Introduction and Summary

Climate pollution must be reduced by about 8% per year worldwide from now through 2030 – and then beyond – to avoid worldwide catastrophe, according to the consensus of the world's scientists as expressed in the latest United Nations Emissions Gap Report. This grim situation requires a massive response.

In New York City, energy use in buildings is responsible for about 70% of the city's enormous climate footprint, which is about 40 million metric tons of CO_2 equivalent per year. Thankfully, in 2019, New York City took the most important municipal action ever worldwide to fight climate change by passing **Local Law 97**, which requires large buildings over 25,000 square feet to slash their climate pollution.

Local Law 97's requirements will generate tens of thousands of jobs in design, renovation and construction as large building owners raise the energy efficiency of their buildings to comply with the pollution limits. It could become the beginning of a Green New Deal for New York City.
The roughly 50,000 large buildings covered by Local Law 97, while just 2% of the city's real estate (5% of buildings), produce about 60% of the city's pollution from buildings. These buildings generate about 20 million metric tons of CO_2 equivalent climate pollution each year. The city's worst polluters per square foot include super-luxury buildings are examined below, and include:

- Billionaire pencil tower One57 has a weather-normalized source energy use intensity (EUI) of 471.2 kilo British thermal units per square foot ($kBtu/ft^2$)[1], more than twice the median EUI in New York City.
- Trump International Hotel and Tower, located at 1 Central Park West, pollutes more than 90 percent of the city's buildings, as evidenced by its weather-normalized source EUI of 276.21 $kBtu/ft^2$.
- 15 Central Park West reported a weather-normalized source EUI of 225.7 $kBtu/ft^2$, putting it in the top 15 percent of polluting buildings.
- 666 Fifth Avenue aka "Kushner's Folly" had a weather-normalized source EUI of 271.4 $kBtu/ft^2$ in 2017, worse than 90 percent of the buildings in New York.

Local Law 97 passed despite fierce opposition from the city's deep pocketed real estate industry, thanks to pressure from the climate activist movement and leadership by Councilmember Constantinides and Council Speaker Corey Johnson. Mayor de Blasio also supported the law's passage.

The law requires 40% cuts in pollution by 2030 and over 80% by 2050 (relative to a 2005 baseline). These are cuts at the pace and scale of the Paris climate agreement. These super luxury polluters – and thousands of other buildings - will need to clean up their dirty acts. It is vital that the new law succeeds, and that new standards covering smaller buildings, are also developed, enacted, and implemented. This report documents some of the worst polluting buildings and also makes a series of policy recommendations for implementing and expanding Local Law 97, detailed below.

Local Law 97 A.K.A. New York City's "Green New Deal" Law Is a Worldwide Model

Local Law 97 is the world's first law to set tight overall standards on building pollution from existing buildings, not just in new construction or in major renovations. All large buildings are covered by climate pollution limits per square foot based on occupancy type. If all covered buildings comply,

climate pollution will be cut by in aggregate by 40% relative to a 2005 baseline by 2030. The law also requires the Administration to set pollution limits to achieve over 80% climate pollution cuts by 2050.

Local Law 97's first requirements take effect in 2024. These standards cover the dirtiest large buildings in the city, outliers whose pollution is higher than three quarters of their peers. Tighter standards are set for 2030. The 2030 limits on pollution are tight enough that only about the top quarter of buildings in the city are currently energy efficient enough to comply. Many of these buildings will need to undertake substantial capital improvements to reduce their pollution, generating major economic activity and large numbers of jobs.

The law's requirements are backed up by mandated reporting, audits, penalties, and enforcement. In aggregate for all covered buildings, the pollution cuts required by the law are at the pace and scale of the Paris Agreement. NYCC supports pulling forward the 2030 deadlines in Local Law 97 to 2027 or 2028, which would accelerate pollution cuts and economic development. Notwithstanding that its requirements to cut pollution could (and should) be even more aggressive, the law as it currently stands is a model for municipal action, worldwide. NYC is leading the world.

Two Percent of Properties Cause Half of the City's Pollution From Buildings

In 2017, New York City emitted about 50 million metric tons of CO_2 equivalent (MMT).[2] 50 MMT is a staggering amount of climate-heating pollution. To put it in perspective, the city more than doubled the greenhouse gas emissions of the entire nation of Ethiopia,[3] which has a population of 109 million.[4]

About 70 percent of the city's massive climate footprint comes from the energy use by its building stock. There are over 1 million buildings in the five boroughs. Together they produced over 33 million metric tons of greenhouse gases in 2017.[5]

But not every building in New York is equally guilty of poisoning the planet. Some are far worse than others. An outsized share of the responsibility for climate pollution falls on the very biggest buildings: those over 50,000 square feet in floor area. Often luxury condos or Class A office space, they represent just two percent of the properties in the city (five percent of buildings). Yet, according to a report by New York City's Buildings Technical Working Groupvz, this largest two percent account for almost half of the citywide building-based energy use.[6] These buildings, often luxury residential and commercial real estate, are the cities dirtiest buildings.

#DirtyBuildings

The city's super-luxury buildings are often super-polluters. These famous luxury buildings are among the city's worst, dirtiest buildings. With the exception of One57, which is currently unrated and presumably in non-compliance, they received "D" grades in the City's new energy efficiency letter grading system, which is the lowest grade currently possible. If it were up to NYCC, we would have given them all an F.

One57: A Luxury Polluter on Billionaire's Row

What does $27 million buy these days? With that kind of money, you could purchase a three-bedroom, 4,200-square-foot apartment in One57, the ultra-luxury Extell Development property at the heart of Billionaire's Row.[7] The hefty price tag comes with lots of amenities: a grand salon with 11-foot ceilings and a stunning view of Central Park,[8] the services of a lifestyle concierge,[9] and well-heeled neighbors like the founder of Dell Technologies and the Prime Minister of Qatar.[10] But one thing $27 million cannot buy is a clean conscience about climate change. That is because, as Crain's New York Business once put it, high-end condos such as One57 are "wasteful energy hogs."[11] According to the most energy data released by the city, One57 had a weather-normalized source energy use intensity (EUI) of 471.2 kilo British thermal units per square foot (kBtu/ft²).[12] That is more than twice the median EUI in New York City.

Trump Buildings, Like Trump, Are Full of Hot Air

From pulling out of the Paris Climate Agreement,[13] to slashing environmental regulations,[14] to approving the Keystone XL Pipeline,[15] the Trump presidency has been a disaster for the climate. It only stands to reason, then, that Donald Trump's buildings are some of the dirtiest in New York. Trump Tower, the president's former home, had a weather-normalized source EUI of 174.9 kBtu/ft²,putting it in the top 25 percent of building-based polluters. Trump International Hotel and Tower, located at 1 Central Park West, also tops charts: the building pollutes more than 90 percent of the city's buildings, as evidenced by its weather-normalized source EUI of 276.21 kBtu/ft².

15 Central Park West: Posh Pad or #DirtyBuilding?

Once called "the world's most powerful address," 15 Central Park West has been home to celebrities including Robert De Niro, Sting, and Alex Rodriguez as well as titans of business like Goldman Sachs CEO Lloyd Blankfein, Citigroup CEO Sandy Weill, and Yahoo CEO Jerry Yang.[16] The building is also one of the city's worst polluters. In 2017, 15 Central Park West reported a weather-normalized source EUI of 225.7 kBtu/ft², putting it in the top 15 percent of polluting buildings.

666 Fifth Avenue: Kushner's Folly a Top Polluter

666 Fifth Avenue was a disastrous investment for the Kushner Companies, the real estate firm connected to President Trump's son-in-law and "senior advisor," Jared Kushner. The building was purchased in 2007 for $1.8 billion, then the largest sum ever paid for an office tower in the United States.[17] It went on to cause endless headaches for the Kushners, including allegations of shady dealings with foreign financiers seeking to buy influence with the administration.[18] The family eventually offloaded the building for $500 million less than they paid for it.[19] Unsurprisingly, 666 Fifth Avenue won't win any awards for environmental stewardship. Corrupt politics goes with climate corruption: the building's weather-normalized source EUI was 271.4 kBtu/ft² in 2017. That is worse than 90 percent of the buildings in New York.

Baccarat Hotel & Residence: Luxury Name Hides a Super Polluter

Located across the street from the Museum of Modern Art, the Baccarat Hotel & Residence is home to the 1 percent of the 1 percent. Or not a home, exactly. Many of the units in the Baccarat are empty because their uber-wealth owners don't actually live there.[20] The luxury condos are just a place to park their cash. Which raises the question: How does an underpopulated building burn so much fossil fuel? The building's weather-normalized source EUI was a shameful 227 kBtu/ft² in 2017, putting it in the top 15 percent of NYC polluters.

Seagram Building: Famed Office Tower a #DirtyBuilding

The Seagram Building is a New York icon. Designed by master architect Mies van der Rohe, the bronze and glass skyscraper had a profound impact on the history of modern design. However, the top property should not be celebrated for its record on climate pollution. In 2017, the Seagram Building's weather-normalized source EUI was 443.3 kBtu/ft². This greedy greenhouse-gas producer has more than twice the median EUI score for New York.

Energy Efficiency Can Slash Greenhouse Gas Emissions

Buildings generate climate pollution through fossil fuel use for energy. They burn fossil fuels typically on site, for example, in the building's boiler. And they consume power from the electric grid, which is heavily reliant on fracked gas; about 70% of the downstate electric grid's power comes from fossil fuels (the rest is primarily nuclear energy and Indian Point's imminent closure will likely result in an even higher proportion of fossil fuel power) New York must tackle both problems in order to accomplish 80x50.

The good news is that it is technically feasible. Technical experts tell us that, with existing technology, New York buildings can reduce their energy use by 40 to 60 percent.[21] Combined with the greening of the electric grid by transitioning from dirty fossil fuels to carbon-free renewable power,[22] we can slash building-based climate pollution by more than 80 percent.[23]

New York state's new climate law, the Climate Leadership and Community Protection Act (CLCPA), requires the state to reach 70% renewable energy on the grid by 2040 and 100% "carbon-free" power by 2040. While current state policy is inadequate to this task, activists and advocates are pressing for more aggressive action by Governor Cuomo and his regulators to actually achieve these targets (New York has a history of missing its stated objectives for renewable energy use on the grid, which must change).

Upgrading buildings and the electric grid while turning to 100% renewable energy creates enormous amounts of economic activity, and jobs. Cutting energy use also saves money, as well as the planet. It also improves local air quality, reducing the pollution that causes asthma attacks and other respiratory problems. COVID-19 death rates are also linked to poor air quality.

Under the leadership of City Council Speaker Corey Johnson and Environmental Committee Chair Costa Constantinides, and with the support of Mayor de Blasio, New York passed a landmark piece of climate legislation last year. Local Law 97 requires all large buildings in the city achieve a high level of energy efficiency.[24]

The first requirements to limit pollution begin in 2024 and cover roughly a quarter of the worst buildings in New York City. By 2030, the law's pollution limits mean that about 3/4ths of large buildings will need to slash their energy use, cutting pollution from the city's large buildings in aggregate by about 40 percent. By 2050, the law will slash pollution from large buildings by over 80 percent.

▲ Rallying at City Hall for legislation that became Local Law 97

New York is now a global leader in the movement to fight climate change. Local Law 97 will also clean the city's air and improve the health of everyday New Yorkers by reducing pollution-related respiratory illnesses. **It is critical that Local Law 97 is properly enforced and funded.**

Local Law 97 Policy Recommendations

Enforcement and implementation is critical, including proper city funding.

There are many detailed implementation issues for city government in Local Law 97. As of now, the Buildings department has created and staffed the new Office of Building Energy and is advising building owners of the new law. The Advisory Board mandated to advise the Administration is up and running (NYCC's Climate & Inequality Campaigns Director was appointed by the City Council as a member of this board).

Sophisticated building owners are highly aware of the new law's mandates. By and large, these owners understand the law's requirements are achievable and that energy efficiency generally saves money. Other owners, however, are not in a good place: anecdotally, some owners believe they can dodge the requirements. Others are deferring decision-making. Dysfunctional or ineffective co-op and condo boards are prevaricating.

Such owners are making a mistake. Instead of procrastinating, they should hire expert advice, begin assessing their buildings, and create a medium and long-term plan to slash their pollution. Delay is likely to raise their eventual costs of compliance.

For its part, the City should create detailed and aggressive outreach programs including focused one on one outreach to get through to these owners, who need to get to work cleaning up their buildings. Person to person, one on one contact, rather than just mailings and notices, will be critical to reach these recalcitrant and/or unsophisticated owners. When the time comes, the Department should move aggressively to penalize non-compliant buildings (the law has exceptions for extraordinary situations).

The City must also fully fund the Office of Building Energy, which is slightly understaffed relative to its immediate needs as budget cuts are imposed in the COVID crisis. By 2024, the office will need in the range of a couple dozen staff to implement the law. The ramp up and orderly hiring into these positions must proceed apace.

In the coming city budget, despite the crisis, the city must allocate the funds needed, including funding for staff lines and necessary studies the law mandated, such as an economic impact analysis of the law. (otherwise, the Council should eliminate the requirement written into the law for such studies) The sums required are less than rounding errors in the city budget: truly tiny sums are needed relative to the size of the city budget to hire and staff the office.

Funding the staff lines needed by the law is necessary and will repay with the massive job creation and economic impact the law generates. Conversely, if the office isn't properly funded, the law's rollout will be unnecessarily rocky, impeding the implementation of its requirements, which will impede economic development and job creation at a time when the city desperately needs it. Despite the city's budget problems, it would be a serious, short-sighted mistake to not hire the minimal necessary numbers of new staff for this office. NYCC urges the de Blasio administration and Council to ensure the very small sums needed for proper funding of the Department of Building Energy.

In the wake of Intro 1947 enactment to strengthen LL97's requirements for rent-regulated buildings with under 35% regulated units, other loopholes should be eliminated.

Intro 1947, recently passed by the Council and signed by the Mayor, extends Local Law 97's specific

limits of pollution per square foot to thousands of large buildings that are not currently covered by the law's main requirements. It will create thousands more jobs and more economic activity that will employ people from low and moderate income communities of color.

The bill, like Local Law 97's predecessor, was prime sponsored by Council Environmental Committee Chair Costa Constantinides and supported by Council Speaker Johnson. The Council passed the legislation with the de Blasio Administration's support.

The bill specifically applies to rent-regulated buildings with 35% or fewer regulated units. State law, enacted in June of 2019 after Local Law 97 was enacted in April of 2019, strengthens the rent laws by prohibiting Major Capital Improvement (MCI) rent hikes in such buildings. Landlords are therefore prohibited from raising rents as a result of the city extending energy efficiency requirements to those buildings. (rent regulated building owners of buildings with more than 35% regulated units can still impose MCI rent hikes).

While the state does not publicly release the data that would show how many and which buildings fit into this category, NYCC estimates that around or within the range of 20-30% of regulated buildings have 35% or fewer regulated units. About 12,000 regulated buildings are over 25,000 square feet, so Intro 1947, if enacted, will cover thousands more large buildings. The Council should pass the bill.

The Council should also eliminate loopholes in the Local Law 97 definitions that allow certain types of housing, such as 80/20 buildings and buildings with tenants who use Section 8, to avoid coverage under the law.

These buildings never could impose MCI rent hikes under state law, so there was no rationale for exempting them from Local Law 97's main requirements when it was enacted. They were exempted from the pollution limits set in the law, presumably at the behest of industry lobbyists behind closed doors (housing groups and advocates did not ask for such an exemption).

▲ Press Conference with Local Law 97 prime sponsor Costa Constantindes

Offsets and Renewable Energy Credits (RECs) should not be a loophole for owners to avoid on-site energy efficiency.

Local Law 97 grants significant authority to administrators. Currently, the de Blasio Administration appears to be moving forward to enforce the new law in an effective manner. Under the law, the Administration can choose to allow landlords to use offsets to satisfy up to 10% of their pollution reduction requirements. RECs can also be used. No limit is set into statute as an upper ceiling on the Administration's ability to allow landlords to use them to satisfy the law's requirements. The offset provisions are rife with potential for abuse.

Under Local Law 97, RECs must be NYISO RECs "located in" or "directly delivering into" Zone J, which is the NYC electric grid zone. Offsets are required to follow rules to be set in a rule making process and satisfy "additionality," which is the concept that they must create additional pollution reductions than would exist without the offset.

Of course, the fact that no limit is set into law on the use of RECs is not indicative of the law's intent. Rather, the law is meant to generate maximum pollution reductions and local job creation through the maximum feasible energy efficiency work within New York City (not through renewable energy development outside of NYC).

The REC and offset mechanisms should not become loopholes for landlords to buy their way out of compliance using credits or offsets. Neither RECs nor offsets create jobs locally. Neither improve local air quality by slashing fossil fuel use in the City. And ultimately, RECs and offsets should be entirely eliminated in a 100% renewable energy economy.

There are some limited numbers of buildings where limited REC usage is appropriate because costs would be unreasonably high for on-site energy efficiency improvements alone to reach the law's pollution limits. However, other than in such limited cases, regulators should not allow REC use as a substitute for pollution reductions from covered New York City buildings.

In the debate over Intro 1253, which became Local Law 97, NYCC opposed allowing use of any offsets and supported a 10% cap on RECs. Local Law 97 should be amended to eliminate offsets and cap RECs at 10%. Short of amendment by legislation, regulators should continue to be clear that these mechanisms will not be a loophole that building owners will be allowed to abuse. Regulators should also consider imposing requirements that offsets, if ever used, be both strictly limited but if allowed and tightly regulated, only apply to local in-city pollution reductions that generate local air quality improvements and local jobs in disadvantaged neighborhoods or in public housing (NYCHA housing).

Enforcement should be firm and follow the law's intention for penalties.

. Local Law 97 is the product of a hard lesson: voluntary standards, educational programs and exhortations to action will not induce the majority of building owners to upgrade to high energy efficiency. New York City – and other cities – have learned that requirements are needed. And requirements cannot work if they are not backed up by enforcement and penalties.

Local Law 97 sets specific penalties into law. It also allows regulators to allow lower fines. However the intent of the law is to ensure that penalties are large enough to eliminate any incentive for building owners to flout the law. Put another way, the cost of the penalty must be larger than the cost of the energy efficiency improvement to achieve the law's requirements, otherwise some building owners might opt to pay penalties rather than cut pollution.

The climate crisis is severe. The economic crisis caused by COVID also means that the job creation and economic activity generated through energy efficiency upgrades is especially important. Achieving the law's results of 40x30 and 80x50 cuts necessitates resolute action. Regulators should remain firm, impose the penalties set under the law, and not allow building owners to slide on compliance by paying lower penalties or other loopholes.

Trading should not be adopted unless it can guarantee better results for low-income communities of color.

Local Law 97 requires a study of trading as a method for compliance with the law. Trading programs, such as cap and trade and various pollution credits, are often ineffective or worse, leading to higher pollution, especially in local areas, particularly low-income communities and communities of color.

In theory, a system that allows owners of expensive, hard to upgrade real estate to pay to produce

larger pollution reductions by upgrading less-expensive, easier-to-upgrade properties could produce net benefits for low-income communities. Yet a trading program would introduce complexity and a potential for abuse. Some potential tradings systems are so complex that there is no realistic way that they could be trustworthy to produce even well-intentioned results. Trading may also cost job creation by eliminating harder, more labor-intensive work in favor of simpler, less-labor intensive work.

Trading credits is fundamentally an odd system because it allows polluters to continue spewing pollutants from their buildings while "buying" pollution reductions elsewhere. Such a system is analogous to the medieval Catholic church selling indulgences to a rich, dissolute nobility.

Given the too-often abortive and counterproductive history of such programs in other countries, states and cities, anything less than a system that with certainty would produce equitable results should not be attempted or approved by regulators. While Local Law 97 in theory mandates such results, in practice regulators have discretion that they could abuse. Regulators should not be tempted to approve a system that won't clearly result in improvements for low income communities and communities of color, with no downside that can reasonably be expected to emerge.

Strong post-2030 standards that achieve 80x50 pollution cuts must be set and a clean grid created.

Beyond 2030, Local Law 97 requires the Administration to set into place requirements that achieve 80x50 climate pollution cuts. The deep pollution cuts needed to hit such levels will, in effect, push many buildings to electrify through heat pumps, which are more energy efficient and use grid electricity (not fossil fuels in a boiler).

The grid must be powered by renewable energy by that point, or it will be effectively impossible for buildings to hit the requirements that are mandated to be set for years after 2030-2035. Therefore, in its later years, Local Law 97 depends on a shift to a clean, renewable grid. A massive increase in electric use by buildings as they turn to clean electricity will also necessitate large investments to upgrade the grid infrastructure.

By pegging requirements to climate pollution, Local Law 97 aligns the real estate industry's financial interest with a clean grid; the cleaner the grid, the easier for buildings to slash their GHG footprints. However, the state (and federal) government, not the city, controls the grid. The state has set requirements through the new climate law that must be achieved. New York City should intervene in state proceedings to ensure that these targets are achieved. It should also use its own powers to the maximum extent that is permissible to transition the grid to renewables.

Hydropower should not be allowed for RECs under Local Law 97

Local Law 97 incentivizes a private equity-backed hydropower project, the Champlain Hudson Power Express, whose development is a long-time goal for Mayor de Blasio. At the Mayor's behest, the law includes language that allows building owners to use hydropower generated in Canada by Hydro Quebec to satisfy pollution reduction requirements as RECs under the program, which makes the Blackstone-backed project more viable economically. It is an odd and unusual REC definition. It is also damaging because the hydropower resources that may as a result be tapped by building owners should not be considered renewable or clean energy.

NYCC opposes CHPE because the project would take indigenous peoples' lands; create methyl mercury pollution; and is of dubious climate benefit given that renewable power should be procured from NY sources. Incentivizing use of hydropower in Quebec reduces the use of renewable energy

generated in New York state, which in turn reduces economic development and local jobs.

Mayor de Blasio is closely connected to the main financier of the CHPE project, Blackstone, which is a large Wall Street private equity firm. Blackstone's Chairman and CEO, Stephen Schwartzman, is a top Trump supporter. The firm has retained well-connected lobbying firms in New York and has such direct ties to the Mayor that a movie showing became a subject of controversy with the Mayor because it criticized Blackstone. We urge regulators to slow this process and reconsider the use of such hydropower. The Council should amend Local Law 97 to eliminate this unusual and troubling provision from the REC definition. Moreover, as outlined in an earlier section, REC usage should be capped.

Building a Green New Deal for New York

Large-scale federal, state and local funding should be allocated for affordable housing that also guarantees good, union jobs.

New York City has about 1 million rent-regulated apartments with over 2 million residents. NYCHA houses about 600,000 more people. Intro 1947's enactment ensures that a large minority of rent regulated buildings will be covered by Local Law 97's pollution limits, and therefore upgraded largely without public funds. However, that leaves the large majority of rent-regulated buildings with over 35% regulated tenants, which must be upgraded without triggering MCI rent hikes for tenants. NYCHA, for its part, is proceeding on energy efficiency upgrades that are producing some results, but its programs will only deliver limited results without large, new funding. There's no way around the problem: massive public funding is needed over the coming decades.

If an average rent-regulated apartment building costs $10,000 - $20,000 per apartment to upgrade, as an estimate, to heat pumps and high efficiency, then something on the order of $10-20 billion dollars will be needed for regulated housing alone. Ideally, the state will eliminate MCIs and support affordable housing through general revenues, and these sums will be spent. Absent eliminating MCIs, the state should allocate funding at that level.

Due to decades of federal, state and local cutbacks, NYCHA now requires a simply massive infusion of capital: the system has a gargantuan capital backlog that's been estimated to cost $32 - $68 billion to return to a state of good repair. The federal government needs to fix NYCHA, and the state and city need to do their part, as well. Energy efficiency must be integrated across the system and implemented.

In order to deliver the funding needed, some organizations, including NYCC, and state legislators support taxing the rich. In particular, state government could raise an additional $10 billion per year for a Green New Deal statewide, which would include these and other funds needed for a rapid and just transition to 100% renewable energy.

While $10 billion per year is a very large stream of revenue, it can be raised through just a 5% tax on marginal income over roughly $500,000, which in effect covers only the top 1%. In other words, a small tax on the top 1%, a virtually all-white elite, could fund a Green New Deal, including upgrading the state's rent-regulated housing. Other proposals to tax the wealthy, including reversing corporate tax cuts and ending the stock transfer rebate also raise enormous sums. The city should support state level budget action to create such revenues and programs.

Large new programs funding upgrades should maximize good jobs, including union jobs hiring into career-track positions especially from low-income communities of color. Put another way: new

programs should not subsidize poor quality, low-pay, low benefit, non-union jobs. The state should tie any public funding to high-road requirements, ensuring better pay and conditions on state-funded work. At scale, these programs would change the industry as a whole, pushing up standards even on work that is not funded by the state.

New laws to cover all smaller buildings in an equitable manner should be enacted.

Local Law 97 covers public buildings and large private buildings over 25,000 square feet. Collectively these 50,000 buildings are about 60% of the city's square footage and also the majority of the city's pollution from buildings. The city has almost 1 million buildings total, which produce the other approximately 40% of its pollution generated buildings. These are the types of buildings prevalent in the rest of the country, including one family suburban-style homes. The city will need to enact laws analogous to Local Law 97 that produce pollution reductions and jobs by requiring these buildings to upgrade, while ensuring equitable results for low- and low-middle income homeowners and buyers.

Small buildings are usually not owned by sophisticated owners (although private equity and large firms are scooping up housing). Requirements on these buildings must be tailored to a different type of owner – a single person who cannot be reasonably expected to develop expertise in building operations and energy efficiency. Rather, requirements will need to follow common sense principles that legislators and experts should begin to develop, tailored to particular types of buildings and/or owners. For example, a mid-size co-op is very different from a one family home, which is in turn different from a small commercial building. Supportive programs including effective outreach and funding for conversions to clean energy will be needed.

Any program the city enacts cannot impede home ownership for low- or low-middle income people and communities of color by unacceptably raising costs for such buyers or owners. An analogy lies in the successful push to pass Local Law 97, which does not apply pollution limits to rent regulated buildings where MCIs would have caused mass rent hikes on tenants. In other words, any pollution limits or other energy efficiency requirements on small buildings cannot be allowed to produce inequitable results. In the end, all types of buildings will need to be transformed in order for the city to achieve its 80x50 standards, which will necessitate new requirements and supportive programs on small buildings that produce equitable results.

Conclusion: NYC Should Build a Green New Deal by Enacting and Implementing Further Requirements

Some energy-efficiency improvements are simple: insulating pipes, sealing air leaks, and optimizing operations. Other upgrades are more challenging: capping elevator shafts, replacing heating and cooling systems, or re-skinning a building's façade. It's a lot of work that creates man good-paying jobs, including good, union, career-track jobs. By mandating deep cuts in energy usage, Local Law 97 is poised to trigger a wave of hiring across New York City. This will benefit the city's low- and moderate-income communities of color, improving the prospects of workers and their families. It also stands to increase the economic security of the current workforce.

Energy-efficiency improvements, while sometimes costly, ultimately save enough in energy costs to pay for themselves, enabling building owners to finance the upgrades over time. They also improve local air quality by reducing the use of fossil fuels, which will help New Yorkers suffering from respiratory illnesses such as asthma. It will also help protect New Yorkers at risk from COVID, which attacks lung function.

Our city is in an economic and climate crisis, and also a crisis of inequality. These crises are inter-related. The city should build a Green New Deal to address these problems holistically. Local Law 97 is a worldwide model that should be properly implemented and enforced. Properly-constructed follow on legislation covering all buildings, including small, one family suburban style homes, should be enacted that produces pollution reductions, jobs and equitable impacts. New York City could be on its way to beginning a Green New Deal through Local Law 97, offering a model to the world.

[1] Data collected by the Mayor's Office of Sustainability for calendar year 2017 includes over 22,000 buildings that reported weather-normalized source EUI. The data includes duplications and some impossibly high EUIs for a small number of buildings. This report discounts these obvious errors. We analyzed 22,207 records and rounded all percentiles to the nearest 5 percent. For example, if a building falls in the 83rd percentile of the records we analyzed, it is reported as a "top 15 percent" polluter. See the city's data set at https://www1.nyc.gov/html/gbee/html/plan/ll84_scores.shtml

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[6] See page 6 of Buildings Technical Working Group. (2016, April 21). One City: Built to Last: New York City's Buildings for a Low-carbon Future. Retrieved from https://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/TWGreport_04212016.pdf

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