city of **yes**

city of **solar**
city of **health**
city of **energy**
city of **carbon neutrality**
city of **resilience**

NYC PLANNING

city of **yes**
for Carbon Neutrality

Referred April 24, 2023

city of **yes**
for Economic Opportunity

Referral this fall

city of **yes**
for Housing Opportunity

Referral Spring 2024

Updating our zoning to support decarbonization

A citywide zoning text amendment to **remove impediments** to, and **help support**, ongoing decarbonization of:

our grid
supporting the greening of our grid by broadly allowing for wind, solar, and storage

our buildings
supporting the retrofitting of NYC's buildings to become energy-efficient and electrified

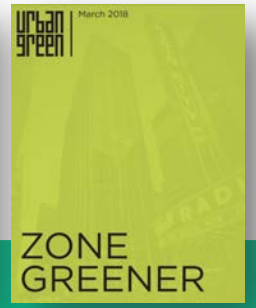
our vehicles
supporting EV adoption, biking, and e-mobility, by broadly allowing for charging

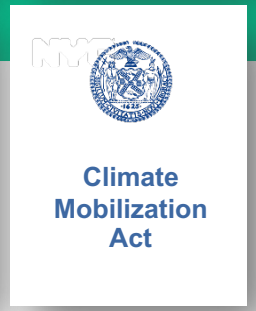
our waste
supporting other City efforts to grow composting and rainwater collection

…in order to reduce New York City's operational carbon emissions 80% by 2050, in line with the Paris Agreement.

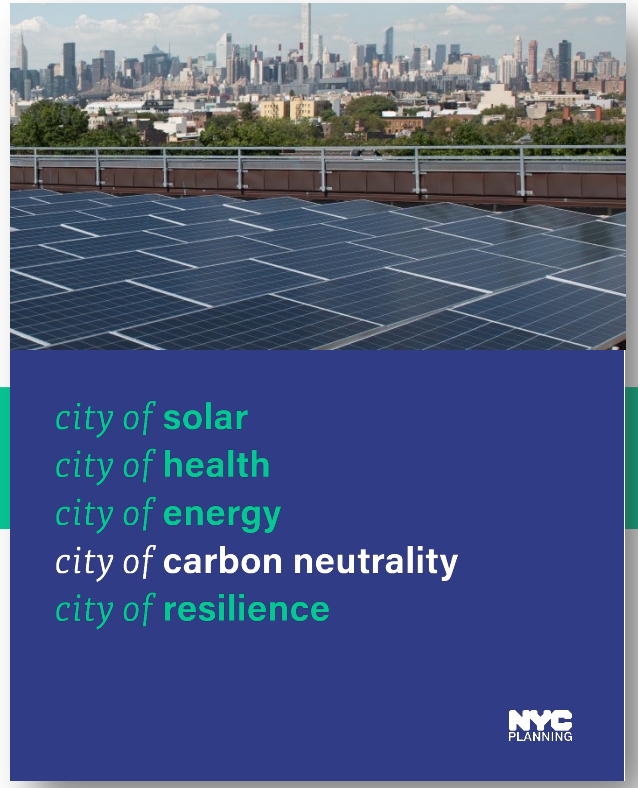
Building on a strong foundation:

2012 Zone Green text amendment





2012: Designed to support elective, progressive experiments with “green building features”



2023: Respond to the climate crisis by removing zoning impediments to urgent retrofitting work, solar, energy storage, and EVs

Engagement process to date

March 2022
City of Yes Kickoff

June 2022
Engagement Kick-off

October 2022
Info Session 1

Urban Green convening
March 2023

March 2023
Info Session 2

April 2023
Referral

Initial stakeholder outreach

Collaboration with advocates and practitioners

to date:

Four open-to-the-public pre-referral info sessions	**100+** meetings with stakeholders	**Two** in-depth working sessions convened with Urban Green Council

Where do we need to go? How can zoning help?

Meeting the challenge of our climate crisis is a massive undertaking.

We've worked with our partner agencies, as well as dozens of non-profit and private-sector groups, to understand what they're working on – **and how zoning can help support their efforts.**

Inclusion here does not necessarily indicate endorsement.

Goal 1

Decarbonize our energy grid

By 2040, the New York energy grid must be 100% renewably-based

see: **2019 NYS CLCPA**

Since 2016, we have an ambitious goal for solar in NYC – and to date, we're only a third of the way there.

see: **2016 Climate Week NYC**

The grid of the future will be less centralized with 'distributed resources' spread across the city

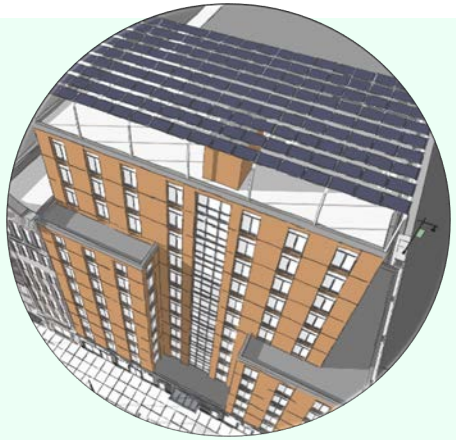
see: **2015 NYS Reforming the Energy Vision**

To store clean energy, and respond to demand, gigawatts of local energy storage will be crucial.

see: **2022 State of the State**

Goal 1

Decarbonize our energy grid



1. Rooftop solar: remove zoning impediments to allow up to 100% coverage

2. Parking lots: ensure zoning always allows solar canopies

3. Community Solar: allow renewable energy generation in all zoning districts

4. Energy Storage: allow some facilities as-of-right in all zoning districts

5. On-shore wind: create a tool for future review of proposed wind

Goal 2

Decarbonize our building stock

Our buildings are NYC's biggest source of CO_2 emissions

see: **2019 NYS CLCPA**

To decarbonize our building stock, virtually every one of our city's 1,000,000+ buildings will need to be retrofit.

2015 Roadmap to 80x50

Windows and walls will need to be improved or replaced with new efficient ones.

Boilers and furnaces will need to be replaced with all-electric heat pumps

Large buildings (> 25,000 sf) that fail to cut their CO_2 emissions will face steep fines

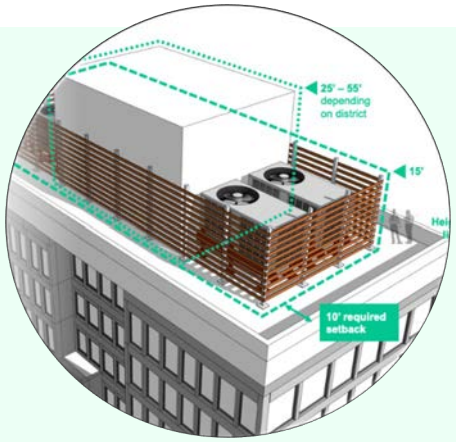
2019 NYC Climate Mobilization Act (Local Law 97)

New buildings will be prohibited from installing fossil-fuel equipment

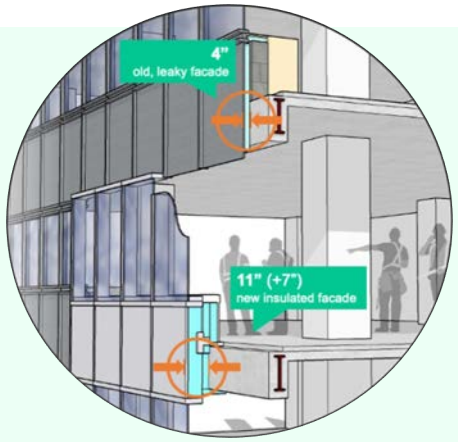
Local Law 154

Goal 2

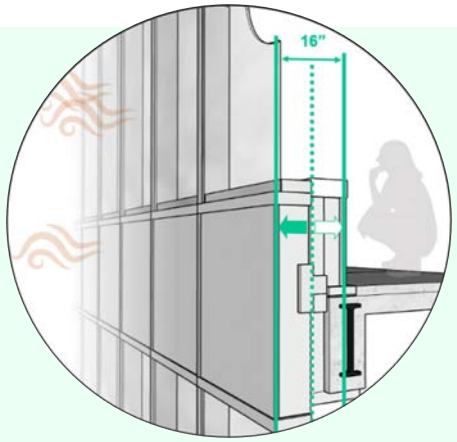
Decarbonize our building stock



6. Electrification retrofits:
expand rooftop and yard allowances to accommodate increased need for outdoor electrified equipment like heat pumps



7. Building exterior retrofits:
fix rules to ensure that the widest range of exterior retrofits are allowed.



8. Fix Zone Green:
update and improve this floor area exemption to ensure it continues to promote better-than-code performance.

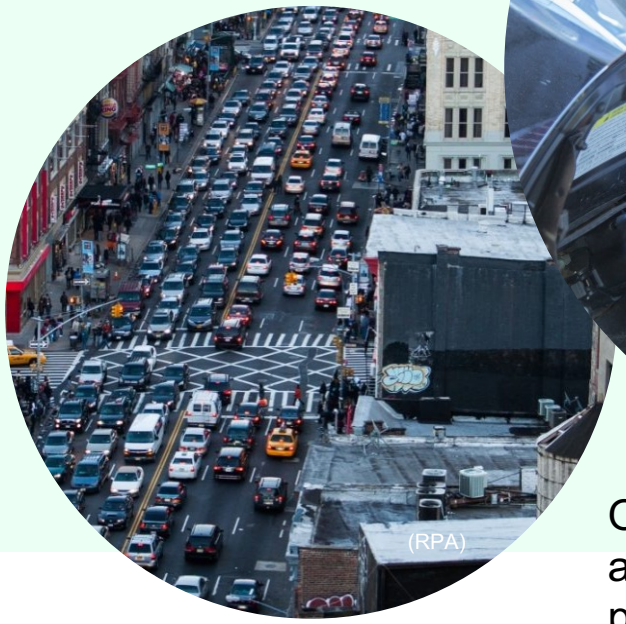
Funding?
NYC Accelerator from the MOCEJ can help connect homeowners to funding assistance.

Goal 3

Decarbonize our vehicles

Less than 1% of the 2,000,000 cars registered in NYC are zero-emission.

see: **NYS DMV, 2021**


(RPA)


Charging an EV (DOT)

One of the biggest hurdles to achieving **EV adoption** is finding a place to charge overnight.

see: **The New York Times**

By 2035, all vehicles sold in NYS must be EV; demand for charging will rapidly increase

see: **NYS Adv. Clean Cars II**


(Citibike)

A one-to-one transition to EVs is not the solution. We also need to promote greater use of **bicycles**, **e-mobility**, and **mass transit**.

see: **2016 PlaNYC**

Goal 3

Decarbonize our vehicles

9. Vehicle charging: expand allowance to all Commercial Districts

10. Charge-sharing: allow a % of residential spaces to be shared w/ the public

11. Parking flex: streamline car-sharing, car rental, and commercial parking rules in non-residential facilities

12. Automated parking: expand rules to encourage more automated facilities outside the Manhattan Core

13. Bike parking: add rules for storage and charging

Goal 4

Decarbonize our waste streams

Our waste stream only accounts for 4% of our City's greenhouse gas footprint – but there are some **clear steps** to take.

80x50

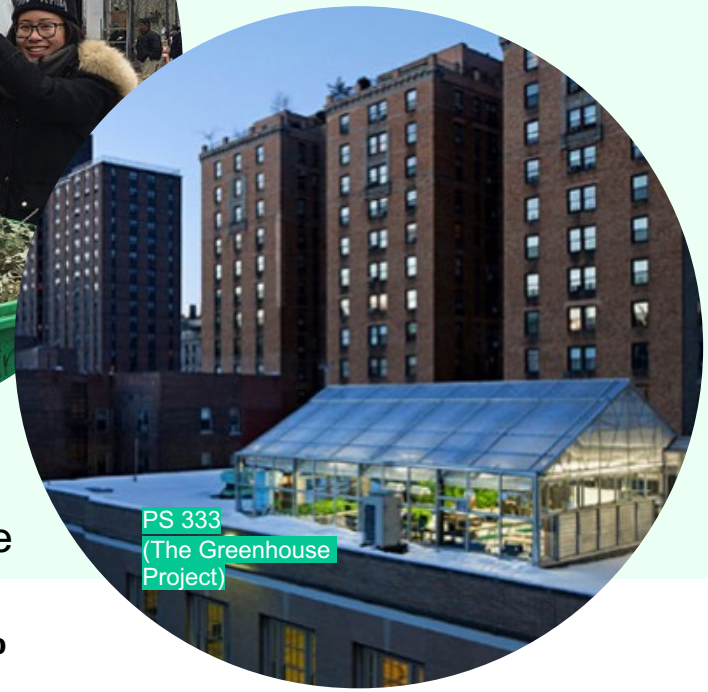
Reducing stormwater runoff also reduces the need for energy-intensive stormwater treatment

Newtown Wastewater Treatment Plan (DEP)

Organics Drop-off (GrowNYC)

By diverting organic material from the waste stream, we can reduce our solid waste by **45%**

Supporting local food systems can also play a role in reducing CO_2 associated with food.



PS 333 (The Greenhouse Project)

Goal 4

Decarbonize our waste streams

14.
Porous paving:
clarify language to ensure permeable paving is allowed.

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

16.
Organics:
add new use regulations clarifying when composting and recycling are allowed.

17. Rooftop greenhouses:
simplify the process for adding them by allowing as-of-right

Results from the public review process:

To date, 35 of 59 Boards have submitted resolutions:

Results from Borough Board + Borough President review:

MN
BP: Approval
BB: Approval

QN
BP: Approval
BB: Waived

BX
BP: Approval
BB: Approval

BK
BP: Approval
BB: Waived

SI
BP: Disapproval
BB: *awaiting*

Commission modifications to the proposal:

Energy Infrastructure Equipment

ZR Sections 12-10, 22-14, 26-61

- Improved language to make it clear that **fossil-fuel based systems** are ineligible to qualify under this definition.
- Clarify how the **10,000 ft^2 maximum** for Use Group 4 classification is evaluated
- Enhanced **screening + vegetation requirements** with design criteria for fences and vegetation, up to a minimum height, with evergreen species, will fully screen all sides (not just front) of the facility.

Commission modifications to the proposal:

Ultra Low Energy Building

ZR Sections 11-333, 12-10

- Create a transition period for buildings currently designed / in design using current Zone Green deduction
- Remove the pathway for buildings achieving 38 kBTU/sf/year (because this likely will be less-stringent than code in coming years) and modify the “50% better than ASHRAE 90.1” requirements to 15%, which practitioners and DOB agree would be achievable.
- Allow existing buildings to qualify for the exemption.

Commission modifications to the proposal:

Definition of “**accessory use”** (12-10)

- Re-draft proposed changes to avoid perception of expansive changes, more clearly address the intended subject: campus-based developments under single ownership.

Definition of “**qualifying exterior wall thickness**” (12-10)

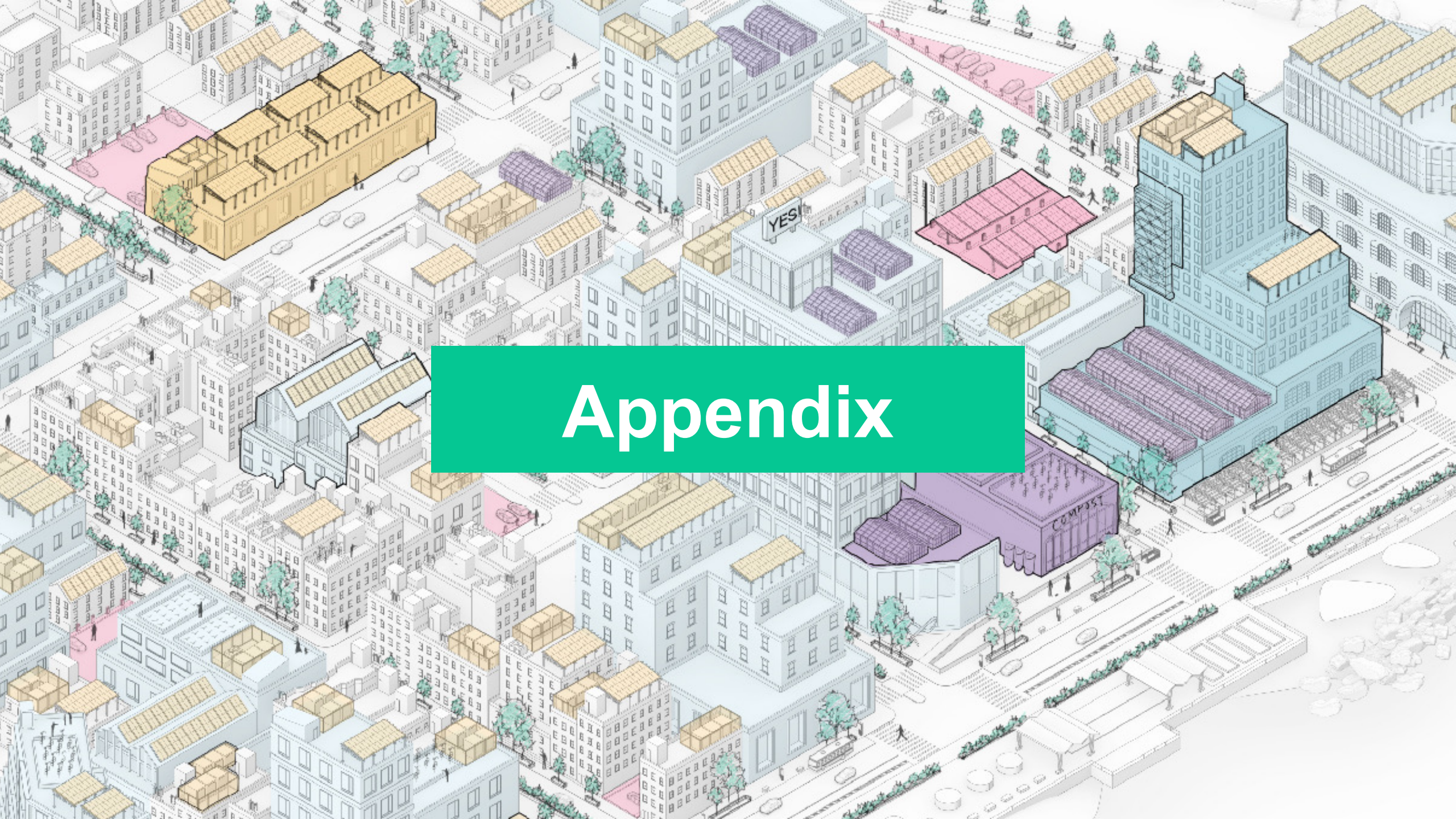
- Small textual adjustments to more clearly address what is permitted to be included in this area, as well as to avoid rendering current buildings non-compliant.

Paragraphs (K) and (L) of the definition of “floor area” (12-10)

- Due to concern around deleting paragraph (K), and concern about landmarks being “boarded up” to siphon off floor area, this paragraph is retained and more carefully edited to ensure ordinarily-exempt mechanical space remains exempt.

Permeability (105-01, 119-01) Clarify that permeable paving counts as impervious surfacing in Natural Areas and Hillsides special districts.

Thank you!



Appendix

Summary of proposal

ENERGY

1. **Rooftop solar:** removing zoning impediments.
2. **Solar parking canopies:** remove zoning impediments to allow.
3. **Solar:** ensure standalone generation is allowed
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

BUILDINGS

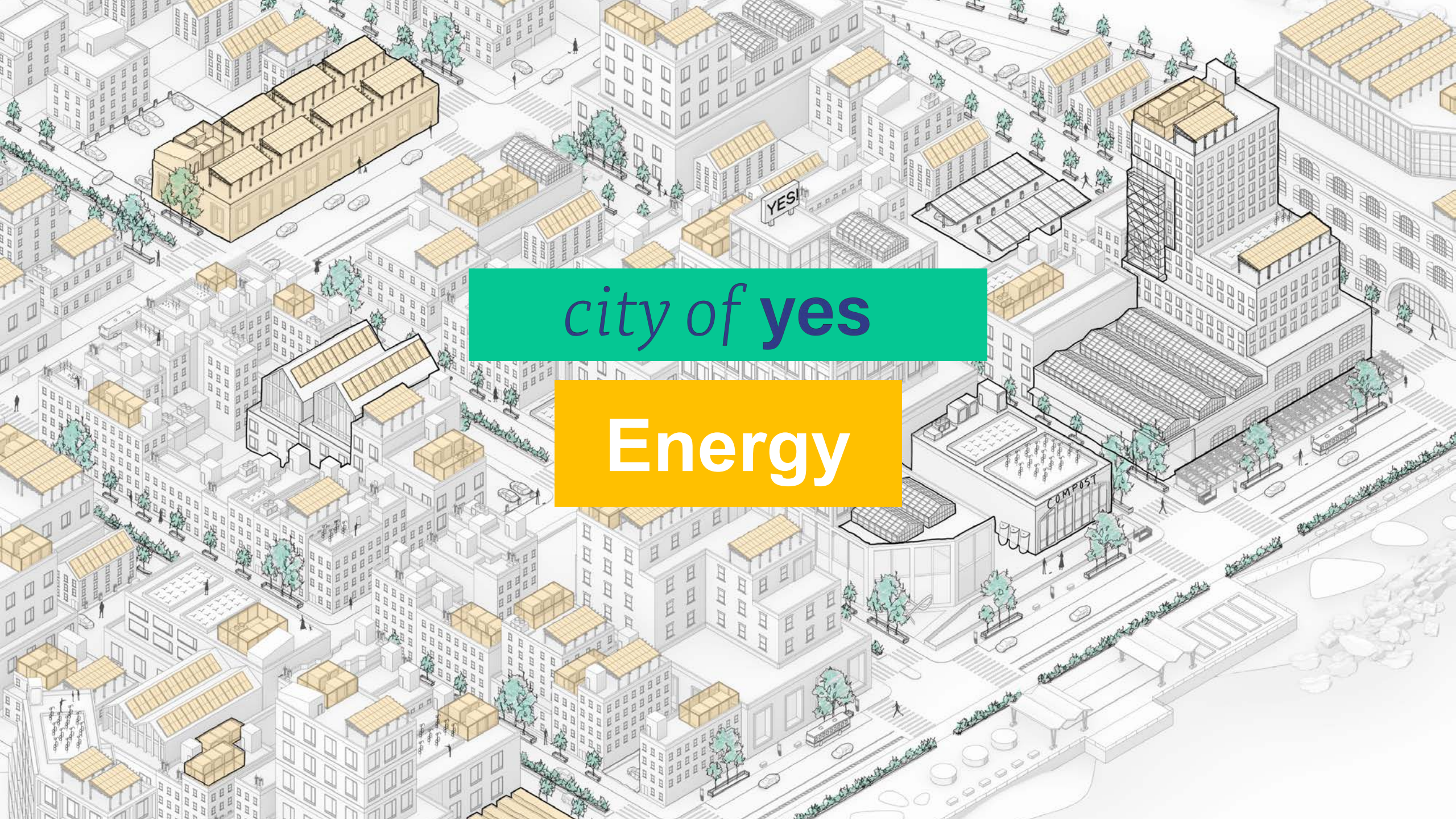
6. **Electrification retrofits:** expand rooftop and yard allowances to accommodate increased need for outdoor electrified equipment like heat pumps
7. **Building exterior retrofits:** fix rules to ensure that the widest range of exterior retrofits are allowed.
8. **Fix Zone Green:** update and improve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

TRANSPORTATION

9. **Vehicle charging:** expand allowance to all Commercial Districts
10. **Charge-sharing:** allow a % of residential spaces to be shared w/ the public
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

WASTE & WATER

14. **Porous paving:** clarify language to ensure permeable paving is allowed.
15. **Street Trees:** update rules to accommodate new raingarden prototypes
16. **Organics:** add new use regulations clarifying when composting and recycling are allowed.
17. **Rooftop greenhouses:** simplify the process to allow them as-of-right



city of **yes**

Energy

Goal 1

Decarbonize our energy grid

By 2040, the New York energy grid must be 100% renewably-based

see: **2019 NYS CLCPA**

To meet demand, we need to generate energy everywhere; we've set a goal of 1000 MW of rooftop solar by 2030.

see: **2016 Climate Week NYC**

The grid of the future will be less centralized with 'distributed resources' spread across the city

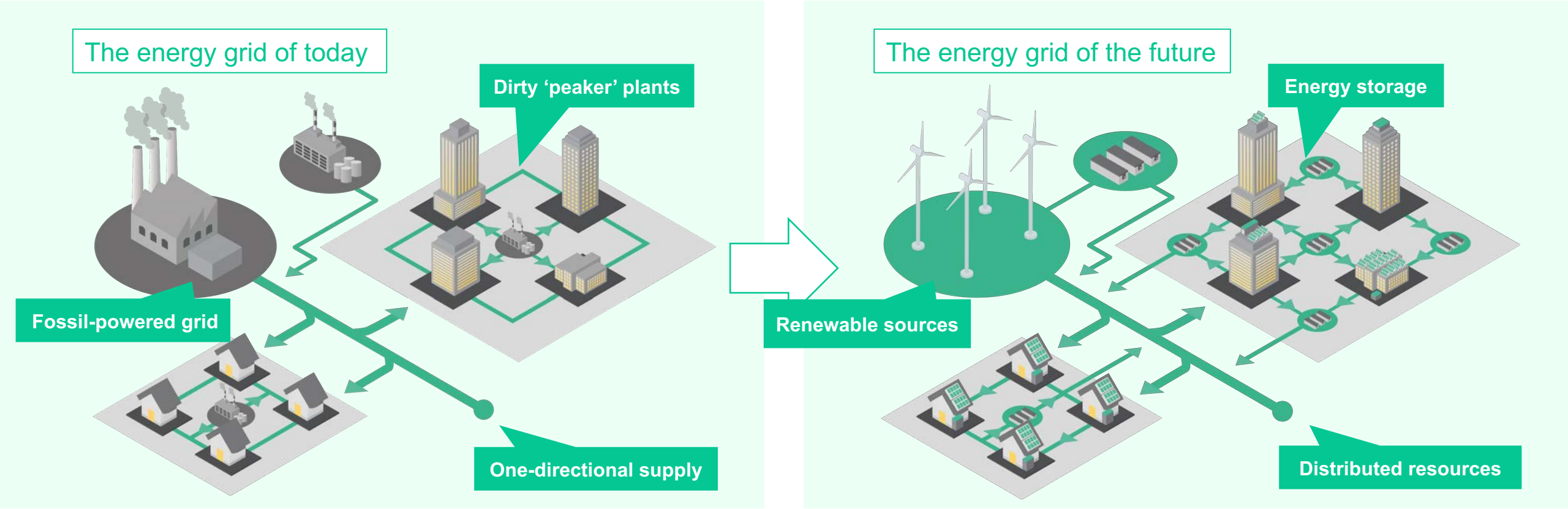
see: **2015 NYS Reforming the Energy Vision**

To store clean energy, and respond to demand, gigawatts of local energy storage will be crucial.

see: **2022 State of the State**

Goal 1

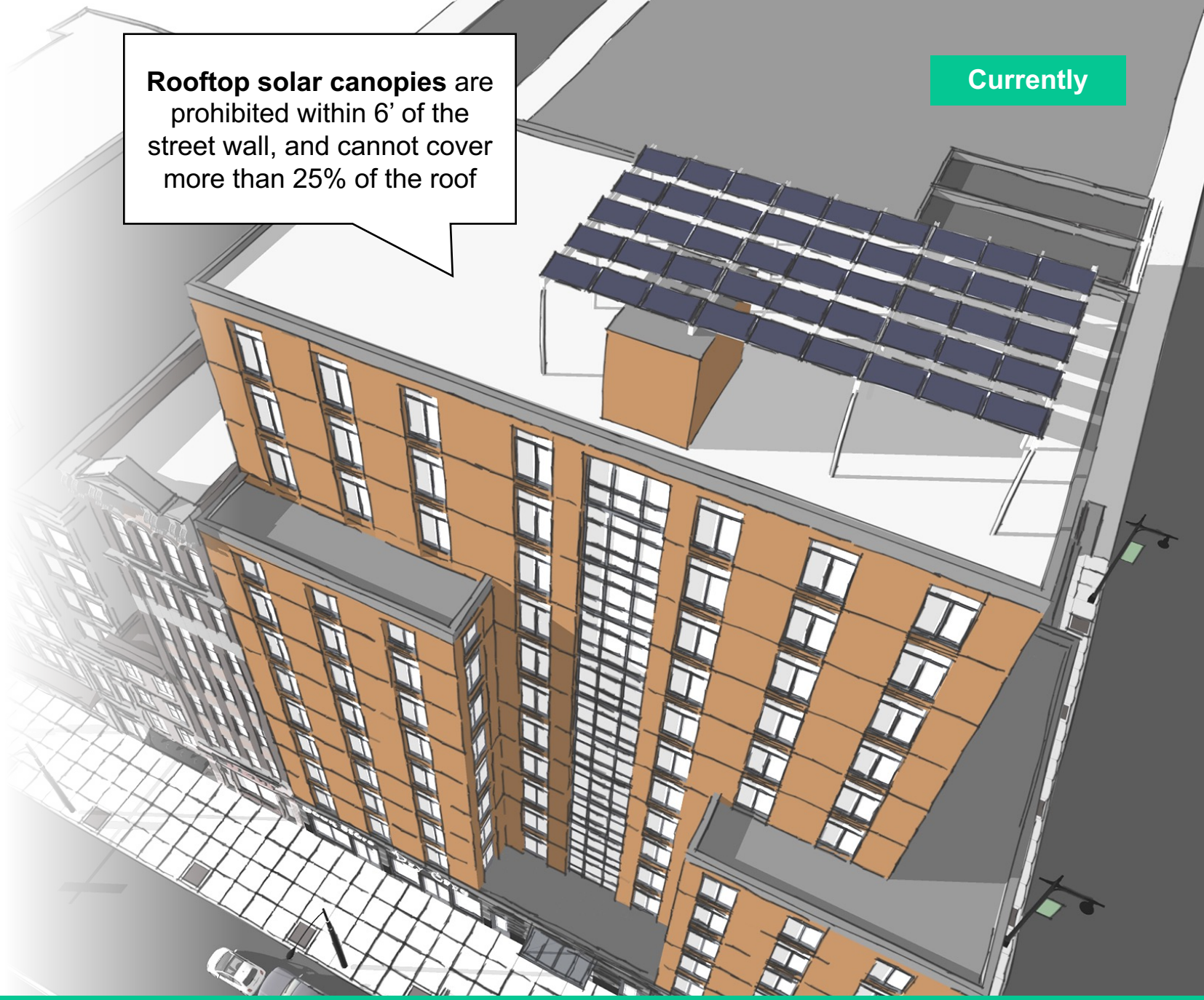
Decarbonize our energy grid



Proposal 1

Solar on building rooftops (flat)

- **Currently:** Zoning allows solar panels to be added to flat roofs, above the height limit, up to 6’ (R1-R5) or 15’ (R6+, C, M). When elevated to these heights, a 25% maximum coverage, and 6’ setback from the façade, also apply.
- **Issue:** These zoning rules curtail how much solar a home/building owner realistically can install, artificially limiting solar potential and making installations infeasible. (The 6’ height in certain districts also conflicts with FDNY need for 9’ of clear headroom.)
- **Proposal:** Remove coverage and setback requirements for rooftop solar, and apply a 15’ maximum height limit to all flat-roof solar installations, regardless of district.



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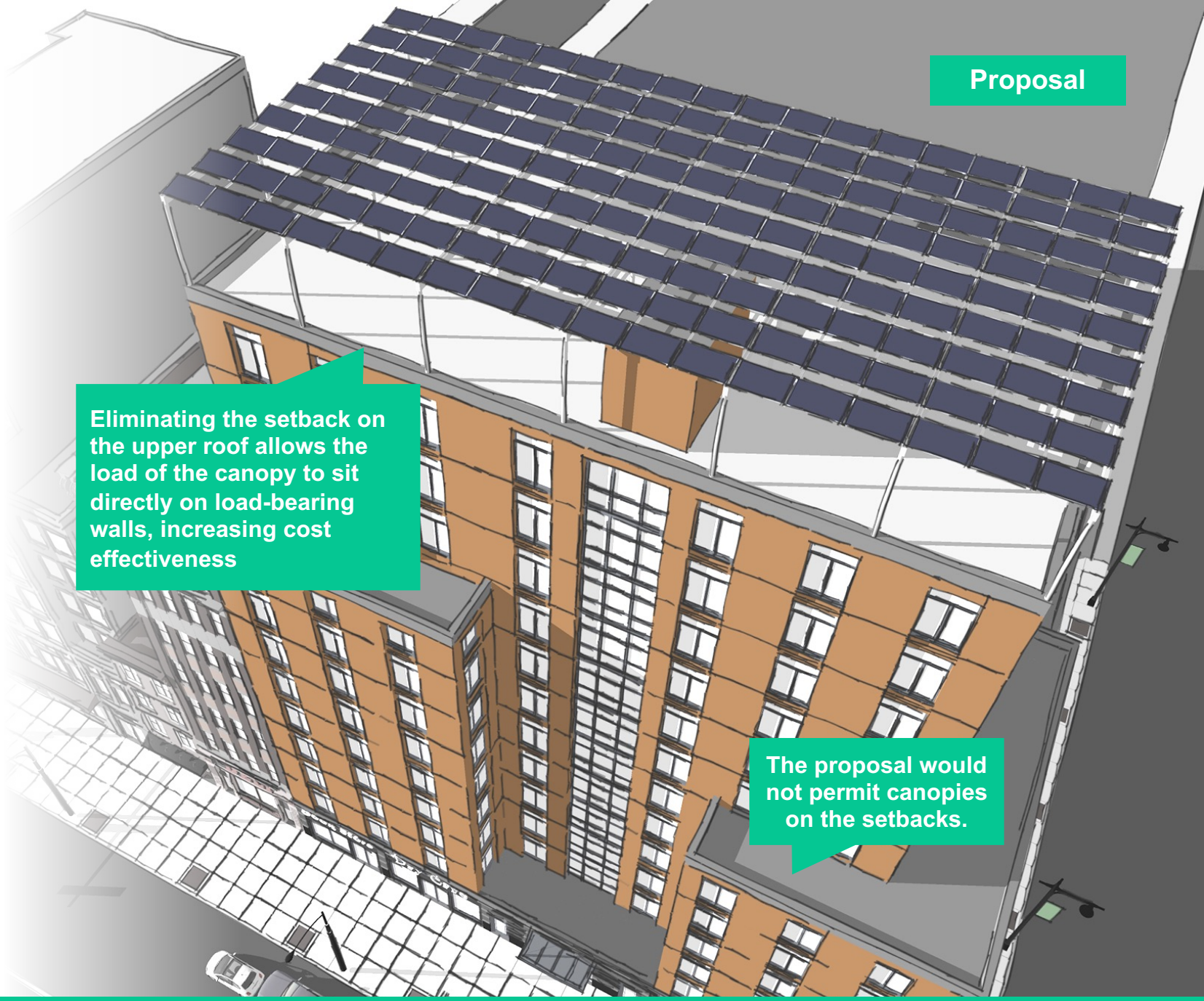

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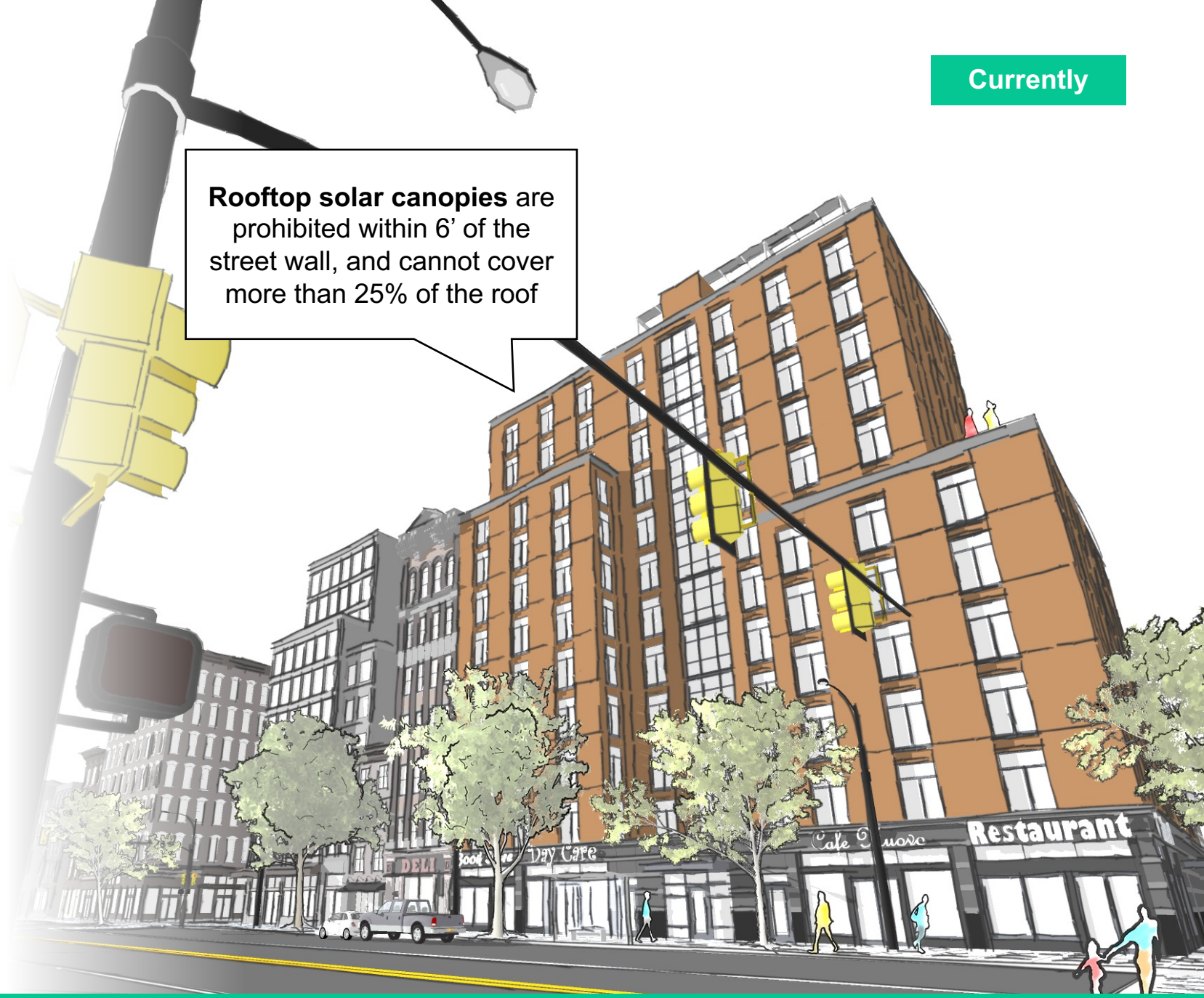
Currently



Proposal 1

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- **Issue:** These zoning rules curtail how much solar a home/building owner realistically can install, artificially limiting solar potential and making installations infeasible. (The 6’ height in certain districts also conflicts with FDNY need for 9’ of clear headroom.)
- **Proposal:** Remove coverage and setback requirements for rooftop solar, and apply a 15’ maximum height limit to all flat-roof solar installations, regardless of district.

LPC review would still be required in historic districts and for landmarked buildings.

Proposal 1

Solar on building rooftops (flat)

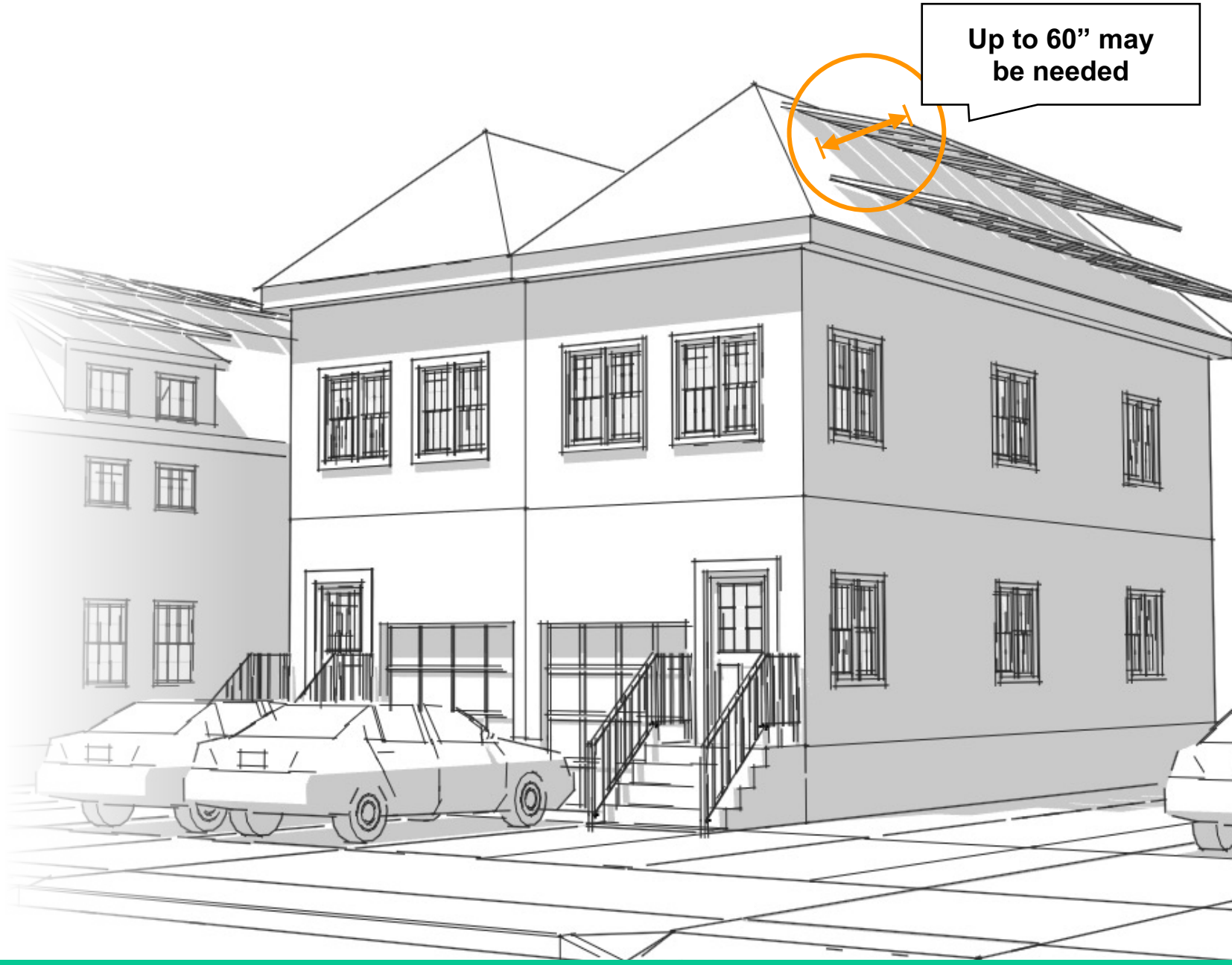
Currently for solar energy systems >4’ in height, where above the zoning height limit:	
Height limit	6’ (R1-R5) 15’ (R6+, C, M)
Coverage cap	25%
Rooftop setback	6’ from street wall
Contextual setback	Not allowed

Proposal for solar energy systems, where above the zoning height limit:	
Height limit	15’ (all districts)
Coverage cap	100%
Rooftop setback	0’ from street wall
Contextual setback	Not allowed
New BSA special permit to increase height allowances if needed	

Proposal 1

Solar on building rooftops (sloped)

- **Currently:** Zoning allows solar panels to be added to sloped roofs, above the height limit, up to a maximum of 18 inches.
- **Issue:** This requires panels to hug the roof, even on roofs with poor solar orientations. Without the ability to “tilt” the installation to catch more sun, the installation is infeasible.
- **Proposal:** Provide greater flexibility for rooftop solar on pitched roofs, by expanding the 18” allowance to **60”**.



Proposal 2

Solar canopies over parking areas

- **Currently:** Zoning allows “accessory off-street parking spaces, open or enclosed” to obstruct a number of required open spaces, required front yards, required rear yards, etc.
- **Issue:** “Solar awnings/canopies” are not always permitted in the same areas as parking, preventing their installation.
- **Proposal:** Allow solar awnings / canopies (pictured at right) to cover parking areas by adding them as 'permitted obstructions'

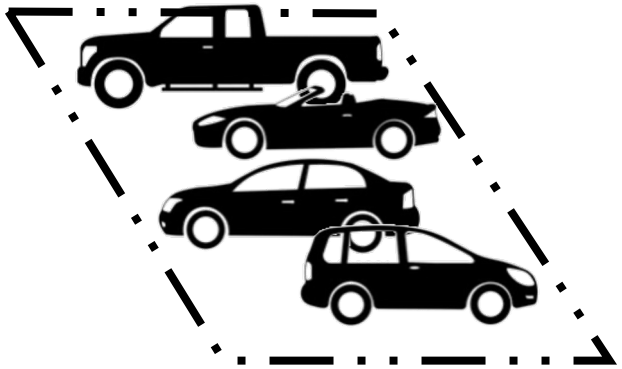
Proposal 3

Community solar + other renewable energy: Primary uses vs. accessory uses

Example: **vehicle parking** in a **Residence District**

Primary use

Primary use with an allowed **accessory use**



Disallowed primary use

Proposal 3

Community solar + other renewable energy

- **Currently:** The Zoning Resolution (ZR) currently classifies “non-accessory” solar generation as a commercial use.
- **Issue:** Large parts of the city are off-limits to crucially-needed, grid-supporting solar arrays. To locate here, solar and storage systems need to be kept small so that they can be considered “accessory” – precluding grid-supporting installations.
- **Proposal:** Reclassify this use as “energy infrastructure equipment (EIE)” and permit installations of <10,000 ft^2 in Residence Districts as-of-right.

Proposal 3

Community solar + other renewable energy

- **Currently:** The Zoning Resolution (ZR) currently classifies “non-accessory” solar generation as a commercial use.
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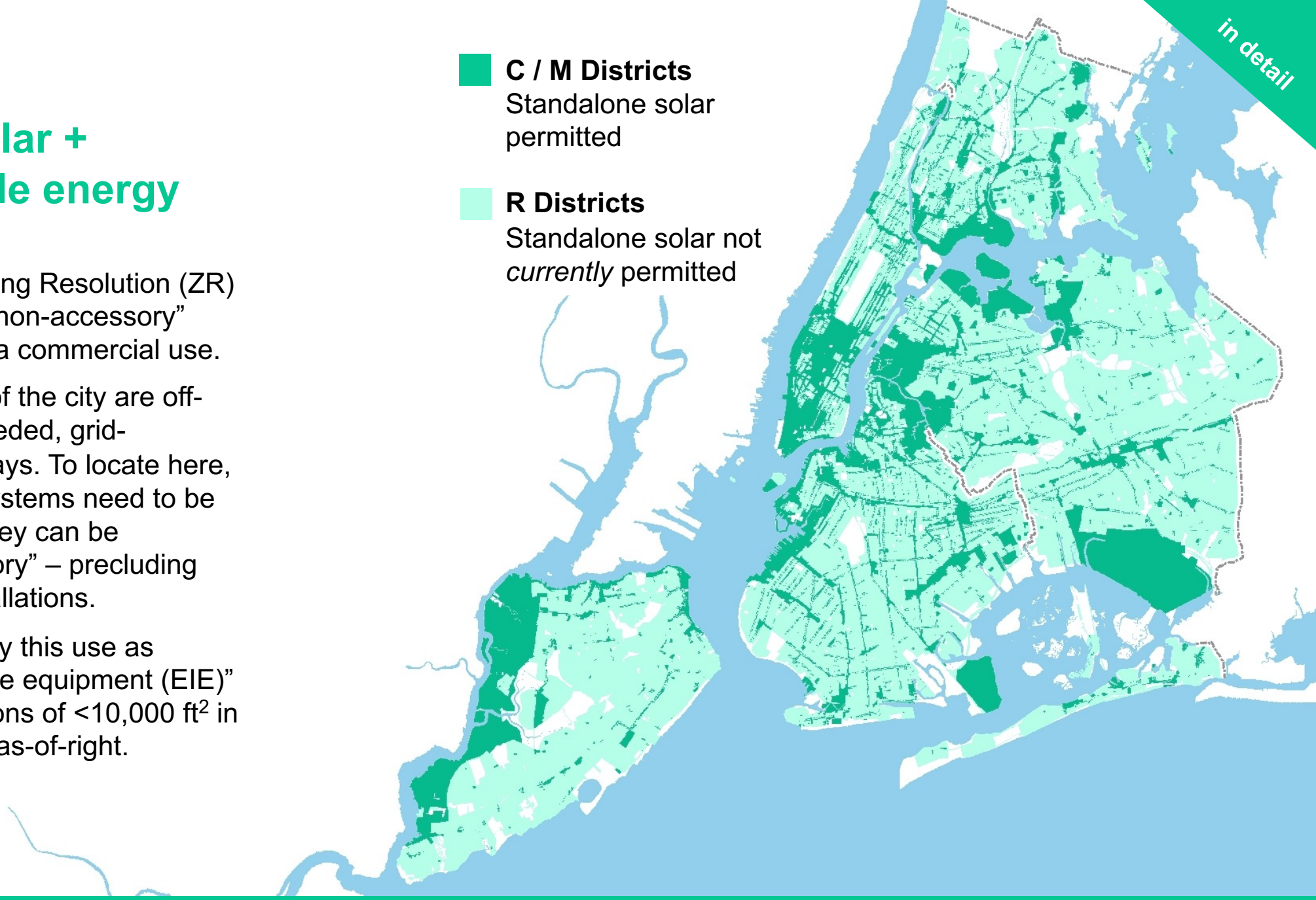


Proposal 4

Energy storage systems (ESS)

What is energy storage?

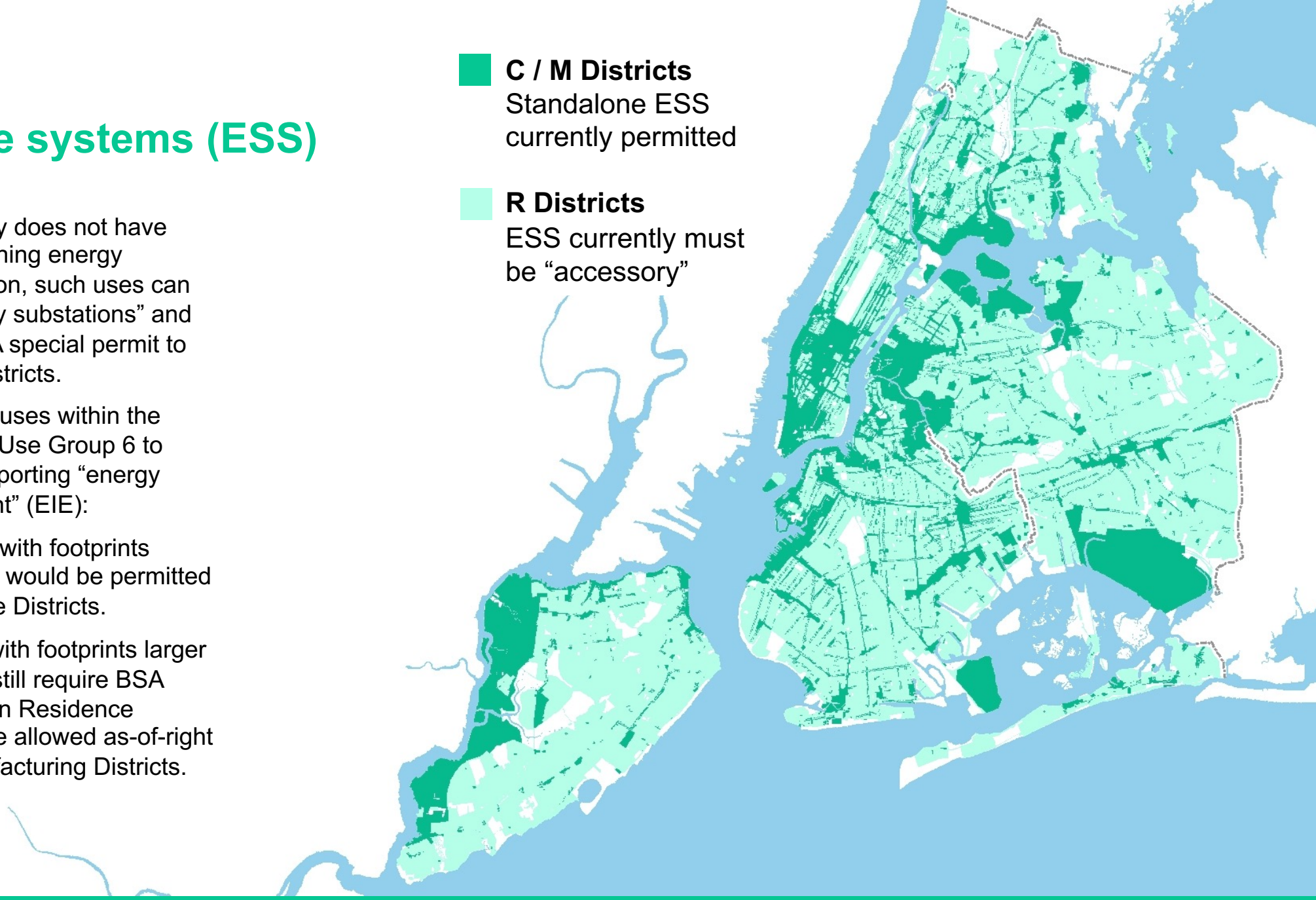
- Battery-based ESS are available with many different chemistries (e.g., Lead, LCO, LiFePO4)
- Battery-based systems are thoroughly reviewed, extremely safe, and are completely different from the systems found in common e-bike batteries.
- Each facility is essentially custom-designed and installed by specially-trained engineers and electricians.
- All installations must use UL-certified technologies pre-approved by FDNY
- All installations must be reviewed on a site-specific basis by DOB
- All installations >250 kW are classified as “large” systems and also all must be reviewed in parallel by DOB and FDNY

Rooftop energy storage
at the Barclay’s Center, BK

Proposal 4

Energy storage systems (ESS)

- **Issue:** The ZR currently does not have clear regulations governing energy storage. By interpretation, such uses can qualify as “electric utility substations” and thus must obtain a BSA special permit to locate in Residence Districts.
- **Proposal:** Create new uses within the ZR’s Use Group 4 and Use Group 6 to accommodate grid-supporting “energy infrastructure equipment” (EIE):
- **Smaller installations**, with footprints smaller than 10,000 ft^2, would be permitted as-of-right in Residence Districts.
- **Larger installations**, with footprints larger than 10,000 ft^2, would still require BSA review before locating in Residence Districts. They would be allowed as-of-right in Commercial + Manufacturing Districts.



in detail

Proposal 4

Energy storage systems (ESS)

	R Districts	C Districts	M Districts
Accessory solar / wind Accessory ESS	Permitted AOR	Permitted AOR	Permitted AOR
Electric utility substation <10k sf	**BSA permit needed**	Permitted AOR	Permitted AOR
Electric utility substation 10k-40k sf	**BSA permit needed**	**BSA permit needed**	Permitted AOR
Electric utility substation >40k sf	**CPC permit needed**	**CPC permit needed**	Permitted AOR

	R Districts	C Districts	M Districts
Accessory solar / wind Accessory ESS	Permitted AOR	Permitted AOR	Permitted AOR
Energy infrastructure equipment ≤10k sf	**Permitted AOR**	Permitted AOR	Permitted AOR
Energy infrastructure equipment >10k sf	**BSA permit needed**	**Permitted AOR**	Permitted AOR
Electric utility substation regs will remain for actual substations	n/a	n/a	n/a

+ Clarifications that accessory energy storage + electrical equipment is included in "mechanical" floor area exemption

+ Clarifications allowing within rooftop mech. obstructions

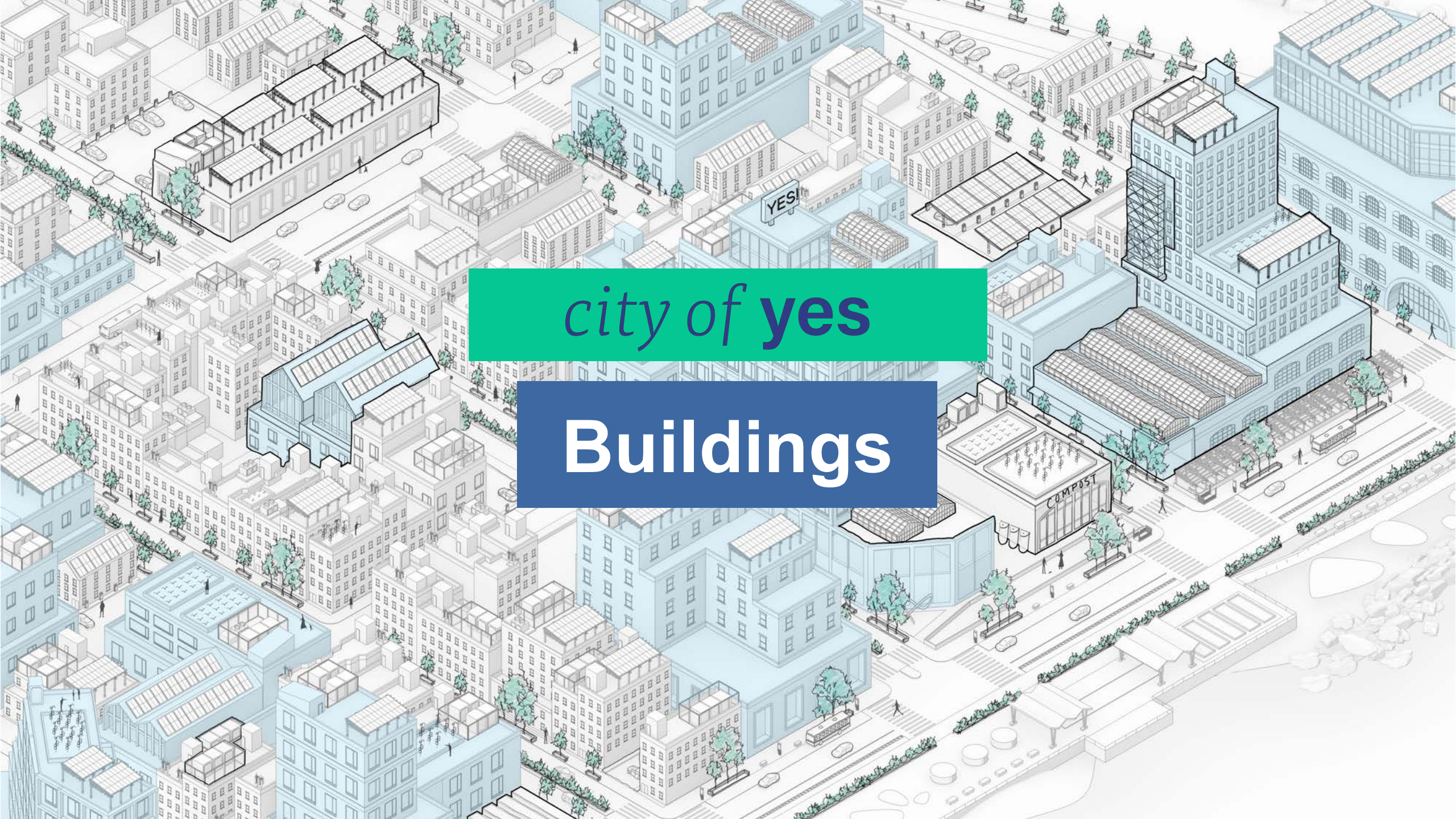
*** ESS Installations will always require safety review by DOB, and for systems >250kW, FDNY as well.**

Proposal 5

New authorization for on-shore wind

- **Currently:** Along the waterfront, on-shore wind turbines must comply with strict height limits *(see table at right).*
- **Issue:** Some installations may need greater height flexibility. However, there is no tool to allow the CPC to consider such applications.
- **Proposal:** Create a new authorization that will allow the CPC to consider future applications for height & setback relief to facilitate on-shore wind. (This proposal itself will not change the height limits for on-shore wind.)

Current regulations	on roof	on ground
R1 – R5 + C Overlays	**n/a**	**35’**
R6 – R10 + C Overlays + Most C Equivalents M Districts (excl. M1-1)	50% of bldg. height or **55’** whichever is less	**35’**
C4-1, C7, C8, M1-1	**55’**	**85’**
Not allowed in, or within 10’ of, waterfront yards and/or WPAAs		



city of **yes**

Buildings

Goal 2

Decarbonize our building stock

Our buildings are NYC's biggest source of CO_2 emissions

see: **2019 NYS CLCPA**

To decarbonize our building stock, virtually every one of our city's 1,000,000+ buildings will need to be retrofit.

2015 Roadmap to 80x50

Windows and walls will need to be improved or replaced with new efficient ones.

see: **NYC 80x50**

Boilers and furnaces will need to be replaced with all-electric heat pumps

see: **NYC 80x50**

Large buildings (> 25,000 sf) that fail to cut their CO_2 emissions will face steep fines

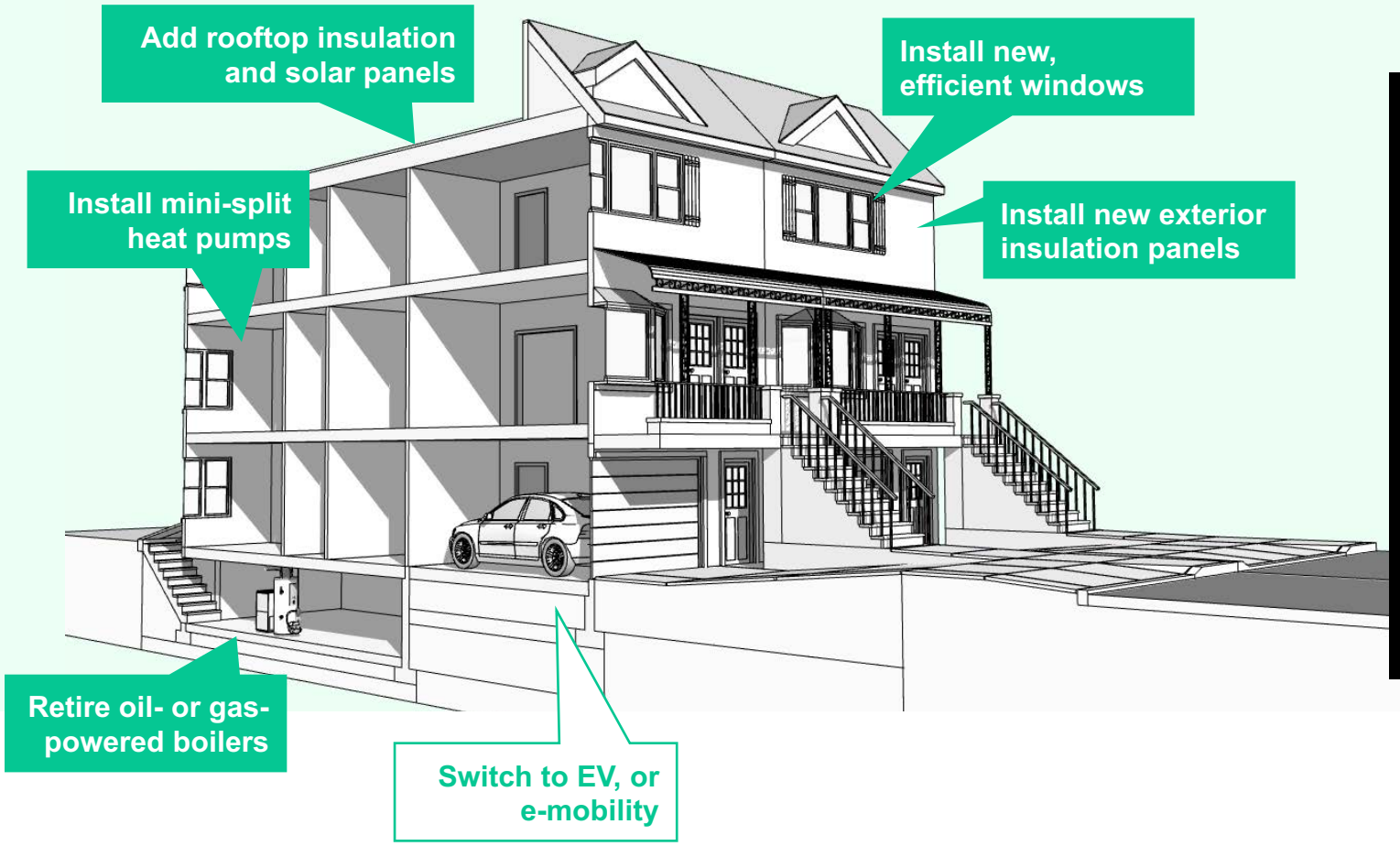
2019 NYC Climate Mobilization Act (Local Law 97)

New buildings will be prohibited from installing fossil-fuel equipment

Local Law 154

Goal 2

Decarbonize our building stock



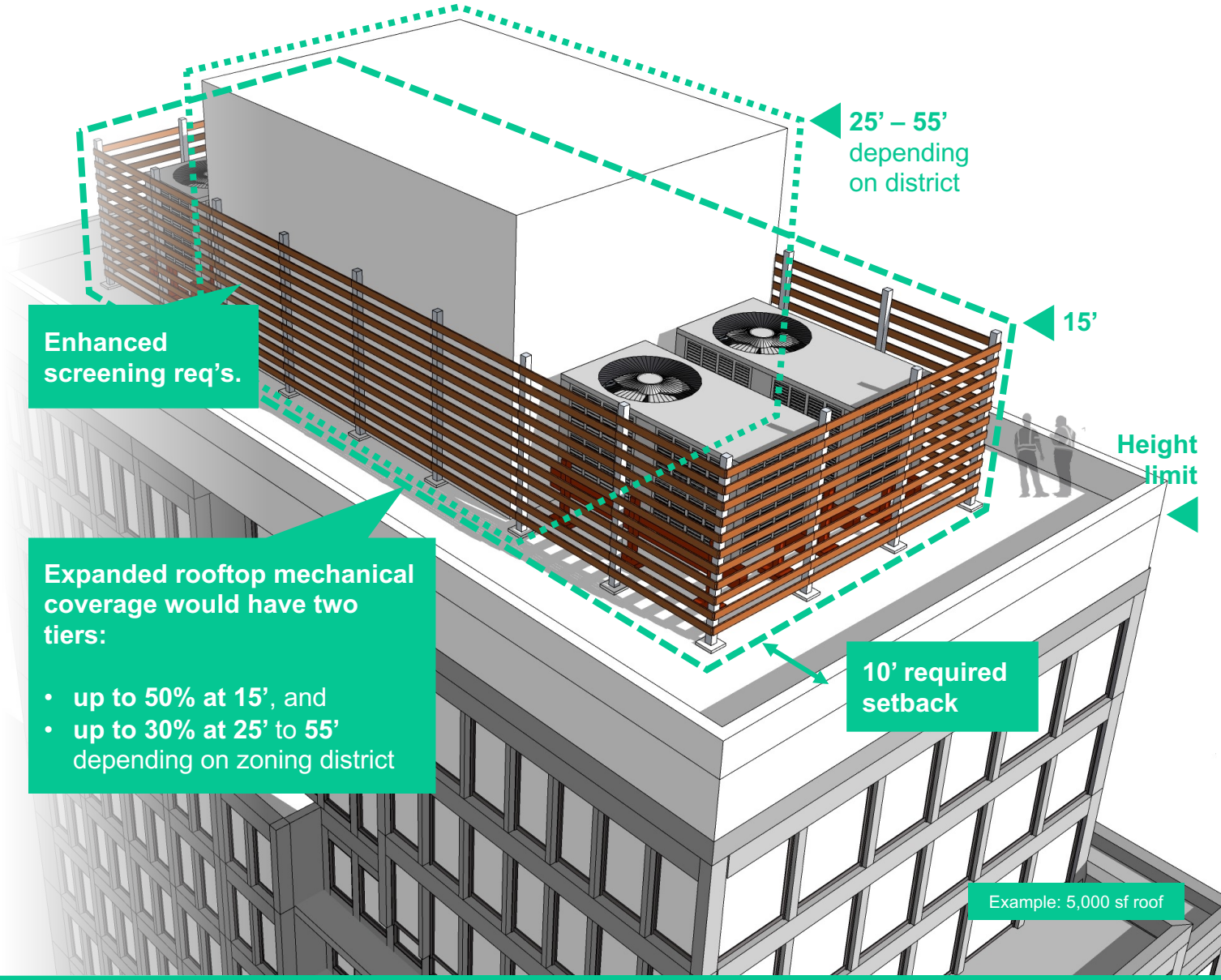
NYC ACCELERATOR

- A program of the **MOCEJ (Mayor's Office of Climate and Environmental Justice)**
- NYC Accelerator provides free expert guidance and trainings
- It also connects home- and building-owners to service providers and financing opportunities
- **accelerator.nyc**

Topic 6

Retrofitting mechanical equipment for electrification

- **Currently:** Zoning regulates how much rooftop mechanical equipment is permitted above the zoning height limit. This takes the form of a coverage cap, and separate height limit, on the rooftop mechanical equipment.
- **Issue:** Buildings which are retrofitting to all-electric systems often need to replace boilers in their basement with heat pumps that are outdoors, typically on their roof – sometimes running into zoning limitations.
- **Proposal:** To provide greater flexibility for electric equipment like heat pumps, zoning allowances that currently apply only within the floodplain would be rolled out citywide.



Topic 6

Retrofitting mechanical equipment for electrification

Height & setback	coverage	height
R3-2, R4, R5	20%* (varies based on use and district)	+25' * (varies based on use and district)
R6 – R10, C, M where permitted height < 120'	20%	+25'
R6 – R10, C, M where permitted height > 120'	20%	+40'

Yards, Courts & Open Space

All accessory power systems are permitted obstructions up to 25% of area, up to 10'/15' high

Height & setback	coverage	height
R3-2, R4, R5 residential	50%	at **+15'**
	up to 30%	at **+25'**
R3-2, R4, R5 community facilities	**50%**	at **+15'**
R6 – R10, C, M where permitted height < 120'	up to **30%**	at **+35'**
R6 – R10, C, M where permitted height > 120'	**50%**	at **+15'**
	up to **30%**	at **+55'**

Yards, Courts & Open Space

All accessory mechanical equipment (incl. power sys.) are permitted obstructions up to 25% of area, up to 10'/15' high

Topic 6

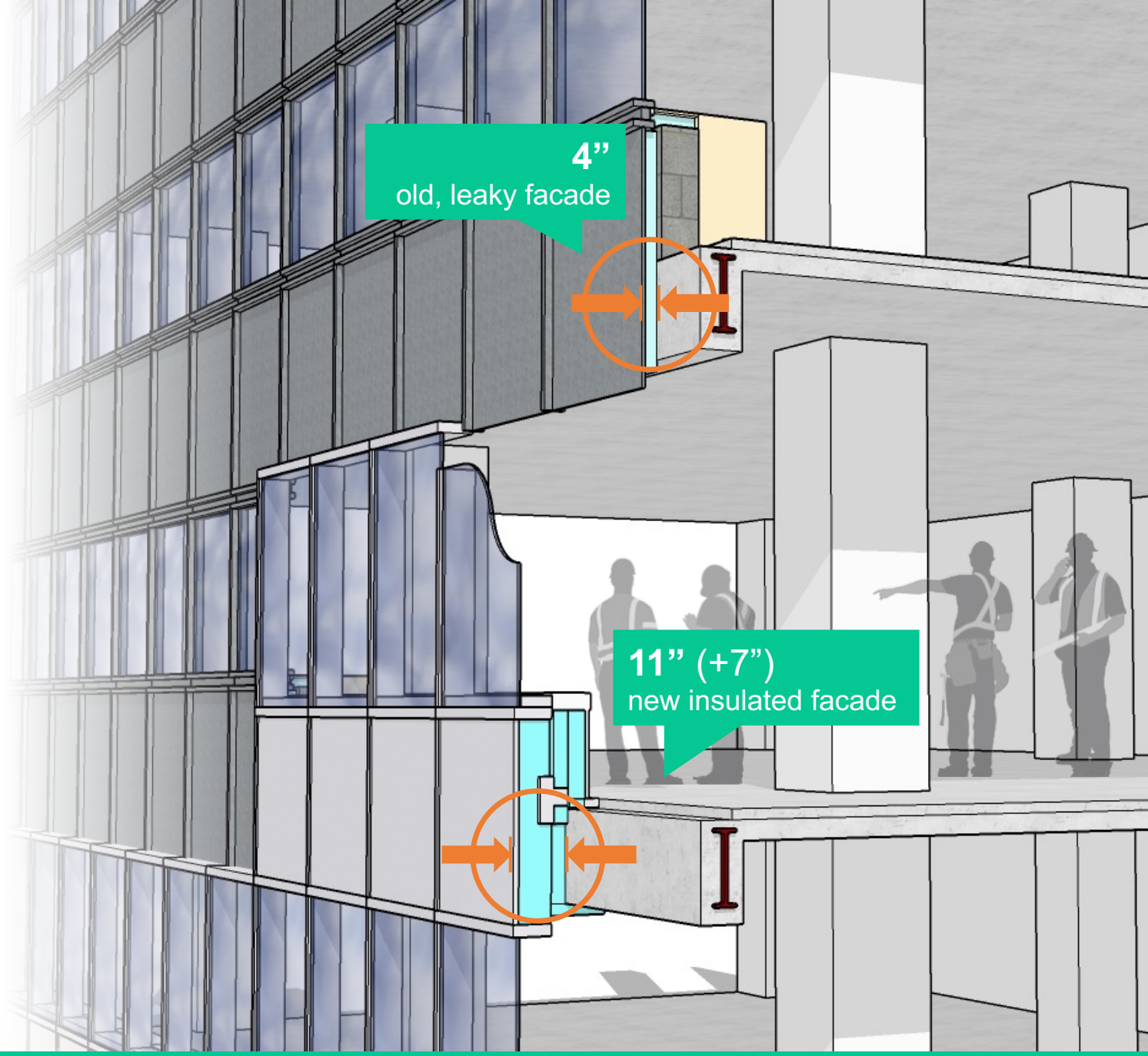
Retrofitting mechanical equipment: screening

- **Currently:** Zoning currently requires accessory mechanical equipment that is a “permitted obstruction” above zoning height and setback requirements to be screened.
- **Issue:** Rooftop mechanical equipment that is not a “permitted obstruction” because it is **below** the zoning height limit has **no applicable requirement**.
- **Proposal:** We will be expanding our screening requirements to ensure better screening of permitted obstructions, as well as, for the first time ever, require other rooftop mechanical equipment which is not a permitted obstruction to be screened as well.

Proposal 7

Allowing envelope retrofits to meet code

- **Currently:** Zoning considers wall thickness as “floor area” – this counts against your FAR, or the amount you are allowed to build.
- **Issue:** When trying to completely replace a thin (4”) façade with a thicker (11”) façade, those additional 7” count as new floor area – and are not allowed to be added. This makes this façade replacement project impossible.
- **Proposal:** To ensure that a recladding is allowed, create a new allowance for additional wall thickness, provided the new wall complies with the latest thermal barrier requirements in the NYC Energy Code.



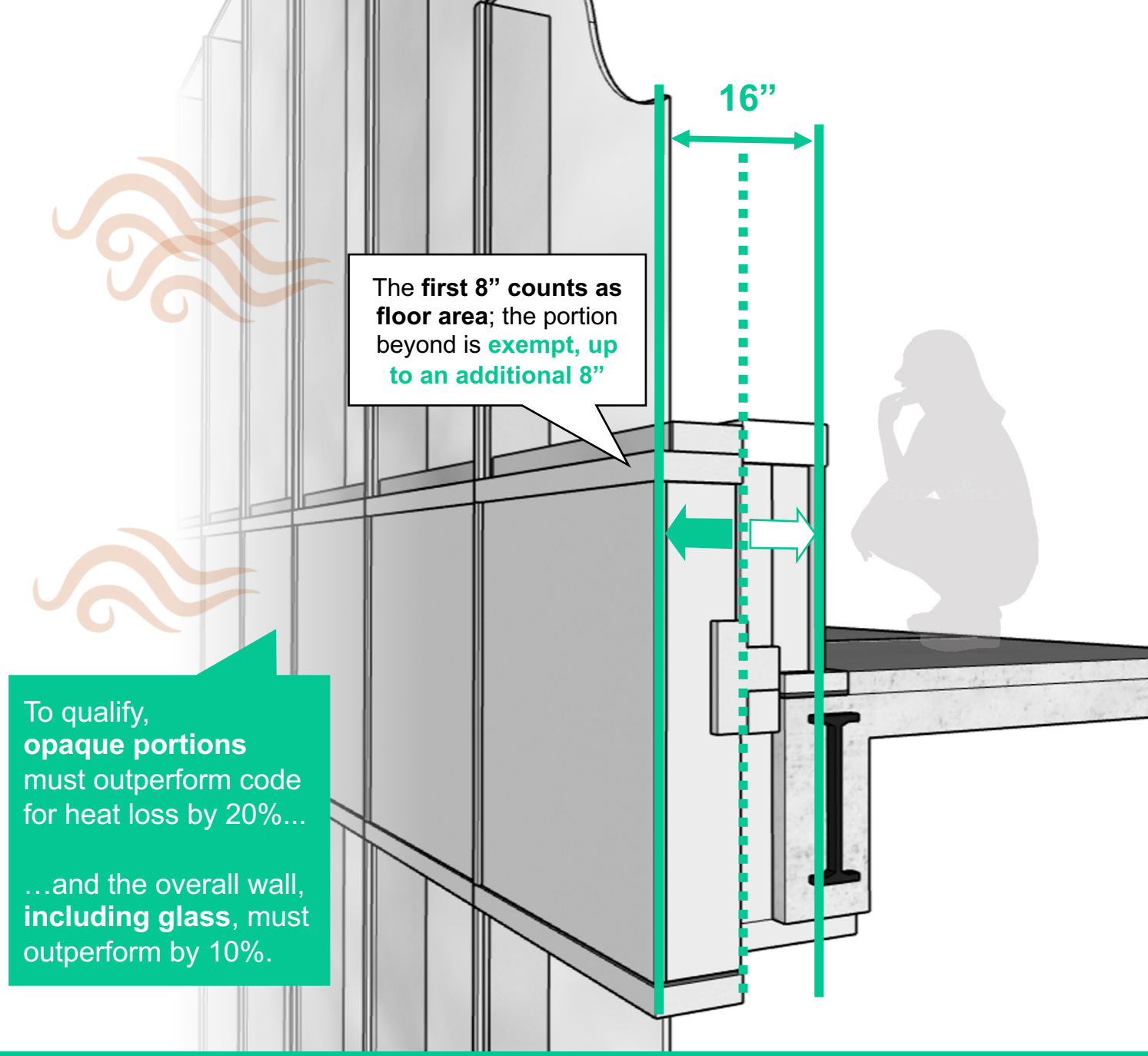
Proposal 8

Promoting envelopes that perform better-than-code

Currently: Zoning allows a 'wall thickness floor area exemption' (the "Zone Green bonus") for portions of walls that exceed Energy Code.

Issues:

- The current exemption focuses on the **heat transmission (u-factor)** of a wall. This misses other key criteria, such as air leakage.
- Code's "u-factor" has been heavily revised since Zone Green. It is very difficult to outperform today's u-factor, and **nearly impossible** to outperform future u-factors.
- Administering this "up to 8 inch" wall exemption is **complex + prone to issues**.
- It is impractical for **existing buildings** to take advantage of this exemption.



Proposal 8

Promoting buildings that perform better-than-code

Proposal:

Simplify the deduction from “up to 8in. beyond the first 8in. of wall thickness” into a **flat 5% exemption** from total FAR.

Align the exemption with Local Law 97 by promoting newer performance criteria:

- **existing buildings** which retrofit to become “fully electrified buildings” would be eligible for the exemption
- **new buildings**, which are already required to be fully electric (LL 154) would be eligible for the exemption if they design to “ultra-low-energy” usage building design standards.

The House at Cornell Tech, one of the few new buildings in NYC complying with ultra-low-energy standards

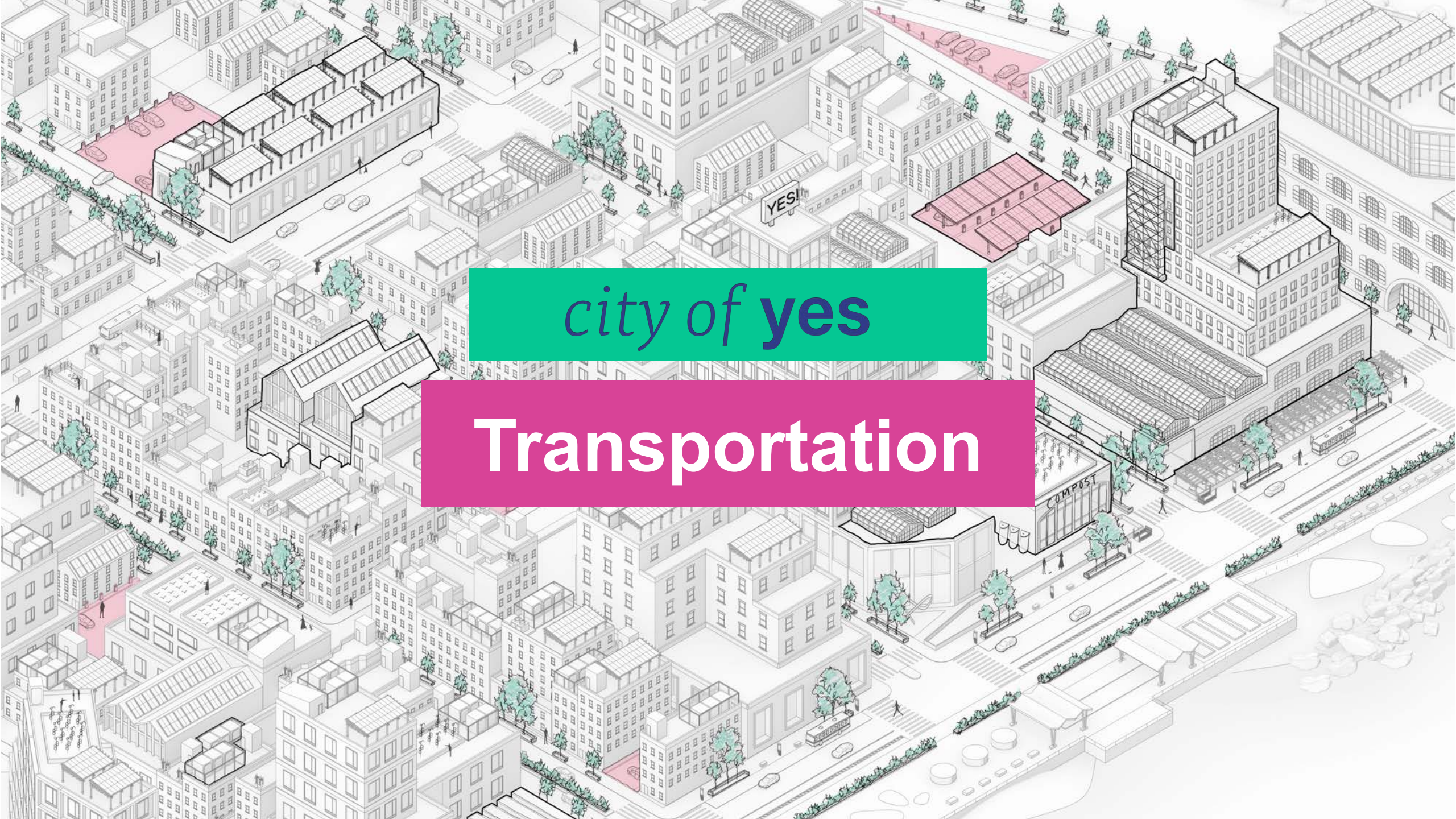
Image: Handel Architects

in detail

Proposal 8

Promoting buildings that perform better-than-code

Today **Wall thickness deduction**	Proposed Pathway A **Promoting Code outperformance**	Proposed Pathway B **Supporting LL97 compliance**
Primarily for **new buildings**	Available to **new buildings**	Available to **existing buildings**
up to 8” of wall thickness	flat 5% FAR exemption	
Promote **higher u-factor** than required by Energy Code	Promote **ultra-low-energy** buildings which exceed today’s requirements	Support compliance with LL97 by awarding floor area to **#fully electrified buildings#**
• Focused on envelope heat transmission based on prescriptive Code requirements (u-factor) which are very hard to meet for opaque walls • Hard for practitioners as well as DOB to evaluate and enforce • Leads to contrived wall designs to unlock maximum 8” beyond 8” deduction.	• Flat FAR exemption eliminates complexity/issues • Assumes a fully electrified building • Building must demonstrate specific at time of plan review that they will be either: • For 3 stories and less, a “net zero” building, or • Outperform a similar building designed to comply with Energy Code by 15%	• Flat FAR exemption eliminates complexity/issues • New construction will be required to be fully electric by 2024/2027 per LL 154 • Existing buildings have no incentive other than fines that may be levied under LL97 (if applicable to that building)



city of **yes**

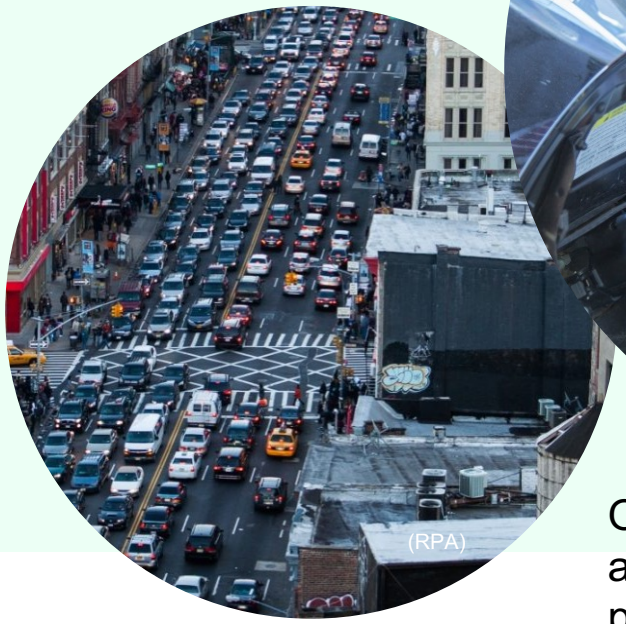
Transportation

Goal 3

Decarbonize our vehicles

Less than 1% of the 2,000,000 cars registered in NYC are zero-emission.

see: **NYS DMV, 2021**


(RPA)


Charging an EV (DOT)

One of the biggest hurdles to achieving **EV adoption** is finding a place to charge overnight.

see: **The New York Times**

By 2035, all vehicles sold in NYS must be EV; demand for charging will rapidly increase

see: **NYS Adv. Clean Cars II**


(Citibike)

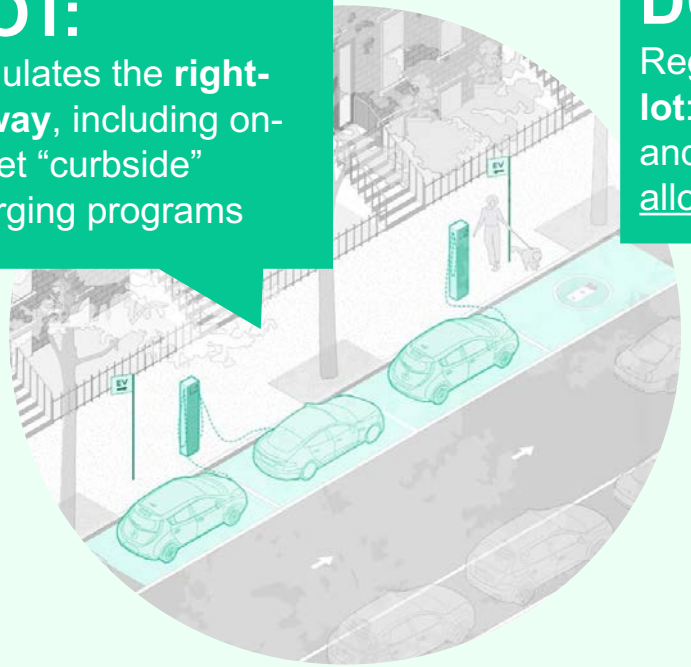
A one-to-one transition to EVs is not the solution. We also need to promote greater use of **bicycles**, **e-mobility**, and **mass transit**.

see: **2016 PlaNYC**

Goal 3

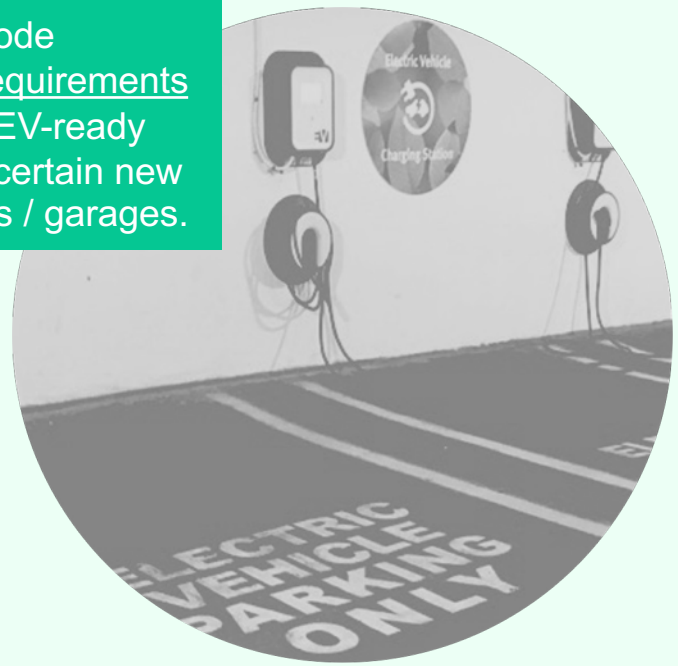
Decarbonize our vehicles

DOT:
Regulates the **right-of-way**, including on-street “curbside” charging programs



DCP:
Regulates the **zoning lot**: off-street parking, and off-street charging allowances.

DOB:
Building Code contains requirements to include EV-ready spaces at certain new parking lots / garages.



Proposal 9

Open-to-the-public EV charging facilities

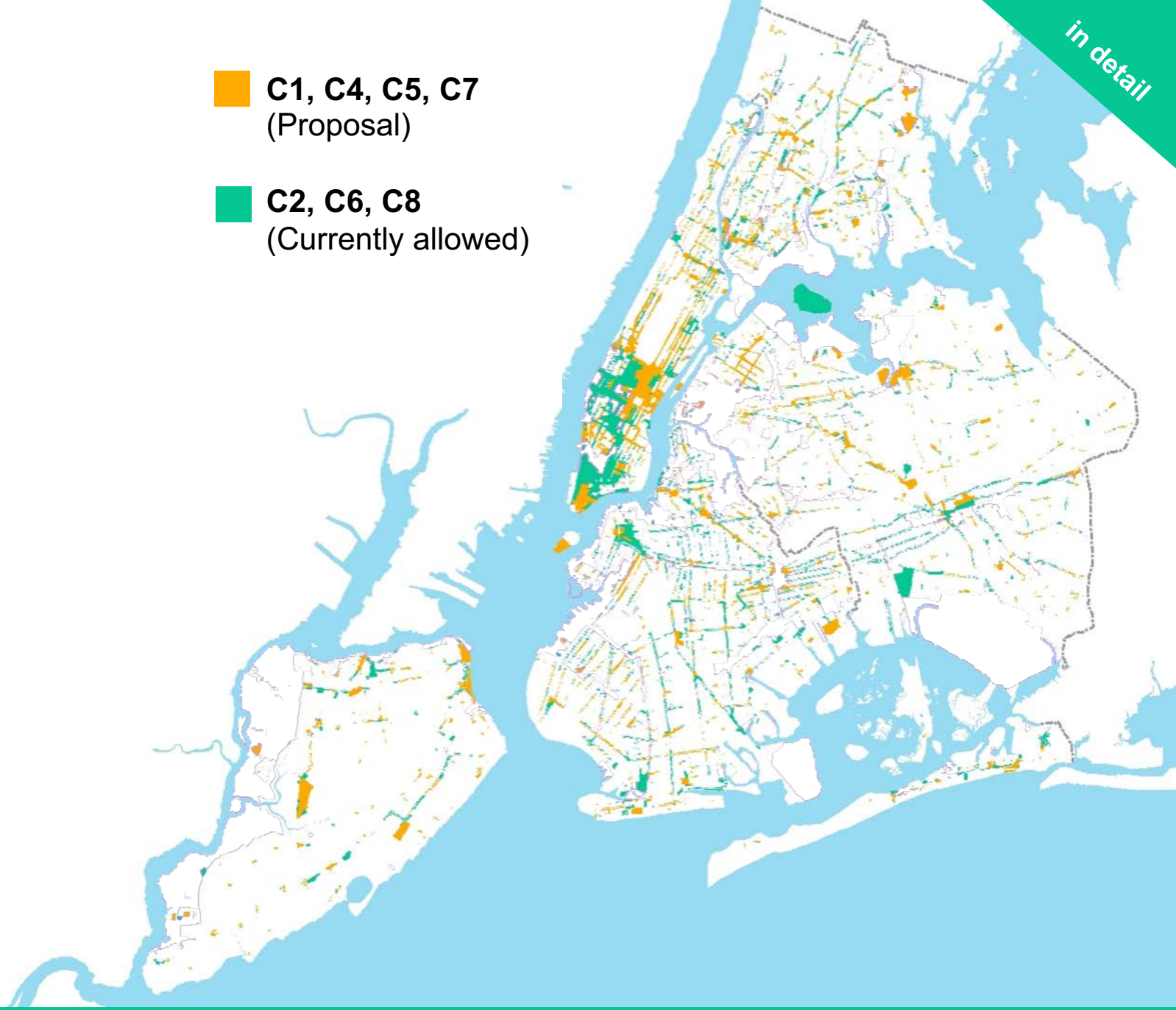
- **Currently:** Zoning considers open-to-the-public EV charging facilities as “Use Group 7” commercial uses.
- **Issue:** These facilities aren’t allowed in many C Districts commonly mapped closest to where people live.
- **Proposal:** Reclassify these facilities as Use Group 6 uses that are permitted in all Commercial Districts, more than doubling the commercial land area available for EV charging facilities.

Proposal 9

Open-to-the-public EV charging facilities

	Currently	Proposed
C1, C4, C5, C7	**No**	**Yes**
C2, C6, C8	Yes	Yes
All **M Districts**	Yes	Yes
All **R Districts**	**No**	**Limited***

* See next proposal

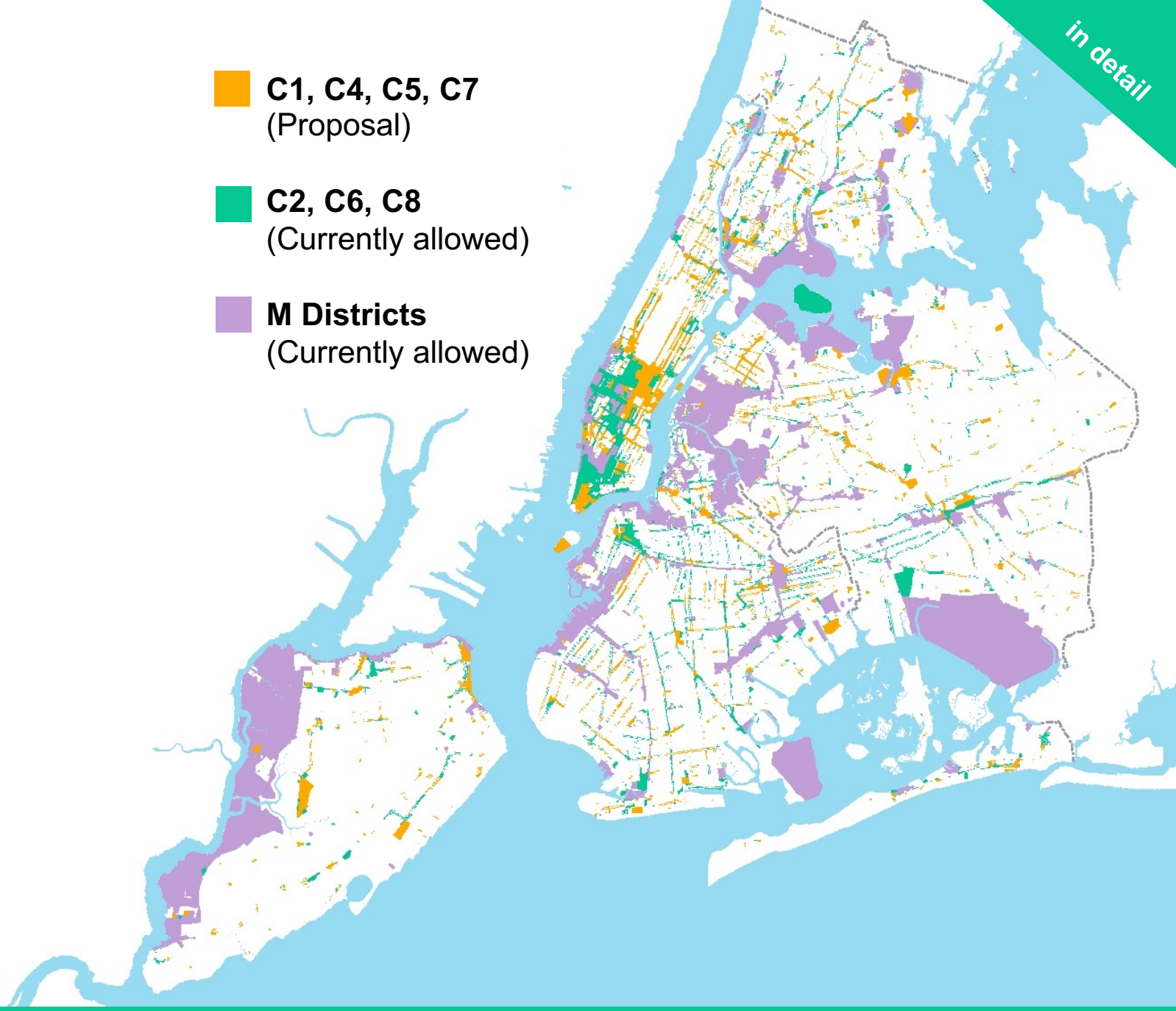


Proposal 9

Open-to-the-public EV charging facilities

	Currently	Proposed
C1, C4, C5, C7	**No**	**Yes**
C2, C6, C8	Yes	Yes
All **M Districts**	Yes	Yes
All **R Districts**	**No**	**Limited***

* See next proposal



Proposal 10

Expanding car sharing: public EV charger sharing

- **Currently:** Zoning generally requires parking spaces serving uses, such as retail stores, or apartment buildings. Accessory charging is permitted in all of these spaces. Some of these spaces are permitted to be occupied by commercial car share program vehicles.
- **Issue:** EV chargers installed in accessory spaces are not available to the public, per zoning rules.
- **Proposal:** Expand existing car share rules to allow property owners to **designate up to 20% of their spaces** (or 5, whichever is greater) for flexible, public EV 'charger-sharing', *or* car sharing, *or* any combination thereof.

Proposal 10

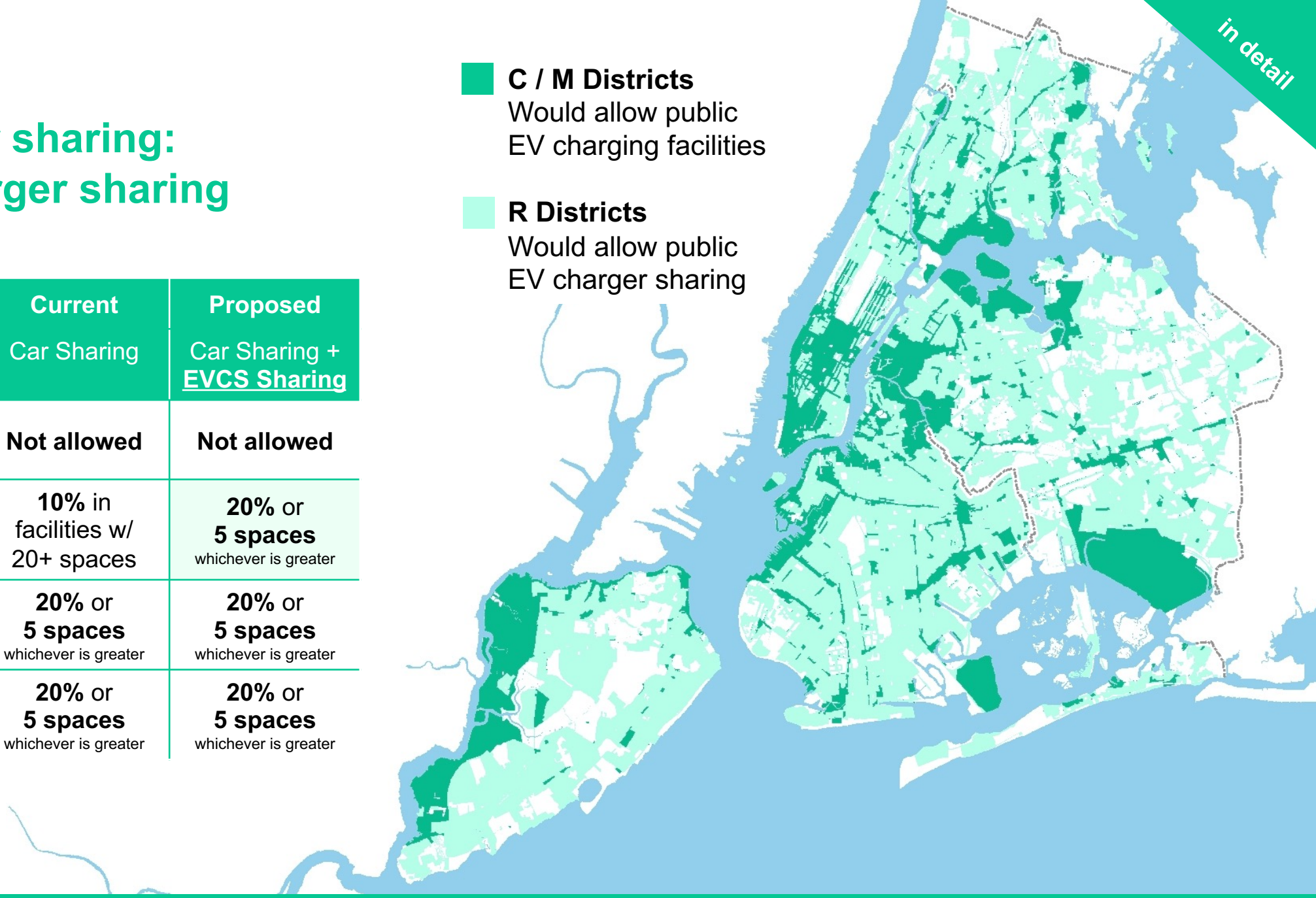
Expanding car sharing: public EV charger sharing

	Current	Proposed
	Car Sharing	Car Sharing + **EVCS Sharing**
R1, R2, R4-1, R4A, R4B, R5A	**Not allowed**	**Not allowed**
R3-2, R4	**10%** in facilities w/ 20+ spaces	**20%** or **5 spaces** whichever is greater
R5 – R10	**20%** or **5 spaces** whichever is greater	**20%** or **5 spaces** whichever is greater
Non-residential uses	**20%** or **5 spaces** whichever is greater	**20%** or **5 spaces** whichever is greater

in detail

C / M Districts
Would allow public EV charging facilities

R Districts
Would allow public EV charger sharing



Proposal 11

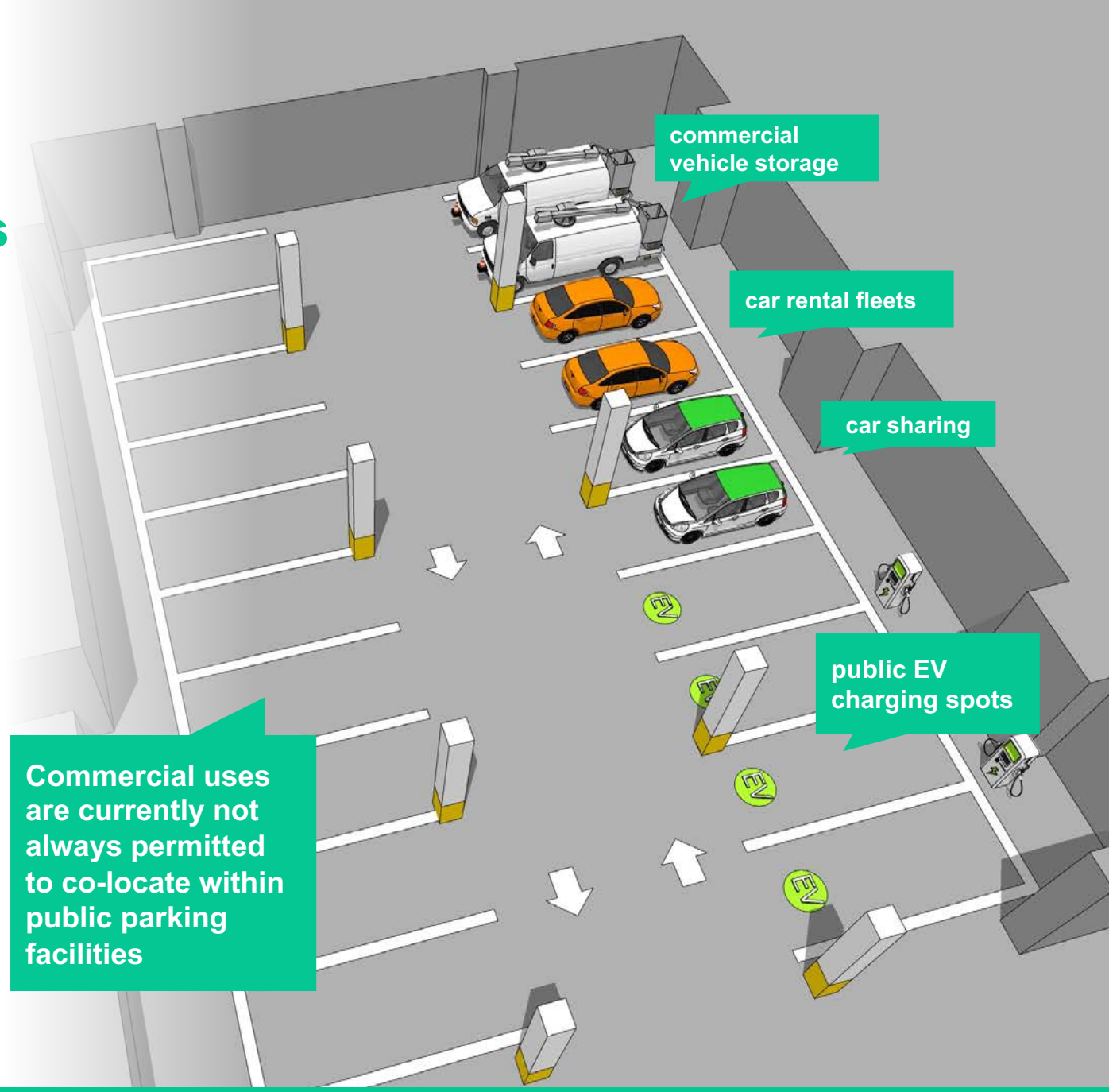
Flex parking: commercial vehicles in non-residential districts

Currently:

Zoning separately regulates the use of parking spaces for (1) car sharing services, (2) car rental services, and (3) commercial vehicle storage.

Issue:

These rules are varied, confusing, and limited. They should be expanded to promote car rental/sharing services (as an alternative to personal car ownership) and provide more locations for overnight truck parking and charging.



in detail

Proposal 11

Commercial Fleet EV Charging in both Accessory and Public Parking Lots + Garages

Proposal: In most Commercial, and all Manufacturing Districts, allow up to **20% of accessory spaces** to be occupied by:
1. car share vehicles, 2. car rental vehicles, 3. public EV charging spaces, 4. commercial vehicle (<20') storage
…or any combination thereof.

	R Districts		C Districts				M Districts	
	Accessory	Public Lots / Garages	Accessory		Public Lots / Garages		Accessory	Public Lots / Garages
	R3-2+ MF	N/A	C1, C2 mapped in R3-2+	C4, C5, C6, C7, C8	C1, C2	C4, C5, C6, C7, C8	M1, M2, M3	where permitted
Publicly-accessible EV charging (not inclusive of any EVCS for below uses)	**20% of total spaces, or 5 spaces,** whichever is greater	N/A	**20% of total spaces, or 5 spaces,** whichever is greater	**20% of total spaces, or 5 spaces,** whichever is greater	**100% of total spaces**	**100% of total spaces**	**20% of total spaces, or 5 spaces,** whichever is greater	**100% of total spaces**
Car share services		N/A			**50% of total spaces**	**50% of total spaces**		**50% of total spaces**
Automobile rental services	N/A	N/A						
Commercial vehicle storage (< 20 feet)	N/A	N/A	N/A		N/A			

Proposal 12

Expansion of automated parking regulations

- **Currently:** In limited areas, the ZR provides special allowances to “automated parking facilities” that are tailored to their unique operational needs versus a typical parking facility. For example, the minimum size requirements for a parking space are reduced to reflect the unique ‘tray-and-rack’ system used to store cars.
- **Issue:** These allowances don’t apply outside of the Manhattan Core and a few other areas, limiting the feasibility of such facilities citywide.

123 Baxter Street, MN – automated facility

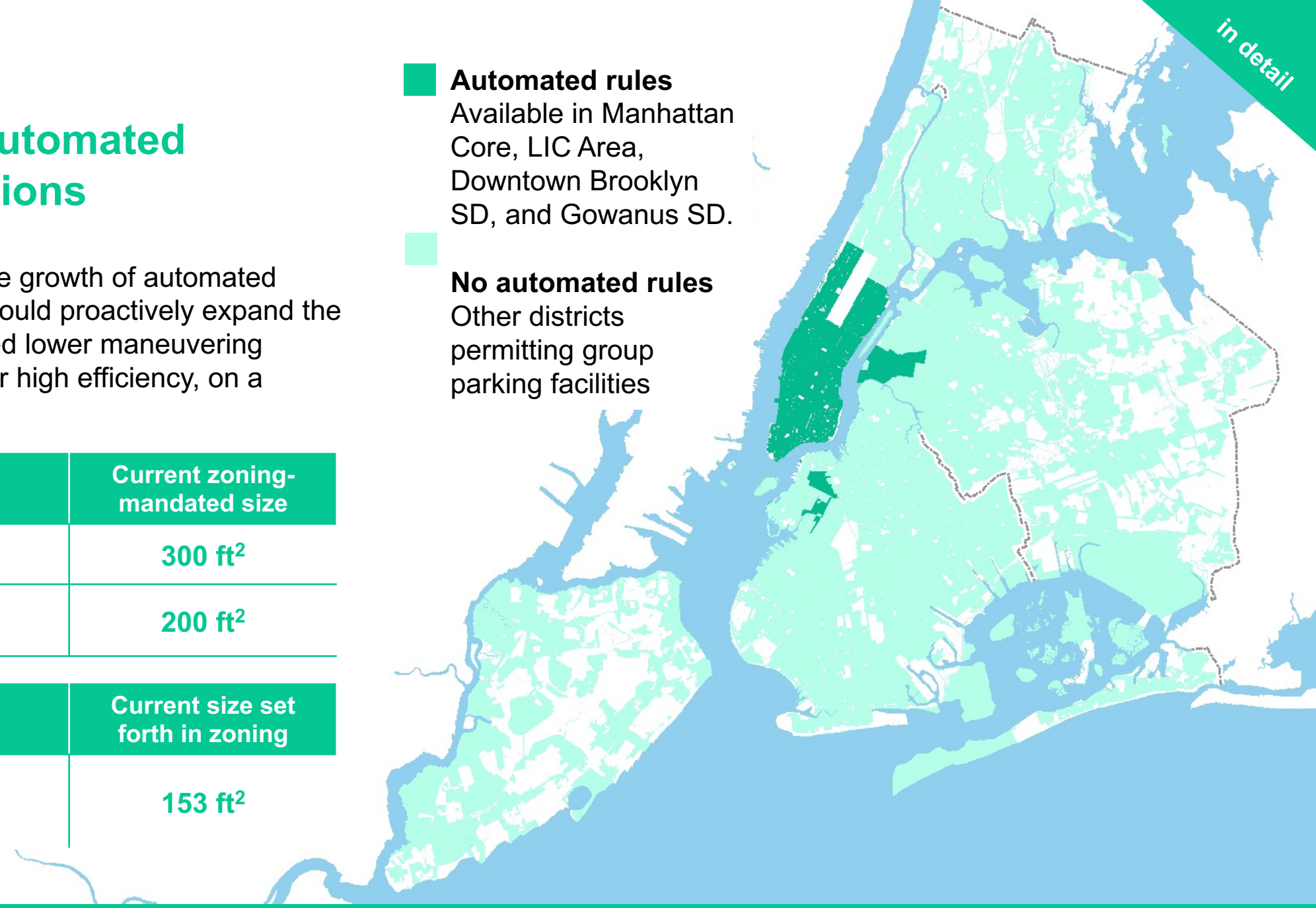
Proposal 12

Expansion of automated parking regulations

Proposal: To support the growth of automated facilities, this proposal would proactively expand the allowance and associated lower maneuvering requirements due to their high efficiency, on a citywide basis.

Typically	Current zoning-mandated size
Standard parking space	300 ft^2
Attended or alternate maneuverability space	200 ft^2

Automated rules	Current size set forth in zoning
Automated parking tray (in designated areas only)	153 ft^2



Proposal 13

Bicycle and e-mobility: storage & charging uses

- **Currently:** Zoning provides use regulations for automobile parking and charging.
- **Issue:** Zoning doesn't provide any similar regulations for bicycles and other e-mobility. This creates regulatory uncertainty around where **bike / micromobility parking facilities** are permitted.
- **Proposal:** Create a new commercial use for public bicycle and micromobility parking. New rules would also provide for secure outdoor bike storage lockers as permitted obstructions in yards & open spaces.

Image courtesy of Oonee

city of **yes**

Waste & Water

Goal 4

Decarbonize our waste streams

Our waste stream only accounts for 4% of our City's greenhouse gas footprint – but there are some **clear steps** to take.

80x50

Reducing stormwater runoff also reduces the need for energy-intensive stormwater treatment

80x50

Newtown Wastewater Treatment Plan (DEP)

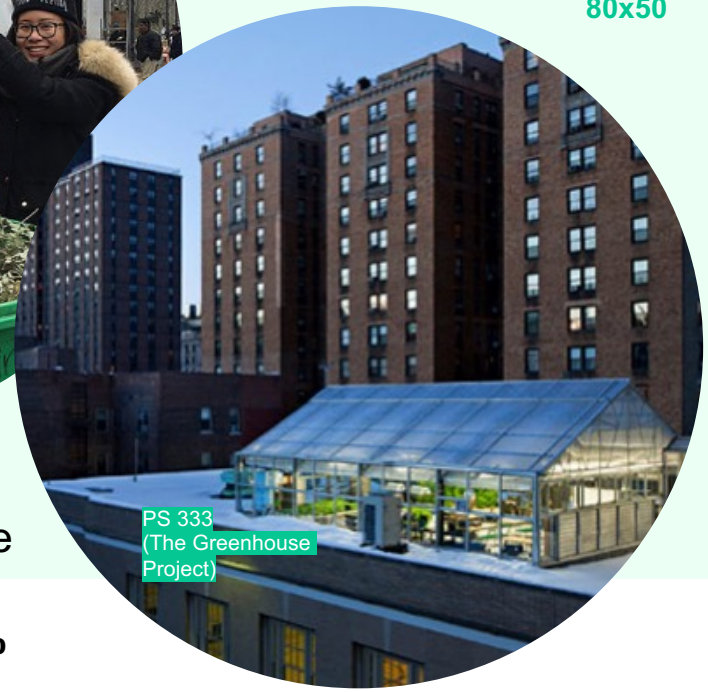
Organics Drop-off (GrowNYC)

By diverting organic material from the waste stream, we can reduce our solid waste by **45%**

80x50

Supporting local food systems can also play a role in reducing CO_2 associated with food.

80x50



PS 333 (The Greenhouse Project)

Proposal 14

Expand the use of permeable paving

- **Currently:** Zoning is supposed to allow any paving area to be paved with permeable paving.
- **Issue:** The text, as drafted, requires the Department of Buildings to investigate each proposed installation to deem it appropriate. Ambiguity about how to do so has complicated the process of using permeable paving in NYC.
- **Proposal:** Revise this language to make it clear that permeable paving is always allowed.

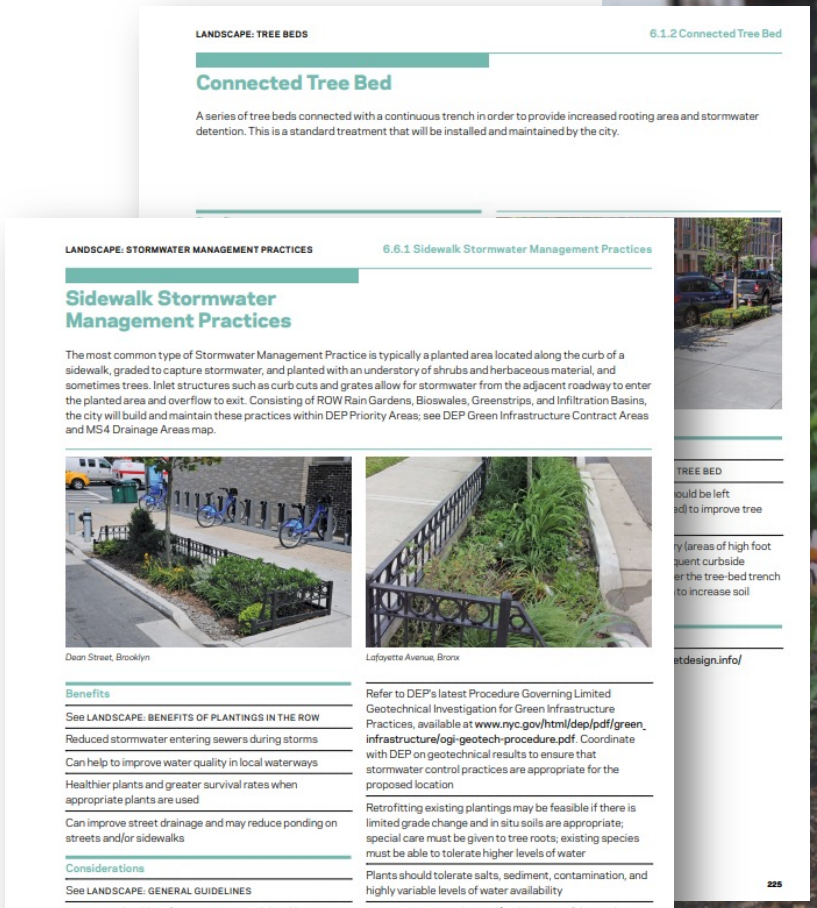
Standard ZR language regarding paving:

"asphaltic or Portland cement concrete, or other hard-surfaced dustless material […] However, permeable paving materials may be used in open parking areas where the Commissioner of Buildings determines that such materials are appropriate."

Proposal 15

Allow for high-performance street beds

- **Currently:** Zoning requires street trees to be installed alongside new developments and enlargements.
- **Issue:** As drafted, the zoning text precludes the use of newer, more inventive prototypes such as “connected tree beds” and “raingardens” that have been designed and approved by DOT.
- **Proposal:** Add flexibility to the street tree requirements to allow location of required trees within connected tree beds or raingardens, as well allow as substitution of one required street tree with a DEP-compliant raingarden.



LANDSCAPE: TREE BEDS 6.1.2 Connected Tree Bed

Connected Tree Bed

A series of tree beds connected with a continuous trench in order to provide increased rooting area and stormwater detention. This is a standard treatment that will be installed and maintained by the city.

LANDSCAPE: STORMWATER MANAGEMENT PRACTICES 6.6.1 Sidewalk Stormwater Management Practices

Sidewalk Stormwater Management Practices

The most common type of Stormwater Management Practice is typically a planted area located along the curb of a sidewalk, graded to capture stormwater, and planted with an understory of shrubs and herbaceous material, and sometimes trees. Inlet structures such as curb cuts and grates allow for stormwater from the adjacent roadway to enter the planted area and overflow to exit. Consisting of ROW Rain Gardens, Bioswales, Greenstrips, and Infiltration Basins, the city will build and maintain these practices within DEP Priority Areas; see DEP Green Infrastructure Contract Areas and MS4 Drainage Areas map.

Dean Street, Brooklyn

Lafayette Avenue, Bronx

Benefits

See LANDSCAPE: BENEFITS OF PLANTINGS IN THE ROW

Reduced stormwater entering sewers during storms

Can help to improve water quality in local waterways

Healthier plants and greater survival rates when appropriate plants are used

Can improve street drainage and may reduce ponding on streets and/or sidewalks

Considerations

See LANDSCAPE: GENERAL GUIDELINES

Designers should perform environmental due diligence to ensure green infrastructure installations will not exacerbate preexisting subsurface contamination, including, but not limited to, researching current and past uses of the site, and reviewing publicly available local, state, and federal databases; additional environmental analysis, and potentially site remediation, may be necessary

Refer to DEP’s latest Procedure Governing Limited Geotechnical Investigation for Green Infrastructure Practices, available at **www.nyc.gov/html/dep/pdf/green_infrastructure/ogi-geotech-procedure.pdf**. Coordinate with DEP on geotechnical results to ensure that stormwater control practices are appropriate for the proposed location

Retrofitting existing plantings may be feasible if there is limited grade change and in situ soils are appropriate; special care must be given to tree roots; existing species must be able to tolerate higher levels of water

Plants should tolerate salts, sediment, contamination, and highly variable levels of water availability

Due to existing grading and/or the crown of the road, stormwater installations along the gutter are ideal for stormwater capture, while installations in the center of the road will not capture significant volumes of water unless the road can be regraded

Avoid in areas adjacent to retaining structures, structural foundations, critical infrastructure, or on roadways elevated atop a retaining wall structure; cannot be sited within 2.5 feet of above or below-ground MTA structures

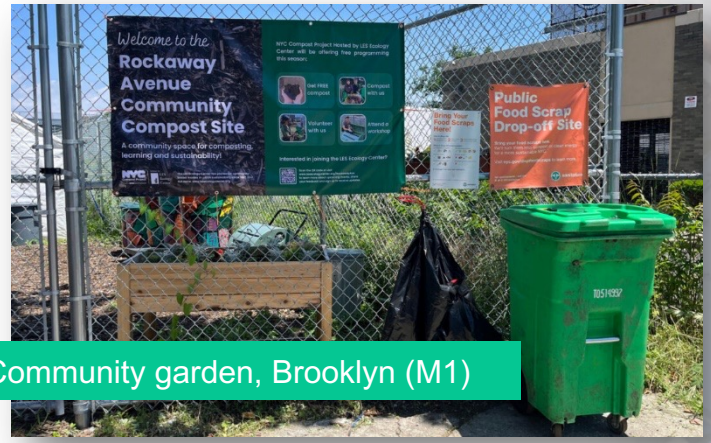
249

Proposal 16

Clarify regulations for composting & recycling

- **Currently:** Zoning doesn't mention "composting" or "recycling" at all.
- **Issue:** This creates confusion about where composting and recycling are allowed to occur. (DSNY's only compost facility is classified as a "dump" and located in a heavy M3 District on Staten Island.)
- **Proposal: 1.** Clarify that small-scale composting can be considered an "accessory use", **2.** that neighborhood-focused recycling facilities can locate in commercial storefronts, and **3.** that large-scale facilities should continue to locate in Manufacturing Districts.

Community garden, Manhattan (C1/R7A)



Community garden, Brooklyn (M1)

DSNY Facility, Staten Island (M3)

Proposal 17

Facilitate rooftop food production

- **Currently:** Zoning allows rooftop greenhouses to be added atop **non-residential buildings**, beyond maximum FAR and height limits.
- **Issue:** Even though there are a few straightforward requirements, all applicants are required to obtain a CPC certification that they've followed the rules – increasing the cost and process, and discouraging projects.
- **Proposal:** Change the rooftop certification to an as-of-right allowance. (Proposals would still be evaluated for compliance by DOB.)

75-01 Certification for Rooftop Greenhouses

LAST AMENDED 4/30/2012 HISTORY

A rooftop greenhouse shall be excluded from the definition of *floor area* and may exceed *building* height limits, upon certification by the Chairperson of the Commission that such rooftop greenhouse:

(a) is located on the roof of a *building* that does not contain *res* sleeping accommodations;

(b) will only be used for cultivation of plants, or primarily for c *accessory* to a *community facility use*;

(c) is no more than 25 feet in height;

(d) has roofs and walls consisting of at least 70 percent transpar permitted pursuant to paragraph (f)(3) of this Section;

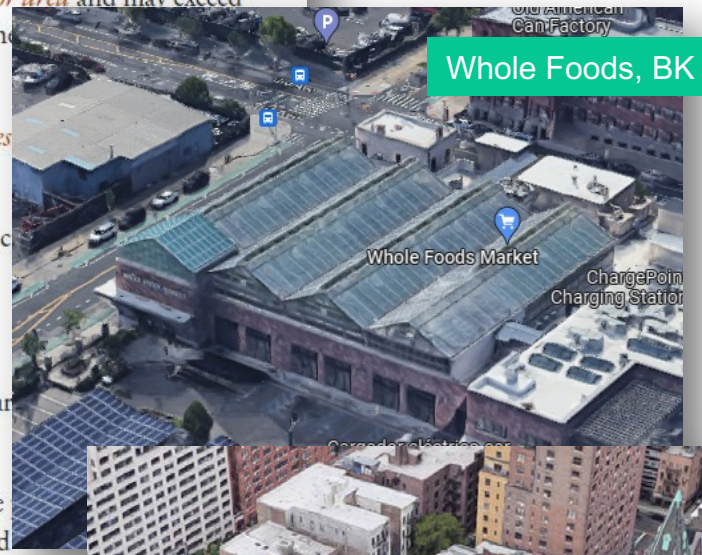
(e) where exceeding *building* height limits, is set back from the *story* immediately below by at least six feet on all sides; and

(f) has been represented in plans showing:

(1) the area and dimensions of the proposed greenhouse, the l existing or proposed *building* upon which the greenhous and access to and from the *building* to the greenhouse;

(2) that the design of the greenhouse incorporates a rainwater reuse system; and

(3) any portions of the greenhouse dedicated to office or storag to the greenhouse, which shall be limited to 20 percent of the greenhouse, and shall be exempt from the transparency requirement in paragraph (d) of this Section.



Whole Foods, BK

Friends Seminary, MN

Racial equity report

As a zoning text amendment affecting more than 5 community districts, this proposal is subject to the racial equity reporting requirement.

The proposal serves as an important step to meet the City's climate goals by alleviating regulatory burdens and allowing for the creation of a more sustainable, more resilient and more equitable city.

Due to the nature of this proposal, no increases in residential space, non-residential space, or other development activity are anticipated. Therefore, analysis of residential affordability, employment, or construction jobs is not applicable.

A 'peaker' plant – among the dirtiest forms of energy production in NYC.
Source: Gotham Gazette, "Peaker Plants Harm Communities of Color; It's Time for New York City to Replace Them" (2020) by Rachel Spector (NYLPI), Elizabeth Yeampierre (UPROSE) & Dariella Rodriguez (The Point CDC)