BRONX BOROUGH PRESIDENT'S RECOMMENDATION
CITY OF YES FOR CARBON NEUTRALITY
APPLICATION NO: N 230119 ZRY

PROJECT DESCRIPTION

The New York City Department of City Planning (DCP), in close consultation with the Mayor's Office of Climate and Environmental Justice (MOCEJ), is proposing a citywide zoning text amendment to implement changes to the City's Zoning Resolution (ZR) to remove impediments to, and expand opportunities for, decarbonization projects within all zoning districts, and across all 59 of the City's Community Districts. The Proposed Action involves citywide changes to zoning regulations to remove impediments to high-performance building retrofits, decarbonization retrofit projects, solar energy, electric vehicle charging, and energy storage systems, as well as other measures that are needed to help achieve the City's ambitious climate goals, falling broadly into four key categories: Energy, Buildings, Transportation, and Waste.

A-Energy

Modify zoning to encourage and ensure that renewable energy sources can be incorporated into both newly constructed and existing structures throughout the City. These renewable energy sources include wind, solar, and energy storage.

Rooftop solar: Approval of this application will facilitate the removal of zoning impediments that currently may prohibit the installation of solar arrays.

Current Zoning Poses Challenges:

Current zoning allows for the installation of rooftop solar systems referring to them as "permitted obstructions." These installations are subject to size and location limits.

On sloping roofs built at or above the permitted height, zoning limits solar to a height of eighteen inches (approximately 1.5 feet) as measured perpendicular to the specific roof. This severely limits rooftop solar equipment which, in addition to other considerations, require solar panels that must be properly tilted to capture a maximum amount of sunlight.

On flat roofs built at, or above, the permitted height, current zoning advances a complex framework of height and coverage limits. As now in place, zoning mandates that if a solar system exceeds the permitted height by more than four feet, it must be at least six feet from street walls and cannot cover more than 25 percent of the roof. In R1-R5 Districts a solar system cannot exceed a height of six feet. In the remaining residential zones this height restriction is fifteen feet. Essentially, these restrictions encourage solar installations be low-to-the roof.

Among numerous issues associated with the installation of solar panels on flat roofs, the New York City Fire Department notes the presence of low solar panels on the roof may hinder access to the roof, most notably since firefighters could not safely walk on the panels if necessary. So too, a

minimum of nine feet of height clearance is required by firefighters if they are to walk beneath the panel installation.

Proposed Zoning Resolves Challenges:

Approval of this application will consider sloped and flat roofs separately.

Sloped Roofs: Height allowance will increase to sixty inches (five feet) allowing with the need to orient panels to maximize sunlight retention.

Flat Roofs: Height allowance will increase to fifteen feet. Solar panel installation would be able to cover the entire roof area up to a height of fifteen feet.

Solar Parking Canopies: Approval of this application will facilitate the removal of zoning impediments that currently may prohibit the installation of solar parking canopies. It is acknowledged that there are countless parking facilities throughout the city that offer an opportunity for solar panel installation.

Current Zoning Poses Challenges:

Current zoning refers to accessory off-street parking spaces as either open or enclosed. Current zoning does not provide allowances for canopies that could be erected over an exterior parking lot on which solar panels could be installed

Proposed Zoning Resolves Challenges:

Approval of this application would allow solar panels to be installed on canopies for parking lots up to a height of fifteen feet. Landscaping requirements in commercial zones would also be modified to accommodate solar canopy installations. Planted areas will not be required below solar panels within ten feet of a panel.

Stand-Alone Solar

Stand-alone solar panel facilities serving residential communities can potentially allow for the production of energy that could serve multiple properties. A key objective is to facilitate stand-alone solar installations for the production of grid supporting solar energy in residential neighborhoods.

Current Zoning Poses Challenges:

In 2012 the Zone Green text amendment was adopted. A key component of this text amendment was to facilitate solar generation as a permitted use in New York City. As such, “solar energy systems” were added as a permitted “accessory use” in the Zoning Resolution. An apparent lack of clear verbiage has stymied the inclusion of stand-alone solar infrastructure in residential areas. Rules pertaining to manufacturing and commercial districts are better understood and clearer.

Proposed Zoning Resolves Challenges

By way of reducing the ambiguity of the 2012 Zone Green text amendment, the following clarifications would be adopted:

- Clarify accessory uses, noting that solar energy systems can serve multiple zoning lots that are under the same ownership.
- Allowing solar energy systems up to a maximum of 10,000 square feet in all residential districts, allowing community solar projects that cannot meet the accessory use definition.
- Adopting a *new primary use*; "energy infrastructure equipment" to include stand-alone solar, wind, energy, and energy storage. This new primary use would be allowed on sites up to 10,000 square feet in residential districts. Larger versions in residential districts would require a special permit from the Board of Standards and Appeals. Larger standalone solar facilities could site in commercial and manufacturing districts without size limits.

On-Shore Wind

Wind as a source of energy is especially suited for shoreline locations like New York City. The challenge will be to reconcile the most efficient ways to reap the benefits of wind technology with the location in which the required infrastructure is installed.

Current Zoning Poses Challenges

Current zoning mandates height restrictions to thirty-five feet within residential districts and most commercial districts. This restriction reduces the potential benefits associated with on-shore wind turbines given that stronger wind currents function at more elevated heights.

Proposed Zoning Resolves Challenges

Pending approval of this application, the City Planning Commission would have the authorization to allow for the modification of related zoning rules in order to site this infrastructure along the waterfront. On-shore wind turbines would be included within the broader "energy infrastructure equipment."

Energy Storage Systems (ESS)

Energy storage systems allows for surplus energy to be "stored," thereby reducing the need to generate energy when demand increases. These systems also allow for the sale of "surplus" energy to neighboring properties, which, in turn, reduces the overall need to constantly add new energy to the system.

Current Zoning Poses Challenges

Current zoning considers energy storage systems as an "electric utility substation." As such, the siting of these facilities is restricted as to where they can be placed, their maximum size, and if sited for a residential area, approval by the Board of Standards and Appeals (BSA) is required.

Proposed Zoning Resolves Challenges

This proposal would allow ESS as primary uses in residence districts on sites up to 10,000 square feet and eliminate size limitations in commercial and manufacturing districts. These facilities will be required to satisfy screening requirements. For those facilities exceeding 10,000 square feet in residential districts, a BSA special permit would be required. Energy Storage Systems will be considered an accessory use if its energy storage capacity does not exceed 24-hours of the primary use's peak electric load. Approval by the FDNY will remain unchanged.

Electrification Retrofits

Current zoning regulates infrastructure such as HVAC systems to run a building. The size limits for mechanical equipment is a commonly referenced problem and the placement of this equipment is usually in basement or cellar areas. Given that such equipment would be better placed on roofs or other areas located around a building, the proposals this application offers will address this matter.

- Building roofs: An update regarding the permitted obstruction rules to allow accessory equipment and energy infrastructure equipment on roofs above maximum heights. Equipment could cover up to 50 percent of the building, up to a max height of 15 feet. Within this area, 30 percent could rise above 15 feet to accommodate elevator bulkheads and larger equipment. In low-density districts this height is limited to 25 feet. Height limitations in other districts will be based on the height of the building.

- Yards and Open Spaces: The proposal expands on the locations that energy systems cannot be placed on roofs, such as on a pitched roof. For equipment with screening and size requirements, these existing regulations would still apply regardless of where it is placed in order to limit the visual effect of this equipment from streets and other buildings. Where additional relief to undertake an electric retrofit, the Board of Standards and Appeals would offer a permit.

- Fix Zone Green: Revising the Green Zone rules include a flat 5% deduction of the zoning square footage from the floor area calculations if the building meets the standards prescribed by this proposal and aligns with Local Law 97 requirements. These include becoming fully electric for new buildings as defined in Local Law 154. After 2027 most new buildings will be 100-percent electric. New "ultra-low" energy buildings would be meet Local Laws 31 and 32. New buildings with fewer than three stories would have to be a net-zero energy building, meaning it generates more energy than it requires. Remaining buildings would have to meet an ultra-low consumption standard of 38,000 kBTU per square foot per year. These standards are subject to change if technology improves.

B-VEHICULAR PARKING, STREET TREES, POUROUS PAVING & ORGANICS

Additional provisions included in this proposal pertain to:

- Parking:
  - This proposal encourages the installation of automated parking facilities which maximize the use of limited space for such facilities. These allowances are permitted today within the "Manhattan core" and other central business districts such as Long Island City but would be expanded citywide.

  - Bicycle parking. This proposal would create a series of clear allowances for public bicycle parking. The focus for this provision are for commercial and manufacturing districts.

- Street Trees:
  - This proposal would allow for connected tree beds if they satisfy Department of Transportation standards (distance from intersections, fire hydrants, etc.). Where street trees cannot be accommodated, as determined by the Department of Parks and Recreation, above grade planters are a viable alternative.

- Porous Paving
  - Porous paving would be permitted in all cases and eliminate the reference to Department of Buildings approval or "appropriateness."

- Organics
  - Clear rules pertaining to composting and recycling will be established. It would add small-scale composting to the list of accessory uses. Composting and recycling facilities would be allowed in all commercial districts subject to a 5,000 square foot size limit. Larger facilities would be allowed in manufacturing districts.

BRONX COMMUNITY DISTRICTS VOTE

Community District votes submitted through ZAP, as of July 2, 2023.
Community District 1:
Community District 2:
Community District 3:
Community District 4:
Community District 5:
Community District 6: 19 in favor, zero opposed, 2 abstaining
Community District 7: 25 in favor, zero opposed, 0 abstaining
Community District 8:
Community District 9:
Community District 10:
Community District 11:
Community District 12:

BRONX BOROUGH BOARD VOTE

The Bronx Borough Board will convene a meeting on July 13, 2023.

BRONX BOROUGH PRESIDENT'S RECOMMENDATION

The impact of climate change and how it is addressed will pose one of the most dramatic challenges and opportunities this city has ever confronted. With the majority of the existing housing stock in The Bronx being constructed between 1920 to 1940, when the population increased by approximately 664,000 people, addressing how to retrofit these properties is a core goal for reducing carbon dioxide emissions and our dependence on fossil fuels to become a "carbon neutral" city. To get to these ambitious goals, both government and the private sector will be required to invest billions of dollars to upgrade properties in order to satisfy the mandates of Local Law 87, 92, 94, and 97. This proposal is modifying various zoning regulations to ensure that zoning does not impede the ability of buildings to have the flexibility needed to meet these requirements.

Speaking generally on the proposal, the merits of the application offers little to debate. Further support for solar panel installation to maximize the thousands of acres of flat roof space across New York City makes sense. Acknowledging that current zoning obstacles pose challenges that need to be corrected, is both essential and timely. As an example, zoning pertaining to the installation of solar panels on slanted roofs today restricts the operating efficiency of these panels; approval of this application will address this problem. So too will allowing for the installation of solar canopies on exterior parking lots which is a solution that will expand renewable energy production in a city with limited space.

In the near future, all new vehicles will be electric and require electric charging stations, so it goes without saying that such charging stations need to be accessible wherever possible. Given this, I recommend that charging stations be permitted wherever parking garages are located, regardless of whether these stations are in a commercial or residential zoning district. Across New York City there are numerous garages in residential districts that charging stations would serve those who reside in them. This directly connects to the recent *521 East Tremont Avenue Rezoning* application that I supported, but also noted should add electric vehicle charging stations. While acknowledging they were not legally permitted at that time, this proposal will allow that development to add them as-of-right.

The one caveat with permitting electric charging stations is to ensure that fire safety and fire education precautions are being taken. City Planning stated they have been in discussions with both the Department of Buildings (DOB) and the Fire Department (FDNY) to ensure safeguards are tied into approvals. Fire safety is a real concern for me, and any new regulations permitting to charging stations need to be continuously adapted, as needed, to stay ahead of any potential problems. Additionally, fire education needs to occur to ensure people are trained in how to use these new electrical systems, such as charging stations.

Associated with electric charging stations for vehicles is the issue of charging stations for bicycles and similar vehicles. I was pleased to learn that Senators Charles Schumer and Kristen Gillibrand

are supporting the building of *safe* charging stations for e-bikes outside NYCHA buildings. NYCHA residents need options for transportation, and ensuring clean energy alternatives to mass transit is a step in the right direction. I hope this model can be replicated as a way to ensure safety is at the forefront of any new transportation modes.

While out of scope with this application, one concern that may need to be addressed at the federal level is how (and if) there should be a standard plug-in for charging stations. Whether it be a standardized outlet or a universal outlet that will allow multiple electric vehicle types to plug into. Much like electric outlets in our homes that was standardized in the early 1900's, this standardization would remove challenges with finding charging stations that are compatible with the various vehicle manufacturers.

On-shore wind as a renewable energy source is another way our city can generate renewable energy that I generally support. In the proposal there is a City Planning Commission (CPC) Authorization for on-shore wind for when an applicant is seeking height and/or setback relief. I ask that the CPC consider adding a finding to analyze the potential impact the wind turbine may have on bird migration patterns as a requirement to any approvals. As New York City is an important migratory corridor for a number of bird species, understanding the impact a wind turbine may have on these migrations is important. Considerations the CPC could make may include reduced wind turbine use during selected migratory windows when the wind turbine is being proposed along an environmentally sensitive route. Adding this provision may help to avoid any unintended consequences.

Energy storage facilities allow for renewable energy to be stored and is a core component to a complete system. Different types of renewable energy generate power at varying amounts and frequencies, but the energy system must be relied upon to have a continuous amount of power under any conditions to keep New York City running properly. I am satisfied that what is being proposed in this application is appropriate.

On matters pertaining to wall insulation and the resulting increase of the wall's thickness to meet NYC Energy Codes, I endorse the proposed flat five-percent Floor Area Ratio (FAR) exception changes this application is considering for buildings. I understand this five-percent exception is a simplified yet comparable exemption to the current regulations while also making it possible for existing buildings to more-easily retrofit these buildings. These rule changes will align with upcoming Local Law 97 requirements.

This application references rooftop greenhouses for food production and permitting them as-of-right by requiring DOB compliance rather than requiring a DCP approval. As an advocate of healthy food and finding creative solutions for food production in the city, this proposal makes sense. This change would address a recent problem that was brought to my attention, where an owner was looking to build a greenhouse in the South Bronx, but due to the existing zoning certification requirement, that owner did not pursue the greenhouse due to the added time and resource requirement it would have taken.

Street trees and the additional flexibility the regulations would allow are intended to better provide for their growth and reduce stormwater runoff, as cited in the proposal. Street tree maintenance

and upkeep is a continual problem in the city and I endorse any plans that support street trees and their long-term viability. I am optimistic that the regulations will help trees survive which will have the added benefit of improving air quality and further reducing carbon dioxide emissions.

The updated language for permeable paving is something that is additive to the proposal. Any regulations which clarify and support impervious surfaces will help with stormwater runoff that filters into our waterways, causing additional pollution that is not necessary when there are alternatives. In addition to what is proposed, I would like to see DCP to add clarifying language to the Special Natural Area District (SNAD) regulations to incentivize pervious surfaces. The current rules only state an area is considered as pervious or impervious, but if certain conditions are met, then I would propose that areas that use permeable paving techniques are considered as a 50-percent pervious area. This is a compromise with the current regulations while incentivizing a permeability standard that will improve the special district regulations.

The underlying proposal would update a number of zoning regulations to help take New York City from a fossil fueled metropolis to one reliant on electricity produced by renewable energy sources. My overriding concern is that while lawmakers adopt laws and guidelines essential for climate change mitigation, far less attention is given to how the typical New Yorker will finance what is being required of them, particularly as it relates to the upcoming Local Law 97 requirements for existing buildings. It would be a disservice to the city if buildings that are unable to afford energy conversions receive fines that they will never be able to afford. I will continue to stay optimistic that additional resources will be rolled-out along with additional support for how every building can meet these regulations. An important part of this conversation is how DOB will also include a "good faith" clause that will allow buildings working toward energy goals, but unable to achieve them in time, may avoid unnecessary fines. Additionally, for buildings that are not working to comply with these new regulations, the city will need to enact enforcement measures that will get results by going after these landlords. It is not fair to the buildings who strive to comply with the regulations when other "bad actor" landlords are not duly punished.

In short, our city cannot afford the price for ignoring global warming and must reduce our reliance on fossil fuels and reduce our greenhouse gas emissions. We must come together as a city and find ways of absorbing these short-term costs so our city can have the long-term benefits of renewable energy.

Therefore, as I endorse the core principles of this application which makes sustainable energy more easily realized, and while I am generally supportive of the proposed text amendment, my **conditional approval** of this application is to ensure that some additional modifications, as previously noted, will act to further enhance this proposal.