

City of Yes for Climate Neutrality Text Amendment  
Project Description

## **I. Introduction**

The NYC Department of City Planning (“DCP” or “the Department”) in close consultation with the Mayor’s Office of Climate and Environmental Justice (MOCEJ) is proposing a citywide zoning text amendment (the “Proposed Action”) 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.

## **II. Background**

### **Evolution of Zoning for Environmental Goals**

In 2012, DCP proposed a set of sustainability-related zoning changes titled “Zone Green”. Building on the results of the Urban Green Council’s “Green Codes Taskforce,” these forward-thinking revisions set the stage for early adoption of solar, wind, and electric vehicle charging infrastructure, and allowed home- and building-owners to improve their buildings’ energy efficiency through adding insulation and sun screening devices.

### **The Shift to Decarbonization**

Over the 10 years since Zone Green’s adoption, the international conversation and regulatory landscape surrounding sustainability has changed significantly – most notably for its increased focus on the specific environmental topic of ‘decarbonization’, a focus arising from the Paris Climate Agreement of 2016.

The Agreement is an internationally binding treaty requiring participating countries (including the United States) to limit their emission of climate change-causing greenhouse gasses (GHGs). The agreement requires countries to reduce emissions to the extent necessary to prevent overall global warming from exceeding two degrees Celsius – the upper limit threshold agreed upon by the scientific community for preventing catastrophic risk to life as we know it on Earth.

More than 80 percent of New York City’s GHG emissions are attributable to the ‘operational’ carbon dioxide emissions associated with the day-to-day activities of the city’s inhabitants: the cooling and heating of buildings, the combustion of fossil fuels to transport goods and passengers, and the generation of electricity to power homes and businesses. The reduction of these operational carbon emissions is imperative to achieve the goals of the Paris Climate Agreement.

In keeping with these goals, in 2016 New York City introduced a roadmap to achieving carbon neutrality – “80x50” – setting a goal of reducing the cumulative operational carbon emissions of the city by eighty percent of a 2005 baseline, by 2050. (The City expects to mitigate the remaining 20 percent of carbon emissions through the purchase of carbon offsets, leading to the term ‘carbon neutrality’.)

## Recent City and State Initiatives

In 2016, in conjunction with the vision of achieving carbon neutrality through “80x50”, the Mayor’s Office set a goal of installing 1,000 megawatts (one gigawatt) of solar photovoltaic capacity across the city by 2030. This ambitious push meant a more than three-fold increase in the solar capacity installed in the city at that time. Current estimates show that there are now about four hundred megawatts installed in the city. This means that, to achieve this goal, the private and public sector, working together, must more than double the amount of solar installed across the city in the next eight years. This will be a massive undertaking and will require greater flexibility regarding where and how solar can be installed across the city’s vast landscape of rooftops.

In 2018, in order to ensure that new construction was being built to very high energy conservation standards, the City Council adopted Local Law 32 of 2018, requiring the adoption of “model stretch codes” developed by New York State as the City’s baseline energy code, and to require that successive updates of the stretch code likewise be adopted as the City’s baseline energy code in 2019 and 2022. Taken together, the mandate to adopt the most advanced energy conservation code standards as the City’s baseline requirement has resulted in a very high degree of efficiency in new construction and will result in even greater efficiency as successive versions of the code take effect.

In 2019, in line with the Paris Agreement and broader national discussion of the “Green New Deal,” the New York City Council enacted the Climate Mobilization Act, a suite of rigorous local laws requiring extensive building retrofits to reduce emissions, among other measures. These include Local Laws 92 and 94 of 2019 which require green roofs or solar photovoltaic arrays on newly constructed buildings and major rooftop renovations. This also includes Local Law 97 of 2019 which requires buildings 25,000 square feet or larger to meet energy efficiency and greenhouse gas emissions thresholds. Another significant Local Law, adopted outside of the Climate Mobilization Act, was Local Law 154 of 2021, which essentially prohibits the use of fossil fuels for heating, hot water, or cooking in new buildings, with a phase-in period beginning in 2024.

At the State level, decarbonization initiatives have also been advancing. In 2016, New York State released the policy plan “Reforming the Energy Vision” which set sweeping goals for the decarbonization of the state’s energy grid. This framework laid out the regulatory and technological reforms that would be necessary to shift to carbon-free electricity generation. This included changes to how electric utilities purchase energy and how they work with ‘distributed energy resources’ – smaller, privately-owned wind, solar, and energy storage systems distributed throughout the grid. This modernization of the utility grid changes fundamental assumptions about how the grid functions that underpin municipal zoning frameworks.

In 2019, the State passed the “Community Leadership and Community Protection Act” (CLCPA) a sweeping plan that set goals similar to New York City’s 80x50 plan at the state level: a 40 percent reduction in greenhouse gas emissions by 2030 and an 85 percent reduction by 2050. Building on “Reforming the Energy Vision,” the CLCPA requires that the state’s energy entirely come from renewable sources. To achieve this transformation, the State has been working with the U.S. Department of State and the U.S. Department of Energy to develop large-scale renewable-based energy projects, including approximately twelve gigawatts of off-shore wind generation off the southern shore of Long Island to supply energy to New York City and neighboring counties.

The State has, and will continue to, play a key role in funding decarbonization projects. In the 2022 State of the State address, Governor Kathy Hochul announced plan to achieve two million climate-friendly, electrified- or electrification-ready homes by 2030 as part of the State budget. This includes supporting

the retrofitting of one million existing homes, and the construction of one million new homes that either do not use fossil fuels or designed to easily switch to non-fossil-based systems in the future. The State will be receiving funds recently appropriated by the U.S. Congress to support decarbonization projects across the state. Finally, state voters passed the Environmental Bond Act, making another \$4.2 billion available to support environmental and community projects across the state – including crucial projects in New York City.

Responding to this context of ambitious climate legislation at the City and State level, the Department has developed its proposal for zoning changes to recognize, adapt to, and support these overarching efforts to achieve a cleaner, healthier, and more equitable community.

### III. Purpose and Need

The City’s target to achieve carbon neutrality by the year 2050 will require significant changes related to energy production, storage, and transmission; building performance and management; transportation; and waste streams. The Department, collaborating with advocates and expert practitioners, has found ways that zoning changes could further support the City’s ambitious climate goals. The Department is proposing 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 needed to help achieve the City’s ambitious climate goals, falling broadly into four key categories:

**A. Energy** – The proposal will help ensure that zoning is supporting the City’s ambitious goals for installing solar arrays and energy storage systems.

**B. Buildings** – In recent years, updates to the NYC Construction Codes include stringent requirements on energy efficiency and building performance. This means that the requirements of the 2012 Zone Green text amendment must change to ensure that they support the next generation of high-performance construction.

**C. Transportation** – New York has ambitious electrification goals for its transportation sector, but recent studies show it is significantly behind other major US cities. Of the city’s 1.9 million private vehicles, less than 1% (approximately 12,500) are zero-emission vehicles, and there are few public locations available to charge electric vehicles. Zoning regulations updates can contribute to this effort.

**D. Waste** – Improving the city’s waste stream is key to achieving carbon neutrality. This will require a substantial reduction of organic matter sent to landfills, as well as a reduction of stormwater that needs treating. While the bulk of this effort will occur outside of zoning, the proposal will update our regulations to support these efforts.

#### A. Energy

As the city’s energy grid transitions to renewable sources, it will increasingly need to decentralize with “distributed energy resources” (wind, solar, and energy storage) at multiple points throughout the grid. Zoning changes can play a role in this necessary transition by supporting the siting of distributed wind, solar, and energy storage throughout the city.

##### 1. *Rooftop solar: removing zoning impediments.*

2. ***Solar parking canopies:*** remove zoning impediments to allow.
3. ***Solar:*** ensure standalone solar generation
4. ***On-shore wind:*** add a new tool for the CPC to consider future applications
5. ***Energy storage (ESS):*** add new rules to allow grid-supporting ESS in a wide range of zoning districts

### **1 Rooftop Solar**

The Proposal would increase opportunities for solar energy generation on roofs throughout the city.

Zoning allows building owners to add solar energy systems on roofs even if a building is taller than the permitted height in its respective zoning district. Zoning considers them “permitted obstructions” and subjects them to size and location limits.

On sloping roofs built at or above the permitted height, zoning limits solar to a height of eighteen inches as measured perpendicular to the roof. This limit makes it hard to fit the equipment these systems need: panels, structural supports, conduits, and associated equipment. This limit also makes it hard to add panels on sloping roofs with weak solar orientations, since owners cannot tilt the panels to capture more sun. These requirements limit the ability of homeowners in low density areas to construct solar energy systems on their roofs.

On flat roofs built at or above the permitted height, zoning subjects solar to a complex framework of height and coverage limits. If the system exceeds the permitted height by more than four feet, then it must be at least six feet from street walls and cannot cover more than 25 percent of the roof. The system cannot exceed a height of six feet in R1 through R5 districts or fifteen feet in all other districts. Practitioners and solar advocates have pointed out issues with these regulations. Since the rules encourage panels low to the roof, they create conflicts with other uses such as recreation or mechanical systems. They also conflict with the needs of the Fire Department (FDNY) since fire fighters cannot walk on solar panels and need at least nine feet of clear height when walking beneath them. These conflicts often lead building owners to either abandon solar projects or install smaller systems than they wanted. The New York City Housing Authority had to pair back their proposed installation at the Red Hook Houses because of these regulations.

The Proposal would address sloped and flat roofs separately. For sloped roofs, the height allowance would increase to sixty inches to allow a broader degree of solar panel orientation. This would increase power generation and accommodate the equipment they need. For flat roofs, solar energy systems would be able to cover the entire roof area up to a height of fifteen feet. This would account for fire safety, allow greater use for roof areas, while increasing the amount of area for solar panels. The Department addressed this issue through similar changes in the Special Gowanus District in 2021 (C 210177 ZMK).

### **2 Solar Parking Canopies**

The Proposal would unlock solar power opportunities in thousands of acres of parking lots across the city.

Solar canopies installed over parking lots are a straightforward solution to generating more power by using space only used to store vehicles. This strategy has seen widespread adoption elsewhere but has lagged in the city partly due to zoning obstacles.

Zoning currently lists “accessory off-street parking spaces, open or enclosed” as a permitted obstruction in required open areas. This means that building owners have broad discretion to site parking on their property. However, zoning does not have allowances for canopies above these parking areas. In addition, zoning has landscaping rules for large commercial parking lots that do not envision solar canopies.

To address this, the Proposal would allow canopies as permitted obstructions over all parking areas up to a height of fifteen feet. In addition, the Proposal would change the commercial parking landscaping requirements to allow solar panels. To encourage practical planting growth, designs would not have to include planted material below solar panels or trees within ten feet of a panel.

### **3 Stand-alone Solar**

The Proposal would support the development of crucial, grid-supporting solar energy in residential neighborhoods.

The drafters of the 2012 Zone Green text amendment intended to allow solar generation as a permitted use anywhere in the city. They did this by adding “solar energy systems” as one of the listed uses in the Zoning Resolution’s accessory use definition. However, in practice, this allowance has raised questions for solar installations. People planning community solar projects have struggled to understand they can serve multiple properties. They have also questioned how the allowance meshes with the accessory use definition’s size controls (it must be “incidental” to the primary use). While commercial and manufacturing districts have clearer rules, these issues have slowed solar infrastructure in residential areas.

To address this, the Proposal would clarify the Zoning Resolution in line with the original intent of the Zone Green project. First, it would clarify that accessory uses, like solar energy systems, can serve multiple zoning lots when they are in the same ownership. It would allow solar energy systems up to 10,000 square feet in all residence districts. This would support systems, such as community solar projects, that cannot meet the accessory use definition. The new primary use – “energy infrastructure equipment” – would include stand-alone solar, wind energy and energy storage, as described further below. The Proposal would allow the use on sites up to 10,000 square feet in residence districts. Larger facilities could site in commercial and manufacturing districts without size limits. Larger versions in residence districts would need a special permit from the Board of Standards and Appeals.

### **4 On-shore Wind**

The Proposal would make it easier to develop wind turbines along the city’s waterfront, where they can be most effective.

Zoning currently subjects wind energy systems along the waterfront to stringent height limits. For example, when built at grade, the structures can only be thirty-five feet tall within residence and most commercial districts. This can make it difficult to develop workable wind energy systems, since they may need to be taller to better capture wind at their location. Zoning does not include any way to change these

height controls to construct new wind energy systems. The FDNY ran into this issue when recently trying to construct turbines at their facility at Fort Totten.

The Proposal would create a new City Planning Commission authorization to consider proposals for taller wind turbines in the waterfront area. In addition, the authorization would allow modifications of related zoning rules so the systems can site along the waterfront. The Proposal would include wind energy systems within the broader “energy infrastructure equipment” uses. This would clarify that wind systems can be a primary use and would continue to be subject to the current height rules for them.

### **5 Energy Storage Systems (ESS)**

The Proposal would support the development of safe energy storage systems in the city.

Zoning currently considers energy storage systems (ESS) as “electrical utility substations”. It allows this use in both Use Groups 6 and 17. As a Use Group 6 use, the system can have a maximum size of 10,000 square feet and site in commercial and manufacturing districts. Larger facilities (Use Group 17) can only site in manufacturing districts. In residence districts, the BSA can allow ESS up to 10,000 square feet through one special permit (Section 73-14) and can allow larger systems in residence and commercial districts through another (Section 73-16). Zoning also allows ESS as an accessory use if the energy storage capacity of the facility does not exceed 10 hours of the primary use’s peak electrical load.

The Proposal would allow these systems as primary uses in residence districts on sites up to 10,000 square feet and without size limits in commercial and manufacturing districts. The Proposal would include ESS in the broader “energy infrastructure equipment” uses. ESS would also be subject to screening requirements on roofs and in required open areas. Larger facilities would need a BSA special permit in residence districts. ESS would be an accessory use if its energy storage capacity does not exceed 24 hours of the primary use’s peak electrical load. FDNY reviews and approves all ESS systems and their specific installation. This will remain unchanged.

## **B. Buildings**

Decarbonizing the city’s million-plus existing buildings will be a massive undertaking, but also an essential one to achieve the City’s climate goals. Building owners will have to replace fossil fuel-based building systems with electrified systems; and retrofit or replace exterior walls and roofs to ensure a high degree of efficient energy usage. Zoning can support these crucial retrofits by removing impediments to these projects and by helping new construction achieve extremely high levels of efficiency that will serve those buildings, and the city, long into the future.

6. ***Electrification Retrofits:***  
*expand rooftop and yard allowances to accommodate increased need for outdoor electrified equipment such as heat pumps*
7. ***Envelope Retrofits:***  
*fix rules to ensure the widest range of exterior retrofits.*
8. ***Fix Zone Green:***  
*update and improve this floor area exemption to ensure it continues to promote better-than-code performance.*

## **6 Electrification Retrofits**

The Proposal would give New Yorkers the room they need to decarbonize their building's mechanical systems.

Zoning currently has regulations meant to address the infrastructure needed to run a building. Zoning calls this necessary infrastructure, such as HVAC equipment and fire protection systems, accessory mechanical equipment. This equipment has special zoning regulations reflective of their importance in building operation. For example, zoning does not consider its floor area. There are also allowances (as "permitted obstructions") to site them on roofs above height limits and in required open areas subject to size controls. These special regulations extend to energy infrastructure like solar power and battery storage.

However, when building owners have tried to electrify their mechanical equipment or add new energy infrastructure, they have run into zoning issues. They cite the size limits for mechanical equipment as the main problem since these rules do not address the special needs of this equipment. Most traditional mechanical equipment could be inside a building, primarily in the basement or cellar. The zoning allowances for other areas, like roofs, then tend to be too limited. However, electric systems often need outdoor locations for ventilation purposes and typically want locations on flat roofs. When the roof cannot fit the equipment, like in a low-density pitched roof building, it needs to be in open areas on and around the building.

To address these issues, the Proposal would update the framework for accessory mechanical equipment to reflect the needs of electric retrofits and other energy infrastructure. These changes, described below, would update rules in required open areas and above maximum heights, as well as the rules for floor area.

### **Building Roofs**

The Proposal would update the permitted obstruction rules to allow accessory mechanical equipment and energy infrastructure equipment on roofs above maximum heights. The current regulations differ in different zoning districts and within the city's floodplain. These rules allow larger equipment as permitted densities increase, reflecting the greater need for this equipment as buildings get larger.

The Proposal would keep this concept, as well as current setback and screening rules meant to limit the visual effect of the equipment. Equipment could cover up to 50 percent of the building to a height of fifteen feet. Within this area, 30 percent could rise above 15 feet to account for larger equipment and elevator bulkheads. In low density districts, this would increase to twenty-five feet. In other districts, the height would depend on the permitted height of the building – 35 feet for buildings 120 feet or lower, fifty-five feet for taller buildings. The coverage changes would allow more equipment at roof level and the height changes would allow for equipment on top of existing bulkheads.

### **Yards and Other Open Areas**

The Proposal would expand existing allowances for energy systems in required open areas to other mechanical equipment, as well as energy infrastructure equipment. This would be most beneficial in situations where owners cannot add the equipment to the roof, such as when it is a pitched roof. The existing size and screening requirements would still apply.

### **Floor Area**

While mechanical space typically does not count as floor area, the Proposal would remove two limitations that can make an electrical retrofit more difficult to undertake. One rule requires floor area that becomes unused or inaccessible within a building to still count as floor area. While this rule intended to keep building owners in the 1970s from abandoning older buildings, it has had the unintended consequence of keeping building owners from reconfiguring their building's mechanical equipment as part of an electric retrofit. Additionally, some lower density residence districts have special rules that limit the amount of floor area deductions available for mechanical equipment. These rules encourage mechanical spaces to be small and in cellars, however they do not account for the needs of electrified equipment described above.

### Other Changes

To address situations where mechanical equipment is below height limits and not subject to screening, the Proposal would extend screening requirements to all mechanical equipment regardless of its location. This would limit the visual effect of all equipment from streets and other buildings. The Proposal would also clarify that zoning allows accessory mechanical equipment serving building multiple uses at the top of mixed buildings and does subject it to enclosure requirements. Screening rules, as described above, would instead apply. Finally, for buildings that need more relief to undertake an electrical retrofit, a new BSA permit would be available.

### 7 Envelope Retrofits

The Proposal would support efforts to retrofit the walls and roofs of existing building across the city.

One of the most critical obstacles to meeting the City's climate goals is addressing the energy use of existing buildings. Because of poorly insulated walls and roofs, their energy use can be much higher than it should have to be. To address this, building owners will have to make improvements to their building walls and roofs. These improvements come in two flavors: adding insulation onto existing walls and roofs ("overcladding") or replacing them with new high-performing versions ("recladding").

Zoning currently includes special provisions to encourage the "overcladding" of existing buildings. While exterior walls count as floor area, zoning discounts up to eight inches of thickness when added to the outside face of existing walls. To get this deduction, the added wall must meet a specific insulation value (R-value of at least 1.5 per inch). To support these retrofits, these additions can encroach into required open areas. Similar allowances exist for building roofs.

Practitioners have noted these requirements favor "overcladding" even though other methods can lower a building's energy use. For example, a "recladding" cannot get the floor area deduction since zoning only allows it for designs that add insulation to existing walls. Building owners looking to preserve their existing facades by adding interior insulation also cannot get the deduction. This can be a problem for landmarked buildings. The 8-inch deduction allowance has also proven challenging to fit insulation and other wall elements within it. These issues have prevented building owners from retrofitting or replacing their buildings' low-performance building envelopes.

To address these issues, the Proposal would make updates to this provision to ensure it can be more effective. It would keep the existing "overcladding" provision, but designs could now add insulation on the interior. The Proposal would also add a "recladding" provision that would give the deduction if the new envelope met the stringent rules in the Energy Code. In both situations, the Proposal would increase the deduction to twelve inches to encourage workable retrofits.



### **8 Fix Zone Green**

The Proposal would help usher in a new generation of ultra-low energy buildings in the city.

Zoning currently includes a small incentive to encourage higher-performing walls in new buildings. When a design includes walls that exceed the Energy Code by 10 percent, it can exclude the part of the wall beyond eight inches from floor area calculations. This is known as the “Zone Green deduction” and typically results deductions of around five percent.

While this rule has encouraged energy-efficient construction since 2012, practitioners have found problems with its ongoing use. First, since it focuses on wall thickness, it does not address the more-holistic energy concerns needed to meet the City’s climate goals. As the Energy Code gets more stringent, it is becoming impossible to meet the required 10 percent threshold. DOB has also noted the current rules force them and applicants to undertake a laborious process to figure out compliance. They have also found situations where building designs have met the listed requirements of the rules, but do not meet its spirit. For example, buildings have overinflated their wall thickness to access the deduction. Finally, the rules do not address the special issues raised when dealing with existing buildings.

To address these issues, the Proposal would modernize the Zone Green deduction to better align with the City’s climate goals. Buildings could deduct five percent of their square footage from floor area calculations if they meet new standards. Existing buildings would get the deduction if they retrofit to become a fully electric building, as defined in Local Law 154 of 2021. Most buildings constructed after 2027 will have to be electric, but the deduction could encourage existing buildings to do the same. New buildings could get the deduction if it is fully electric and meets a new standard for “ultra-low energy buildings”. The standard comes from the stringent requirements proposed for City-owned buildings under Local Laws 31 and 32. New Residential buildings, three stories or less, would have to be a net-zero energy building (i.e., it produces at least the energy that it requires). All other buildings would have to meet an ultra-low energy consumption standard. This standard would be set as the source energy use intensity of thirty-eight thousand British thermal units (kBtu) per square foot per year or 50% outperformance of a comparable building complying with energy code. To ensure these standards do not fall behind technology and code changes, the Department could change these requirements by rule.

### **C. Transportation**

To achieve the decarbonization of the city’s transportation sector, residents and businesses will need to shift away from fossil-fuel-powered transportation towards electric vehicles (EVs), bicycles, electric micro mobility, and mass transit. The Department of Transportation (DOT) regulates on-street EV charging and DOB regulates requirements for EV charging equipment in new parking lots and garages. Within this context, zoning can support this transition through expanding use allowances for EV charging on private property and improving regulations for bicycles and micro mobility.

9. ***EV Charging:*** *expand allowance to all Commercial Districts*
10. ***Charge-sharing:*** *allow for shared EV charging in a percentage of parking spaces*
11. ***Parking Flex:*** *streamline car-sharing, car rental, and commercial parking rules*
12. ***Automated Parking:*** *expand rules to encourage more automated facilities*

### *13. Bike Parking: add rules for storage and charging*

#### **9 EV Charging**

The Proposal would support electric vehicles by allowing charging stations in all commercial areas.

Zoning currently considers “Electric vehicle charging stations and automotive battery swapping facilities” a Use Group 7 commercial use. This means operators can site them in C2, C6, and C8 districts, as well as all manufacturing districts. They cannot site them in other common Commercial Districts found throughout the city (like C1 and C4). This means that zoning restricts this important infrastructure from over half the city’s commercial areas.

The Proposal would reclassify the use to allow it in all commercial and manufacturing districts. The Proposal would also address issues raised by operators that have impeded new facilities. This includes clarifying that the use does not have a parking requirement and that zoning does not force it into a fully enclosed building. The Proposal would also clarify that automotive service stations (i.e., gas stations) can include electric charging.

#### **10 Charge-Sharing**

The Proposal would also support private electric vehicles by allowing shared charging infrastructure.

Zoning currently includes a confusing mix of allowances for EV charging and motor fuel pumps. These rules have caused practitioners to question the amount of EV charging they can put in parking facilities. Zoning also does not allow outside users to access or charge their vehicles in accessory parking facilities. Zoning does allow operators to reserve spaces for car-sharing in most accessory facilities. If operators could reserve spaces for shared EV charging in their facilities, it would be easier to make investments in charging infrastructure. This would help increase the amount of EV charging available in the city.

The Proposal would make clear that operators can add EV charging to spaces in both accessory and public parking facilities. The Proposal would make available up to 20 percent of spaces in accessory facilities (or five spaces, whichever is greater) for a mix of shared EV charging or car share. The Proposal would allow this for 100 percent of the spaces in public parking facilities. Lastly, the Proposal would remove the motor fuel pump allowances to limit fossil fuel infrastructure in the city.

#### **11 Parking Flex**

The Proposal would support electrified commercial vehicles by letting them use parking spaces in commercial and manufacturing areas.

Commercial vehicle fleets (including delivery and utility trucks, and rental and shared cars) face hurdles accessing EV charging. These fleets often need to charge overnight when use of parking facilities is lower. In commercial and manufacturing districts, zoning includes separate and confusing regulations for these different vehicle fleets. They make it hard for these fleets to park in accessory and public parking areas and access EV charging. However, the Manhattan Core and Long Island City have special rules that allow these fleets to use parking facilities there.

To support these fleets, the Proposal would apply those special rules to more commercial and manufacturing districts. The 20 percent allowance for charger sharing in accessory facilities would expand to cover car rental in most C1 and C2 districts. It would further expand to cover commercial and public utility vehicles in commercial districts at C4 and above. This would also apply in all manufacturing districts.

Public parking operators could make up to 50 percent of their spaces available to car rental in most C1 and C2 districts. This would expand to cover commercial and public utility vehicles at C4 and above. This would also apply in all manufacturing districts.

### **12 Automated Parking**

The Proposal would ensure proper regulations apply to automated parking facilities throughout the city.

Automated parking facilities use mechanical trays and racks to store vehicles. They are smaller and require less vehicular movement/idling compared to traditional facilities, both of which make these facilities more environmentally friendly.

Zoning currently grants special allowances for “automated parking facilities” tailored to their unique design. For example, these facilities have reduced minimum size requirements for parking spaces to reflect the smaller amount of space needed to store vehicles. In traditional facilities, zoning typically requires 300 square feet for each space to ensure cars can maneuver around the facility but only 153 square feet (the minimum size of a parking space) for each space in an automated facility. However, these allowances only apply in a limited area of the city including the Manhattan Core (Manhattan Community Districts 1 through 8) and other central business districts like Long Island City. Outside of these areas, zoning’s larger size requirements meant for traditional facilities hampers the construction of these automated facilities.

The Proposal would extend the allowances to all automated parking facilities throughout the city. These would be available for both accessory and public parking facilities.

### **13 Bicycle Parking**

The Proposal would promote use of bicycles and other micro mobility by creating public parking options for them.

Zoning currently has rules for accessory bike parking and public automobile parking. However, there are no corresponding rules for public bicycle parking, which operators have begun to try to provide in the city. The lack of clear regulations has made it difficult to do this.

To address this, the Proposal would create a series of clear allowances for public bicycle parking. First, it would create a new use (“public bicycle and micro mobility parking”) available in all commercial and manufacturing districts. The Proposal would further support these vehicles by allowing storage racks and lockers in required open areas.

## **D. Stormwater and Solid Waste**

While the city’s stormwater and solid waste streams account for only four percent of its greenhouse gas footprint, there are simple and straightforward solutions available, such as reducing stormwater runoff, reducing the amount of organic material sent to landfill, and increasing the amount of local food production. Zoning can support these solutions by updating use regulations, paving regulations, and rooftop regulations to ease the path towards solutions that will help us achieve the City’s solid waste and stormwater goals.

*14. **Porous Paving:** clarify language to fully allow permeable paving.*

*15. **Street Trees:** update rules to accommodate new raingarden prototypes*

*16. **Organics:** add new use regulations to allow composting and recycling.*

*17. **Rooftop Greenhouses:** simplify the process to allow them as-of-right*

### **14 Porous Paving**

The Proposal would support stormwater runoff reduction by always allowing permeable paving.

Zoning includes rules for the “surfacing” of certain areas – parking areas, driveways, and curb cuts. Drafters of these rules intended to allow permeable paving when “the Commissioner of Buildings deems it appropriate.” However, this phrasing has caused confusion as it implies applicants at DOB must prove the appropriateness of permeable paving on their site. As a result, few permeable paving installations in areas controlled by zoning have occurred.

The Proposal would change rules throughout the Zoning Resolution to allow permeable paving in all cases.

### **15 Street Trees**

The Proposal would support stormwater runoff reduction by allowing new forms of planting.

Zoning requires new developments and enlargements to plant street trees on adjacent sidewalks. The Street Trees Text Amendment (N 080081 ZRY) put this rule in place in 2008. The rules include relief where the Department of Parks and Recreation (DPR) finds the planting would be infeasible. Since 2008, City agencies have developed new concepts for on-street planting. These include bioswales, raingardens and connected tree beds. Department of Environmental Protection (DEP) and DOT design guidelines now include these options. However, the zoning requirements have not kept pace to account for these planting schemes.

The Proposal would update the street tree requirements to address this. The Proposal will allow connected tree beds if they meet DOT standards. On long frontages, designs could also group streets trees in the beds. The Proposal would also add raingardens and above-grade planters as alternatives if DPR finds the typical street tree would be infeasible

### **16 Organics**

The Proposal would support composting and recycling efforts by adding clear zoning rules for them.

Zoning currently does not mention composting or recycling at all. It only allows the closest listed uses (dumps and junk yards) in manufacturing districts. This has caused problems for homeowners and small businesses looking to set up small-scale composting or recycling facilities.

The Proposal would address this by adding clear regulations for composting and recycling. The Proposal would add small-scale composting to the list of accessory uses. The Proposal would also allow composting and recycling facilities in all commercial districts, subject to a 5,000 square foot size limit. manufacturing districts would continue to allow larger facilities.

### **17 Rooftop Greenhouses**

The Proposal would support sustainable food production by making it easier to build rooftop greenhouses.

Zoning currently exempts rooftop greenhouses from floor area and height limitations if they get a CPC chair certification. To get the certification, the design must meet size, location, and transparency rules. The building also cannot include any sleeping accommodations. Since the rules first went into effect in 2012, building owners have used them far less than expected. To date, only two applicants have obtained the greenhouse certification. Potential applicants have noted the costs and timing issues caused by the current process. These keep potential greenhouses from occurring.

The Proposal would convert the current requirements into rules that DOB can regulate. Moving forward, buildings without residences could use the rules. Together, this would ease the administrative burden on these important facilities.

### **Other Changes**

The Proposal also includes changes that would make the Zoning Resolution clearer and more consistent.

Zoning currently has multiple lists of permitted obstructions for required yards and open areas, as well as for height and setback. They are all very repetitive. Because there are so many lists, earlier zoning changes often did not make necessary updates to all these lists. This has caused them to become more inconsistent over time. Because of this, the lists are hard for practitioners and DOB to keep track of. To address this, the Proposal would condense the obstructions into two permitted obstruction lists – one for required open areas and the other for height and setback. The Proposal would make these lists more consistent by adding items missing from current lists (for example, windowsills and steps). This change would make the Zoning Resolution shorter and easier to understand and update over time.

The Proposal would also make changes in special purpose districts consistent with changes described above. These consist of three major types. First, there are special purpose districts that include their own lists of permitted obstructions. The Proposal would replace these lists with references to the two new lists described above. The Proposal would keep allowances for unique obstructions (for example, heliostats in the Special Battery Park City district). Second, a significant share of special purpose districts includes cross references to current permitted obstruction lists and the Proposal updates them to reflect that change described above.

Finally, there are special purpose districts that include unique height limits where it is unclear whether they allow permitted obstructions above them. To support building retrofits, the Proposal would make

clear that accessory mechanical equipment and energy infrastructure equipment can be above these height limits as “permitted obstructions”.