

TESTIMONY IN SUPPORT OF CITY OF YES: CARBON NEUTRALITY BEFORE NYC CITY PLANNING COMMISSION CITIZENS HOUSING & PLANNING COUNCIL SARAH WATSON, DEPUTY DIRECTOR JULY 26, 2023

Thank you for the opportunity to testify today. My name is Sarah Watson and I am the Deputy Director of Citizens Housing & Planning Council (CHPC).

On behalf of CHPC, I am delighted to share our strong support for the proposed city text amendment, City of Yes for Carbon Neutrality.

This proposal aligns the essential public policy goals of environmental sustainability and sustaining investment in our buildings, transportation, and energy systems.

CHPC has long advocated for zoning and regulatory reform to promote necessary investment in all segments of our housing stock, and to clear bureaucratic barriers to meeting the needs of New Yorkers. Zoning needs to *make it easier to do the right thing* for a carbon neutral future, and this proposal does just that.

There are four items that CHPC believes are especially critical for residential buildings:

First, the City of Yes for Carbon Neutrality would allow elevated solar trellises over 100% of roof area, a change CHPC has advocated for. The proposed allowance would nearly quadruple the solar wattage a typical rooftop can generate.

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Third, the changes will make it easier for building owners to place low-carbon HVAC equipment, on roofs and in yards; allowing sufficient flexibility for existing buildings as well as new ones to use clean energy systems, and supporting State and local goals for the electrification of building systems.

Fourth, we are in strong support of the changes that will remove administrative barriers to the use of permeable paving, an important surfacing option that helps reduce stormwater runoff.

We have some technical comments about specific adjustments needed to enable the text to accomplish its intended purpose, and these are included in the attachment with our written testimony. In particular, the standards for "ultra-low energy buildings" should be compatible with the "gold standard" of Passive House, today and into the future. Our board president, and Chair of our Zoning Committee, Mark Ginsberg, will testify on this point.

In summary, the City of Yes for Carbon Neutrality text amendment is exactly the type of zoning reform the city needs. We applaud the work of DCP's staff and the City team in developing this proposal, and are pleased to support these changes, with the technical refinements we have outlined.

TESTIMONY IN SUPPORT OF CITY OF YES: CARBON NEUTRALITY BEFORE NYC CITY PLANNING COMMISSION CITIZENS HOUSING & PLANNING COUNCIL MARK GINSBERG, PRESIDENT JULY 26, 2023

I am Mark Ginsberg, President of the Citizens Housing & Planning Council (CHPC) and a practicing architect. CHPC is in strong support of this Proposal and compliments the Department on good work. Our Deputy Executive Director, Sarah Watson, is giving our testimony on the overall Proposal. I will concentrate on "ultra-low-energy buildings."

One of the most important features of this proposal is the updating of standards that earn new buildings a floor area deduction for achieving leading-edge energy efficiency standards. There are two ways to qualify for this standard: (a) be a "better than code" building or (b) meet the current "gold standard" for energy efficiency.

CHPC convened a group of leading experts on building energy efficiency to evaluate this piece of the proposal. We all agreed on the importance of this proposal but identified areas for adjustment:

- First, the "better than code" standard is unachievable with today's best practices, in large part because of how much more stringent codes have become.
 - IECC baseline performance is now over 33 percent better than it was 15 years ago when Zone Green was passed.
 - Beating code by 50% is effectively impossible. Beating it by 15% represents a building that's significantly better than the code and what was required in the past.

- As codes continue to become more stringent, there may be a point when being "better than code" is no longer the right standard. This makes it more important for the "gold standard" option to reflect current best practices.
- Second, the Passive House standard is the current gold standard for building energy efficiency. We understand the proposal intended include Passive House buildings.
 But we found that a Passive House building <u>would not qualify</u> under the originally proposed language.
 - The standards should be updated to reflect the most recent version of the Passive House standard and to enable DOB to administer them for several different modeling tools that are used in the industry.

As a group, we drafted recommended modifications for the definition of "ultra-lowenergy building" that would reward Passive House buildings and other cutting-edge projects today and into the future. These recommendations are attached to CHPC's written testimony.

When the Commission votes on the proposed text amendment, we strongly recommend that your report acknowledge the purpose of these respective standards, to provide adequate guidance for future rulemaking.

I'll be happy to answer any questions about our comments.

CHPC COMMENTS CITY OF YES: CARBON NEUTRALITY

The comments compiled below reflect the feedback of CHPC's Zoning Committee and staff. We look forward to offering formal testimony on this proposal when the City Planning Commission holds its public hearing.

ENERGY

Feedback on zoning text

- The committee raised questions about whether the regulations adequately address adjacency considerations when solar canopies are located within a yard. The proposed changes do not seem to differentiate between two very different conditions: parking lots in commercial and higher density zones, and parking in rear yards in lower density districts. What adjacency impacts have been considered in lower density residential (R1-R6) districts? Should limitations on canopies mirror those applied to enclosed off-street accessory parking?
- It is unclear how the interaction between different permitted obstructions in rear yards (ZR §23-441) will work:
 - There is an implied distinction between "canopies" and "solar canopies," though neither is defined. The terminology may be confusing. Canopies are traditionally fabric-topped structures that are open at the sides. A solar canopy will not have a fabric top.
 - In addition, the allowance for "solar energy systems" as permitted obstructions "above other permitted obstructions, as applicable, provided that the additional height shall be limited to 18 inches" seems to allow solar panels to be placed atop a canopy or trellis without limitation on height or coverage. DCP should examine appropriate limits on such a configuration. (Canopies and trellises are not limited in height or coverage today, to no adverse effect, but if solar energy generation is allowed on top of them, this could produce unintended consequences.)
- Though this committee previously recommended a 20-ft limit on the height of a rooftop solar canopy, the proposed 15-ft height limit (ZR § 23-621) is adequate to accommodate a range of installations.

Additional comments

- Energy storage systems are critical to the city's clean power future. DOB and FDNY are responsible for assessing these continually evolving technologies. While it may not need to be explicitly stated in the zoning text, it is important to communicate that DOB and FDNY (not zoning) are responsible for evaluating these systems for safety and suitability. Zoning should not be a barrier to the adoption of approved energy storage systems.
- The committee supports authorizing CPC to consider future applications for onshore wind installations (ZR § 62-825), but notes that their contribution toward reaching the City's decarbonization goals is limited. Experience with buildingmounted vertical-access turbines, for instance, has been poor, with maintenance problems and minimal energy production.

BUILDINGS

Feedback on zoning text

- The proposed definition of an "ultra-low energy building" (ZR § 12-10) should be revised to reflect ambitious and achievable standards that will be durable.
 Recommended language for this definition appears at the end of this document:
 - The standard in paragraph (b)(2)(i) should reflect a "better than code" building. As this standard is updated by rule, as permitted by the proposed text, it should be recognized that the ability to outperform code will be increasingly constrained as codes become more stringent. IECC baseline performance is now over <u>33 percent better</u> than 15 years ago. In the future, the costs associated with outperforming code by x percent will increase, and we should expect this margin to decrease.
 - Accordingly, the standard in paragraph (b)(2)(ii) should reflect a "today's gold standard high-performance" building; i.e., equivalent to Passive House. At some point in the future, this standard may converge with code requirements, at which point compliance with this standard should be viewed as sufficient to fulfill the purpose of the text buildings need not exceed code at such time as code reflects the "gold standard."
 - When it votes on the proposed text amendment, the CPC's report should explicitly acknowledge the purpose of these respective standards, in order to provide adequate guidance for future rulemaking.
 - The standard of performance beyond ASHRAE 90.1 laid out in the proposed text for (b)(2)(i) is unachievable, and should be modified to reflect an achievable high-performance standard.
 - The EUI standard (kBTU/sf/yr) in (b)(2)(ii) cited should be framed in terms of site EUI, rather than source EUI. The purpose of the text amendment is to design buildings that, in conjunction with improvements to the electric grid, will achieve decarbonization goals. Use of source EUI would penalize electrified buildings built today, which is counter to the purpose of the proposal.
 - The EUI standards used reflect an old version of the Passive House standard, and should be updated. In addition, modeled EUI can vary depending on which modeling method or tool is used. The text should authorize DOB to promulgate as needed equivalent EUI standards for different tools. The text should avoid compelling use of one modeling tool or another, to avoid additional administrative burdens on buildings (e.g., a building that is certifying as Passive House should not have to do an additional form of modeling).
 - There is great variation in the EUIs for different uses and occupancies. Because it is desirable for zoning floor area regulations to be tied to the physical space rather than the specific nature of the occupancy (e.g., health care vs. commercial vs. warehouse), it is not possible to assign a simple EUI standard that would suffice for all uses. Therefore the (b)(2)(ii) standard should be applicable only to predominantly residential buildings. Other uses would remain eligible for the (b)(2)(i) standard.
- If a building was approved for the exterior wall floor area deduction under the current regulations, but does not meet the new regulations required for the 5% deduction, this appears to make the building non-compliant with respect to floor area, creating potential problems for this class of buildings. To avoid this, the text could specify that such a condition should not be considered a noncompliance.

 The proposed text (ZR §12-10, "floor area" definition) allows a 5% floor area deduction for electrification of an existing building or ultra-low-energy design of a new building. Should an existing building undergoing gut rehab (or any existing building) also be eligible to use the ultra-low-energy building option, at the owner's election, or should it be limited to the electrification option? It makes sense to allow existing buildings the more flexible electrification standard, but it doesn't seem to make sense to prohibit them from complying with the rules that would apply to a new building (even if this would be uncommon).

Additional comments

- When 2012's Zone Green proposal offered a floor area exemption for up to eight inches of exterior wall insulation, it was coupled with State legislation to update the corresponding reference in the Multiple Dwelling Law (MDL), and subsequent changes updated the NYC Building Code. DCP should consider working with legislators to introduce legislation that increases the permitted wall thickness in the Building Code § 3202.2.5 and MDL § 26(9)(m).
- The proposal allows accessory mechanical equipment like air conditioners and heat pumps to project up to 18 inches from an exterior wall into any yard. If a building is at the street line, a mechanical projection facing the street would conflict with the requirements of Chapter 32 of the Building Code, "Encroachments Into the Public Right-of-Way," which limits air conditioning units to four inches or 10 inches of encroachment, depending on their height above the right-of-way. Legislation modifying Chapter 32 should be proposed to align the Building Code with the zoning proposal.
- Can DCP clarify how to measure wall thicknesses where a de minimis portion of the wall assembly exceeds the permitted wall thickness? For example, if there is only a 1-inch-high wall at the base and a 1-inch wall at the window head, essentially a 7'-10" glazed window with added thickness only an inch only at the top and bottom? This is relevant in the re-cladding example. Energy code compliance seems to limit the potential for such a strategy to be misused.

TRANSPORTATION

Feedback on zoning text

- There is a potential conflict between the language at the end of ZR 25-412 and analogous sections (allowing residents to claim spaces upon written request to a landlord) and the provision of charging spaces. A building that invests in charging infrastructure should be able to allocate chargers to electric vehicles. This existing language implies that the owner of a ICE vehicle has the ability to take a charging space. We recommend **adding language to reflect that spaces dedicated to charging may be restricted to use by EVs**:
 - Such spaces provided pursuant to paragraphs (a) and (b) of this Section shall be made available to the occupants of the #residences# to which they are #accessory# within 30 days after written request is made to the landlord. <u>However, spaces allocated to electric vehicle charging may be</u> restricted to occupancy by electric vehicles.
 - We note that not all EV charging spaces are fixed, but rather that chargers may be installed that can reach multiple spaces. The text

appears to accommodate either dedicated charging spaces or a more flexible configuration, which is appropriate.

• The changes proposed to allow the parking of commercial or public vehicles in accessory parking facilities **do not specify that such commercial vehicles must be electric vehicles** (ZR § 36-461, 44-352). This appears to be at odds with the characterization and intended purpose of the proposed provisions, and should be revised.

Additional comments

- When outside users are allowed to charge their vehicles in an accessory parking space, the operation of a parking facility may be subject to the jurisdiction of the Department of Consumer Affairs (DCA). DCA regulations for parking facilities do not currently make provisions for charging of EVs, and do not for instance include any restrictions on the prices that can be charged for vehicle charging in such a facility. This allows underprovision of chargers with high prices charged for the chargers that are provided, a practice that will slow EV adoption. The City should consider rulemaking or legislation needed to authorize DCA to regulate parking facilities in a way that supports the economics of vehicle charging as well as its rapid adoption.
- The changes proposed to allow EV charging as a Use Group 6 use are laudable for expanding the potential for EV charging at a wider range of locations. However, DCP should consider the potential for this provision to encourage curb cuts in inappropriate locations where they would disrupt the pedestrian or retail environment, and whether any limitations should be introduced on this provision.
- Questions may arise during the public review process as to whether the conversion of existing parking spaces for a rent stabilized building to public EV charging would be considered a reduction in services. DCP should work with HPD and the Law Department to understand these implications.

WASTE & WATER

Additional comments

• Consider complementary administrative changes or legislation that would encourage removal of impervious surfaces and/or use of porous paving alternatives. For instance, owners should be able to get credit for installation and maintenance of permeable surfacing during the DEP sewer permitting process, or via a stormwater credit.

MISCELLANEOUS

Feedback on the zoning text

 The language amending the definition of "accessory" (ZR 12-10) to facilitate accessory infrastructure sharing across campuses, appears sufficient to also enable centralized amenities (e.g., a fitness center serving multiple buildings on a campus), district energy strategies, graywater collection, and refuse/recycling storage. This is an important feature of the proposal. Recommended language for 12-10 definition of "ultra-low-energy building":

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(2) for all other #buildings#:

(i) an energy use intensity that is no greater than 1550 percent or more below the energy use intensity of such a building if designed and constructed according to one of the approved modeling methods in ASHRAE 90.1; or

(ii) <u>for predominantly #residential buildings#</u>, a <u>source_or site</u> energy use intensity that is no greater than:

1. 34 kBTU per square foot per year for #buildings# not exceeding four #stories#;

2. 45 kBTU per square foot per year for #buildings# of more than four #stories# but not exceeding eight #stories#;

3. 48 kBTU per square foot per year for #buildings# exceeding eight <u>#stories#.</u>

The Department of Buildings may allow the use of alternative parameters to the energy use intensity thresholds specified in paragraph (b)(2)(ii) of this section, which are based on DOE-2 energy modeling, to enable the application of equivalent standards that utilize other energy modeling methods.