

city of **yes**

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





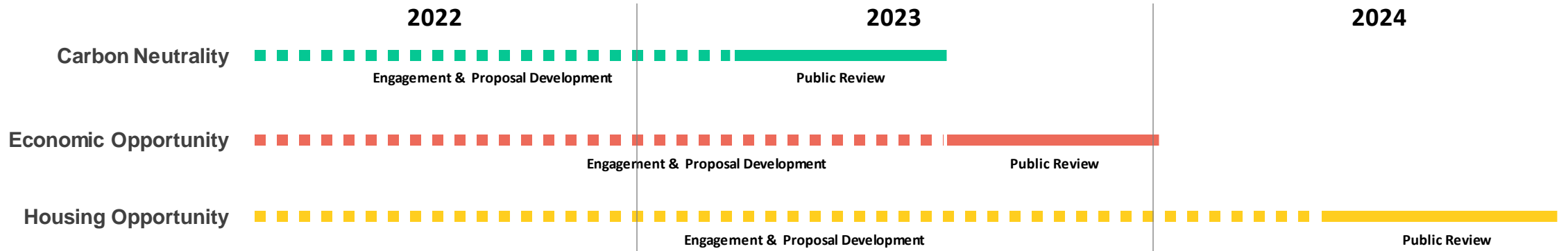
for Carbon Neutrality
Expanding opportunities for decarbonization projects



for Economic Opportunity
Growing jobs and small businesses with more flexible zoning



for Housing Opportunity
Ensuring all neighborhoods are meeting the need for housing opportunities



Why carbon?

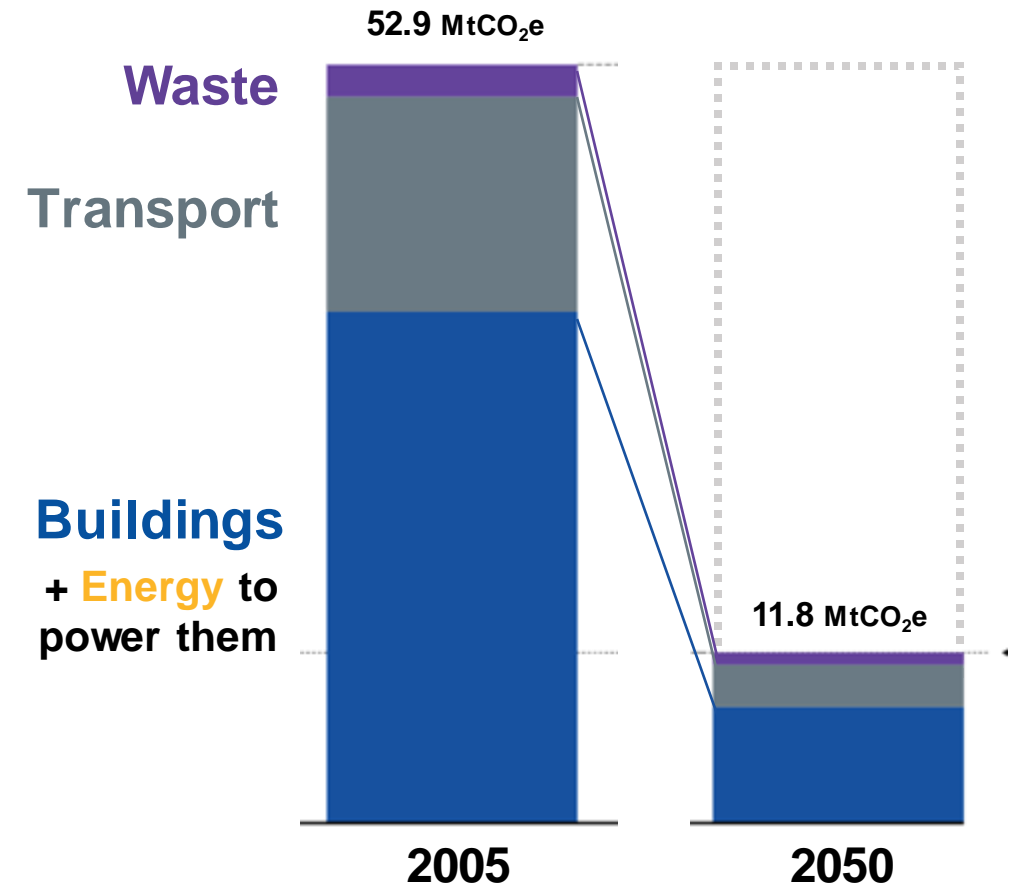
- We are in a **climate emergency**, caused by greenhouse gas emissions.
- Carbon dioxide (CO₂) is the **primary greenhouse gas (GHG)** emitted through human activities - **80% of US GHG** emissions in 2019.
- CO₂ is largely produced through the **burning of fossil fuels**
- Paris Agreement aims to limit global warming to 2°C and **avoid greater climate damage** by curbing GHG



What do we mean by a "carbon-neutral city"?

It's a city where we've...

- 1. Reduced our energy needs**
(retrofit buildings to be efficient)
- 2. Cleaned the grid**
(decarbonize the source of electricity)
- 3. Electrified buildings + vehicles**
(all remaining energy needs are powered by the clean electric grid)



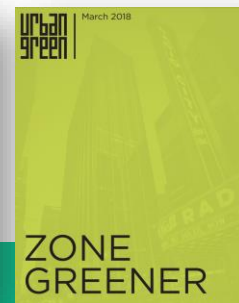
Necessary operational carbon reductions to meet 2050 goals, in millions of metric tons of carbon dioxide equivalent.
Source: NYC's Roadmap to 80x50

Recap

What has New York City already done?



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



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

Engagement process to date



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](#)

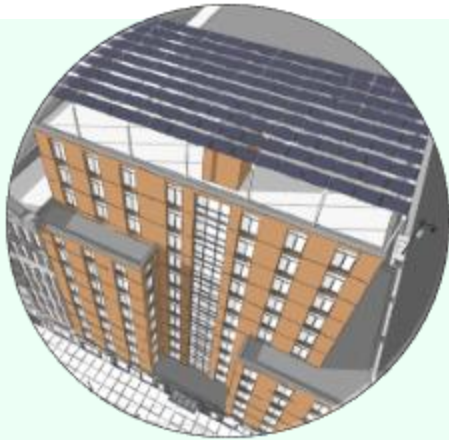


To store clean energy, and respond to demand, gigawatts of local energy storage will be crucial.

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 CO₂ 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.



Large buildings (> 25,000 sf) that fail to cut their CO₂ emissions will face steep fines

2019 NYC Climate Mobilization Act (Local Law 97)

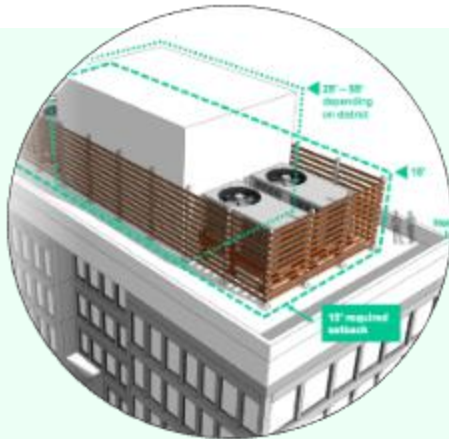
New buildings will be prohibited from installing fossil-fuel equipment
Local Law 154

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



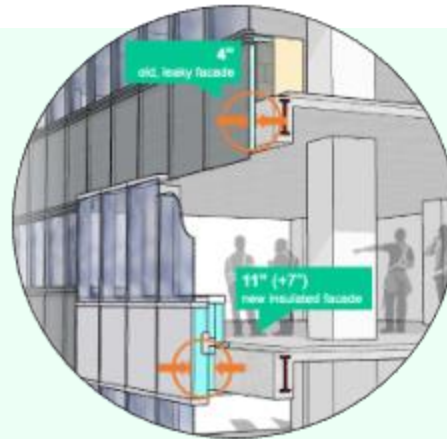
Goal 2

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](#)



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](#)



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](#)

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.

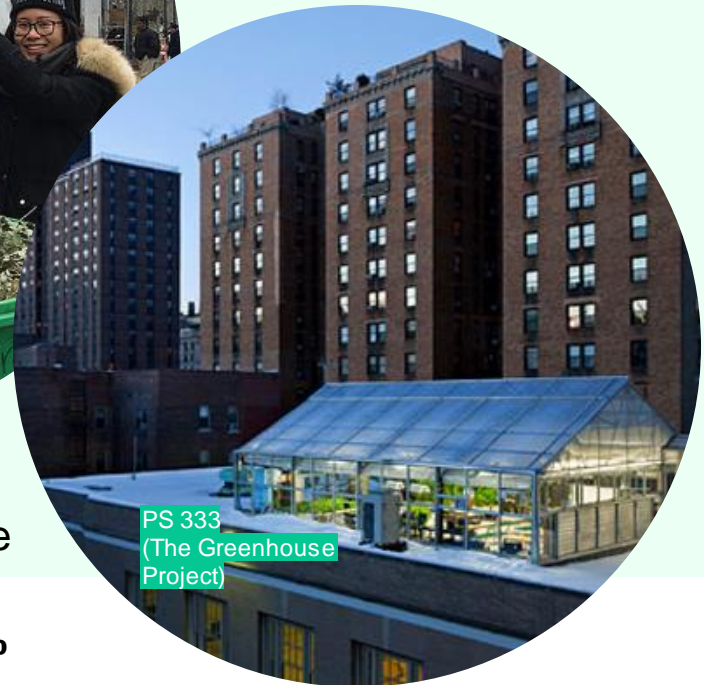
80x50

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



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 CO₂ associated with food.



Decarbonize our waste streams



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



15. Street Trees: update rules to accommodate new rain garden 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

Summary of proposal



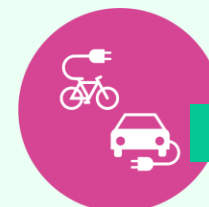
ENERGY

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

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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

Beginning the public review process



CB Review:
All 59
Community
Boards

BP + BB Review
All 5
Borough
Boards

Continued
coordination with
partner agencies

Continued
collaboration with
subject experts

May
16

LCV Panel
@ AIA

Council Review:
All 51
Council
Districts

Approximate schedule of public review, for illustrative purposes only



Thank you!