade unions that are affiliated with 15 International Unions in the North American Building Trades Union. Our local union affiliates represent approximately 100,000 union construction workers. The Building Trades mission is to raise the standard of living for all workers, to advocate for safe work conditions and to collectively advance working conditions for our affiliates' members, as well as all workers in New York City.

Our affiliates and their members participate in apprenticeship programs that provide in classroom education and on the job training to workers entering the construction industry. Many of these programs provide skills training in State-of-the-Art Facilities. These programs prepare workers with the skills, knowledge, and safety awareness to propel them in life-long union construction careers where they can earn wages to support a middle class lifestyle as well as medical benefits to provide for their health and the welfare of their families as well as retirement benefits. These apprenticeship programs are constantly training workers on the newest technology available, on innovative tools and equipment, and on the most efficient systems. Notably, this includes training on building retrofits, green energy alternatives, and on systems and methods that reduce a buildings carbon footprint. The Building Trades Council's affiliates are already providing this training to its members to prepare them for changes being implemented now and on the systems they will be working on in the future. Our members are prepared to work in a clean/green energy environment.

Additionally, the Building and Construction Trades Council has works closely with the apprenticeship readiness collective. "ARC" is a collective of four pre-apprenticeship programs that recruit from different demographics throughout New York City, prepares participants with the skills and knowledge they need to succeed in an apprenticeship program and career in construction, and offers its graduates direct entry into a union apprentice program. These four programs are The

Edward J. Malloy Initiative for Construction Skills, which recruits youths from New York City Schools as well as an adult population; Helmets to Hardhats, which recruits veterans in the New York City Area, Non-traditional Employment for Women, which recruits women from the New York City Area, and Pathways 2 Apprenticeship, which recruits justice involved individuals in the New York City Area. These four programs are recruiting New York City residents and preparing them for a future in the New York City Construction Industry. We are working everyday with ARC and our affiliates' apprenticeship programs to make sure our members, and the City's construction workforce, is prepared to work in a clean/green energy environment.

We thank you again for this opportunity to testify here today.





June 28, 2022

**Founders**

Vernice Miller-Travis  
Peggy M. Shepard  
Chuck Sutton

**Testimony of Lonnie J. Portis, Environmental Policy and Advocacy  
Coordinator at WE ACT for Environmental Justice**

**Board of Directors**

*Chair*  
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**To the New York City Council Committee on Civil Service and Labor,  
Committee on Environmental Protection & Committee on Housing  
and Buildings**

*Secretary*

Nancy E. Anderson, Ph.D.

**Regarding Local Law 97 Green Workforce Pipeline**

*Treasurer*

Ken P. Mak

To Committee Chair Carmen De La Rosa and the Committee on Civil Service and Labor, Committee Chair James Gennaro and the Committee on Environmental Protection and Chair Pierina Ana Sanchez and the Committee on Housing and Buildings:

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Dart Westphal

I am Lonnie J. Portis the Environmental Policy and Advocacy Coordinator here at WE ACT for Environmental Justice.

WE ACT, an organization based in Harlem, has been fighting environmental racism at the city, state, and federal levels for more than 30 years. I want to start by highlighting WE ACT's [Solar Uptown Now](#) program where ten solar workers established a cooperative, fulfilling their ambition to own a stake in the emerging green economy, to create job opportunities for other people of color, and ultimately, to give back to their communities.

*Executive Director*

Peggy M. Shepard

As of March 2021, the program has installed solar panels on 13 buildings, including 11 Housing Development Fund Corporation (HDFC) cooperatives in Northern Manhattan, producing 415 KW-DC of renewable energy, avoiding 802 pounds of nitrogen oxide emissions, and saving residents an estimated \$61,700 in the first year and an estimated \$1.9 million over the 25-year life of the panels. The development of a green workforce is extremely important to WE ACT and we look forward to further working with City Council and City agencies to make the equitable implementation of Local Law 97 possible.

We are in the midst of a worsening climate crisis and the City must do everything it can to reduce emissions, decarbonize our buildings, remediate environmental health hazards and more; all with environmental and climate justice as the foundation of this work.



The passage of the landmark Climate Mobilization Act in 2019, was a significant step in the right direction to reduce NYC’s greenhouse gas emissions. Buildings across New York city contribute to [over 70% of the city’s GreenHouse Gas emissions](#). Local Law 97 of 2019 (LL97) requires building owners to meet emission reduction targets by optimizing building energy systems to make them more efficient.

[Researchers project Local Law 97 has the potential to create more than 140,000 jobs by 2030](#) in the NYC metro area. WE ACT is testifying on the need for the City to use community-based solutions to develop a diverse green jobs sector. Renewable energy jobs are among the fastest-growing employment categories in the United States, and with intentional, pointed action, these industries have the potential to employ a large, diverse workforce.

WE ACT and other community-based organizations are a source of positive-impact workforce development that can help carry forth Just Transition ideals and advocacies. The City does not need to reinvent the wheel when it comes to implementing a Just Transition; rather, they should ensure that existing programs led by community-based organizations have the financial and informational resources necessary to support their communities.

New York City should take this opportunity to invest in successful pre-apprenticeships, apprenticeships, and certification training programs to fully support a Just Transition in the growing clean energy industry and expand access to good, green jobs to workers who have been traditionally underrepresented and/or systemically excluded from this job sector.

In order to accomplish one of the primary Just Transition goals – closing the diversity gap within the green jobs and renewable energy sectors – The City must scale up and implement community-based organizations’ best practices, including:

**PAY FOR OSHA TRAINING CARDS** Thirty-hour OSHA training cards are a requirement for most construction jobs, and the training typically costs more than \$350.00. These costs should not be allowed to dissuade or deter the participation of individuals with low incomes because they cannot afford the fees.

**PROVIDE AND SUBSIDIZE TRANSPORTATION** Low-income communities often have to limit use of public transportation due to the pay-per-ride cost of daily commuting and inability to afford unlimited, cost-saving monthly metrocards. Training programs may not be available



in their communities and people have to travel longer distances or make additional trips to get to programs. Helping participants get to and from training by providing or subsidizing costs removes another potential barrier to participation.

**EMPLOY ON THE JOB TRAINING** Having prior experience is a key qualification that employers look for in an applicant. However, if applicants are not being hired for the jobs, they are unable to obtain any experience. They are trapped in an unfair cycle, especially considering employers are more likely to hire people they know or people in their networks. Paid training is fair to the job seeker and incentivizes the employer to hire inexperienced candidates.

**ENHANCE PUBLIC TRAINING PROGRAMS** The City offers several public training programs that are designed to equip New Yorkers with the necessary skills to qualify for a green job. However, these programs need to be enhanced to include subjects that augment their training. The most common subjects are math, basic life skills training, resume building, financial literacy, computer training and small business development. A more holistic approach to training provides additional benefits that go beyond a job site; enabling individuals to live longer, healthier, financially stable lives.

**CONNECT EJ COMMUNITIES WITH COMPANIES IN THE INDUSTRY** The construction sector is becoming increasingly competitive, and many companies do not recruit or form relationships with communities of color (and do not have the internal history or infrastructure to pursue such endeavors). The City should coordinate green job fairs in environmental justice communities throughout the city, bringing employers to job seekers that traditionally do not have access to companies in the industry.

**REQUIRE & INCENTIVIZE COMMUNITY HIRING** The City can and should require community hiring for public building upgrades, and there should be incentives for community hiring for private infrastructure projects. This expands opportunities for traditionally underrepresented New Yorkers in green industries including many women, immigrants, and Black and brown New Yorkers.

During this historic period of racial justice examination and demonstration, we are coming to understand that environmental discrimination and racism are deeply embedded forms of structural and institutional injustice in all sectors, including workforce development. It is crucial that we deeply



examine current trends in the renewable energy sector and identify and remove any barriers to entry.

As The City implements one of the most important climate laws in the nation, it is necessary to point out the need to identify and recognize the false solution of renewable energy credits which would drastically reduce the job creation potential of Local Law 97.

Building owners should not be able to buy out of their obligations to clean up their dirty buildings. Given the severity of our City's building emissions, it is crucial that we strengthen the law to prevent harmful cap-and-trade schemes and what the environmental justice community calls "false solutions." For this reason, we would like to see more stringent requirements on the purchase of Renewable Energy Certificates (RECs) to meet emissions requirements and a steadfast opposition to carbon trading by the Council and Administration.

Ultimately, RECs should only be applied to electricity supply and should not be used to offset the GHG emissions from on-site fossil fuel combustion. Life offsets, REC purchases should be limited to 10% of a building's GHG reduction requirements in order to maintain the local emissions reductions that this law was designed to generate.

WE ACT strongly supports Local Law 97 and is looking forward to its equitable implementation and we ask that the City Council continues to monitor the Adams' Administration during the process to ensure Local Law 97 is enforced and not diluted to cater to special interest groups.

**Lonnie J. Portis**

Environmental Policy and Advocacy Coordinator

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Local Law 97  
Green Workforce Pipeline  
Written Testimony  
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Climate Jobs NY  
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Monday, Jun 27, 2022

Firstly, thank you to Chairs De La Rosa, Genarro, and Sanchez, and the members of the committees for holding this oversight hearing on Local Law 97 and the Green Workforce Pipeline, and affording myself and others the opportunity to submit testimony on the subject.

I wanted to take the opportunity in my written testimony to address a question that was posed during the hearing to the panel by Chair De La Rosa concerning the industries in which we anticipate seeing the highest demand of building retrofit jobs. While not an exhaustive list, we have identified the following trades and unions as ones that will see an increased demand in work, and thus where many of the apprenticeship and pre-apprenticeship opportunities will be found in the Green Workforce Pipeline resulting from Local Law 97 and energy efficiency building retrofits: Electricians (Local 3), Carpenters (Carpenters District Council), Laborers (Local 79), Painters (District Council 9), Sheet Metal Workers (Local 28), Plumbers (Local 1), Insulators (Local 12), and Steamfitters (Local 638).

[Climate Jobs NY](https://www.cjnrc.org/wp-content/uploads/2022/05/NYC-Full-Report-Finalized5.10_compress.pdf) is a growing coalition of labor unions representing 2.6 million workers statewide committed to advancing a pro-climate, pro-worker agenda. Recently, our partner Cornell University's Labor Leading on Climate Program released *Climate for Change, a Complete Climate Jobs Roadmap for NYC*, a report that lays out a concrete plan to address these issues of climate change and lower New York City's emissions, while addressing racial and economic inequity by investing in pro-worker renewable energy transition. This report provides a comprehensive climate agenda for New York City including recommendations spanning buildings, energy, transportation, resilience and adaptation, and workforce development. The full report can be found online: [https://www.cjnrc.org/wp-content/uploads/2022/05/NYC-Full-Report-Finalized5.10\\_compress.pdf](https://www.cjnrc.org/wp-content/uploads/2022/05/NYC-Full-Report-Finalized5.10_compress.pdf).

Major job opportunities exist if we do climate work the right way, and they span nearly every economic sector, including building energy-efficient retrofits. We must ensure that

the jobs created in the clean energy economy are family-sustaining, long-term union careers that have lasting economic impacts in communities of color and historically under-resourced communities.

It is especially important that any public dollars spent on financing, subsidizing, or otherwise financially incentivizing, or administering funds for building retrofits, should attach strong labor standards including: Prevailing Wage, PLAs for constructions, LPAs for other than construction jobs, and pre-apprenticeship, apprenticeship and other forms of labor management training programs that lend to the readiness of the workforce to take on the work resulting from Local Law 97 and additional climate initiatives.

The only way to guarantee the creation of union career pathways in building retrofits is by funding a robust pipeline of union work under a PLA, which is exactly what we are calling for under the Carbon Free Healthy Schools initiative, as laid out in the [\*Climate for Change\*](#) report.

The City can lead by example by prioritizing a transition to Carbon-Free and Healthy Schools for New York City's Public K-12 schools by 2030, which will not only reduce emissions by the equivalent of taking 154,000 cars off the road and save the City millions annually in energy costs, money that can be reinvested in but the report estimates that over 62,000 direct good union jobs can be created over the lifetime of the initiative.

Additionally, Carbon Free and Healthy Schools can serve as a blueprint for decarbonizing the City's public buildings beyond schools, including Carbon Free and Healthy NYCHA and NYC Health + Hospitals, initiatives that Cornell's report estimates have the potential to create nearly 260,000 direct jobs combined. Of note, there is already an existing Local Hire and Prevailing Wage Mandate that comes with NYCHA's capital work, that both requires economic and employment opportunities produced by federal assistance to public housing authorities be directed, whenever possible, to public housing residents and other low and very low-income residents, and that where there are contracts greater than \$500,000, 15% of labor costs be spent on resident hiring (*Opportunity NYCHA, 2019*).

These investments in building retrofits are necessary and urgent in order to lower the City's emissions and make our schools and communities healthy and resilient. But, without question they must go hand-in-hand with creating union career pathways and well-funded pre-apprenticeship programs, under PLA's, in order to truly create a green workforce pipeline that leads to lasting union careers for our environmental justice and frontline communities, improving environmental and economic resiliency for all New Yorkers.

## **Testimony of Climate Families NYC to the New York City Council June 27th, 2022**

My name is Marta Schaaf. I am a member of the Climate Families NYC Coalition, a group that galvanizes climate activism among parents, other caregivers, and children. As parents, we feel the stakes of climate change viscerally. As our children get older (mine is ten years old) they start to ask hard questions about what the adults are doing to stop the extreme weather, health problems, and food insecurity that climate change will bring. I also have a doctorate of public health and have spent several years living in the Sahel Region of West Africa, where I have already seen these nightmare scenarios come to pass. If any City in the world can be a climate beacon for transformative local level action, it is New York City. What we do here will have a major impact on New Yorkers and folks all over the world.

### **Testimony & Recommendations:**

Members of our group were excited when Local Law 97 passed; many of us worked hard to elect City Counselors who would support such a law, and then advocated for the passage of the law once they were elected. Local Law 97 has the potential to create good union jobs, lessen the air pollution that causes significant health problems, and lessen the carbon emissions that have us on track for catastrophic changes in temperature. I assume everyone here is familiar with the ever-darkening picture of climate change; food insecurity and famine, flooding, wildfires, and deadly heat waves are here and will worsen. These will lead to mass migration and catastrophic damage to public infrastructure in cities like New York. The UN Secretary General has taken to Twitter to sound the alarm for immediate transition away from fossil fuels, as legislation and policy are not where the need to be, given the scale of the climate crisis. The emerging science regarding air pollution from fossil fuels is similarly dire; this pollution is killing children in New York now. Black and Latinx communities are disproportionately affected.

Local Law 97 has the possibility to make a dent in these trends, and to set an example the rest of the world will follow (indeed, as you know, some cities are already considering similar legislation). However, improvements will occur only if the law is implemented as it was written. Our group of

parents is extremely concerned by signals from the Mayor's office that implementing this law is not important, or even worse, that the fossil fuel and real estate industries could influence its implementation.

The members of our group are all juggling multiple responsibilities, including parenting and full time jobs. We would prefer to assume that once a law is passed, its implementation is certain. But we know that we cannot make this assumption. Too often, climate and jobs related legislation sets lofty goals and has no teeth. Indeed, we understand that some in the industry are already acting on indications from the Mayor's Office that enforcement will be light, and are delaying improvements to super polluting buildings. It is essential that this legislation not be defanged. This means that penalties should be assessed as per the law's formula, the Administration should strictly limit Renewable Energy Credits, establish aggressive requirements for efficiency upgrades, adequately fund Office of Building Energy and Emissions Performance and NYCHA, and hold off on carbon trading. The Administration should also create a fund to support upgrades in low- and middle-income multi-family housing, and tie these funds to labor standards.

As parents, we like to provide hopeful examples to our kids – to show them that the grown-ups are doing something and that there are solutions within reach. Local Law 97 is one such solution. If enforcement and implementation are structured with serious penalties, aggressive goals, and no loopholes, it can lessen carbon emissions and pollution and create good jobs. Otherwise, it is just another example of grownups letting inertia prevail.



**Testimony of New York Communities for Change to the New York City Council  
June 27th, 2022**

*[this testimony will be condensed into 3-5 minutes of verbal testimony, as directed. It will be modified as appropriate based on the Administration's live testimony and Q&A]*

My name is Pete Sikora. I am the Climate & Inequality Campaigns Director for New York Communities for Change. I am also a member of the City's Advisory Council for Local Law 97's implementation.

NYCC organizes in low- and middle-income communities of color in New York City and on Long Island. We work for affordable housing, good jobs, and racial justice. We also work against climate change, which hurts low income and communities of color especially badly.

**Testimony Summary & Recommendations:**

Local Law 97 is often referred to as the city's "Green New Deal law". It is poised to create massive numbers of jobs slashing pollution. Right now, the law is on track to create tens of thousands of jobs this decade, including good, union jobs. People like NYCC's members - Black and Latino people from low and low-middle income communities - will get good-paying work.

Already, jobs in design and assessment are being created as property owners gear up. Over the coming decade as projects get done, huge numbers of renovation and construction jobs will be created.

Unless the Adams administration weakens or guts Local Law 97.

That would be a tragedy.

We are extremely concerned that's the direction the Mayor intends, based on repeated public statements by his spokespeople and his top climate officer, Rit Aggarwala's testimony at the previous Council oversight hearing. On the one hand, they praise the law's goals, but on the other hand they immediately emphasize some sort of system - yet to be determined - to weaken or delay penalties.

***The strength of the pollution reduction requirement and its enforcement drives job creation: the stronger the requirements and enforcement, the more jobs are created, including good union jobs for communities of color.*** There is a direct causal link between anti-pollution action and job creation. If the law is weakened by the Adams Administration in implementation and enforcement, that would cost jobs and raise pollution.

Local Law 97 properly gives flexibility to the Administration to rationally implement, regulate, and enforce. This flexibility cannot be used to undermine the law's purpose and intent. We have some very specific recommendations, which we detail below:

1. **The Mayor should make a clear statement: the city will fully implement and enforce the law, including assessing penalties for violations as set by the law's formula.** The city - and state - have created many helpful programs for building owners to comply. However, compliance and therefore job creation and pollution reductions will be achieved only if property owners understand that they will be fined as under the formula in the law if they break it by exceeding the pollution caps. Local Law 97 will fail if it becomes another housing law that isn't enforced. Landlords know they can flout laws that don't have any teeth. In fact, they routinely break such laws. The law's penalties will drive compliance; wrist slaps won't. The Administration cannot be allowed to create some phony, easy-to-game compliance program that enables building owners to evade the law. For example, a terrible system that would gut the law would allow a building owner to hire consultants to make some attestations that the owner made a "good faith" effort but cannot comply, and then the owner would get a delayed, waived or weakened requirement/penalties.
2. **The Administration must tightly limit Renewable Energy Credits (RECs).** With CHPE and Clean Path likely to proceed in 2025 and the later 2020s, there will be a flood of RECs available in Zone J, the city's electrical grid zone. We are glad these transmission projects are moving forward because will green the grid. However: Unless the Administration sets rules for owners to tightly limit these RECs use as a vehicle for Local Law 97 compliance, the volume of RECs available will become a huge loophole in the law allowing landlords to "buy out" of upgrading their buildings on-site. If building owners can buy cheap RECs instead of upgrading their buildings, New York City will lose thousands of jobs and air pollution will be higher in our neighborhoods. We urge the Administration to limit RECs to only a. electricity use and b. up to a maximum of 10% of a building's pollution reduction requirement. The law needs proper regulation in this area to maximize jobs and pollution cuts.
3. **Rules and regulations must be set properly to maximize local jobs and pollution reductions via energy efficiency upgrades to buildings.** For example, as the Department of Buildings proceeds as directed under the law with a finer categorization of buildings to specific requirements, it must set requirements correctly. In particular, the 2030 requirements should mandate about 75% of covered buildings to undertake emissions reductions, as intended by the law and its drafters. Experts agree that finely-tailored requirements at that level are aggressive and achievable. Such levels maximize pollution reductions and therefore job creation. Failing to set such levels would gut the law, leaving NYC's requirements weaker than other cities which have followed the city's lead and enacted laws to reduce pollution from their largest buildings.
4. **The Administration and Council should continue to appropriately fund OBEEP.** We commend the Council for insisting on proper staffing in this year's budget and the Mayor for agreeing. These are tiny, but critical allocations that will need to grow in future years to properly implement the law. [note: this testimony

draft reflects the best information available on June 16th, at which time it appeared the Mayor and Council had agreed on this item of the enacted city budget, but we have not absolutely confirmed as of June 16, 2022]

5. **The City should fund NYCHA properly**, especially since the federal and state governments are continuing to disinvest. Local Law 97 compliance by NYCHA is only possible if the buildings are properly maintained and in state of good repair.
6. **Carbon trading should not move forward** (at least not anytime soon). We commend the Administration for acknowledging at the Council's previous oversight hearing that carbon trading should not move forward as of now. Creating a workable, fair system that advances pollution cuts, job creation and environmental justice is, at best, an enormous technical challenge. That is especially true as the law's regulations are not yet set into place, and therefore putting together a carbon trading system on top of the law's requirements is far too complex to create at this time. We are deeply skeptical that a workable system that is fair and equitable can be created.
7. **The Administration and Council should create a roughly \$100 million per year grant fund restricted to support for upgrades in low and low-middle income multi-family housing (and tie these funds to labor standards to maximize high-quality, union labor)**. Affluent building owners should not be subsidized to do the right thing. Moreover, many or even most owners will save money on utility bills and operating costs over and above their costs of financing by complying with Local Law 97. Nonetheless, the city ought to provide a generous subsidy to working class owners to help defray up-front costs. Any new program should be limited to low-income and lower-middle class owners. No program should be another giveaway to any affluent owners. It is absolutely appropriate for the city to require property owners to follow minimum social standards on air pollution, as set by Local Law 97, in the same manner property owners are expected to pay for basic fire safety standards, proper treatment of sewage, basic upkeep of sidewalks, building code etc.

### **Introduction:**

Local Law 97 is the world's most important municipal-level climate and jobs law.

It is vital to this city's future survival and our world's survival. It is a law that should be replicated across the U.S. and the world. Now, some cities, such as Boston, D.C. and St. Louis, are enacting similar laws. That's huge.

We are very proud, along with many others, to have played a significant role in winning Local Law 97's passage. Many of us in this hearing vividly remember the titanic political struggle in the last Council over this law.

It was a long, intense fight. The real estate lobby did everything it could to hold the city back. Collectively, elected officials led by Costa Constantinides and Corey Johnson and then-Mayor de Blasio stood with experts and a movement to defeat the real estate lobby by passing this law.

It is fair to say it was the biggest and most important legislative action the last Council took. I believe that in the not-too-distant future, it will be remembered as the most important law the city passed in decades.

But now the Empire aims to strike back, so to speak. The real estate lobby wants to gut the law administratively. We, really you, can't let them win.

Right now, the law's requirements are already starting to create jobs as building owners begin to assess their buildings and prepare to comply.

The law's first requirements, which cover only highest-polluting buildings, begin in 2024. These simple, clear pollution limits per square foot will reduce pollution from the most wasteful, most egregious polluters in real estate. Many of these super-polluting buildings haven't done some of the very basics of energy efficiency, including very low cost upgrades like insulating heating pipes and installing LEDs or training and managing their staff so that boilers are properly tuned.

These buildings, which are about one in five buildings, will save money immediately on very short paybacks by reducing their energy waste. The city gave building owners five years to achieve the 2024-2029 pollution caps, which any affected building can meet with a good faith effort. The city also created a waiver process by application as required in the statute, which only about 90 buildings have applied for. It makes perfect sense to require the worst polluters to reduce their egregious emissions first.

Much lower, stronger pollution limits start in 2030. The 2030 pollution caps were set to a level which about 75% of covered buildings exceed. The city is giving these owners over a decade. That also gives the city the time to set all the rules into place in a thoughtful, thorough manner.

There is an expert consensus that a level of pollution reduction requirements that induces work this decade in the most polluting three quarters of buildings is aggressive AND achievable. They're the right levels. They're the levels that satisfy the city's law to cut pollution at the speed of the global Paris climate agreement. These levels are the minimum necessary to prevent global catastrophe.

Now of course, there are many regulatory decisions that must be made to set into place the specific levels for 2030, including a finer categorization of building types to more tightly match specific types and uses of buildings to pollution limits. The law directs the Department to take such action. That's all spelled out. There is also a process for the 2024-2029 limits to be adjusted as necessary for finer categorization, which will make those limits more tailored to building type and use.

Right now, landlords know what they need to achieve for 2024 and 2030. In fact, they can very easily look up their buildings on an [easy to use online tool and check it](#). In the coming year, all large building owners will know more exactly the level they need to achieve for 2024 as various rules and regulations are set into place. Soon after, they'll have the exact levels for 2030.

Again, keep in mind the 2024 limits are basic levels every building should already comply with: no building should be an egregious polluter in violation of these limits. It's the energy efficiency equivalent of being a coal power plant... at this late date, it's just not acceptable. They need to clean up. The 2030 limits are much tighter and require years of serious work to achieve. That's where the big job growth will come from as building gear up and begin to implement energy efficiency upgrades.

We are heartened that the staff at the Office of Building Energy and Emissions Performance tasked with implementing the law are proceeding competently and appropriately in very close consultation with experts on the Advisory Council and Working Groups. These are top-notch, widely-respected experts led by Gina Bocra. They are an impressive bunch. Director Bocra and her team are making these decisions carefully and properly. That is in everyone's interests.

Already, building owners are moving to hire experts and assess their buildings. For example, a friend of mine is the President of a covered building's co-op. (a brave guy!) His building is already considering their options to improve the building to reach the 2030 limits. They know they can do it and that they will have a better building with lower operating costs as a result.

Local Law 97 is now on track to slash climate and other air pollution, cut energy costs, and deliver better, more valuable and more comfortable buildings.

While New York City is not doing everything it should to combat climate change and create good jobs, it is far ahead of the state and virtually every other locality, nationwide. Along with a gas ban and city pension fund divestment, NYC is leading the way, though of course far more must get done, and fast.

### **The Real Estate Lobby Wants to Gut the Law & Mayor Adams Inconsistent Rhetoric is Already Costing Job and Pollution Reductions**

But all is not well. The real estate industry lobbyists and billionaire developers bitterly opposed this law's passage. Now, they want to undermine or gut the law administratively. They see an opportunity in a new Administration.

As the UN's most recent IPCC report identifies, the resistance of powerful, incumbent interests that use or produce fossil fuels is the primary obstacle to enacting and implementing the transformational policies the world desperately needs.

*We are very concerned that Mayor Adams may attempt to weaken or gut the law, primarily through non-enforcement by eliminating, reducing or delaying penalties or by failing to properly*

*limit REC use and therefore opening up a corporate loophole to “buy out” of upgrading properties to cut pollution in New York City. Either of these would cost many thousands of jobs.*

*NYCC and many other groups and experts have repeatedly urged the Mayor or his Administration to make a clear statement that the law will be fully enforced and implemented.*

Instead, the Mayor’s spokespeople and top climate staffer Rit Aggarwala have repeatedly, over several months, answered inquiries from the media and councilmembers with blurry rhetoric. On the one hand, they say they agree with the law’s goal, but on the other hand cast doubts on the requirements and penalties (I’m paraphrasing).

These talking points are similar to REBNY’s talking points. In fact, at the last Council hearing, REBNY was very clear, stating: “We want investment, not penalties.”

Of course! They’re happy to take the city’s money to do nothing, and not be penalized.

The Mayor himself has been conspicuously silent. In fact, in April, he avoided answering a direct question from the press after a rally of activists, advocacy groups and citywide and Council elected officials urged the Mayor to fully implement and enforce the law.

***The Administration’s rhetoric is already having a negative effect in the real world. We have been told by some in the industry that some building owners are delaying pollution cuts - and therefore job creation - because they take the Mayor’s spokespeople’s comments as a hint that the law will not be enforced.***

These regressive owners currently believe that they will ultimately be allowed to ignore its provisions, just as the government all too often fails to enforce other provisions of housing and tenant-protective law. As a result, these building owners are sticking their heads in the sand and delaying the work they’d otherwise perform to upgrade their buildings to high energy efficiency.

Some are also hoping that the industry’s Randy Mastro lawsuit, filed last month, will gut the law. I don’t think that will work because the legal underpinning of the law is solid. Nonetheless, New Yorkers shouldn’t underestimate corruption and pro-developer judges.

Thankfully, many or even most building owners seem to believe what I believe: the law is the law, and it should be followed. In the end, I strongly believe that Mayor Adams will recognize the vital nature of creating good jobs and slashing pollution and fully enforce Local Law 97. Responsible building owners are not trying to evade the law. They are rolling up their sleeves to get the job done.

**NYC Has Created Extensive Programs to Support Building Owners with Local Law 97. But a Stick is Necessary, Not Just Carrots**

Local Law 97 was carefully written and enacted to be backed up by strong penalties for a reason: it's necessary to have both a carrot and a stick. The city has created educational, supportive and financing programs. [The NYC Accelerator](#), the [Building Energy Exchange \(BeX\)](#), [PACE financing](#), and the [NYC Energy Efficiency Corporation \(NYCEEC\)](#) are all useful, valuable programs for owners. The state, although it is way behind the city in this area, also has grant, financing and other supportive programs.

Those are all carrots. Nice big, juicy carrots. Certainly, the city could offer more and bigger carrots, as proposed above. But it can't be all carrots. We know that won't work. There is well over a decade of evidence from all across the country: building owners by and large won't implement energy efficiency projects even if those projects save them money AND they're given helpful resources, even grants. They simply opt, by and large, not to do any work and run their buildings the same way they always have. Inertia prevails.

That's why this is such a difficult problem: the "market" is not going to solve it. The government has to set and enforce requirements. Even when great private sector entities like BlocPower that can demonstrate to owners that they can pretty much painlessly save them money and make their buildings better, building owners usually just opt to stay inert.

Personally, I can relate to building owners who aren't taking action even though they could save money and cut pollution: that's my building. I live in a drafty old four unit co-op with a battleax of an oil boiler. We aren't doing anything currently to improve the building even though we know we should.

But let me contrast what happened when the city sent us a notice that we'd get fined if we didn't fix the sidewalk: we fixed it! We hadn't even noticed that the sidewalk plate was bulging up and could trip people, but it was. The city spotted it and sent us a notice. We then spent a couple thousand bucks on that routine maintenance, which is a basic cost of owning and operating a building. We got it done. The system worked.

That means enforcing laws. As everyone in this hearing knows, housing and tenant laws are routinely not enforced and therefore landlords just ignore them. That can't happen with Local Law 97.

Local Law 97 has real penalties and real enforcement. There is a formula in the law to assess penalties on building owners who pollute above their requirements. These penalties are set directly in proportion to the level of pollution. The more that a building exceeds its pollution cap, the higher the penalty. It is simple multiplication. Your excess pollution per square foot over your cap times a dollar penalty. The formula is set at a level that makes it economically in the interest of owners to comply. It's not excessive. It's simply a strong and appropriate penalty for breaking the law.

I want to quote from an industry news publication that makes the point<sup>1</sup>:

“[T]he fact that the law has serious financial penalties for not meeting reduction targets has created a push for owners to begin planning for emissions reductions, emissions monitoring, and even building retrofits and electrification.

‘LL97 is one of the few laws with actual teeth,’ said Nikhil Daftary, executive vice president of product at Carbon Lighthouse, a building analytics firm focused on decarbonizing buildings. ‘What’s interesting is that it’s forcing change in the market in interesting ways. You can’t just pay lip service, you need thoughtful implementation.’”

The previous administration was very clear: the city would penalize landlords for failing to cut their pollution as in the formula in the law. However, the law leaves some room for discretion in enforcement by the City. That discretion is not there to weaken or gut the law. The Administration should not try to weaken or gut the law in any way, including through weakening penalties or otherwise relaxing enforcement.

### **Renewable Energy Credits (RECs) Must Be Limited**

Limiting RECs is vital. According to the NYSEERDA Tier 4 Petition, CHPE will generate 10.4 million RECs and Clean Path will generate 7.9 million more, yearly. That’s 18.3 million RECs per year. CHPE is likely to be in service in 2025. While Clean Path is less advanced, it should be in service in the later 2020s. 18.3 million Renewable Energy Credits per year is larger than the yearly pollution reduction requirements for all the buildings covered by Local Law 97 in the 2024-2029 period.

You can see the problem: building owners may simply opt to buy RECs rather than upgrade their buildings. In fact, that’s highly likely in some cases. Local Law 97 anticipated this, and the Administration is tasked with creating the regulations to implement REC programs. I believe the Administration will limit RECs, but these limits must be tight enough to maximize jobs and pollution reductions here in New York City.

As a side note, people should understand that the REC provisions in the bill that became Local Law 97 were designed to help induce the state to act on climate, in particular to get renewable energy into the city. That’s worked brilliantly: there are two large new transmission projects approved which will hugely alter the city’s emission’s profile by bringing hydropower, wind and solar into Zone J.

This is a very good thing.

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<sup>1</sup> See BisNow “City Emissions Laws Fueling Cottage Industry Of Sustainability Consultants” March 2, 2022

<https://www.bisnow.com/national/news/top-talent/city-emissions-laws-creating-ecosystem-of-firms-for-sustainable-shift-112069>



We are very glad that the law hugely incentivized the real estate lobby to get serious about renewable energy. We believe the state's actions under Cuomo and Hochul are reflective of that dynamic. After Local Law 97 passed, the state reformed its terrible renewable siting law, which was inhibiting development, and got moving and approved two big transmission projects. That's no coincidence.

However, wide availability of RECs into Zone J must not prevent the on-site energy efficiency improvements. Therefore proper regulation must limit RECs. In 2019, as the bill was being finalized, we urged the Mayor and Council to limit RECs (and not allow any offsets). Instead, the Administration was given flexibility to regulate in this area. Now it's time for the city to use its authority to limit RECs to 10% of pollution reductions (as offsets are limited under the law) and to limit RECs to electrical use since RECs derive from the grid.

At the same time, the limits and co-efficient and other regulations must be put into place. This is not a simple task! But the city has highly competent staff and an advisory board to put it into place. That's what has to be done by the end of the year.

**Conclusion: Local Law 97 Should be Fully Implemented and Enforced to Create Jobs and Cut Pollution.**

It would be a tragedy if the Mayor weakens or guts Local Law 97.

The city needs to slash its air pollution - both climate and local air pollution - and create jobs. Local Law 97 is on track to create tens of thousands of jobs this decade while achieving over 40% cuts in the city's climate pollution.

Local Law 97 is a shining example of a city confronting its top source of pollution with real, specific and enforceable requirements that will get the job done. It is on track to deliver what could become the beginning of a "Green New Deal" for our city.

The scale and positive effects are immense: if all building owners comply with the law by undertaking improvements on site to their buildings, the law would create an estimated 141,000 jobs this decade alone.<sup>2</sup>

The construction and renovation jobs that will be created as building owners begin to implement solutions in their buildings are especially important to our members, who are predominantly from Black and Brown communities. These are jobs that are similar to existing work, which means the construction and renovation industry will significantly increase in size.

Local Law 97 will meaningfully help reduce unemployment and raise wages in the city. NYCC members and their families need good jobs. Local Law 97 will create tens of thousands of such

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<sup>2</sup> See Urban Green Council Retrofit Market Analysis  
<https://www.urbangreencouncil.org/content/projects/all-about-local-law-97>

jobs, including many union jobs. It is by far the city's largest jobs program that it does not directly pay for.

Local Law 97 is on track to grow the size of the city's energy efficiency industry by a staggering 13X in this decade. It would generate an estimated \$20 billion of new capital investment, again if all owners comply with on-site energy efficiency improvements. It is already accelerating New York as the knowledge center for upgrading large energy inefficient buildings to green buildings. There is already a major boom being created by the law in design and assessment work.

Moreover, the large majority of affected buildings will save money over time through compliance because their energy use and utility bills will drop as they waste less energy. For some buildings, some of these requirements may require improvements with a short payback. For most, it'll be more like a 10-20 year payback period. Building owners will tend to save money over and above their financing costs. Buildings will also become more comfortable.

Most importantly, lives will be saved.

RMI and university researchers [recently estimated](#) that about 1,000 New Yorkers are killed each year by pollution from fossil fuel use to heat, cool and power our city's buildings<sup>3</sup>. Air pollution is worse in low income and communities of color, with Black New Yorkers breathing 32% dirtier air<sup>4</sup>. Local Law 97 will save lives in our city.

Globally, Local Law 97 sets an example for cutting climate-heating pollution at the pace and scale needed to satisfy agreement like the Paris deal. This is an existential crisis and Local Law 97 is a solution.

Unless it is gutted. Or weakened.

None of this is to say that the law isn't complex, or that there aren't many important regulatory decisions left to be made.

The city, state and federal government must also allocate the funding to bring NYCHA to a state of good repair, which would include energy efficiency improvements that would help the city comply with Local Law 97 in its own properties. The city is cutting pollution from its buildings, but it needs to accelerate these efforts as a large landlord itself. The city should create a roughly \$100 million per year grant program to support upgrades by working class owners covered by Local Law 97 (under no circumstances should affluent owners be subsidized by such a program).

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<sup>3</sup> See RMI blog post with links to studies at <https://rmi.org/new-york-emits-more-building-air-pollution-than-any-other-state/>

<sup>4</sup> *ibid*

Thankfully, the current leadership in the Office of Building Energy and Emissions Performance is highly competent and professional and should be supported. They are a credit to the de Blasio and Adams Administrations and the Council.

The Advisory Council and its working groups are working through many complex questions to inform rule-making and regulations, which the Department is closely involved in to help inform its decision making. This process is unfolding at a speed that helps ensure the proper care is taken in setting metrics and requirements into place for 2030 and beyond.

Experts tell us that buildings undertaking a good faith effort can comply with the 2024 limits, often with limited effort. It's not even particularly hard for most.

Of course, there are unusual buildings like One Bryant Park, a super-polluting building that currently exceeds its 2024 limit, whose owners, the Durst billionaires, have taken strong exception to the law.

It's absurd that multi-billionaire developers whine about requirements to cut their pollution. They can and should cut their pollution. They can also buy RECs to satisfy the law. They should get over it, comply with the law, and clean up their acts.

There is no reason to relax the law's penalties, especially at the behest of billionaire developers. The Administration should stop suggesting it may consider doing so and instead make a clear statement that the City will fully implement and enforce the law.

Our top recommendation is for the Mayor to make a clear statement that the Administration will fully implement and enforce Local Law 97. That would end uncertainty in the market that their rhetoric is creating, which is inhibiting air pollution reductions and job creation.

The Administration should stop dog-whistling to the most regressive elements of the real estate industry. It should stop suggesting to billionaire real estate developers and owners that want to keep sticking their heads in the sand that they're going to catch a break with Mayor Adams in charge.

The billionaire developers and all building owners should roll up their sleeves and get moving to improve their buildings both in the short term for 2024 where necessary and in the longer multi-decade future. They can slash energy waste and therefore slash climate and other air pollution. In the process, they will save money, save lives and set an example of action that can save our whole world.

We're New York City. We should lead. Let's do it.

Thank you very much for holding this important hearing.

For More Information:

[NYC Accelerator Program](#)

[NYC Energy Efficiency Corporation \(NYCEEC\)](#)

[Building Energy Exchange \(BeX\) Program](#)

[NYC Pace Financing Program](#)

[NYSERDA Multi-Family Residential Buildings Programs](#)

[NYSERDA Commercial Buildings Programs](#)

[Advocacy groups: Fact Sheet on Local Law 97](#)

[Advocacy groups: Agenda to Strengthen, not weaken, Local Law 97](#)



Cornell University

## **Testimony of Ben Furnas**

*Executive Director, The 2030 Project: A Cornell Climate Initiative  
Former Director of the New York City Mayor's Office of Climate and Sustainability*

**Before the New York City Council's Committees on Civil Service and Labor,  
Housing and Buildings, and Environmental Protection**

### **"Local Law 97 Green Workforce Pipeline"**

**Monday, June 27, 2022**

Hello, my name is Ben Furnas, I am the Executive Director of The 2030 Project at Cornell University. I previously served as the Director of the New York City Mayor's Office of Climate and Sustainability.

The 2030 Project is Cornell's new climate initiative, housed at the Cornell Atkinson Center for Sustainability. We are using the many tools of a world-class university to support impact-oriented research, entrepreneurship, and scholarship in this decisive decade for climate action.

Thank you for the opportunity to testify on this important issue.

The fossil fuels used to heat, cool, and power our buildings account for two-thirds of New York City's greenhouse gas emissions. Any path to reducing these emissions and achieving the city and state's bold climate goals runs through decarbonizing these systems.

To that end, in 2019, the New York City Council, working in close partnership with the mayor's office, passed into law the Climate Mobilization Act and its centerpiece, Local Law 97.

Local Law 97 sets emission targets for New York City's largest buildings, which encompass nearly 60 percent of New York City's built area, and more than 3 billion square feet.

The law's emissions targets are ambitious. But they vary based on the use of the building and are reasonably tailored to the energy consumption of multifamily residential, commercial, hotel, manufacturing/industrial, and other uses. They are technique-agnostic, which means there are many ways for a building to comply – as long as emissions are reduced.

This law is the most far-reaching municipal-level climate law in the world. If fully implemented, it would reduce climate pollution by approximately 5.3 million tons per year, equivalent to the annual greenhouse gas emissions of the City of San Francisco.

And this is not just about climate – reducing New York City's emissions comes with proportional reductions in air pollution, and improvements to human health from reduced asthma and other respiratory diseases.

Today I would like to highlight a few aspects of Local Law 97, and some opportunities and challenges that the Council and the administration face as we enter this next phase of implementation.

### **First, Local Law 97 is a major job-creating and business-development opportunity.**

Local Law 97's targets can seem daunting. They are distinct for directly targeting emissions from existing buildings. And precisely because this law is so distinctive, it represents an enormous opportunity.

New York businesses and workers are poised to develop next-generation companies, technologies, skills, and techniques that will be valuable to cities and property owners across the world. Humanity will have to change the built environment to create a lower-carbon, climate-safe future, and New York will benefit by leading the way.

An analysis by David Hsu of MIT, in partnership with Urban Green Council, found that the retrofits that will be catalyzed by Local Law 97 represent a \$20 billion market and will generate more than 125,000 new jobs. These jobs represent a wide range of skills and expertise — they will require architects, engineers, tradespeople, and HVAC professionals to roll up their sleeves and get this work done.

### **Second, New York City should look to expand support for building owners, while maintaining incentives for partial improvements.**

The NYC Accelerator program and Property Assessed Clean Energy (“PACE”) financing are two critical tools put in place under the previous administration to assist building owners. These help with securing both the technical assistance and the financing needed to improve efficiency and shift away from fossil fuels.

But there is always more that can be done, in particular by working with New York State, NYSERDA, and the federal government. Any resources that the city can find to help upgrade buildings will be key to minimizing the cost burden on those least able to afford it.

The fines associated with Local Law 97 decrease as a building's emissions near the statutory threshold – the less you pollute, in other words, the less you pay. This means that for many building owners, any efficiency upgrade that reduces emissions helps, and there is an incentive to make improvements even if they don't bring a building below the target.

It's very sensible for the City to work with building owners who are operating in good faith to improve their buildings and avoid fines, but maintaining this ongoing incentive for emission reductions and partial compliance will both speed pollution reduction and expand job creation.

### **Third, the right regulatory environment can ease the way for building upgrades.**

Making changes to buildings in New York City is tough, and any upgrades navigate a thicket of regulations. The Council has an opportunity to maximize the economic opportunity from Local Law 97 by making it as easy and cost-effective as possible to improve the efficiency of buildings, install solar energy or battery storage, and reduce on-site combustion of fossil fuels through electrification. That includes the installation of heat pumps and induction stoves.

The Adams administration has indicated a desire to work with the City Council to pursue a zoning text amendment to ease some of these regulatory burdens, and the Council should engage broadly with owners, industry, and entrepreneurs to make improvements to city codes and to allow for new techniques to retrofit and transform buildings in more efficient and less disruptive ways.

**Finally, building-level efficiency and electrification upgrades work best when paired with renewable energy investments connected to the NYC grid.**

Building owners can meet the carbon emission targets established by Local Law 97 in more than one way. They can improve the efficiency and reduce fossil fuel usage of their own buildings. They can also meet some of their obligations by supporting the development of renewable electricity connected directly into the New York City grid.

Both of these actions are critical for achieving deep emissions reductions in New York City.

Building upgrades improve comfort, indoor air quality, reduce energy demand, and create jobs and opportunities across the five boroughs.

Cleaning up the grid reduces emissions associated with electricity generation and reduces fossil fuel combustion at in-city power plants. It has the added benefit of improving air quality in New York neighborhoods adjacent to these plants. An electric building, of course, gets cleaner as the source of electricity that powers it gets cleaner.

As the administration and the Council sharpen the rules around compliance pathways, Local Law 97's support for *both* of these climate and quality of life imperatives should be maintained in order to clean our buildings and clean our power.

**Conclusion**

In conclusion, by implementing this ambitious law, New York City is doing something that no other city on Earth is doing. And the eyes of the world are on us.

I want to thank and congratulate the City Council, the Adams administration, property owners and managers, building superintendents, condo and co-op board members, entrepreneurs, commercial businesses and tenants, and the indefatigable activist community for coming together to grapple with this major challenge and work in good faith to build the cleaner, safer, flourishing city we all know is possible.

David Hsu  
Associate Professor

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Wednesday, June 29, 2022

To: Committees on Civil Service and Labor, Housing and Buildings, and Environmental Protection  
New York City Council  
**RE: Testimony on Local Law 97 Green Workforce Pipeline**

Dear Councilmembers, Staff, and Audience,

I am an Associate Professor of Urban and Environmental Planning at the Massachusetts Institute of Technology. Local Law 97, as you undoubtedly know, is an important and groundbreaking step for the City of New York (NYC) to reduce carbon emissions from buildings. Many other cities are looking to NYC's leadership in making this law successful. I write to you today to communicate the basis of my estimates for the green workforce needed to carry out NYC Local Law 97.

Please let me explain my background and expertise in this area. As an urban planner, I use data, policy analysis, and social science methods to understand how to help cities carry out environmental policies. I have written extensively about the capacity and opportunities that local governments have to implement ambitious climate and environmental policies in areas such as buildings, green infrastructure, and utilities. One area that I have written a number of articles about are the considerable positive effects of NYC's green building laws, particularly Local Law 84 regarding energy and water benchmarking, and Local Law 87 regarding energy audits and retro-commissioning.

In August of 2019 I worked with staff at the Urban Green Council (UGC) to develop an initial estimate of the workforce needed to carry out Local Law 97. I will summarize our work briefly and then go into the analysis steps and literature sources.

Summary: Using UGC estimates for the total cost of compliance, I assumed that the law created additional demand for various building related professions in the New York metropolitan area, similar to the structure of existing building-related expenditures. Using multipliers from the standard input-output model from the US Bureau of Economic Analysis (RIMS II), I estimated the new final demand and the associated employment impacts, which are the changes in all industries as a result of new final demand delivered. The resulting estimates for employment impacts are more than 18,000 new building construction related workers needed to meet the 2024 goal and more than 154,000 new building construction related workers needed to meet the 2030 goal.

Analysis steps, literature sources, and notes:

1. A report from the U.S. Department of Energy and Lawrence Berkeley National Laboratory gave an industry breakdown of which professions are needed to carry out energy efficiency services.
  - o Citation: Goldman, Charles, Merrian C Fuller, Elizabeth Stuart, Jane S Peters, Marjorie McRae, Nathaniel Albers, Susan Lutzenhiser, and Mersiha Spahic. 2010. "Energy



Efficiency Services Sector: Workforce Size and Expectations for Growth.” Berkeley, CA: Lawrence Berkeley National Laboratory. <https://emp.lbl.gov/publications/energy-efficiency-services-sector>.

- The main professions, as indicated by North American Industrial Classification System (NAICS) codes, are:
    - NAICS 2361, Residential Building Construction,
    - NAICS 2362, Nonresidential Building Construction,
    - NAICS 2382, Building Equipment Contractors,
    - NAICS 2389, Other Specialty Trade Contractors, and
    - NAICS 5413, Architectural, Engineering, and Related Services
  - The Goldman et al (2010) report indicates that the skills and workforce needed to build green and energy efficient buildings are not substantially different than the skills and workforce currently employed in the buildings sector. This is a finding that is echoed elsewhere in the academic literature on green jobs.
2. Using US Census data, based on the current spending patterns for receipts and payroll in the New York-New Jersey-Pennsylvania-Connecticut Combined Statistical Area, the breakdown of current spending on buildings is as follows:
- Citation: NY-NJ-PA-CT Combined Statistical Area:  
[https://www2.census.gov/geo/maps/econ/ec2012/csa/EC2012\\_330M200US408M.pdf](https://www2.census.gov/geo/maps/econ/ec2012/csa/EC2012_330M200US408M.pdf)
  - Breakdown:
    - 19% for residential building construction,
    - 12% for nonresidential building construction,
    - 33% for building equipment contractors,
    - 11% for other specialty trades, and
    - 25% for architectural, engineering, and related services.
3. Based on the UGC Retrofit Market Analysis, released June 18, 2019, the total cost of compliance was estimated as:
- \$900 million for residential buildings by 2024
  - \$6,900 million for residential buildings by 2030
  - \$1,300 million for nonresidential (commercial) buildings by 2024
  - \$11,300 million for nonresidential (commercial) buildings by 2024
4. Using multipliers from the RIMS II Input-Output model, based on 2016 County Business Patterns, U.S. Bureau of Economic Analysis for NY-NJ-PA-CT Combined Statistical Area, I estimated the final demand and employment impact.
- Type I multipliers give a conservative impact: sum of final demand + intermediate demand + indirect impacts. Does not include induced impacts (wealth) as in Type II.
  - Most of the Type I employment multipliers range from 7.4 to 8.4 jobs per million dollars, so the impact of the breakdown in step 2 times the cost of compliance in step 3 times the RIMS II multipliers yields:
    - residential building construction: 3,057 jobs in 2024 and 25,293 jobs in 2030,
    - nonresidential building construction: 2,302 jobs in 2024 and 19,040 jobs in 2030,
    - building equipment contractors: 6,445 jobs in 2024 and 53,321 jobs in 2030,
    - other specialty trades: 2,211 jobs in 2024 and 18,288 jobs in 2030, and
    - architectural, engineering, and related services: 4,657 jobs in 2024 and 38,526 jobs in 2030, in sum resulting in
    - total new jobs: 18,672 by 2024 and 154,469 by 2030.

Strengths, weaknesses, and limitations of this analysis:

I did the best I could to develop a simple analysis with the limited information I had at the time. A more sophisticated analysis could certainly be carried out with more time and labor.

This analysis was based on a few initial numbers shortly around the time that NYC Local Law 97 was passed. It should be noted that UGC and I assumed that buildings would comply with LL97 through energy efficiency and on-site building improvements alone. This was a necessary assumption at the time, but it is likely that some buildings will comply using RECs, off-sets and even pay fines. The analysis was meant to estimate the potential market size rather than predict what may actually happen.

The strengths and weaknesses of economic input-output (I-O) models are well-known. On one hand, they use existing data specific to particular geographies to estimate the impacts of new construction or public investment like a stadium. On the other hand, they do not estimate well fundamental structural or technological changes in the economy. For example, while we can forecast that we need more than 154,000 workers by 2030, that does not take into account any possible effects such as the following: shortfalls in existing educational, housing, and transportation capacity; inflation or supply chain challenges; the ongoing workforce changes due to COVID; or the impact of climate risks on existing infrastructure.

I hope that you find this explanation of my analysis methodology helpful. I would like to do anything I can to help NYC with its ambitious and necessary decarbonization goals, and so would be happy to discuss this further, or work with you and others to refine this analysis.

Sincerely,

A handwritten signature in black ink that reads "Yun-Jen David Hsu" followed by a horizontal flourish.

David Hsu  
Associate Professor of Urban and Environmental Planning  
Department of Urban Studies and Planning  
Massachusetts Institute of Technology  
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Cc: Elizabeth Arzt, Policy Analyst, New York City Council

**Draft Testimony to  
NYC Council Committee on  
Committees on Civil Service and Labor, Housing and Buildings, and Environmental Protection  
June 27, 2022**

Good morning, my name is Stephen Sears, I am the CEO of the EIFS Industry Members Association, or EIMA, the organization representing the hard-working men and women comprising every facet—from manufacturing-to-installation—of the Exterior Insulation and Finishing System (EIFS) industry. EIFS are exterior wall claddings that insulate, protect and have beautified many buildings in New York City and across the United States for more than 50 years. Our work contributes to the aesthetic and vibrant architecture of buildings, while simultaneously serving as a weapon in the war on carbon to both run your building more efficiently and reduce energy, and, by extension curtail greenhouse gas emissions. I am here today to speak about the importance of the whole building approach and how organizations like EIMA are eager and proactive about playing a role in reducing emissions through this approach. We understand the exterior wall cladding is only one component of the building, but are confident New York City, State, and the country can benefit from the wide application of EIFS in the construction of buildings.

What Local Law 97 has successfully accomplished is set requirements that improve building performance through new energy efficiency and greenhouse gas emission limits. Rather than relying on prescriptive standards—often in conflict with the long-term goals and guise of our policies—legislation like Local Law 97 has set a new perspective that enables building owners to select the best methods to meet the new requirements based on the use and needs of their particular building and from the outset can intentionally plan to be efficient and cut costs. Our product has been a part of retrofitting before Local Law 97, and we see the implementation—the country's first—as a step towards a just transition.

EIFS are one of the most environmentally friendly products you can integrate into a building in terms of energy efficiency and emissions. A tough material sustaining high and low temperatures well, the product is used in jurisdictions across the country. Notice the same material on a Hampton Inn in Midtown Manhattan is on a Hampton Inn in Monticello, Arkansas—that is because EIFS are an effective, resilient tool, or they would not be so widely utilized in such a broad variety of jurisdictions and contexts.

Even in the City of New York there are EIFS in practically every neighborhood. The affiliates comprising our board and the workers they employ (or represent in the case of our partnerships with Organized Labor) have done jobs as small as one-or-two panels to accent a home, all the way to large, dense multinational hotel brands in Midtown East. The adaptability of EIFS means the product can generally be applied to any type of new or existing structure.

When it comes to the science and building engineering, EIFS are only a value-added to the bottom-line of property owners attempting to reign-in energy costs and reduce carbon emissions. An independent study commissioned by an EIFS manufacturer has shown the total energy to produce or manufacture an EIFS from cradle to wall is 2x less than insulated brick and 1.5x less than insulated stucco. In terms of cradle to wall greenhouse gas emissions created during the manufacturing process, the emissions to produce EIFS is 10X less than used to produce either insulated brick or insulated stucco. I want to be

perfectly clear: when consideration transportation and fuel, EIFS are far more environmentally friendly than brick, stucco, or any other alternative material by a wide margin.

There is no doubt New York City will have challenges implementing the world's first whole building standard, but in doing so, is creating a new model for development that benefits people and the planet. Groups like EIMA are prepared to work with all our affiliates and members to ensure we are a component of the just transition. We stand prepared to be a proactive partner in creating the carbon-free future we all know is possible.



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**Testimony of Food & Water Watch to the New York City Council  
Local Law 97  
June 27th, 2022**

I'm Alex Beauchamp, the Northeast Region Director at Food & Water Watch. We're a national environmental group focused on fighting to move the country off fossil fuels with a large presence here in New York City. Thank you for the opportunity to provide testimony today.

Local Law 97 is the single biggest thing the city has done to address climate change in recent years. With 70% of the city's greenhouse gas emissions coming from buildings, and the majority of that pollution coming from the city's largest buildings, the limits set by the law are absolutely essential to moving past our ruinous reliance on fossil fuels.

And yet preserving a livable climate is only one positive of the law. We'll also slash air pollution, create good jobs, save on energy costs, and create better and more valuable buildings throughout the city because of this groundbreaking law – there's a reason many called it New York City's Green New Deal. That said, I'll focus today largely on climate.

The pollution limits set in the law will mean little without tough enforcement, and we're increasingly alarmed by comments from staff in Mayor Eric Adams' administration suggesting they are not serious about enforcing the law.

In multiple public statements, the mayor's spokespeople, though importantly not the mayor himself, have made alarming comments portraying Local Law 97's penalties and requirements as unfair, echoing false talking points from the real estate industry. This rhetoric is alarming and sends a terrible signal to building owners considering actions to comply with the law.

Let me be very clear, the mayor must not weaken the law's penalties or other requirements, and I urge this city council to fight back against any efforts to weaken the city's most important climate law.

Local Law 97 gives building owners great flexibility in lowering their emissions, allowing



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them to pursue the most cost effective option for their building. And yet, some large buildings have yet to take even the most basic, cheapest first steps such as LED lighting, insulating heat pipes, or tuning and operating boilers correctly. Those buildings that fail to reduce their emissions below the law's limits in 2024 and 2030 will pay penalties.

It's crucial that Mayor Adams send a strong message that the administration will fully implement Local Law 97, including levying fines using the formula in the law for those buildings that exceed the emissions cap. The law will not succeed in lowering emissions without . Simply put, we all know that some building owners will break the law if they think breaking it will be cheaper than following it. Any signal from the administration that they are less than fully committed to enforcing the law will have serious consequences as building owners can and should be planning now not only for the 2024 cap but the 2030 one as well.

We've passed a strong, groundbreaking law here. We cannot allow weak enforcement to ruin its efficacy. And here's the other thing: there's no need to back down now. The city has created serious resources to help building owners comply with the law, and the 2024 limit is high enough that only about a fifth of the city's biggest buildings are over it right now. As a city we must hit the limits we've enshrined into law, but it won't happen without a serious commitment from the city to get tough on those building owners who refuse to comply with the law.

The city can and should also take several other steps to strengthen the law. The council must ensure the city has the proper funding for the law's enforcement by hiring additional staff and funding supportive programs to help building owners comply. The city must also ensure rule-makings prioritize pollution cuts and jobs created and limit the use of Renewable Energy Credits (RECs) so that owners cannot simply evade reducing emissions with unlimited REC use.

In conclusion, we cannot let weak enforcement undermine the single most important climate law we've been able to pass in New York City. As we prepare for the Supreme Court to gut the federal government's extraordinarily modest efforts to address the climate crisis, it's clearer than ever we need real leadership from the state and local level. We simply can't afford to backslide now. Don't let it happen.

Philip H. Kahn  
phkahn@hotmail.com  
June 27, 2022

### **Testimony on Hearing on Oversight: Local Law 97 Green Workforce Pipeline**

I am Philip H. Kahn a member of the leadership team of the Metro New York Chapter of the Climate Reality Project; and I am co-leader of the New York City Chapter of Citizens Climate Lobby.

Thank you for the opportunity to testify at the hearing held by the City Council's Committees on Civil Service & Labor, Environmental Protection, and Housing & Buildings, on the subject of Oversight of Local Law 97 Green Workforce Pipeline.

**We strongly support the Climate Mobilization Act (Local Law 97 (LL97)) and want to see it vigorously implemented and enforced.** It is an essential part of New York City's efforts to reduce its greenhouse gas emissions and will result in less pollution, a more efficient built environment, and a New York based cluster of energy efficiency and clean heating and cooling technologies and service providers with many job opportunities. Accomplishing the emissions reductions set by LL97 will not be easy or simple. But the benefits to the city, its citizens and its buildings will be well worth the effort.

Recommendations:

1. **Continue to increase the budget of the Office of Building Energy and Emissions Performance (OBEEP).** The recent increase in budgeting for the staff of the OBEEP from 6 to 11 positions is a positive step. But considering there are 50,000 buildings covered by LL97, and their unique energy profiles, tenant requirements, and operating and capital budgets will put major burdens on the OBEEP. So, the City should plan to increase the budget of the OBEEP in the future to support a much larger staff and operations.
2. Rather than loosen enforcement provisions, **we recommend the city hold fines in escrow so that they can be reimbursed to building owners and operators to spend on improving their buildings to meet LL97 requirements.**

- a. The object of LL97 is to transform the energy use and emissions profiles of the City's largest buildings. Allowing use of the fines by buildings will accelerate the process.
- b. This will allow time flexibility to building owners and operators if there is a shortage of engineering and design, labor, equipment and or materials needed to modify their buildings, and will allow such projects to be properly planned.
- c. To use their fines, buildings should have to engage certified vendors and present their plans to the OBEEP for approval.
- d. To retain access to their fines over time, buildings should have to show proof of work. If such proof of work is not demonstrated to the OBEEP, then access to previously paid fines will be lost.
- e. Fines should not be allowed to be spent on RECs or emissions trading.
- f. Retaining fines but allowing buildings to use them, will ultimately assure much more labor force participation than loosening enforcement penalties.
- g. Retaining fines but allowing buildings to use them is consistent with Commissioner Aggarwala's emphasis on compliance over penalties.



**Testimony of Nina Liloia,  
New York Lawyers for the Public Interest  
New York City  
Committee on Civil Service and Labor, Committee on Environmental  
Protection, and Committee on Housing and Buildings  
June 27, 2022**

Thank you, Chairs De La Rosa, Gennaro, and Sanchez, and members of the Civil Service and Labor, Environmental Protection, and Housing and Buildings Committee for the opportunity to speak at today's oversight hearing. My name is Nina and I am an Environmental Justice intern at New York Lawyers for the Public Interest (NYLPI).

The tenets of the 2014 NYC Peoples' Climate March and ongoing Peoples' Climate Movement describe three equally important pillars needed to protect New Yorkers from the deadly impacts of climate change; jobs, justice, and climate action.

None of these pillars – climate action, justice, or jobs - can be properly and fully implemented without the others. A livable future for workers and their families requires jobs with family-sustaining wages and that allow for unionization, localized hiring practices, and opportunities for growth and promotions. But a livable future for workers also requires clean air and water in the places they live – rights recently codified in our state's constitution by the people of New York.<sup>1</sup> That would include affordable and energy-efficient cooling and heating for New Yorkers' homes and addressing the extreme heat caused by climate change so that workers can stay safe on the job. There can be no climate justice without justice for workers.

Passing Local Law 97 was a significant step in the right direction to both reduce greenhouse gas emissions from buildings, the City's largest emitters, which contribute to extreme heat and poor air quality. It was also an important creator

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<sup>1</sup> <https://www.bdlaw.com/publications/new-york-becomes-the-third-state-to-adopt-a-constitutional-green-amendment/>

of quality green jobs for New Yorkers. According to the U.S. Bureau of Economic Analysis's economic impact model, researchers project that Local Law 97 has the potential to create **more than 140,000 jobs** in the NYC metro area by 2030.<sup>2</sup>

In order to meet the building greenhouse gas emissions limits set by Local Law 97, covered buildings can adopt beneficial electrification, which can accelerate the replacement of fossil fuel fuels with energy sources that are both affordable and produce low or little greenhouse gas emissions, such as electric heat pumps.<sup>3</sup> Buildings can comply with new limits by reducing their energy use through measures such as installing indoor and outdoor heating system sensors, upgrading lighting, adding better insulation, and weatherizing and air-sealing buildings.<sup>4</sup> The need for new building retrofits and clean energy infrastructure will result in job growth in a variety of sectors, including architects, engineers, sustainability consultants, HVAC professionals, retail, food services and product manufacturing.<sup>5</sup> New York currently trails the rest of the country in terms of recovery from pandemic-related job losses.<sup>6</sup> An analysis of New York's labor force released by Comptroller Thomas DiNapoli last month shows that by April 2022, the U.S. had recovered 95% of jobs lost during the pandemic recession.<sup>7</sup> However, by March 2022, New York State had recovered only 82% of jobs and New York City, specifically, had recovered only 71% of jobs.<sup>8</sup> The problem is most severe among unemployed Black residents of working age in New York, nearly half of whom are long-term unemployed.<sup>9</sup>

Union membership brings wage benefits for all workers in construction; a 2022 Bureau of Labor Statistics report shows that median weekly earnings for union members in construction are about 31% higher than median weekly earnings for nonunion members.<sup>10</sup> But unions are especially crucial to increasing diversity in

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<sup>2</sup> [https://www.urbangreencouncil.org/sites/default/files/urban\\_green\\_retrofit\\_market\\_analysis.pdf](https://www.urbangreencouncil.org/sites/default/files/urban_green_retrofit_market_analysis.pdf)

<sup>3</sup> <https://www1.nyc.gov/assets/nycha/downloads/pdf/NYCHA-LL97-Whitepaper.pdf>

<sup>4</sup> [https://www1.nyc.gov/assets/buildings/local\\_laws/ll97of2019.pdf](https://www1.nyc.gov/assets/buildings/local_laws/ll97of2019.pdf)

<sup>5</sup> [https://www.urbangreencouncil.org/sites/default/files/urban\\_green\\_retrofit\\_market\\_analysis.pdf](https://www.urbangreencouncil.org/sites/default/files/urban_green_retrofit_market_analysis.pdf)

<sup>6</sup> <https://www.thecity.nyc/2022/6/16/23171702/unemployed-nyc-long-term-jobs>

<sup>7</sup> [https://www.osc.state.ny.us/reports/osdc/new-york-citys-uneven-recovery-analysis-labor-force-trends?utm\\_medium=email&utm\\_source=govdelivery](https://www.osc.state.ny.us/reports/osdc/new-york-citys-uneven-recovery-analysis-labor-force-trends?utm_medium=email&utm_source=govdelivery)

<sup>8</sup> [https://www.osc.state.ny.us/reports/osdc/new-york-citys-uneven-recovery-analysis-labor-force-trends?utm\\_medium=email&utm\\_source=govdelivery](https://www.osc.state.ny.us/reports/osdc/new-york-citys-uneven-recovery-analysis-labor-force-trends?utm_medium=email&utm_source=govdelivery)

<sup>9</sup> <https://www.thecity.nyc/2022/6/16/23171702/unemployed-nyc-long-term-jobs>

<sup>10</sup> <https://www.constructiondive.com/news/constructions-union-membership-remains-consistent-as-numbers-across-other/618125/#:~:text=nonunion%20workers%2C%20finding%20that%20nonunion,weekly%20earnings%20of%20union%20workers.>

the building trades and getting resources to minority communities. A 2017 report from the Economic Policy Institute showed that Hispanic and Black construction workers who are in a union earn about 35% more than Hispanic and Black construction workers who are not in a union.<sup>11</sup> The report also showed that the presence of unions and collective bargaining in New York City boosts overall annual wages to the Black community from construction by 83%, or \$152 million each year.<sup>12</sup>

Additionally, nearly 90% of essential workers in 2020 lacked union representation. Yet, declines in union formation and membership are not due to a public perception that unions are unimportant; a Gallup poll from August 2021 showed that 68% of Americans approve of labor unions, the highest approval rating Gallup has recorded since 1965.<sup>13</sup> New York State must ensure that the jobs created by Local Law 97 are union jobs from which workers receive just wages, benefits, and working conditions. This can occur through proactive project labor agreements between building trade unions and contractors, which also protect taxpayers by eliminating costly delays caused by labor conflicts or shortages of skilled workers.<sup>14</sup>

Local Law 97 will be critical to creating needed union jobs in many sectors to help New Yorkers return to their pre-pandemic employment levels. When thinking about our three pillars, justice, as well as climate action and jobs, should be prioritized in the implementation of Local Law 97. To ensure that populations who have been historically underrepresented in green jobs and who were hardest hit by the pandemic are able to benefit from the jobs created by Local Law 97, we encourage New York City to:

- Collaborate with union-linked direct-entry programs and apprenticeships to ensure community-based organizations have time to recruit and organize local workers
- Fund local, targeted outreach in different languages to increase awareness and program enrollment.
- Fund classes for Test of Adult Basic Education (TABE) preparation and GED tests that can be paired with pre-apprenticeship programs.

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<sup>11</sup> <https://www.epi.org/press/unions-promote-racial-diversity-and-increase-wages-in-nyc-construction/>

<sup>12</sup> <https://www.epi.org/publication/diversity-in-the-nyc-construction-union-and-nonunion-sectors/>

<sup>13</sup> <https://news.gallup.com/poll/354455/approval-labor-unions-highest-point-1965.aspx>

<sup>14</sup> <https://aflcio.org/what-unions-do/empower-workers/project-labor-agreements>

To achieve maximum benefit for New Yorkers, especially those who will be most burdened by the impacts of climate change, Local Law 97 must allow for an inclusive and just transition in the building sector. We urge New York to prioritize green union jobs and therefore the health and wellbeing of all workers, families, and communities.

Thank you,  
Nina Liloia

**Delia Kulukundis**

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June 27, 2022

**Carmen De La Rosa**

Chair, Committee on Civil Service and Labor  
New York City Council

**Pierina Ana Sanchez**

Chair, Committee on Housing and Buildings  
New York City Council

**James Gennaro**

Chair, Committee on Environmental Protection  
New York City Council

Re: implementing and enforcing Local Law 97 to promote green workforce development, making New York a true climate leader

Dear Councilmembers De La Rosa, Sanchez, and Gennaro,

I am a volunteer with 350Brooklyn, a grassroots climate organization, and I am writing to urge the New York City Council to fully implement and enforce Local Law 97, and to resist pressure from the real estate industry to weaken the law and its penalties. Local Law 97 will cut our city's contribution to climate change and will improve air quality and concomitant health outcomes for millions of New Yorkers. Retrofitting our largest and highest-emitting buildings is a lot of work - and that work creates jobs, in design, construction, evaluation, and maintenance. I encourage the Council to make sure that the law is implemented as intended - to improve the performance of buildings in our city - and to reject loopholes and administrative changes that would allow building owners to avoid making physical improvements to their buildings. As you do the important work of overseeing the law and its implementation, and as you evaluate potential changes to the law, I urge you to ask "will this policy lead to healthier air and healthier buildings, and will it employ New Yorkers in the process, or not?"

Living with fossil fuel-fired boilers and appliances within our buildings is like living with tailpipes inside our homes. The health impacts are clear - children living in homes with gas stoves are 42%

more likely to experience asthma symptoms.<sup>1</sup> Oil and gas boilers present a similar threat, and we must do everything possible to remove them from our buildings. We can and must replace them with high-efficiency air-source and ground-source heat pumps.

Rulemaking for Local Law 97's implementation should incentivize electrification and the eventual elimination of fossil fuels in buildings. If electricity use goes up when a building stops using gas, that is a good thing. The rulemaking should take into account total greenhouse gas emissions, not simply energy use, and it should be done with full understanding of the planet-warming impacts of methane leaks from stoves, boilers, and pipes within buildings. We now know that gas stoves and boilers (and the pipes that feed them) leak methane even when those appliances are "turned off"<sup>2</sup>; even when those leaks are at a low enough level to avoid creating explosion hazards, they contribute to global heating, since methane is a far more potent greenhouse gas than carbon dioxide.

Replacing fossil-fueled heating systems in New York City buildings will create jobs. The New York State legislature recently passed the Utility Thermal Energy Network and Jobs Act (S9422/A10493) which will allow utilities to construct neighborhood-scale renewable heating and cooling systems for their customers. Thermal networks allow buildings to share their heating and cooling loads on a block or neighborhood scale, making large-scale building electrification affordable. Several prominent labor unions including the United Association of Plumbers, Pipefitters and Sprinkler Fitters supported the bill and celebrated its passage.<sup>3</sup> Laws like the statewide Utility Thermal Energy Network and Jobs Act and New York City's Local Law 97 make New York a leader in the fight against climate change, but only if those laws are fully implemented.

I urge you to limit the use of RECs (renewable energy credits) as a means of avoiding penalties for high emissions. If we allow building owners to compensate for their energy use by purchasing unlimited RECs, we take away incentives to improve those buildings - and we prevent building occupants from feeling the benefits of cleaner indoor air that would have resulted from true improvements. RECs should only be allowed to compensate for a building's electricity usage, not its fossil fuel usage.

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<sup>1</sup> Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children, *International Journal of Epidemiology*, Volume 42, Issue 6, December 2013, Pages 1724–1737 <https://academic.oup.com/ije/article/42/6/1724/737113>

<sup>2</sup> Methane and NOx Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes, *Environ. Sci. Technol.* 2022, 56, 4, 2529–2539 <https://pubs.acs.org/doi/10.1021/acs.est.1c04707>  
<https://www.nytimes.com/2022/01/27/climate/gas-stoves-methane-emissions.html>

<sup>3</sup> Labor and Environmentalists Unify to Push for Neighborhood-Scale Building Decarbonization and Good Jobs <https://www.weact.org/wp-content/uploads/2022/05/Utility-Thermal-Energy-Network-and-Jobs-Act-Release-052622.pdf>

My own building illustrates the need for robust implementation of Local Law 97. We received a “D” rating on our energy audit, and there are multiple potential upgrades that would reduce our emissions while improving the quality of life for our residents. For example, the model of HVAC units in the individual apartments has been discontinued by the manufacturer, and we could either employ a Texas-based company to provide replacement parts as we need them, or we could replace the HVAC units with more efficient (and quieter) models. The cost of making the upgrades would not be a problem for the owners of the apartments in the building, which is a luxury development in good financial standing. However, we need the threat of enforcement in order to overcome inertia and resistance from our management company. We would all be better off if we were required to make improvements to our building, but we would be worse off if given an option to buy credits that would allow us to keep things as they are.

Since Local Law 97 was passed in 2019, we have seen the impacts of climate change become more severe, but we have also collectively declared our desire for change. In 2021, voters statewide overwhelmingly supported a constitutional amendment that declares “Each person shall have a right to clean air and water, and a healthful environment.” Implementing Local Law 97 - in a way that mandates real improvements to buildings - could help New York City provide clean air to its residents. Mayor Eric Adams ran as the “law and order” candidate; now we are counting on his administration and the Council to enforce New York’s most important climate law and protect our constitutionally-mandated right to a healthy environment.

Sincerely,  
Delia Kulukundis

July 27, 2022

**Carmen De La Rosa**

Chair, Committee on Civil Service and Labor

**Pierina Ana Sanchez**

Chair, Committee on Housing and Buildings

**James Gennaro**

Chair, Committee on Environmental Protection

**Re: Enforcing Local Law 97 to create jobs, jumpstart retrofit industry, and lead the way for cities globally**

My name is Sarah Orleans Reed. I am a volunteer with 350Brooklyn, a grassroots organization dedicated to local climate action.

I previously worked as a project manager on urban climate planning programs in South and Southeast Asia, and since then I have worked as a researcher for unions and labor rights organizations. Today, I am a New York City tenant who, throughout my time here, has subsidized utility companies and my landlords by covering energy costs for leaky windows and inefficient heating systems -- or sometimes, by being just really really cold in the winter.

Local Law 97 is critically important for New York City, our local environment and jobs - but our success in implementing this law goes far beyond those boundaries. The decision to strongly implement LL97 will have positive ripple economic and environmental effects across the country and the world. We need to be the city on the hill for the rest of the world; we cannot be the house of cards.

When we talk about climate action and creating green jobs, we must remember that we are losing this battle at the federal level. In spite of overwhelming public support for job-creating climate measures, the federal government has not made the major investments that we would need to meet our international climate commitments. This should terrify all of us -- including any members of REBNY who are under the age of 80, and/or have children or grandchildren whom they love.

The vacuum at the federal level means that cities and states -- and I mean populous, influential and democratic ones like New York State and New York City -- are on the hook.

By passing LL97 in 2019, New York City signaled to the world that we were up to the challenge. The Urban Green Building Council characterizes Local Law 97 as the strongest buildings emissions law anywhere in the world. It has the potential to create more than 140,000 jobs



within the next decade. While the proposed Amazon headquarters in 2019 promised 25,000 jobs in New York City, simply enforcing our existing law would create 5 to 6 times that, without shelling out tax benefits to one of the world's wealthiest corporations. The city can help make sure the jobs created are good ones, by investing in union linked apprenticeships and pre-apprenticeships and certification training programs. As people struggle to recover from the pandemic's fallout, we need these good jobs in New York City now more than ever.

Through this law, New York City can change the status quo of the building profession. Earlier this year, I had trouble convincing my mother who lives in Philadelphia to replace her broken heating system with a heat pump, because she didn't know anyone else who had a heat pump, and couldn't find any trusted professionals in her area to do it. By generating demand for new HVAC, solar, or heat pump professionals, LL97 will jumpstart those industries all across the northeast. We can already see how New York based companies are stepping up to meet these needs.

What happens in New York City also matters on a symbolic level, since our media and cultural visibility is so disproportionate. LL97 has already been held up by global networks and organizations such as C40 as a model for others globally, while cities like Boston, D.C. and St. Louis are enacting similar legislation. We need to show these not just how to enact the law, but how to make sure it works the way it was designed to.

This means keeping the law's strong penalty structure and strongly limiting the use of RECs. I concur with New York Community for Change in advising the administration to limit RECs to 10% of pollution reductions, and only for electrical use since RECs derive from the grid. In order to create the jobs we need and reduce pollution, we need for building owners to be making actual retrofits, not delaying the real work for another time.

I am asking Mayor Adams and his administration to state publicly that you intend to strongly enforce compliance with LL97. We need to support those responsible buildings owners and boards who are already planning for compliance -- and to signal to those who prefer to delay that in breaking the law, they won't be treated with kid gloves. This seems well in line with the administration's purported commitment to law and order.

Thank you,

Sarah Orleans Reed

# **NYC COUNCIL OVERSIGHT -LOCAL LAW 97 GREEN WORKFORCE PIPELINE**

**Human Services Division and Infrastructure Division,**

**Committee on Civil Service and Labor**

**Committee on Environmental Protection**

**Committee on Housing and Buildings**

**June 27<sup>th</sup>, 2022.**

## **Testimony from 350NYC.org**

I represent 350NYC.org, a grass roots local climate group, advocating for political and social solutions to drastically reduce greenhouse gas emissions caused by burning fossil fuels. We have been strong advocates for the passage and timely implementation of Local Law 97 for over 5 years. We and other environmental groups in NYC are not prepared to see the city drag its feet and weaken the intentions of the landmark bill at this late stage of preparation for the climate crisis.

We thank the council members for this important hearing, which will hopefully help city agencies, NYC apartment owners, residents and climate activists understand the preparation the city has made for implementing Local Law 97 with regard to the readiness of the green workforce. By 2024, LL97 it is estimated that 20% of large buildings (at least 10,000) will have to complete retrofitting, in some cases extensive, to be in compliance with the LL97 greenhouse gas emissions benchmark. We are pleased that the city has increased the budget and capacity of the OBEEP allowing it to hire a total of 11 people to oversee important aspects of monitoring compliance; submitting and auditing annual building emissions assessments, inspections to ensure accurate reporting, determining penalties for buildings that are noncompliant with applicable emissions limits etc. Additionally, the office will be responsible for tracking retrofitting progress.

One aspect is puzzling: "Rules are expected to be made in 2023, along with a report outlining metrics and requirements.<sup>1</sup>" This seems like an inordinate time to set rules and will give building owners a additional excuse that they do not have time to comply.

The committee is familiar with the labor market analysis and projected hiring numbers by Davis Hsu of MIT in 2019 [urban green retrofit market analysis.pdf \(urbangreencouncil.org\)](https://www.urbangreencouncil.org/urban-green-retrofit-market-analysis.pdf). An important comment in Dr Hsu's report was that it was imperative that training started immediately: "If building owners and contractors wait until just before each compliance deadline to retrofit their buildings, then the skilled labor necessary to support their projects may not exist."

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The briefing report accompanying this hearing gives an excellent summary of the various programs that have instituted green workforce development programs. In 2017, the former Administration and the Building Construction Trades Council (BCTC) announced an agreement to launch the first class of pre-apprenticeships available through the NYC Green Jobs Corps.<sup>2</sup> The aim of the partnership was to train 3,000 workers with new skills needed for the emerging green economy. Do the city agencies involved in the various green job readiness programs and unions keep track of the number of skilled workers? Is there a central database of qualified contractors, architects, engineers? This would certainly help building owners. Does the DOB have data on the different types of jobs that will be required, engineers, carpenters, electricians? Do the city agencies, know to what extent new or expanded training programs will be needed to fill these jobs?

It is anticipated that hiring for these jobs will be primarily from local community, where unemployment or underemployment remains high post-pandemic. Will the hiring process be tracked by the city or will it be left to private contractors to hire at non-union wages? We recommend that the city facilitate incentives for private contractors to hire workers from underrepresented communities at union wages.

Many of the buildings that must complete energy upgrades by 2024 are in high income neighborhoods and will be able to absorb the costs. For those large buildings and their residents in neighborhoods with fewer resources, there are several pathways available to pay for the necessary upgrades. Including PACE financing. The DOB has the means to identify these buildings and must communicate the necessary information to such owners to link them with approved contractors and agencies to support low-income loans.

A final comment, taken from Davis Hsu's report is that NYC City agencies, particularly the Mayor's Office of Climate and Environmental Justice and DOB must be leaders in "early and consistent messaging" to large building owners, both residential and commercial, on the law, and rules for compliance. Three years after passage of LL97 we see evidence of buildings owners whining about the difficulty of compliance and looking for loopholes. Decisive and supportive government offices can forestall this.

**Margaret Perkins, 350NYC.org**

[350 NYC](#)

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<sup>2</sup> *Earth Day: Mayor, Building Construction Trades Council Launch First NYC Green Jobs Corps Training Opportunities*, Office of the Mayor (2017), available at <https://www1.nyc.gov/office-of-the-mayor/news/254-17/earth-day-mayor-building-construction-trades-council-launch-first-nyc-green-jobs-corps-training>.

[Type here]

Good morning. I am a Manhattan resident, worker, parent, artist, neighbor. I am urging the New York City Council, and Mayor Adams, to fully implement and enforce Local Law 97. Enforcing the law will ensure that the largest source of New York City's pollution is reduced at a swift enough rate to combat climate change. Enforcing Local Law 97 will create jobs, improve energy efficiency (ultimately reducing costs to building owners), and improve air quality. The only "losers" here are big money interests who care more about short term gain for the few more than long term gain for the many. New York City likes to act like we are on the forefront of all that is progressive and exciting. Let's act like it. Local Law 97 is the strongest building emissions law in the world. Fail to enforce it, however, and we become a spineless city without the guts to stand up for what's right.

Testimony to the NYC Council Oversight Hearing - LL97 Green Workforce Pipeline  
Committees on Civil Service and Labor Environmental Protection and Housing and Buildings  
Association for Energy Affordability  
Martha Sickles

Thank you, Committee Chairs De La Rosa, Sanchez and Gennaro and members of the committees for holding this Oversight Hearing on LL97 Green Workforce Pipeline and the opportunity to testify on this issue critical to New York City meeting its ambitious carbon reduction goals and equitable job creation.

My name is Martha Sickles, and I am speaking on behalf of the Association for Energy Affordability, Inc. (AEA) AEA founded in 1990, is dedicated to achieving energy efficiency and transition to clean energy in new and existing buildings to foster and maintain affordable and healthy housing and communities, especially those of low income.

As 70% of NYC's carbon emissions result from its buildings and approximately 50,000 of NYC's one million buildings fall under Local Law 97's requirements, NYC must seize this opportunity to further the transformation of the energy sector. We should look to LL97 as an economic development engine to fuel the energy market transformation that, led properly, will result in many benefits for all New Yorkers: green and healthy buildings, pollution reduction, greater sustainability and resiliency, mitigation of costly extreme weather events, and a wealth of economic and employment opportunities to balance racial, socio-economic and environmental inequities permeating NYC.

David Hsu from MIT projects the demand for building energy retrofits may create up to 140,000 jobs by 2030. The assessment and retrofitting of buildings, work that cannot be exported, provides expanded opportunities for workers of every trade: plumbers, electricians, carpenters, operating engineers, pipefitters, utility workers and laborers. There are opportunities for new manufacturing sectors, creating research and development jobs as well as front line manufacturing positions. There are also many opportunities for small business development.

NYC EDC commented that NYC, as the 10th largest economy in the world and a city with one of the largest carbon footprints, has a critical role to play in leading the fight against climate change and creating a diverse, inclusive clean energy economy that lifts all New Yorkers. (NYCEDC, 2022; Wei et.al.,2021). Building by example in retrofitting NYC's building portfolio provides welcome guidance and needed examples of successful strategies addressing a range of building types. Introducing new technologies such as thermal energy networks that unify labor and environmentalists in support of a solution creating jobs and clean heat is key to continued progress.

In moving policy and legislative commitments to successful implementation, NYC must mobilize all New Yorkers, the public and private sectors, through broad education and engagement programs in all languages and targeted at disadvantaged communities. Leveraging State and Federal resources as well as private capital to fund and finance creative solutions is essential to scaling up retrofits to meet the CMA and CLCPA carbon reduction goals and associated economic development and job creation goals. Expanding the green workforce is key as already the movement to electrify New York's buildings results in a acute labor shortage for air source heat pump installations.

New York City must expand its workforce development funding and programming:

- Invest in union-linked apprenticeships with subsidies for on-the-job training, NYSERDA's workforce development programs (Clean Energy Training Services, OTJ Training, Climate Justice Fellows, Clean Energy Internships) are an example
- Combine technical training and certification programs with wrap around work force preparedness programs
- Use program models such as the Build it Back Program with successful community hiring programs
- Establish building science and clean energy programs in public schools.

Greening buildings should be promoted as the opportunity to address climate change, improve the quality of life for all New Yorkers and boost the economy in a just and equitable manner, not as an "unfunded, unwarranted mandate" as real estate and fossil fuel interests posit.

Thank you for the opportunity to testify on these critical issues.

June 27th, 2022

Daevon Farquharson  
Harlem, New York

Dear Adrienne Adams and the New York City Council,

Hello my name is Daevon Farquharson, I am a resident of Harlem, living in the West Harlem section for over 20 years. I recently teamed up with WEACTION as part of their solar panel installation training program. The amount of information that was delivered in that two week period was a huge benefit to my peers and I for many reasons. Not only did I receive a certificate for my work, I learned the fundamentals on renewable energy and how much it has already, and can continue help this community.

About 20 students and myself attended these classes and now are all on the path to making the city go green. The students that attended the class came from all over New York City and all had the same passion to help the community benefit off of renewable energy.

As you know Local Law 97 is being put in place to help prevent toxic gas emissions and fossil fuels burned all throughout our city, ultimately harming our communities. Putting this law in place will provide over 140,000 jobs in the NYC area and help us keep each other safe, I'm standing by WEACTION, Renewable Energy, and the green workforce pipeline that Local Law 97 will put in place. Being a New York City resident I've seen the damage that pollution can do firsthand to our communities and I'm ready to take a step in the right direction.

Thank you for your time and I hope you all have a great day.

David Rysdahl  
### Brooklyn Avenue  
Brooklyn, NY 11213  
davidrysdahl@gmail.com

June 27, 2022

**Carmen De La Rosa**

Chair, Committee on Civil Service and Labor  
New York City Council

**Pierina Ana Sanchez**

Chair, Committee on Housing and Buildings  
New York City Council

**James Gennaro**

Chair, Committee on Environmental Protection  
New York City Council

Re: implementing and enforcing Local Law 97 to promote green workforce development, making New York a true climate leader

Dear Councilmembers De La Rosa, Sanchez, and Gennaro,

Thank you for holding this hearing! My name is David Rysdahl, and I'm here as a New Yorker and as a volunteer with 350 Brooklyn.

I remember when LL97 was passed and how excited I was and still am for the future of our city and for our green economy. This law gives me so much pride in my city! This bill pushes our environment, our health, and our jobs to the forefront. It positions our city as a leader in environmental justice and in a green economy. And it is good for buildings - making them more efficient and therefore cheaper to operate. This law has the potential to create 126,000 jobs by 2030 - these jobs comprise of architects, engineers, sustainability consultants, tradespeople, and HVAC professionals. And that number doesn't include all the job related growth in other industries like retail, food services and product manufacturing. This is all great news for our city and great news for a more equitable, environmentally just future. But we all know that passing a bill is just the first step - the next step is implementation.

Local law 97 cannot promise job growth or a greener city without a demonstrated commitment to enforcement from the administration. Even though I've been excited and inspired by what I've heard in this hearing, I've been concerned and confused with some statements by the administration about LL 97. I know the debate on the details of this law is going on right now, but I urge the city to quickly come out with those specifics. The law needs early and consistent messaging from the administration on



expectations for compliance or building owners won't have the incentive to begin the work. And if this message isn't consistent and clear and strong, many of them will wait too long to embark on these retrofits, frustrating compliance with local law 97's crucial deadlines and slowing the development of a green workforce.

I'm concerned that the penalties will be watered down. I'm concerned of the mention of potential alternative compliance paths. I'm concerned with what I perceive as a lack of funding and staffing of entities that are focused on research development and job training. I'm concerned that building owners will find loopholes so they can avoid making physical improvements to their buildings – for example, as many have said, I'm concerned with buildings being able to use RECs as opposed to real retrofits. I'm thrilled by the Tier Four green energy projects that are already in motion. I can't wait for all that clean energy from wind and solar to flow into NYC, but this green energy shouldn't replace important building retrofits. For example, this law should incentivize the eventual elimination of fossil fuels in buildings. Implementation should take into account total greenhouse gas emissions, not simply energy use. The law should take into account the planet-warming impacts of methane from stoves, pipes, and boilers. Leaks from these appliances impact the health of our homes, and we have the technology to move away from methane all together.

I use eliminating methane gas as an example of a retrofit that is essential to the health of our planet and our people. We need to do physical work on these buildings! If this law has no teeth – if the penalties allow for alternative paths than actual, physical changes to buildings - then this bill will not be the game changing law that we are all so excited about. New York will not be the game changer, that we all know it is. And our future will be less bright, less green, less equal, than we know it can be.

Best,  
David Rysdahl

June 27, 2022

**To:**

**Carmen De La Rosa**

**Chair, Committee on Civil Service and Labor**

**Pierina Ana Sanchez**

**Chair, Committee on Housing and Buildings**

**James Gennaro**

**Chair, Committee on Environmental Protection**

**Re: Implementation of Local Law 97 and the Green Workforce Pipeline**

My name is Ethan Dubin. I'm a resident of Brooklyn in Prospect Heights. I'm an activist and volunteer with 350Brooklyn. Until recently I worked in a building on the Lower East Side that greeted me with an 'F' energy rating on my way into work everyday. On my commute, I walked past consecutive large scale buildings (over 25k sq ft) on Eastern Parkway with similarly abysmal ratings. Living in NYC for the past ten years, I've noticed my allergies worsen, and have continued to watch asthma rates for New York children, especially in black and brown neighborhoods stay above national levels. I ask: who and what is going to change our massively polluting buildings into the healthy, efficient, and affordable dwellings they can become? As someone concerned with these issues, LL97 makes me proud of our city and hopeful for the future. However, I submit this testimony fearful of any scenario that threatens its implementation.

I recently attended the Urban Green Council's Electrification Conference. I highly support the UGC's work and urge the council to consult them on all of LL97's developments. The conference assured me first and foremost of two significant points:

- 1) That if properly implemented, LL97 will create 141,000 green jobs, far surpassing the number of jobs disrupted in the transition from fossil fuels by a wide margin.
- 2) That all of the data and studies make it clear that buildings will save money in the long term on their energy costs, even if upfront costs appear high. Green transitions will make them cheaper.

We must not strip LL97 of its teeth. The law must uphold a rigorous framework of incentives and penalties that will force buildings of various scale – from small residential co-ops to the biggest (and most polluting) 50,000 buildings (> 25k sq ft) that will be affected in 2024 – to meet the standards of the law. Especially for large buildings, Renewable Energy Credits (REC's) MUST be tightly restricted such that retrofits cannot be dodged.

On a personal note, I used to work for a property management company based out of Harlem, one that operated numerous buildings of the large category size. That company followed a tried-and-true anti-tenant playbook that prioritized private equity profits above all else. It was standard practice to evict tenants without proper cause, covertly pay in-house contractors via shell companies to renovate the unoccupied units and buildings as cheaply as possible, break rent stabilization protections via inflated renovation reports, and finally raise rent prices as much

as the market would bear. A company like my former employer will *never* comply with LL97 unless it is absolutely forced to. Every loophole will be found and exploited. They should not be allowed to buy their way out of the problem via credits, nor should any risk be taken that substandard testing and evaluations be implemented that will let them off the hook. To that end, the DoB, NYSERDA, and all relevant agencies must also be robustly staffed and informed to tackle enforcement. NYCHA must properly maintain its properties.

I also advocate for rigorous studies and transparency surrounding the efficacies of REC's as they are bought. If their availability to major (often billionaire backed buildings like One Bryant Park) is not curtailed and they are widely purchased, there must be corresponding data to show their impact and demonstrate equity. REC's must also be allocated to the electrical sector in this regard. If they are a shell game that donot actually or effectively offset the emissions of these buildings, then once again we will be letting the richest private interests in our city continue unabated.

I furthermore urge the council to explore all available options to increase visibility on these issues and to combat disinformation from the real estate lobbies and fossil fuel industry. This should include public education and industry training. There is a growing number of studies and examples that show the viability and success of green-rehab projects. They all show cost savings over the lifecycle of buildings, even if upfront costs appeared high. Architects and engineers are nervous to be the guinea pigs to design zero-emissions buildings, even when the science and data is there to support their efforts. There is also a scarcity of qualified and trusted engineers. A transparent and rigorous certification program might be implemented to help identify qualified engineers and ease the hiring process for contractors.

I also urge these committees to ensure that incentive structures prioritize lower-income households and projects. The Administration and Council should create a roughly \$100 million per year grant fund restricted to support for upgrades in low and low-middle income multi-family housing (and tie these funds to labor standards to maximize high-quality, union labor).

While we usher in retrofit energy improvements, one glaring issue is the lack of energy storage that should go hand in hand with renewables. I encourage the council to explore and take all possible action to bring batteries to NYC buildings for energy storage. The technology for energy capture within buildings is becoming more advanced, and the city's requirements for solar panels are commendable. But without batteries, these improvements can only go so far. The entrance into and expansion of this industry would only broaden the green job pool in our city.

New York City is one of only five areas in the country to have as stringent an energy code as we do. It's not enough, and the federal government's ability to set standards is set to worsen with an imminent decision from the Supreme Court that will likely decimate national climate goals. NYC's climate initiatives will set an example for the country and for the world. LL97 has already been pointed to as a marker for progress and hope. More will follow. Not only is this critical in

June 27, 2022

the fight against global warming, it is also an economic opportunity. NYC has the opportunity to lead with skills and expertise that can be brought elsewhere.

Healthier buildings have healthier occupants. NY'ers, especially our low-income residents, deserve the dignity and comfort that clean living affords them. We have examples that demonstrate this clearly. NYU has made admirable energy improvements to student buildings that have clearly demonstrated student gains. Buildings have better temperature regulations, quieter rooms, cleaner air, etc., and all of this makes for healthier, happier students. The same model can and must be followed for our working families and citizens. Thank you.

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**From:** Fiona Thomas <fethomas00@gmail.com>  
**Sent:** Wednesday, June 29, 2022 12:19 PM  
**To:** Testimony  
**Subject:** [EXTERNAL] Local Law 97

To whom it may concern,

My name is Fiona Thomas and I am a recent resident of Brooklyn. I have come to understand Local Law 97, and I feel strongly that this should be put into action.

- **BUILDINGS ARE THE LARGEST SOURCE OF EMISSIONS:** 70% of New York City's climate-heating pollution comes from buildings, with the majority of that pollution coming from large buildings (over 25,000 square feet). Local Law 97, enacted in 2019, sets climate pollution limits on these large buildings.
- **THOUSANDS OF JOBS ARE AT STAKE** Local Law 97 is currently on track to generate large-scale economic activity and design, renovation and construction jobs; including good, union jobs for low-income and communities of color
- **THE MILESTONES ARE REASONABLE** Local Law 97's first pollution limits, starting in 2024, are set at a high level. Only the most polluting buildings - about one fifth of large buildings - exceed these 2024-2029 thresholds. We must enforce these minimal demands - with penalties if necessary - or risk perpetuating injustice and serious health impacts in already vulnerable communities.
- **THESE UPDATES ARE LONG OVERDUE!** Buildings are the largest source of air pollution in NYC. If you live here and you care about the climate crisis, you should enforce this law that creates radically more efficient building energy standards.
- **ANY DELAY COMPOUNDS THE PROBLEM AND WORK TO BE DONE.** The Mayor's Climate office and the Department of Buildings should be busy at work finalizing and sharing regulatory guidelines, educating landlords on the minutiae of new requirements, and setting up monitoring and evaluation teams.
- **ANYTHING LESS THAN FULL COMPLIANCE AND ENFORCEMENT IS UNACCEPTABLE.** Instead of leading with vision and foresight, the Mayor seems prepared--at the behest of the real estate industry--to undercut the law by removing penalties for non-compliant landlords and expanding the use of RECS, perpetuating the damage to frontline communities. No one is above the law.

Thank you for taking the time to consider this deeply.

Sincerely,  
Fiona Thomas

## LOCAL LAW 97 AND THE LOSS of GREEN JOBS

Hello and thank you to the joint committees for holding this hearing today, and thanks to all of you for attending.

My name is Georgi Page and I am a senior organizer with 350Brooklyn's City Action committee. We work locally to counter the global climate crisis.

Our organization is engaged in the fight to protect Local Law 97 - THE MOST IMPORTANT piece of environmental legislation passed in this city - because it is in danger. This administration - in failing to MORE AGGRESSIVELY enforce and promote Local Law 97 and its labor and workforce programs may actually be undermining it - and therefore undermining all of our futures.

As I write this testimony I know that there is much more I could say to elaborate on why we need to enforce Local Law 97 as if our lives depend on it - *because they DO*. And there is much to be said on the value of training programs and resulting volumes of good, green jobs that would result from this enforcement...

...But, to be honest, I feel that it's important for some of us to step out of our own realities for a moment and think about the URGENCY of these jobs, training and even basic educational needs for the individuals that we typically refer to in aggregate.

I want to talk about the time I spent tutoring adults here in New York City, through a group called Literacy Partners, teaching them to read. I am thinking of how, in their few spare hours per week, these workers - many of them manual laborers - were striving for dignity, striving to live a fuller life than the one that fate had assigned them. They showed up faithfully to a donated cafeteria space in an anonymous building downtown and they worked humbly and painstakingly with me - with MY rudimentary training - to learn basic phonics.

I am talking about how to read the words: CAT, and DOG.

These workers need us.

While this was an amazing literacy program and we were all grateful for the experience, in a wealthy democracy our workforce, with their diverse needs, should not have to rely on the goodwill of a handful of volunteers to make sure they are supported and properly educated and trained. We pay dearly to this city government in taxes and so everything in this city should be 'World Class', but it is not - far from it. Our workforce is looking to YOU to secure a broad range of opportunities and training - the solutions that will make their lives livable and maybe someday, even joyful.

I think today we need to connect with these stories and that desperation because THAT is the reality we are trying to solve for, that is what is at stake: a whole generation of workers that

could be provided with a toe-hold to the middle class...or who could slip into despair, surrounded by a glittering city of 'haves' that treat them not as brothers and sisters, not as respected members of a community, but as numbers in a spreadsheet to be manipulated for greatest profit. It is a very dark day in New York City, when we allow this great place of dreams and ambitions to become a mere meat-grinder, rigging the game to churn out more profits for wealthy developers and the private sector. To be clear, I have nothing against the private sector - but I don't think that they should always benefit no matter what it costs our city, our economy and planet.

While I do think it's necessary for us to speak in abstract terms and consider the data, I think some of us folks might be a little too far removed from the real possibility of not getting work, or not having the resources to even know where to begin to search. So, as you go about your work today, after you leave this hearing, I hope you will remember that you are tasked not just with ensuring a pipeline of good, green jobs - but with a pathway toward dignity for the many individual humans with complex stories that live in this city.

We need:

- VISIBILITY of the city's municipal piloting program
- PUBLIC PROCESS: we need to know what the 'unique circumstances' are that would prevent buildings from some of the basic compliance we've heard about like installing LED light bulbs and wrapping pipes.
- DASHBOARD DATA ON JOBS: And we need the dashboard-style data to track green jobs that are leveraged or created for this work.

I've worked in project management so I know that in the private sector it is certainly possible to quantify the hours down to even every 15 minutes. When we are talking about our city and our money, and our survival as a species (and we are!) 'Good faith' is not enough.

Now I am going to step back a bit and review the premises of this argument, based on a report published by 'Rewiring America':

1 - FAILURE IS NOT AN OPTION: To have any hope of survival without catastrophic loss of life and even more geopolitical chaos and disruption we must come together to meet our zero emissions targets. These targets have been established by law. We also cannot and should not rely on the goodwill of real estate interests.

2 - ELECTRIFICATION is the only viable path to zero emissions. We cannot continue to rely on fossil fuels. By the time "renewable natural gas" (RNG) reaches 50% of its hypothetical market potential, the price will have jumped to 4X the price of fossil gas. In the worst case, RNG would cost 15X as much as fossil gas. This is not fiscally responsible. By contrast we could save hundreds of millions of dollars through electrification, which can be reinvested in jobs programs.

3 - Renewable Energy keeps the economic benefit closer to home, STRENGTHENING OUR ECONOMIES by:

- Reducing energy bills
- **CREATING JOBS**
- Creating Revenue from energy purchased locally

This 2nd point is why we are here today: this city has a role to play in educating and preparing our workforce and our unions for the jobs of the future. What else is a government for if it is not serving these purposes?

When we are always reactive instead of proactive, we cannot heal this system and get to the root of the problem: education and preparedness! We constantly end up treating the symptoms of problems and not the disease.

At the end of the day this is not solely a battle for the planet, or just a political battle, this is a battle about the day-to-day experiences of 1000s of people who are not being provided the opportunities to make their lives better.

I am asking today:

- What is our city doing in terms of OUTREACH to the potential workforce and unions?
- Are we developing municipal CASE STUDIES that can be used to 'sell' the benefits of Local Law 97 and to begin to understand everything that is needed in terms of outreach, training and workforce development?
- Are we aggressively communicating and promoting our case studies and BEST PRACTICES in a compelling way?
- What is our city doing in terms of TRAINING?
- Are we making these job opportunities competitive?
- Are we creating models that make it clear that the upgrades are competitive?

I look forward to your answers to these questions, but more so I look forward to your implementation of the law.

Thank you.



June 26, 2022

NYC Council  
250 Broadway  
NY, NY

Please stop these budget cuts from going through! Students, Teachers and Families have been through enough these past 2 years. Counseling, Social Emotional work, extra supports and Arts programs are needed now, more than ever!

Why can't the remaining \$5 billion in unspent stimulus dollars be used once again to protect school budgets? Cuts ranging from \$215-\$372 million will devastate and gut schools, at a time they need more help. And on top of all of this, the city has reduced the amount of per-pupil funding it provides to schools through Fair Student Funding by about \$25 per student. Why??

These cuts will force excessing and elimination of enrichment programs that are a vital life-line to so many. NYS is looking to shrink class sizes – cuts like this will make them bigger, reducing the help and attention each student needs.

My school is facing \$1,548,636.00 in cuts – at a time when extra services and staff are needed.

Please stop this from happening. As a Theatre Teacher, I can tell you first-hand, how many emotional, personal, breakthrough moments I've had with students this year – that would NEVER have happened in another classroom. My yearly theme is 'Empathy and Exploration' – having a space where students can express how they feel and act out a variety of emotions has been cathartic for all. Art has the power to heal. So do smaller class sizes, where students get the attention they need and deserve.

Please, please PLEASE – don't gut school budgets when we need more support than ever.

Regards,

Jessica Rodwick  
Theatre Teacher 🎭  
PS 75 – Emily Dickinson

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**From:** Lynn Neuman <neumanl@mac.com>  
**Sent:** Wednesday, June 29, 2022 12:19 PM  
**To:** Testimony  
**Subject:** [EXTERNAL] Local Law 97 and Green Jobs

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Forward suspect email to [phish@cyber.nyc.gov](mailto:phish@cyber.nyc.gov) as an attachment (Click the More button, then forward as attachment).

I am writing as a Brooklyn resident to encourage the City Council to stand behind the strength of Local Law 97 and back it with robust enforcement. As you already know, buildings are the source of 70% of New York City's climate heat pollution. In order to meet New York City's climate goals, and thwart the effects of climate change, this law will need to be enforced. In addition, in order to realize the green jobs that the bill would create, enforcement is critical. Full compliance is necessary and reasonable, and thus I urge you to move forward with conviction.

Lynn Neuman  
Director, Artichoke Dance Company  
Steering Committee, 350Brooklyn

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**From:** Maddy Sher <maddysher@gmail.com>  
**Sent:** Wednesday, June 29, 2022 12:20 PM  
**To:** Testimony  
**Subject:** [EXTERNAL] testimony

Hi there,

My name is Madelyn and I am a constituent of Artichoke Dance Company, based in Brooklyn, NY. I am a dance artist, actor, educator, and producer of local performances. I am interested in living in a city that is responsibly handling the climate crisis and I believe that **Local Law 97 (LL97)** is a very important step towards helping NYC reduce emissions and create new green jobs. The green jobs that Local Law 97 would generate are critical to NYC's recovery and the health of our job market, so we can't let the law be weakened or go unenforced. The Mayor's Climate office and the Department of Buildings should be busy at work finalizing and sharing regulatory guidelines, educating landlords on the minutiae of new requirements, and setting up monitoring and evaluation teams.

ANYTHING LESS THAN FULL COMPLIANCE AND ENFORCEMENT IS UNACCEPTABLE. Instead of leading with vision and foresight, the Mayor seems prepared--at the behest of the real estate industry-- to undercut the law by removing penalties for non-compliant landlords and expanding the use of RECS, perpetuating the damage to frontline communities. No one is above the law.

I hope you will take into consideration my support of LL97. It is absolutely imperative that we support laws like these to ensure a green future.

Best,

Madelyn

--

Best,

Madelyn Sher | [madelynsheer.com](http://madelynsheer.com)

**Date:** 06/23/22

**To:** New York City Council

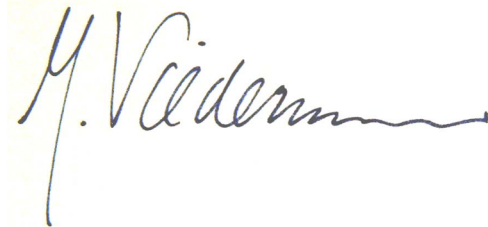
**Re:** Testimony for Subcommittee Hearing 06/27/22  
Committee on Housing and Buildings and the Committee on the Environment

Dear Council Members,

I urge you to uphold the requirements of Local Law 97, a key instrument that will make NYC the most modern and environmentally friendly major city in the US and possibly the world. NYC must maintain leadership in this domain. The City Council was bold when it enacted this law. The world watches what we do here.

I became a certified passive house designer in 2011 and have since made this the focus of my practice as an architect. As soon as a developer has sold the last unit in a multiple dwelling, that developer has virtually no responsibility for the work completed. I have walked by countless new buildings and have been surprised at the low letter grades such as C's and D's for buildings that were built in the last couple of years. Developers currently have no incentives to build better projects in such a market. Consumers are conscious of gas mileage with the purchase of cars, so they should be equally discriminated with the most consequential investment they will make. Additionally, with a quality envelope in a low energy building, everyone profits—the city itself, the microclimate, the owners of the units, and ultimately, the state.

Sincerely,

A handwritten signature in blue ink that reads "M. Viederman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Matthew Viederman Architect  
*Certified Passive House Designer- LEED AP*

## Molly Bombonato

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Astoria, NY • mollybombonato@gmail.com

To whom it may concern,

I am a New York citizen writing in favor of Local Law 97. Buildings make up a large portion of the greenhouse gas emissions in NYC and we need Local Law 97 to address these emissions. Our country has failed to address carbon emissions up to this point and New York needs to be a leader in creating and sustaining this change for the better.

Thank you for taking the time to read this testimony.

Sincerely,

A handwritten signature in black ink that reads "Molly Bombonato". The signature is written in a cursive, flowing style.

Molly Bombonato

**Testimony of Richard Leigh, PhD, PE, LEED AP**  
**Visiting Professor of Physics,**  
**Department of Mathematics and Science,**  
**Pratt Institute, Brooklyn, NY**  
before the  
**New York City Council Committees on**  
**Civil Service and Labor, Environmental Protection, and Housing and Buildings**  
In relation to  
**Oversight - Local Law 97 of 2019 Green Workforce Pipeline**  
**Council Chambers, City Hall, New York, NY**  
**June 27, 2022**

Greetings, Chairpersons De La Rosa, Gennaro, and Sanchez, and Members of the Committees:

I would like to point out three characteristics of Local Law 97 of 2019:

- The extreme importance of not allowing it to be softened,
- The relatively low cost of carrying it out, and
- The substantial number of jobs its execution will create.

I am a Visiting Professor of Physics at Pratt Institute, where I teach climate change and green building science. Previously, I was Director of Research at Urban Green Council for eight years. Today I am speaking solely for myself.

- Although I know the members of these committees are aware of the impending dangers of climate change, to New York City and to the entire world, I must emphasize the extremely short interval, two to four decades, during which we must reduce greenhouse gas emissions essentially to zero if we are to avoid catastrophic failures in our systems of food and water supply, civic order, and international migration. This is not the opinion of one local academic; it is the considered conclusion of the global climate science community, expressed in its most optimistic form in the [reports](#) of the Intergovernmental Panel on Climate Change. To preserve a world comparable to the one we now live in, let alone one with less poverty and injustice, humanity must take actions comparable to or more vigorous than those outlined for New York City buildings in Local Law 97. The concerns raised now by members of the real estate community about the cost of measures needed to lower emissions will be negligible compared to the costs of losing large parts of New York City to incursions of ocean water during major storm events as the sea level rises. Local Law 97 must be implemented vigorously.

- Can we do this? Yes! During my time at Urban Green Council I was originator and lead author of the 2013 study “90 by 50,” in which we showed that New York City could reduce its carbon emissions over 90% by 2050 using current cutting edge technologies. Although some parts of the study have been made obsolete by new technology (electric cars, for instance), the analysis of buildings was consistent with today’s plans. Using data provided by the Lend-Lease costing department, we found that in buildings, the changes would be cost-effective due to energy savings if the capital could be amortized over twenty-five to thirty years, like a mortgage. Local Law 96 and its Property-Assessed Clean Energy (PACE) funding make this approach more accessible. More recent studies find somewhat higher costs for building improvements, but are hard to compare due to different methodologies. Although emission reductions in some buildings will be difficult, there is no doubt that the bulk of New York City buildings can meet

the Local Law 97 standards through 2030 cost-effectively if serious efforts are made to improve them and creativity and acceptance of payback periods consistent with the life of the equipment is brought to the [financing](#).

- Finally, it's important to keep in mind that promoting energy efficiency and electrification of buildings (the key steps in meeting the requirements of Local Law 97) requires that substantial work be done **in** the buildings, which is to say **by** local New York City workers. Typical tasks involved in upgrading buildings, either residential or commercial, include air-sealing, window replacement, added insulation, heat-recovery ventilation, and replacement of aged and inefficient steam heat systems with electrically powered heat pumps. Fabrication of these materials and devices should be encouraged in the city, where there are already window and heat pump factories, but even for products manufactured elsewhere, the job of installing them will be retained in the city. Compared to the money paid for gas or oil or upstate electricity, the wages paid in the city are multiplied in the city as workers use the money to buy food or go to entertainments.

To make this process work, thousands of workers must be trained in specific skills. Educational efforts like the [Building Performance Laboratory](#) or [GPRO](#) are already available, and will grow and be duplicated under market forces. Many unions also offer training programs for their members.

The number of jobs created by moving forward with Local Law 97 and successor steps leading to net zero by 2050 for New York City will be large. The city's [current plan](#) anticipates a cost of around \$1 trillion for buildings, which breaks down to \$40 billion/year over 25 years. The ACEEE [estimates](#) that \$1 million carries 20 jobs in the energy sector, indicating that decarbonization will produce 2000 to 3000 ongoing jobs in this well-paying and partially unionized sector.

Thank you for the opportunity to present these remarks. The importance of maintaining and strengthening Local Law 97 to produce the required emission reductions in the real world is great. I would be happy to answer any questions, and can be reached at [rleigh@pratt.edu](mailto:rleigh@pratt.edu) or 646-872-0493.

Richard Leigh is a Visiting Professor of Physics at Pratt Institute, teaching courses in climate change, building science, and energy systems. Formerly Director of Research at the Urban Green Council, his work included building energy use data, low emission futures, building code development, and worker education. Active in the field of energy efficient engineering and systems studies for over twenty years, he holds a PhD in Physics and is a Professional Engineer and a LEED AP.



Richard Leigh, PhD, PE, LEED AP  
Visiting Professor  
Department of Mathematics & Science  
Pratt Institute  
[rleigh@pratt.edu](mailto:rleigh@pratt.edu)  
### Central Park West  
New York NY 10025  
[rwleigh@earthlink.net](mailto:rwleigh@earthlink.net)

- -

Dear Committee Members –

I was eager to play a part in urging passage of the historic Local Law 97 to reduce building emissions in New York City. The City Council admirably ignored the fearmongering of the real estate lobby and created a strong law. I'm worried that now opponents of climate action are finding ways to water down the implementation of the bill and delay our progress in reducing our carbon emissions and fossil fuel use.

Please ensure that the law is implemented with sufficient fines to impel action. Of course, any support that the city can give to help building owners or managers with up-front capital costs is great, especially for those who are not wealthy. However, reducing fines or allowing renewable energy credits or other offsets from far away will defeat the purpose of the law, both in terms of emissions and pollution reduction here in NYC and in terms of job creation. Both of these were construed in the original law as environmental justice improvements to our city and should not be lost.

Thank you for your consideration and for ensuring that the Adams administration and city agencies don't bow to real estate lobby pressure but instead maintain the spirit and the outcomes intended by the law.

-Ross Pinkerton

Physics and Climate Science teacher, Hunter College High School

#### Lexington Ave

New York, NY 10029



Dear Chairs De La Rosa, Sanchez, and Gennaro,

As someone born and raised in the 5 boroughs I have stark memories in my mind of black smoke rising from buildings as they incinerated literal garbage. I realize as someone in their twenties that I missed the worst of such practices that people had done for generations until sensible legislation reduced these black clouds to where I hardly see them anymore.

Unfortunately, today the worst of our pollution is not as visible to the naked eye. Buildings account for 70% of New York City's emissions comes from our buildings. Local Law 97 is the next step of sensible legislation that will make New York cleaner and healthier, initiatives which I know this Council and Mayor support. Easily enough Local Law 97 is sensible legislation that is already policy, now we just need the will to implement and support it.

Our economy, the creation of thousands of good jobs, and the continuously improving health of our citizens requires Local Law 97 to be fully implemented by this Council and Mayor.

Sincerely,

**Tim Kent**

**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: 06/27/2022

(PLEASE PRINT)

Name: SAMIE HORTON, DIR. SPECIAL PROJECTS

Address: \_\_\_\_\_

I represent: EDC

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: 06/27/2022

(PLEASE PRINT)

Name: COMMISSIONER RONIT AGGARWALA

Address: \_\_\_\_\_

I represent: DEP

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. N/A Res. No. N/A

in favor  in opposition

Date: 6/27/22

(PLEASE PRINT)

Name: Alex Stein

Address: Inwood Rd

I represent: Myself

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: PETE SIKORA NYCC

Address: 275 Degraw St. 4 Brooklyn NY

I represent: NEW YORK COMMUNITIES FOR CHANGE

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: 06/27/2022

(PLEASE PRINT)

Name: GINA BOGRA, CHIEF SUSTAINABILITY OFFICER

Address: \_\_\_\_\_

I represent: DOB

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. Local Law 97 Res. No. \_\_\_\_\_

in favor  in opposition

Date: 6/27/22

(PLEASE PRINT)

Name: Megan Ahearn

Address: E 4th St NY, NY

I represent: NYPIRG

Address: 9 Murray St, NY, NY