



Investigate the NYC Greenhouse Gas Inventory with MOCEJ

July 15, 2026

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The diverse voices and backgrounds of our employees, Board of Directors, members and partners make us stronger.

Collaboration

We believe consensus delivers better solutions and teamwork is essential to our success.

Engagement

We promote a culture of performance, participation and curiosity.

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Panelists

Adam Schiabor,

Associate Director, Research, Urban Green Council

Anthony Perez,

Policy Advisor, Climate Data and Emissions Specialist, NYC MOCEJ

Isabela Brown,

Senior Climate Policy Advisor, NYC MOCEJ

Why are we talking about buildings?

Buildings are the largest source of greenhouse gas emissions in NYC.

Accelerated building electrification (primarily heat pump installations) makes buildings more reliant on the grid.

The GHG emissions associated with grid electricity use impact building owners through:

- Regulatory reports (LL97, Scope 3 emissions, etc.)
- Future retrofit planning





Building Energy Use Data in NYC

NYC's Benchmarking Law (LL84)

- Most buildings larger than 25,000 square feet are required to report
- About 50,000 buildings (5 percent of total NYC buildings)
- Most data submitted since 2010
- Released annually in the Fall (2025 data will be released this Fall)

Key building data

ENERGY USE

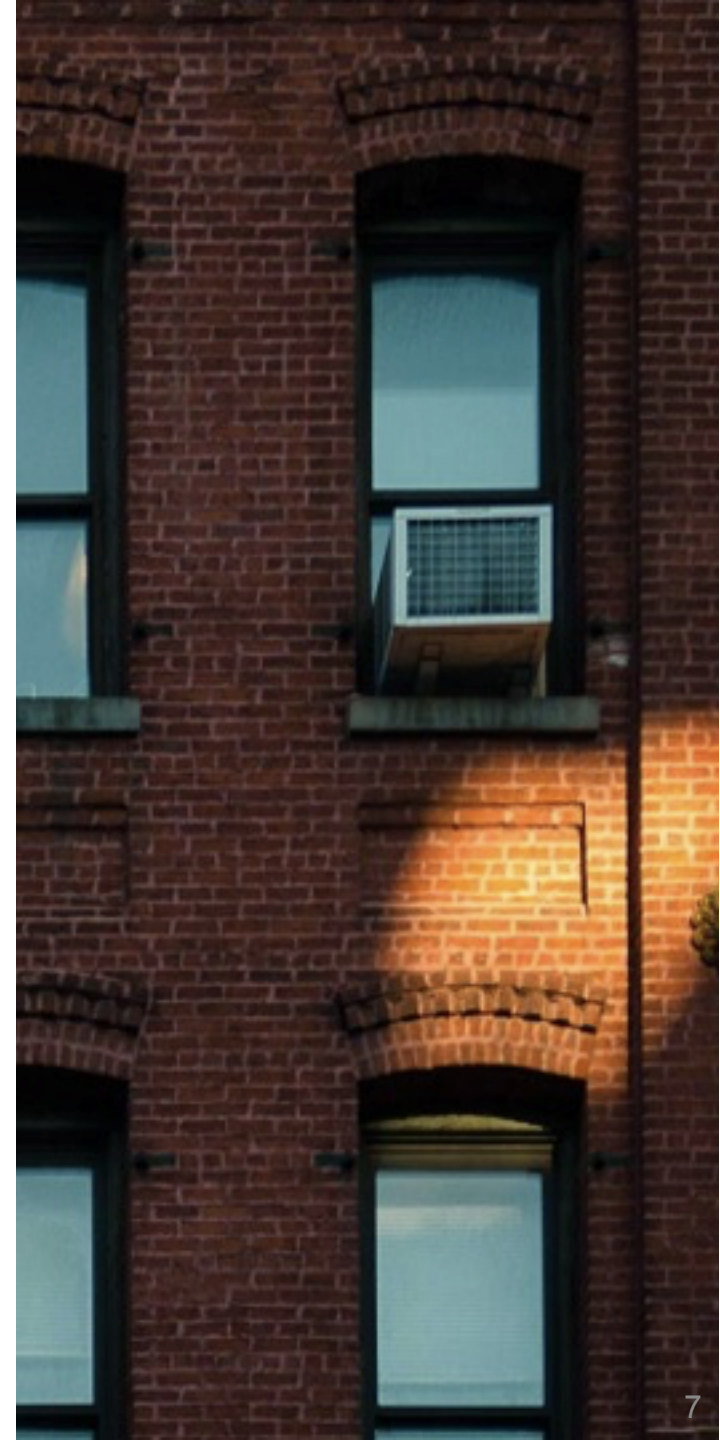
- Utility gas and electric use
 - Delivered fuels
 - GHG emissions
-

CHARACTERISTICS

- Square footage
 - Use type (residential, office, hotel, retail, etc..)
-

OTHER

- Zoning and administrative
- Address and geography



Buildings are the largest source of emissions

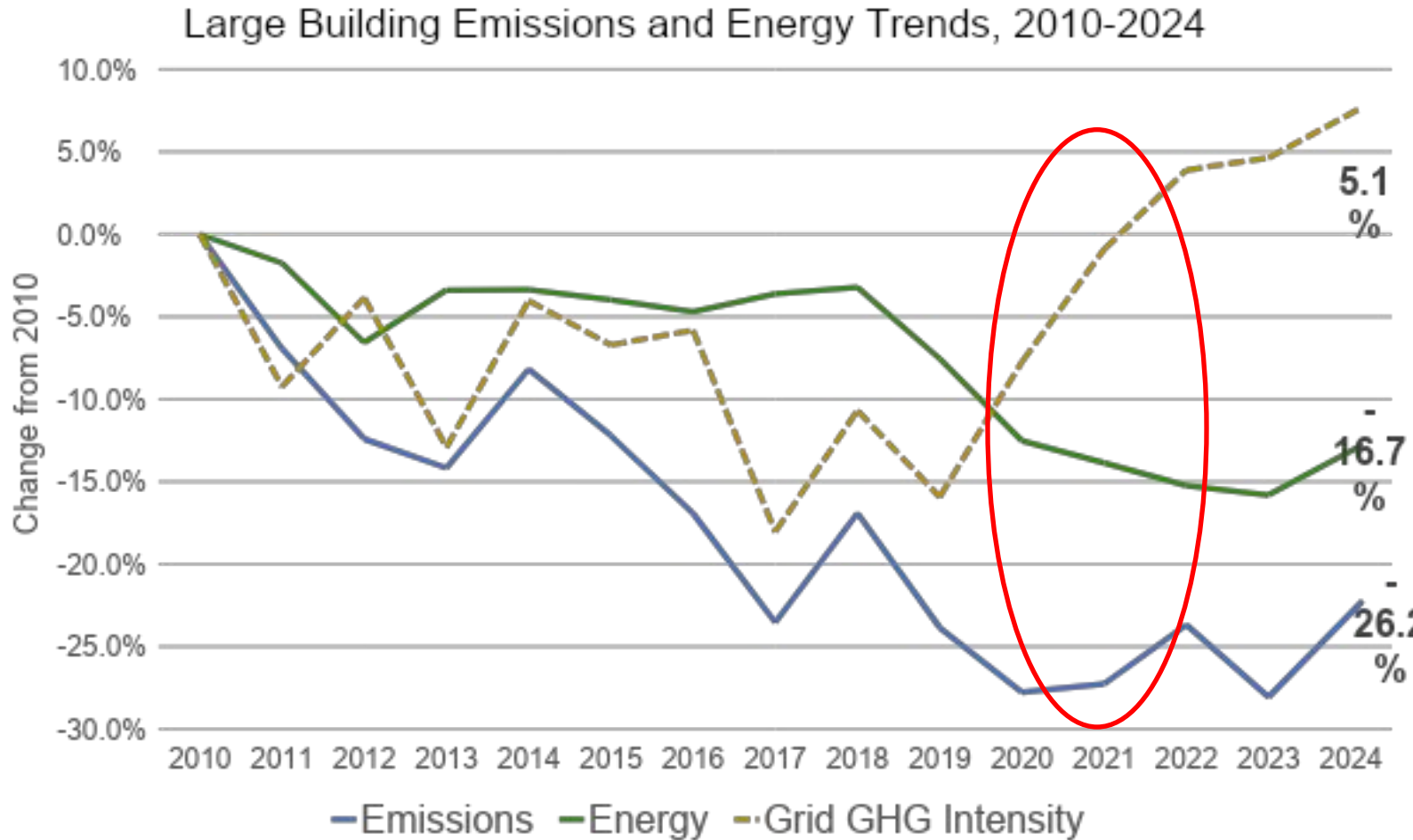
NYC Citywide Greenhouse Gas Emissions, 2024



About **70%** of total NYC emissions come from buildings

More than half of building sector emissions come from buildings larger than 25,000 sqft

Progress since 2010



More **efficient energy use** and the **phase out of oil use** have driven a reduction in large building emissions

More clean electricity on the grid will drive greater emissions reductions

The grid and building emissions

There are multiple methods NYC buildings use to calculate the GHG emissions associated with electricity use:

Method 1:

NYCs GHG Inventory

The City's accounting based real-time generation and transmissions



Method 2:

EPA's eGRID

Federal estimate based on power plants in a specific geographical region



Method 3:

LL97 2024-29 Compliance Period

Forward looking value tied to policy goals



Building emissions for each method

Example Building Energy Use

Large Commercial Building:

- Gas for heating and hot water
- Electricity for cooling, lights, plug loads, ventilation and elevators

Method 1: NYCs GHG Inventory

- *Grid GHG value: 0.348 kgCO₂ per kWh*
- Electric emissions: 4,424 tonnes CO₂e
- Gas emissions: 1,060 tonnes CO₂e

Method 2: EPA's eGRID

- *Grid GHG value: 0.402 kgCO₂ per kWh*
- Electric emissions: 4,993 tonnes CO₂e
- Gas Emissions: 1,060 tonnes CO₂e

Method 3: LL97 2024-29 Compliance Period

- *Grid GHG value: 0.289 kgCO₂ per kWh*
- Electric emissions: 3,674 tonnes CO₂e
- Gas emissions: 1,060 tonnes CO₂e

NYC Greenhouse Gas Inventory

Isabela Brown
Anthony Perez

July 15th, 2026



Agenda



- 2024 Emissions Results
- Inventory Methodology
- NYC GHG Inventory Grid Coefficient
- Questions & Discussion

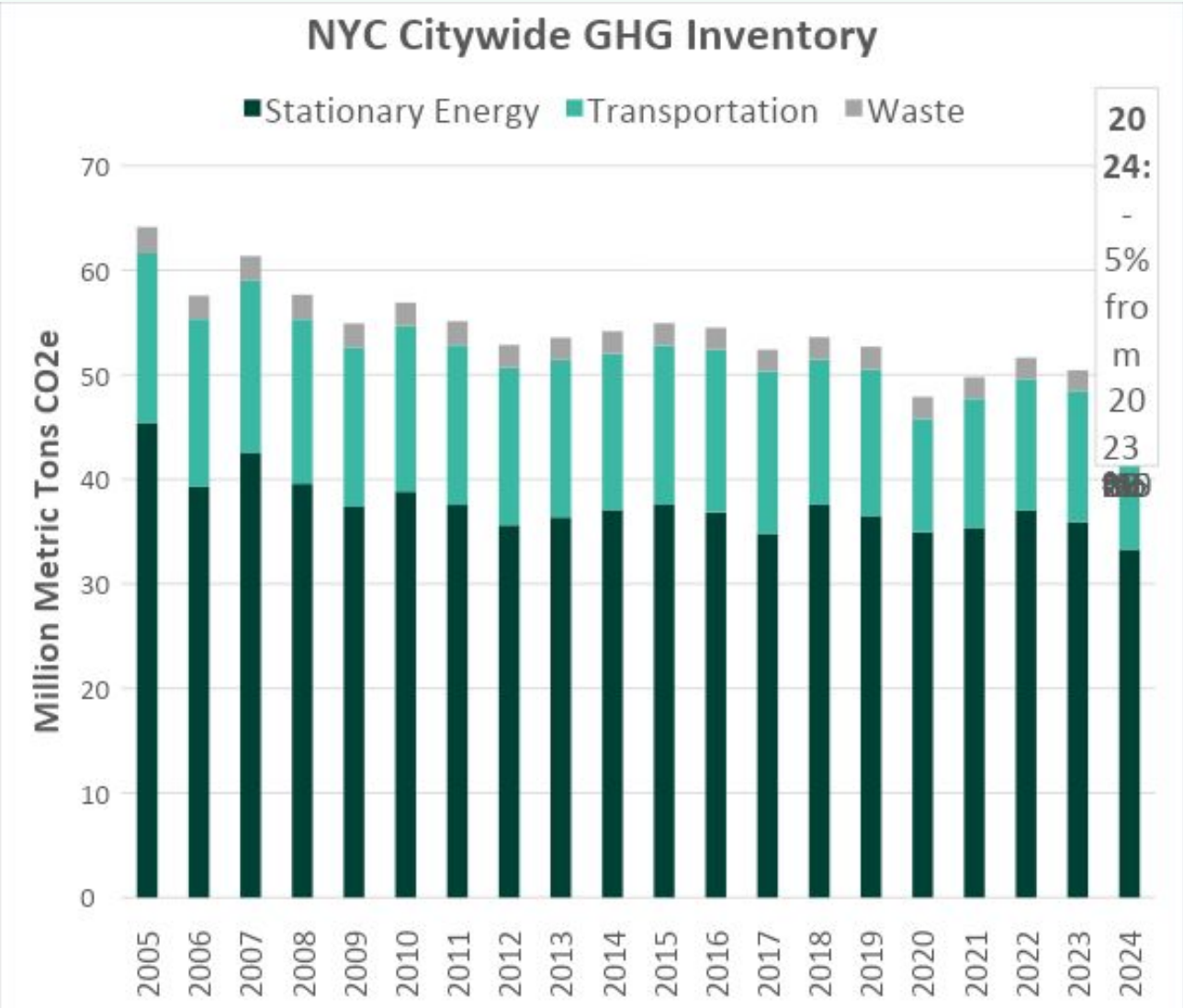


2024 Greenhouse Gas Emissions Results

Citywide Inventory Takeaways

There was a 5% decrease in greenhouse gas emissions since 2023 driven by fuel oil and natural gas reductions in buildings.

Sector	Emissions Change from 2023	Drivers of Change from 2023
Buildings	Decreased	Natural gas and fuel oil reductions
Transportation	Largely Stayed the Same	Increased both heavy duty traffic and for-hire electrification
Waste	Increased	Increased landfilled waste while organics processing expanded
Total	Decreased	Natural gas and fuel oil reductions





NYC Inventory Methodology

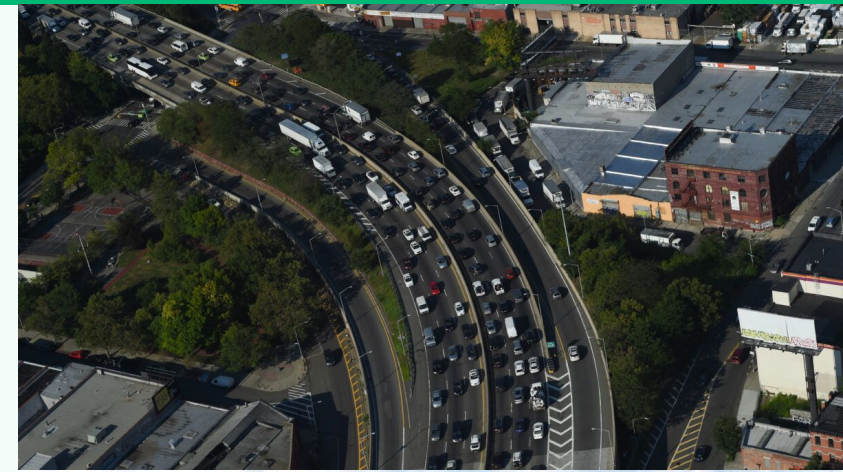
Inventory Basics

Purpose:

- Track the City's progress toward its emissions reduction mandates:
 - Reduce citywide emissions by 40% and city government emissions by 50% by 2030
 - Reach net-zero emissions by 2050
- Identify opportunities to reduce emissions
- Support policy development and implementation:
 - Climate Budgeting emissions forecasting
 - LL97 tracking
- Standardized methods to benchmark against other municipalities
- The GHG Inventory is published on **November 15th**

History:

- ***2025 marks 20 years of Inventory data reporting***



Inventory Data Is Collected from Various Partners

Utilities & Fuel Oil Vendors



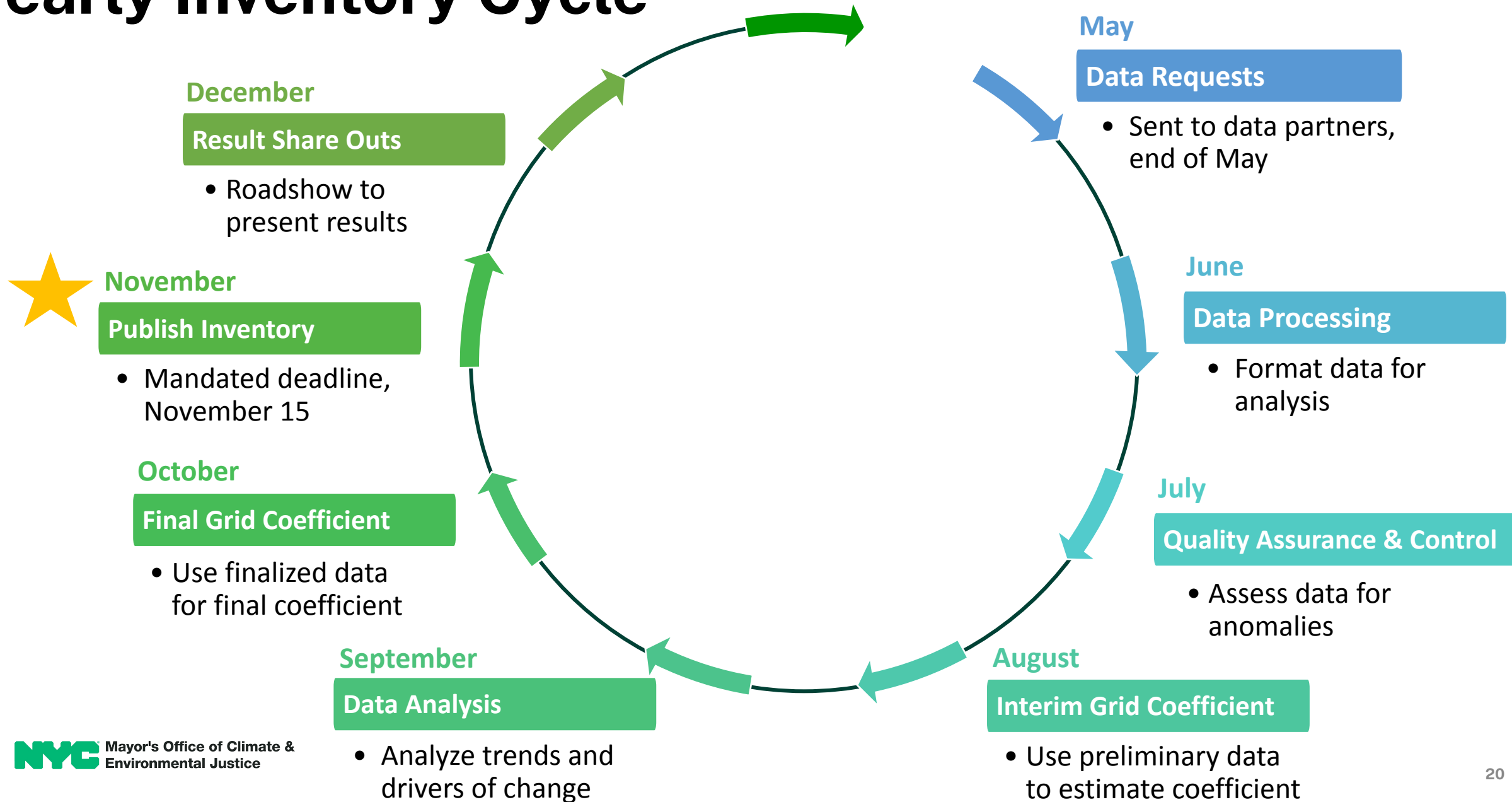
Transportation Entities



Government Agencies



Yearly Inventory Cycle

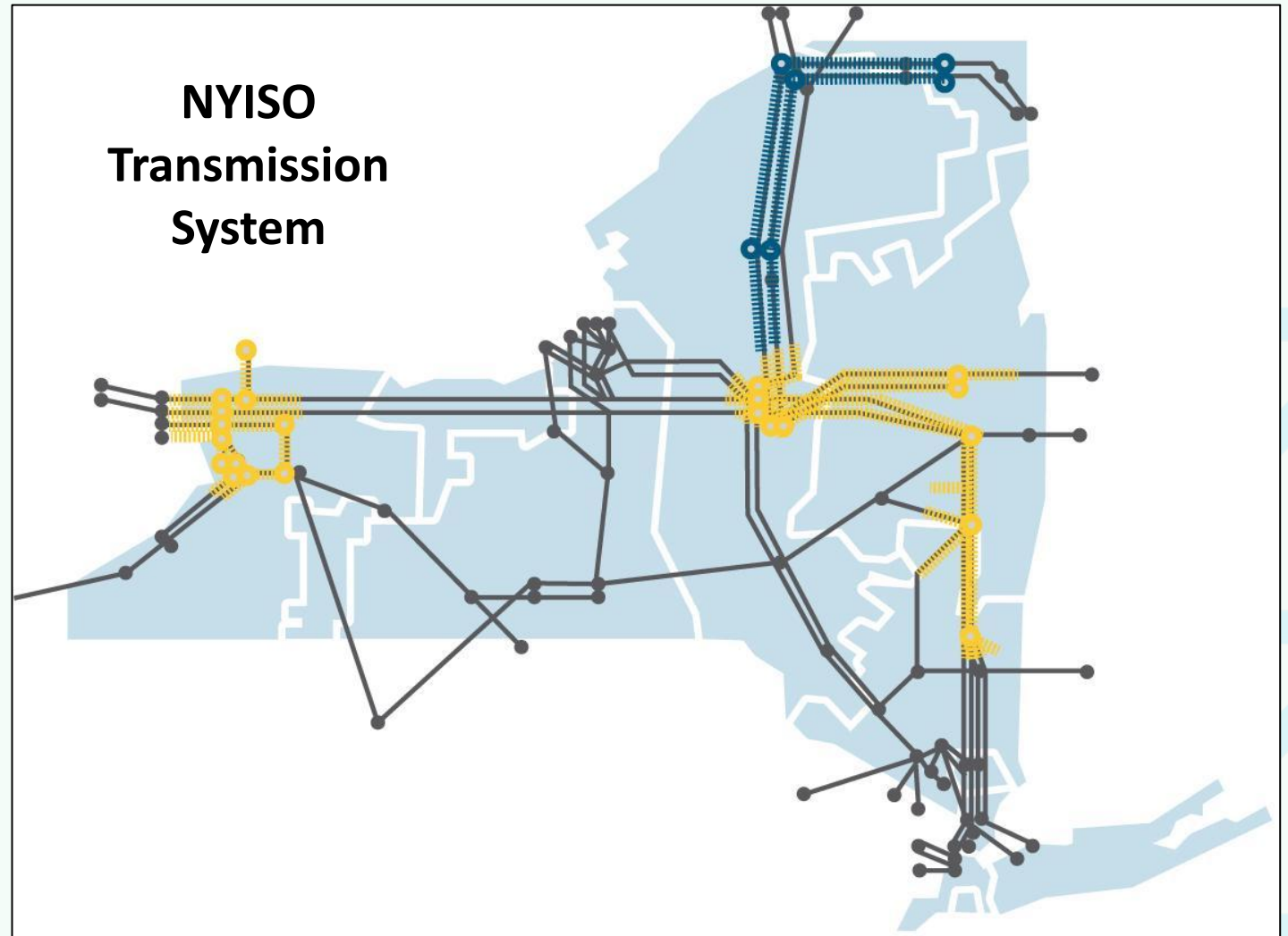




NYC GHG Inventory Grid Coefficient

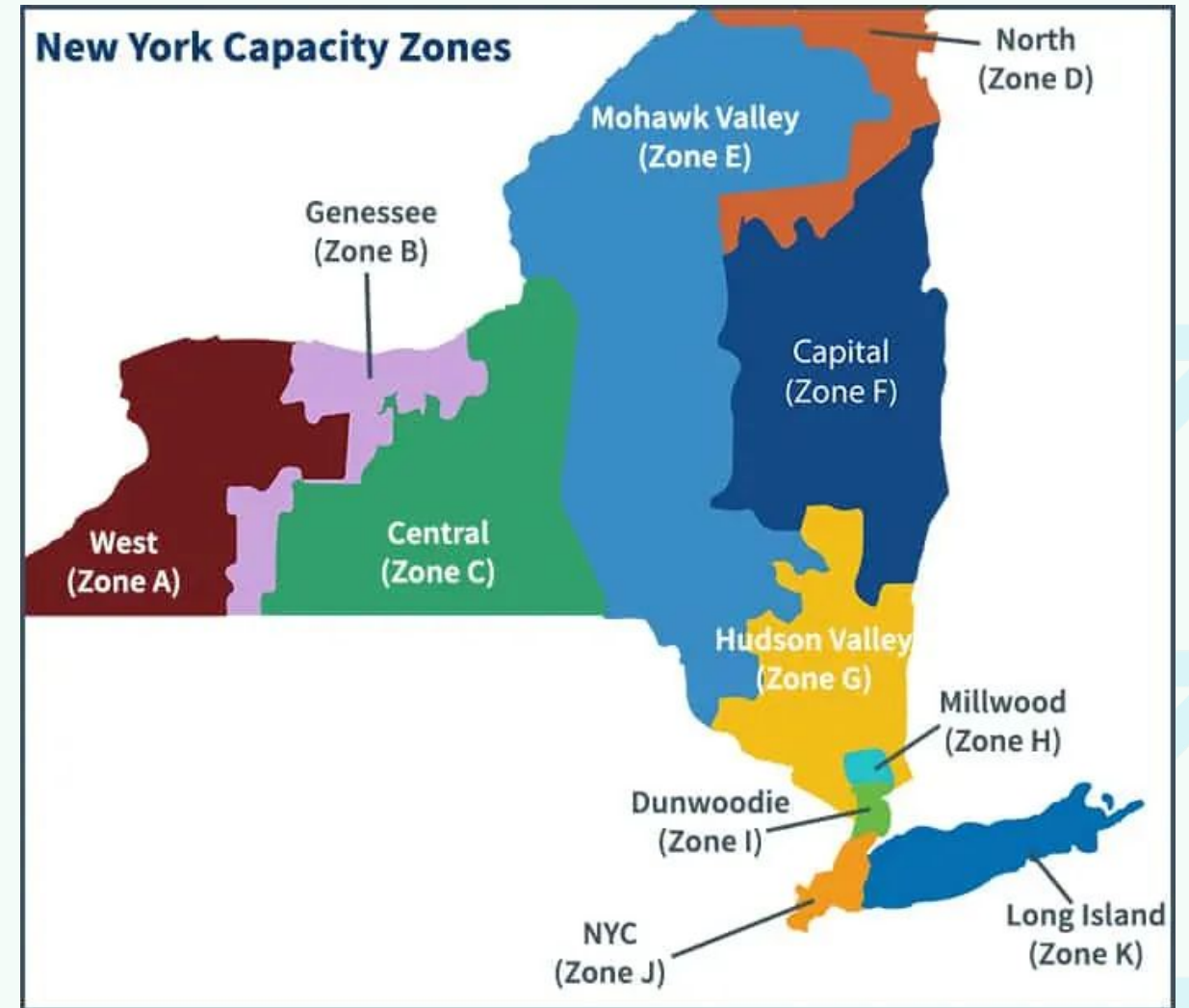
Where does NYC Electricity come from?

- NYC imports electricity from outside the City to meet demand
- Most electricity generation in NYC is powered by fossil fuels
- Transmission lines deliver electricity from fossil fuel and clean energy power plants located across New York State and New Jersey



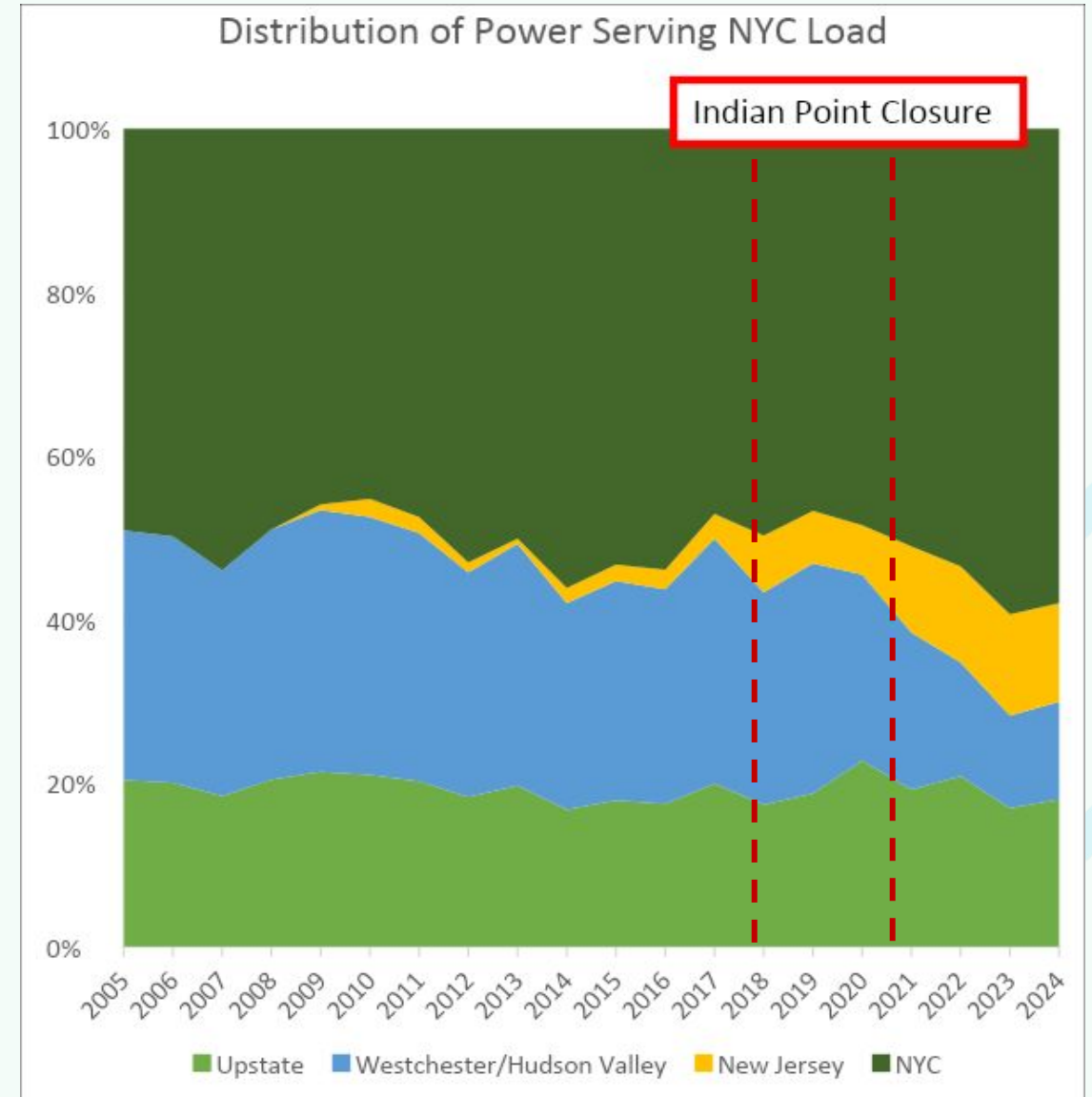
How is the NYC GHG Inventory Grid Coefficient Calculated?

- Data input sources: U.S. EPA, NY Independent System Operator (NYISO), Utility Data
- Assumptions for calculating the grid's emissions intensity:
 - 100% of power generation in NYC serves NYC
 - 100% of imported power from New Jersey serves NYC
 - The remaining demand is served from a split of 60% from upstate sources and 40% from Westchester and the Hudson Valley
 - Long Island power generation does not currently serve NYC



2024 NYC Grid Coefficient Results

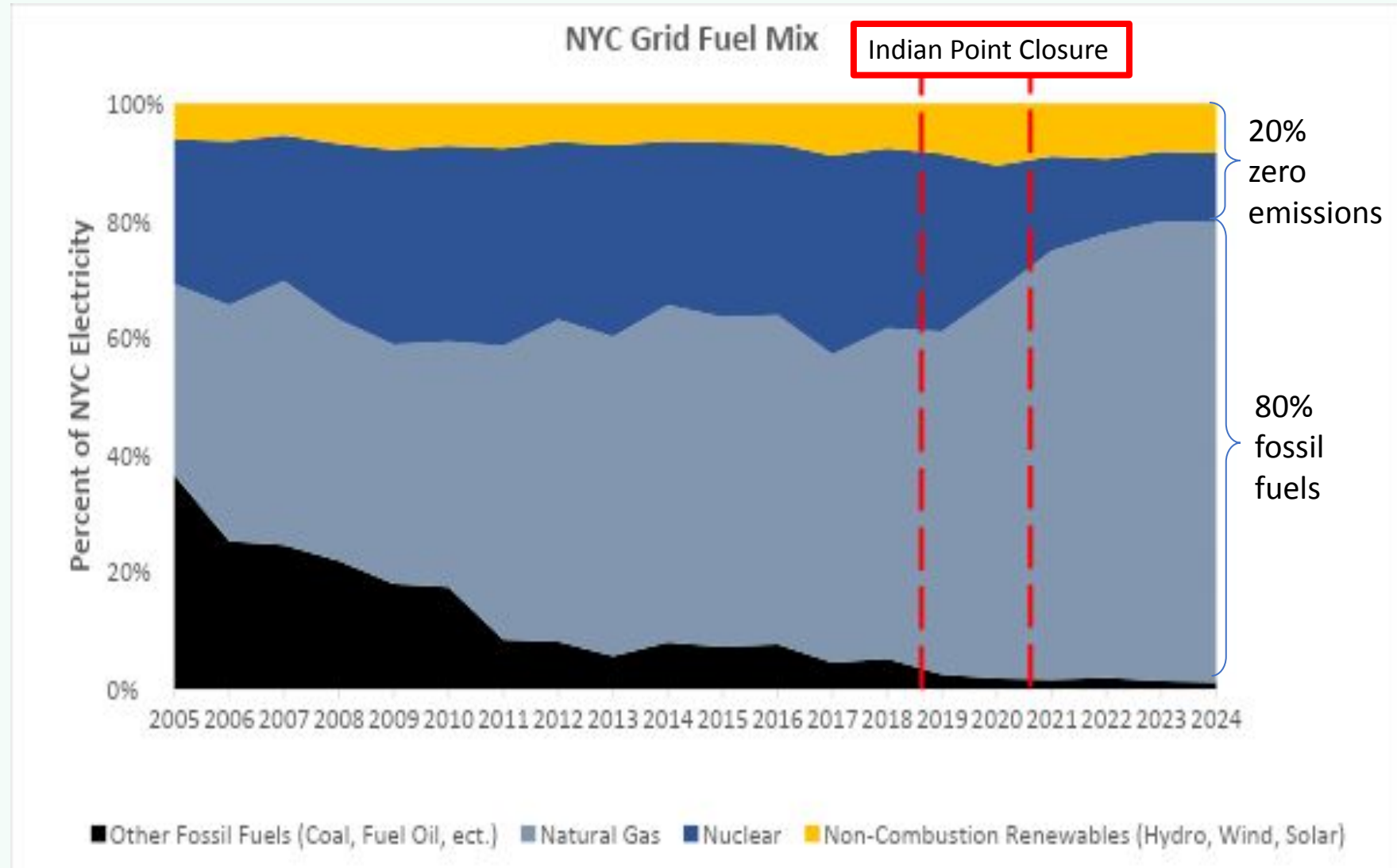
- NYC generation serves about 50-60% of NYC demand
- Remaining demand is met by imports from Upstate, Westchester/Hudson Valley, and New Jersey
- Grid is more reliant on NYC generation and NJ imports since the closure of Indian Point Nuclear Power Plant in April 2021



New Normal: Less Zero Emissions Energy on our Grid

After Indian Point Closure:

- More reliance on In-City natural gas power plants and transmissions from NJ
- Less available zero-emission energy sources due to transmission constraints
- Underscores importance of Champlain Hudson Power Express (CHPE) and large-scale renewables like Empire Wind



How is the Inventory Coefficient Different?

	NYC GHG Inventory	LL97	NYC eGrid (NYCW Subregion)
Generation Region Included in Coefficient:	NYC & Westchester Generation + NJ and Upstate Imports	NYC & Westchester Generation	NYC & Westchester Generation
Purpose:	Annual retrospective modeling of generation, transmission, and electricity imports	Default LL97 compliance coefficient fixed in 2019 to provide regulatory certainty and support building capital-planning cycles. Note: established while Indian Point was operational and does not represent today's grid mix.	US regional zones developed by EPA to track power plant emissions within set subregions.
Applicable Data Year	2024	2024 – 2029* (based on 2017-18 estimates)	2023

Look Ahead for the NYC Electricity Grid

- Champlain Hudson Power Express (CHPE) became operational in May 2026 delivering 1,250 MW of power annually
- Empire Wind 1 is expected to become operational in 2027 delivering 810 MW of power annually
- Interim emissions reductions goals are here and fast approaching
- It's crucial to reflect developments to the electric grid in the NYC GHG Inventory Grid Coefficient



Thank You

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July 2026





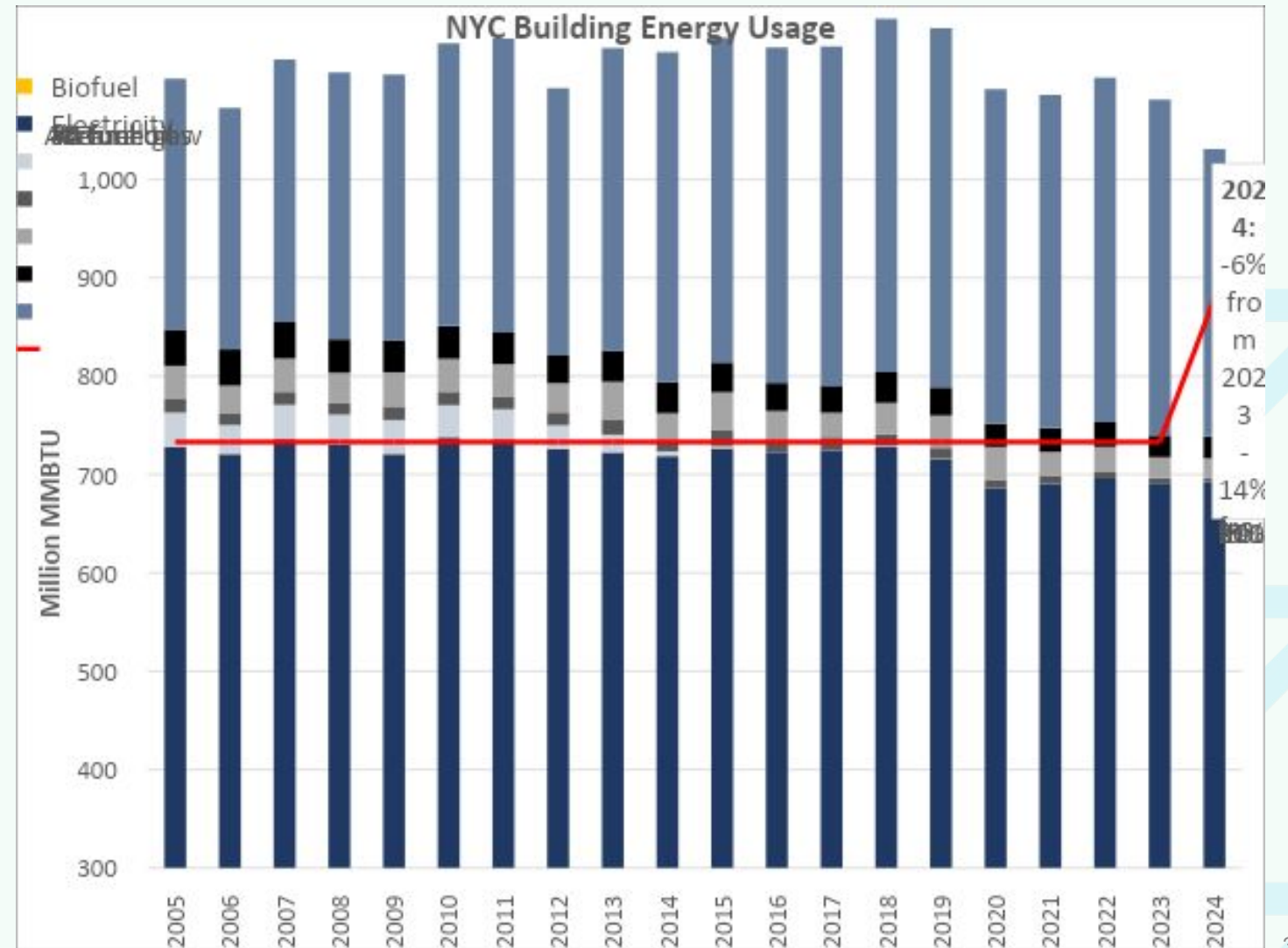
Questions & Discussion



Appendix

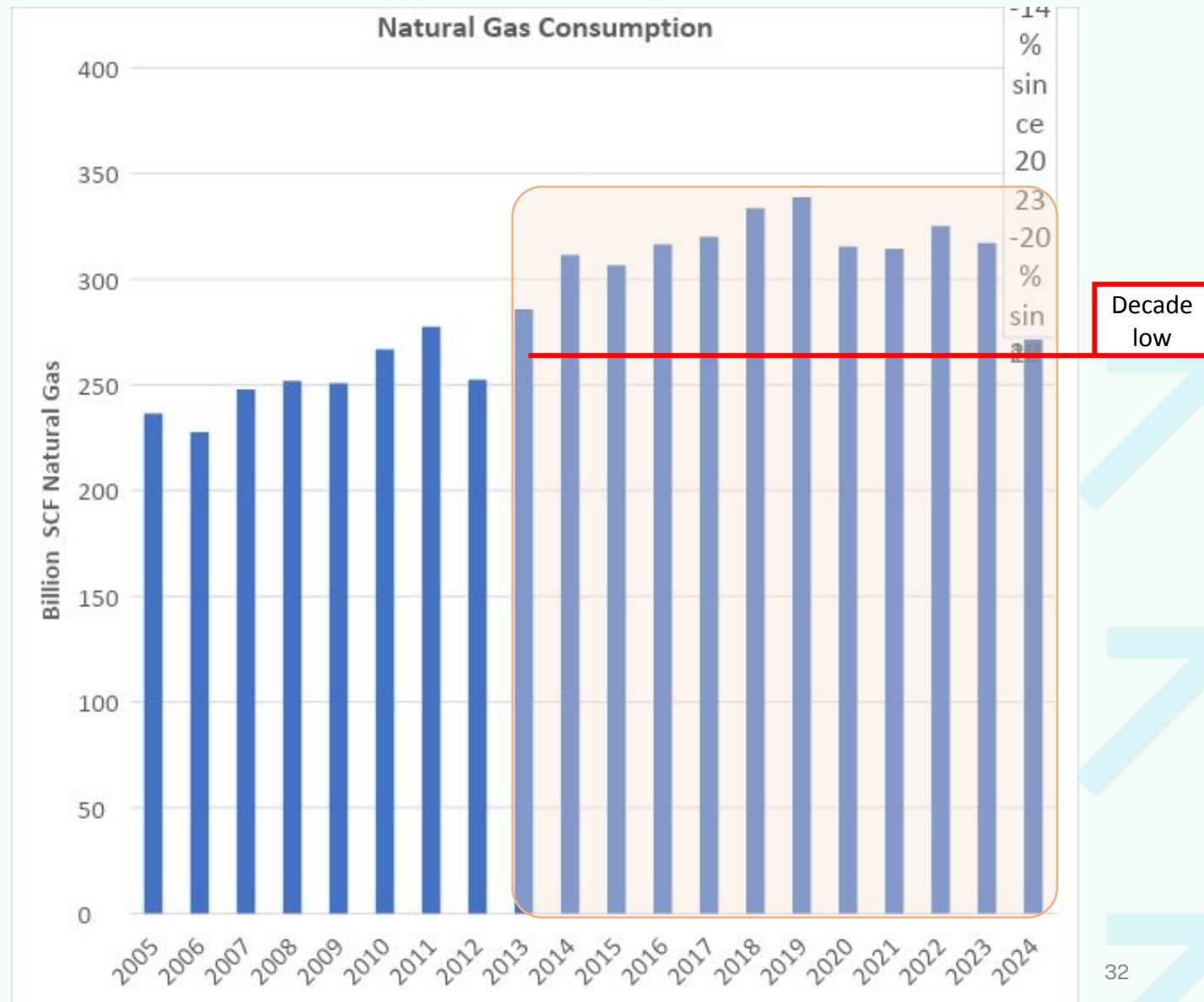
NYC Buildings are More Energy Efficient Than Ever Before

- Buildings are our largest source (70%) of citywide emissions and emission reductions
- NYC building energy usage is at all time low
- Building energy decreases driven by:
 - Over 70% reduction in fuel oil since 2005 due to phase out legislation
 - Lowest natural gas use in the last decade
 - Pandemic-driven drops in commercial building electricity usage



Natural Gas Usage at its Lowest in the Last Decade

- Beyond weather, pandemic, and population impacts, natural gas is still reducing for both utilities due to efficiency
- Reductions driven by a steep decline in residential natural gas
- Reductions are consistent across utilities
 - National Grid: -16% from 2023
 - Con Ed: -13% from 2023

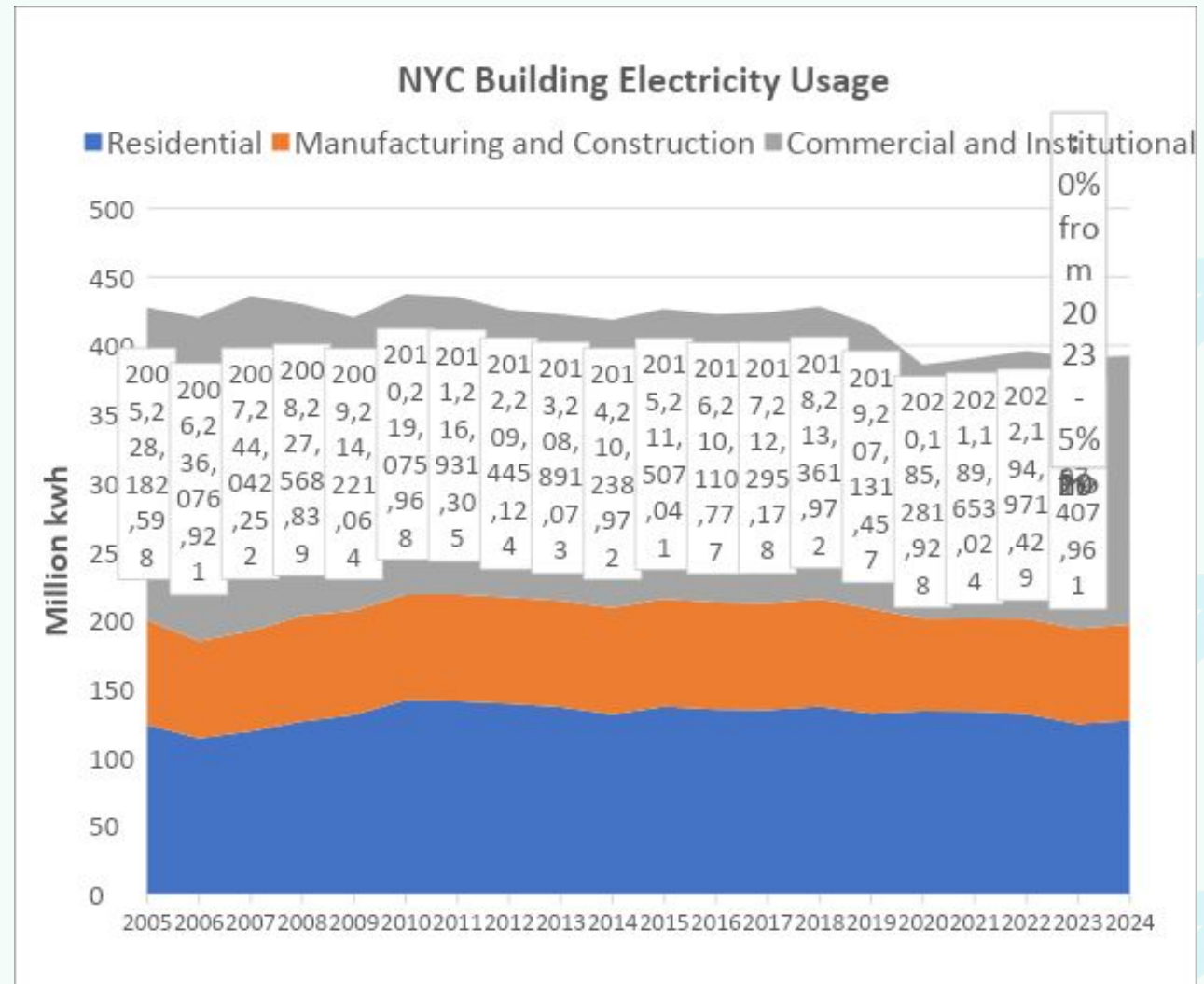


New Normal: Commercial Building Electricity Usage Remains Consistently Below Pre-Pandemic Levels

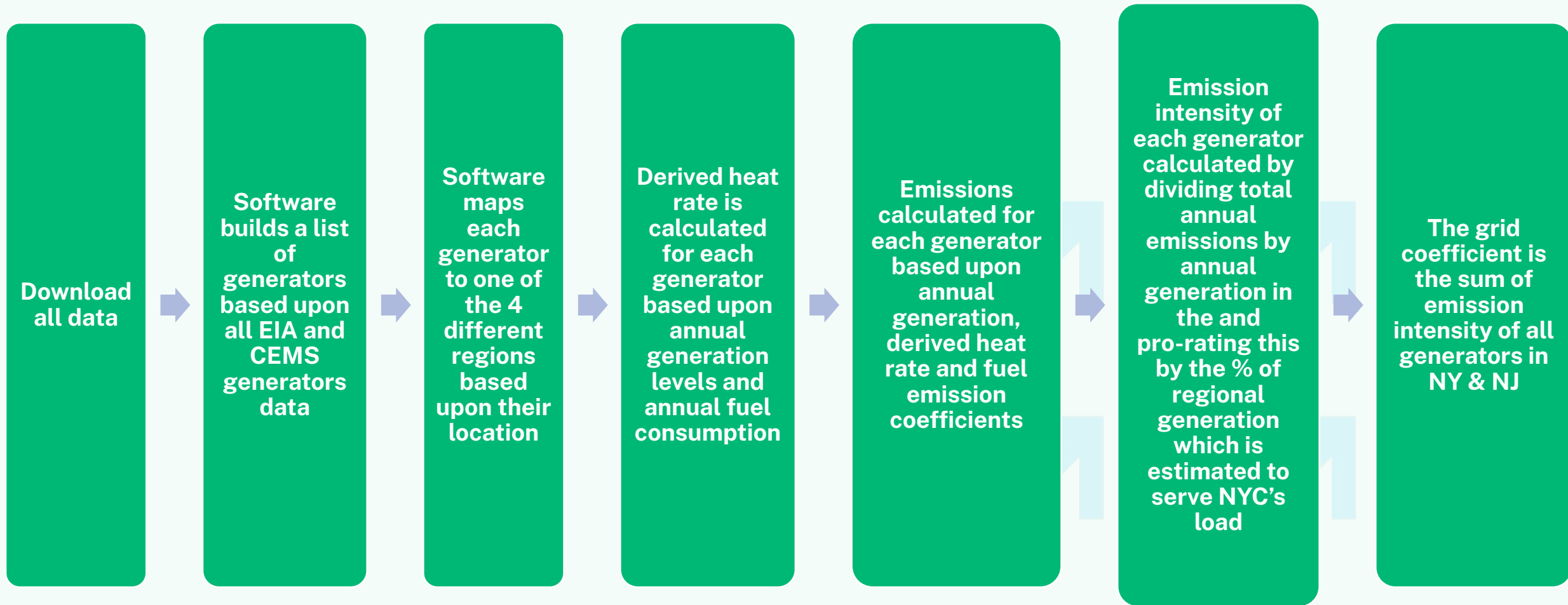
Impact of the pandemic on businesses and **commercial sector drove over half of the electricity reductions** since 2019, largely due to:

- **Smarter operations:** Modified or shortened hours of operation reducing energy usage (i.e. shutting off building systems overnight)
- **Energy Efficiency Upgrades:** Many buildings completed long-overdue commercial energy efficiency upgrades during the pandemic
- **More vacancy:** There are twice as many vacant offices as in 2019

Trend is consistent even when normalizing for building square footage



Grid Coefficient Tool Calculation Methodology



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Javits Center | New York, NY
GREENBUILDEXPO.COM

- The 2026 program has launched! Check Greenbuild's website for details.
- Early bird pricing is in effect until August 7.
- Tour programming will be launching very soon.
- If you are interested in attending the Expo Hall, we would be happy to provide a complimentary pass.



URBAN GREEN Gala

Tuesday, October 20, 2026 • 6-10 pm

The Lighthouse at Chelsea Piers, Pier 61

This year, our Gala is part of



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New course alert!

Match Made in NYC: Choosing the Right Heat Pump for Your Building

Is your New York City building considering a switch to heat pumps? Check out our updated training, ***Match Made in NYC: Choosing the Right Heat Pump for Your Building***! Learn about the first steps in transitioning from fossil fuel heating, cooling, and water heating systems to heat pumps for energy-efficient commercial and multifamily buildings.

Upcoming sessions:

July 16, 2026
2:00 – 5:00 pm

July 22, 2026
9:00 am – 12:00 pm



Learn more and
register now!





Thank you!



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