



UPDATE ON LOCAL LAW 97

November 19, 2021

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PRESENTATION OVERVIEW

This presentation will cover the requirements of Local Law 97 of 2019, from the Climate Mobilization Act, which limits greenhouse gas emissions from certain buildings. Material will include a review of the types of covered buildings that are subject to the law, what requirements owners must meet and when, and how various credits and deductions are considered under the law. The presentation will include updates on the legislation, review of new resources published by the Department, and a review of information that will be issued in the coming year.

TAKEAWAYS

1. Viewers will be able to describe the types of buildings that are subject to greenhouse gas emission limits in New York City and what criteria affect the limits.
2. Viewers will be able to explain to an owner what criteria will affect the greenhouse gas emission performance **of their building**, what the primary timeline is for the law, and how to avoid future fines.
3. Viewers will learn about the resources that are available to building owners to assist with their path to compliance.
4. Viewers will review recent resources prepared by the Department and other City agencies to clarify various sections of the NYC Building Code, including details that were undefined in the law.



NYC CLIMATE MOBILIZATION ACT

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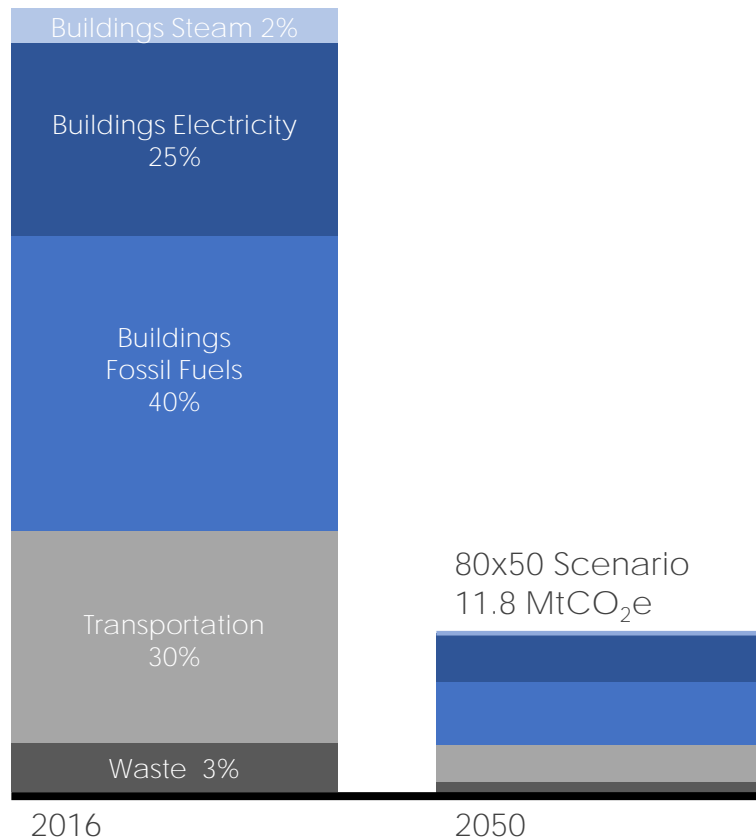
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2019 CLIMATE MOBILIZATION ACT

- Local Laws 92 and 94
requiring that the roofs of certain buildings be covered in green roofs and/or solar PV systems
- Local Law 95 (amended Local Law 33 of 2018)
assigns a building energy efficiency grade
- Local Law 96
establishing a sustainable energy loan program (ie. PACE)
- Local Law 97
the commitment to achieve certain reductions in greenhouse gas emissions by 2050

NYC EMISSIONS: 51.7 MtCO₂e



By 2030, the Climate Mobilization Act will achieve:

- 6 million tons of CO₂e reduced
- 26,700+ jobs created
- 150 hospitalizations avoided per year
- 50 to 130 deaths prevented per year

NEW YORK STATE CLCPA

The Most Aggressive Clean Energy and Climate Agenda in the Country

2019 CLIMATE LEADERSHIP & COMMUNITY PROTECTION ACT

- Updates the Carbon Goal for NYS
requiring that the state eliminate 85% of its GHG emissions by 2050 and offset the remaining 15% (Carbon-neutrality)
- Equity and Social Justice
35% of funding must go to disadvantaged communities
- Interim Targets
70% of electricity to come from renewables by 2030, with 100% carbon free electricity by 2040
- All-in
aspires to be truly economy-wide



CLCPA UPDATE

NEW YORK'S CLIMATE LEADERSHIP and COMMUNITY PROTECTION ACT

New York's landmark new law, the Climate Leadership and Community Protection Act (Climate Act), is demonstrating to the nation how to confront the greatest threat facing life as we know it — a rapidly changing climate. Signed into law in July 2019, the Climate Act will empower every New Yorker to fight climate change and provide the opportunity to improve all our daily lives.

This is our planet. This is our time to fight for it.

By 2040: achieve 100% zero-emission electricity | By 2050: reduce emissions at least 85% below 1990 levels

Achieving the ambitious goals of this law will mean transforming the way we generate and use electricity, the way we heat our homes, and the way we get to school and work. New Yorkers will tackle climate change and create new opportunities for our children and grandchildren. Through thoughtful planning, this effort will breathe life into our economy with well-paying clean energy jobs, new industries and business opportunities, and improved health and quality of life for New York families and communities. New York's course on climate action also means spending less on fossil fuels and keeping our energy dollars in the local economy, and in the pockets of hardworking New Yorkers.

As we experience record temperatures and extreme storms, the Climate Act compels us to take action. New York will undertake a sweeping set of measures to reduce our carbon footprint, make our communities more resilient, and adapt to a changing climate. The State's new climate law sets the stage for this and creates the opportunity for citizens and communities to partner with businesses, schools, and government to create a green economy and build a climate-proof future.

What the Climate Act means for New York State

CLEAN ELECTRIC GRID OF TOMORROW | Solar, wind, and other renewables, combined with energy storage will deliver affordable and reliable electricity over the next decade and beyond

COMFORTABLE, AFFORDABLE, AND SAFE ENERGY EFFICIENT HOMES AND BUSINESSES | New clean heating and cooling technologies, such as electric heat pumps and smart thermostats, combined with energy efficiency, will save New Yorkers energy and money

CLEAN, RELIABLE TRANSPORTATION | Zero emission transportation options for families and neighborhoods will enable New York to trade gridlock and diesel fumes for fresh air and cleaner communities

A CLEAN ENERGY ECONOMY FOR EVERYONE | Every community, every trade, and every region will have access to clean energy solutions and the economic opportunities that the transition to a just and equitable energy system provides

Benefits of New York State's climate leadership

JOBS | Creating thousands of green jobs in communities across the State — from building trades and technicians to engineers and firefighters — making New York a hub of clean energy economic growth

A HEALTHIER NY | Reducing greenhouse gases and local pollution to keep our communities healthier, reduce respiratory illnesses and premature deaths, and avoid healthcare costs that limit our progress and success

AFFORDABLE ENERGY | Reducing energy consumption and utility bills by increasing access to ever-improving clean, efficient, and reliable energy solutions

EMPOWERMENT | Providing a seat at the table for disadvantaged communities, and ensuring good paying job opportunities for all New Yorkers

Find out more and learn what you can do climate.ny.gov
Send all of your questions and feedback to climateact@clcpa.ny.gov

- Climate Action Council
 - 22 member committee of State-agency appointees
 - Includes a Climate Justice Working Group
 - Visit <https://climate.ny.gov/>

LOCAL LAW 97

GHG Limits for Covered Buildings

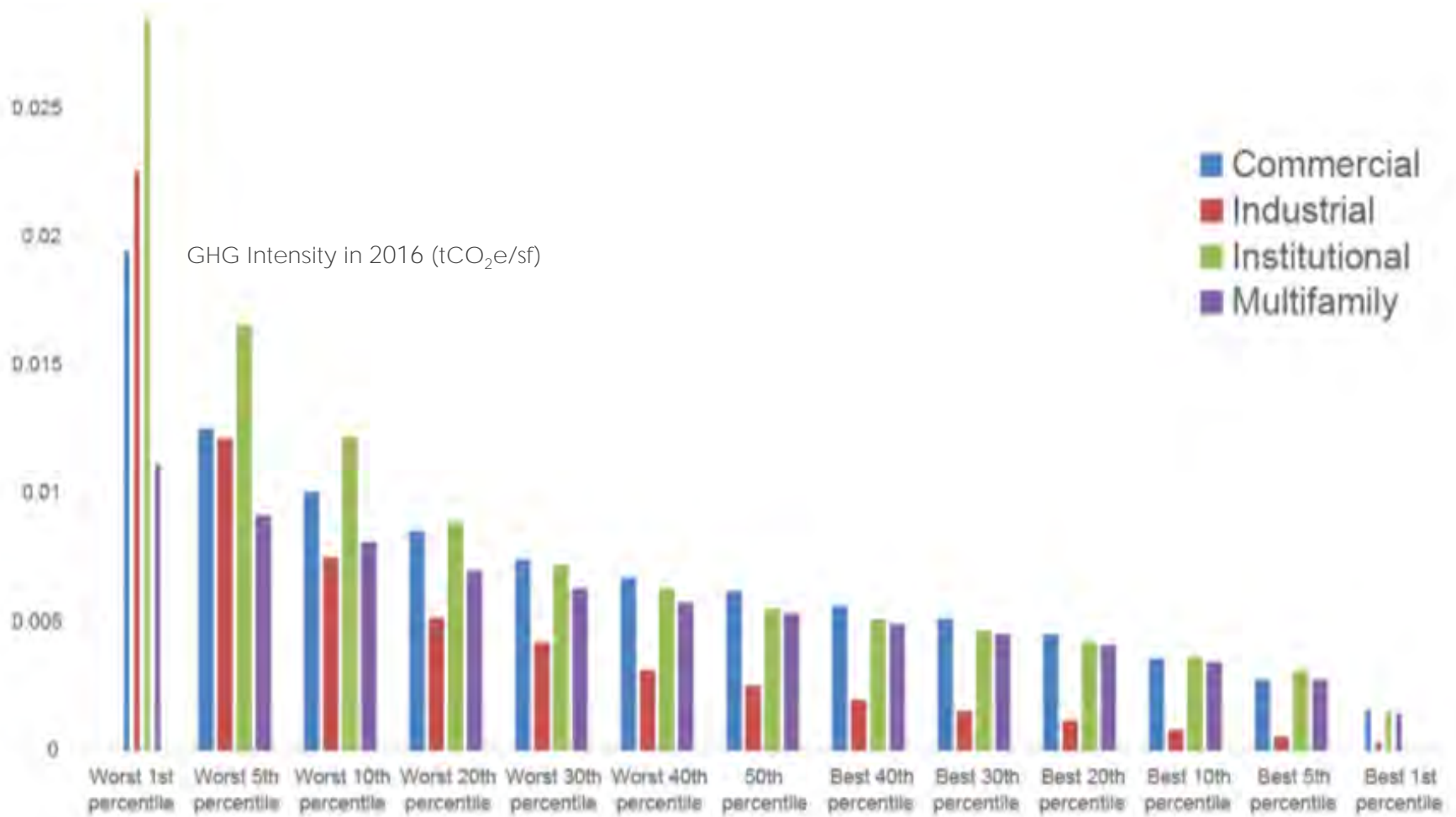
LOCAL LAW 97

- GHG emissions limits for buildings >25,000 square feet (see the definition of [Covered Building](#) in Section 28-320.1)
- Convened an advisory group for open issues, Section 28-320.2
- City operations GHG reductions of 40% by 2025 and 50% by 2030, Section 2 of LL97, which amends Title 24 of the City's Administrative Code, Environmental Protection and Utilities
- NYCHA is subject to the same limits as other covered buildings, in Section 4 of LL97

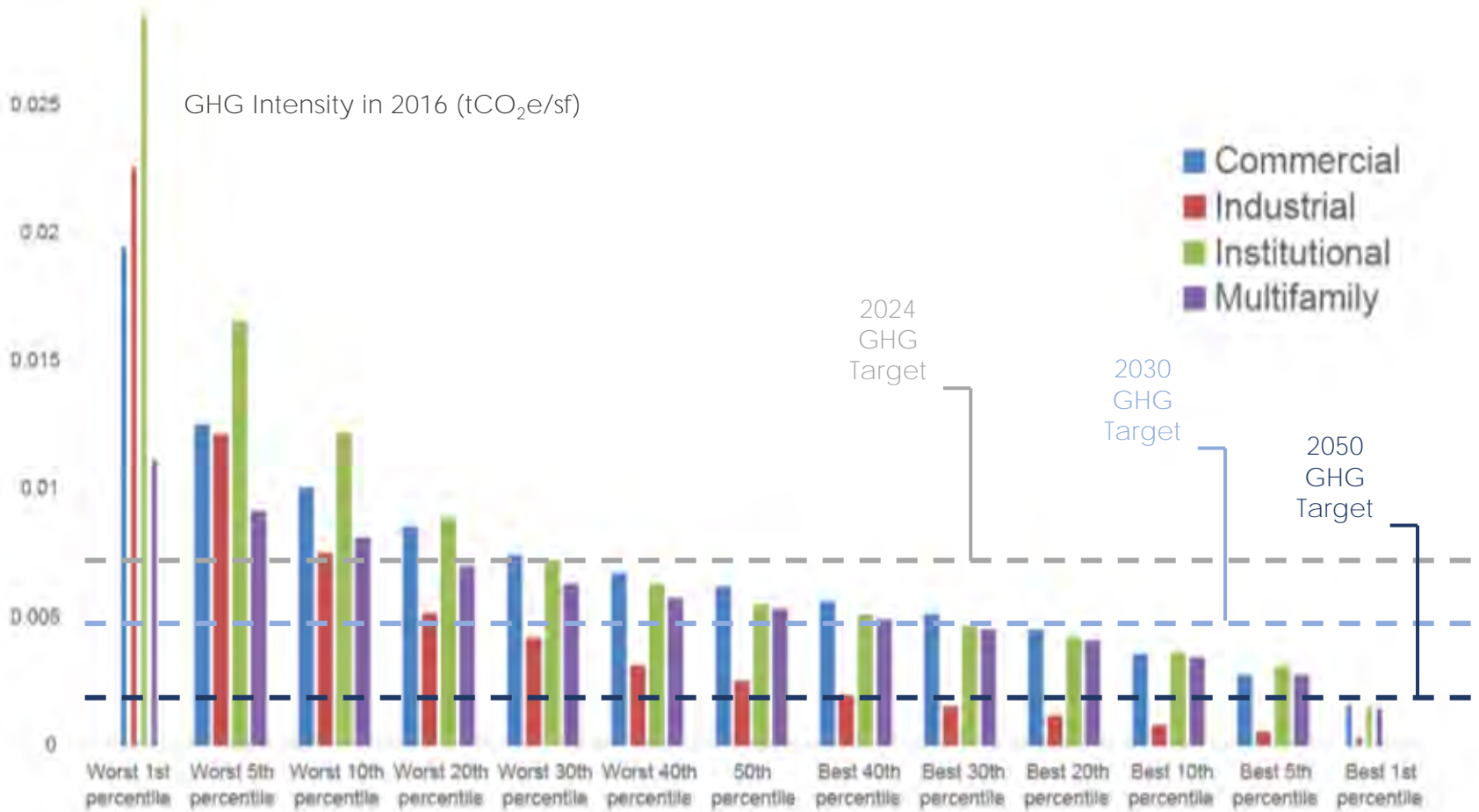
LOCAL LAW 97

- By May 1, 2025, building owners must report emissions from CY 2024, see [Section 28-320.3](#) for the emission limits
- Emissions are reported annually for each calendar year
- The emissions target is more stringent beginning in CY 2030, these align buildings with the City's 40X30 goal
- For 2035 and beyond, targets will be set by DOB rulemaking based on recommendations from the Advisory Board
- Law requires a Study for a building carbon trading scheme, see [Section 28-320.11](#).
- Prescriptive energy conservation measures for rent regulated housing are found in [Section 28-321.2.2](#).

LOCAL LAW 97



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The commitment to achieve certain reductions in greenhouse gas emissions by 2050

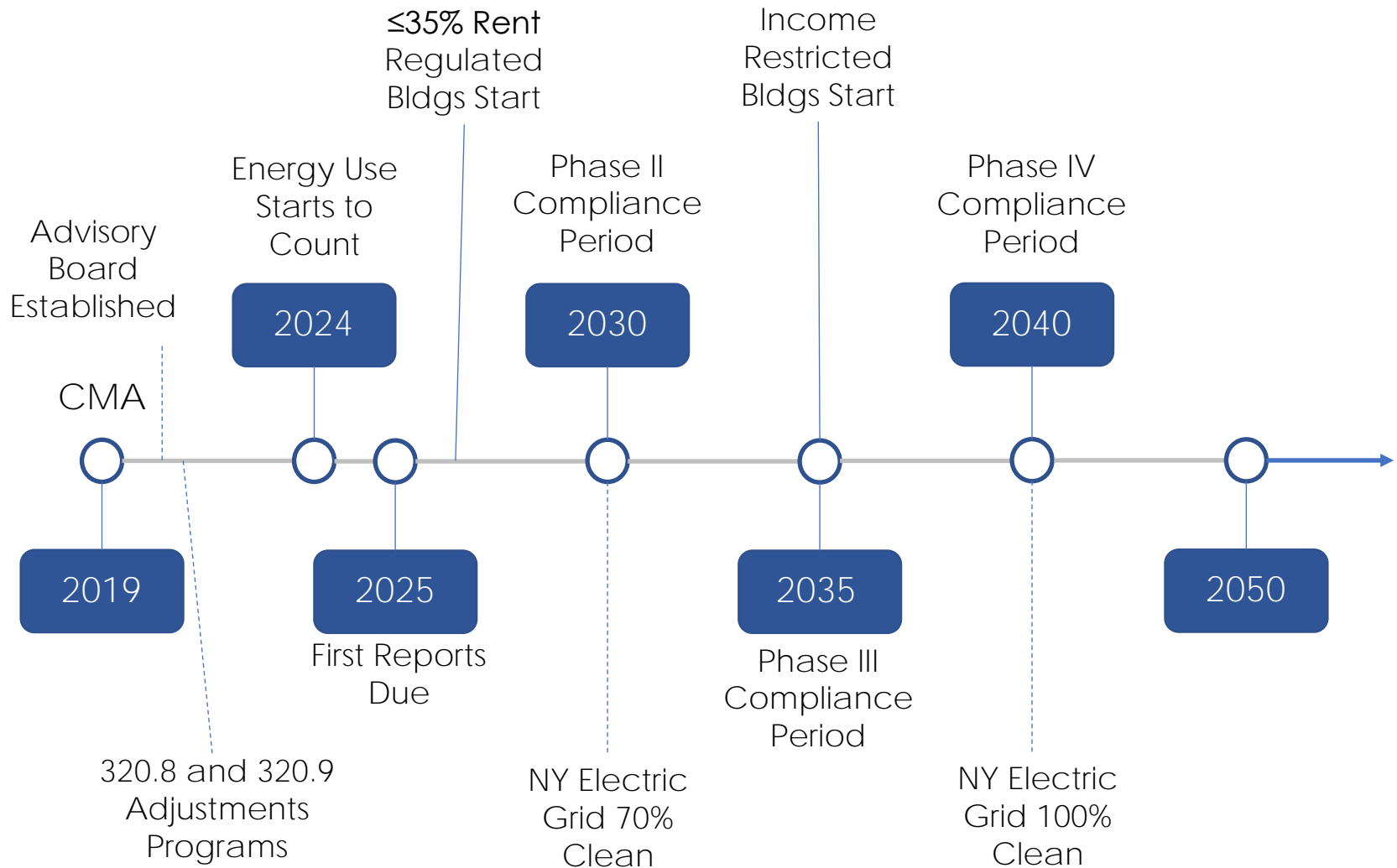
GHG coefficients

Energy Source

2024-2029
(tons CO₂e/kBtu)

Utility electricity	0.0000847
Additional rules for campus-style electricity systems that share on-site generation, but make use of the utility distribution system and for buildings not connected to the utility distribution system to come	
Natural gas combusted on-site	0.00005311
#2 fuel oil combusted on-site	0.00007421
#4 fuel oil combusted on-site	0.00007529
District steam	0.00004493
Other, including distributed energy resources	TBD

LOCAL LAW 97 TIMELINE



COMPLYING WITH LL97

- Each property has a GHG budget based on the occupancy classifications of the spaces within the property.
- A registered architect or engineer will need to calculate the building's GHG budget and report annual GHG emissions total for the property. See [Section 28-320.3.7](#).

COMPLYING WITH LL97

Property Limit Deductions

- Renewable Energy Certificates, Section 320.3.6.1
 - Credited *only* for energy that is deliverable into Zone J
 - Other requirements to come in rulemaking soon
- Greenhouse Gas Offsets, Section 320.3.6.2
 - Limited to 10% of the annual emissions limit
 - Under development
- Distributed Energy Resources, Section 320.3.6.3
 - Under development

COMPLYING WITH LL97

WHAT YOU NEED TO KNOW . . .
BUILDINGS BULLETIN 2021-019
ISSUED: October 5, 2021

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GREENHOUSE GAS EMISSIONS ACCOUNTING FOR ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) *Construction Codes Requirements*

BACKGROUND



New York City has aggressive climate goals, including reaching net zero emissions by 2050 across the building, transportation, and waste sectors. Local Law 97 of 2019 (LL 97/2019), effective November 15, 2019, amends Title 28 of the New York City 2014 Administrative Code to require reductions in greenhouse gas emissions from certain buildings beginning in 2024. The purpose of Bulletin 2021-012 is to clarify that energy used to charge vehicles will not be included in emissions from buildings, as such emissions are considered transportation sector emissions.

HIGHLIGHTS

- For the purposes of LL97/2019, deduction of energy used to charge plug-in electric vehicles (PEV) is allowed for unidirectional EVSE only at this time. Accounting for bi-directional chargers will be addressed by a future Buildings Bulletin.
- Deduction of energy used to charge electric vehicles requires that the system must be metered or submetered in such a way as to generate hourly records and a total annual amount of energy consumed for vehicle charging on-site at a property.
- EVSE require permits prior to installation and must meet other requirements contained within the New York City Construction Codes, Electrical Code, and Fire Code.

Read the full version of [Bulletin 2021-019](#) for more details on the requirements.

Send questions to GHGEmissions@buildings.nyc.gov.

Property Limit Deductions

- Electric Vehicle Charging, Building Bulletin 2021-019
 - Electricity used to charge EVs can be deducted from the building's annual energy consumption
 - https://www1.nyc.gov/assets/buildings/bldgs_bulletins/bb_2021-019.pdf

COMPLYING WITH LL97

Property Limit Adjustments

- Special Circumstances, Section 320.8 - Variance to adjust a building's 2024 GHG target based upon excessive emissions attributable to high-intensity uses and not the building condition
- Not-for-Profit Healthcare, Section 320.9- Alternate GHG target set for hospitals and healthcare facilities with excessive emissions

COMPLYING WITH LL97

Property Limit Adjustments

- Constrained properties, Section 320.7 - legal or physical constraints that limit the owner's ability to comply
- Financial Hardship, Section 320.7 - Cost will restrict the owner's ability to operate the building or the property is subject to financial hardship

COMPLYING WITH LL97

Penalties

- **GHG emissions that exceed the building's GHG budget** are subject to a penalty at \$268 per metric ton of CO₂e. See Section 28-320.6.1.
- Section 28-320.6.2 establishes a penalty of \$0.50 per square foot for failure to file
- Section 28-320.6.3 establishes a penalty for false statements- \$500,000 or up to 30 days imprisonment, or both

LL97 OPEN ISSUES

*Implementation coming from DOB, the
Advisory Board and Working Groups*

LL97 ADVISORY BOARD

Appointees

- Architects
- Engineer
- Building Owner
- Business Sector Representative
- Public Utility
- Environmental Justice Representatives
- Environmental Advocacy Organization Representative
- Stationary Engineer
- Construction Trades Representatives
- Green Energy Representative
- Residential Tenant Representative
- Non-profit Representative
- Speaker and Mayor Designees
- Chair

LL97 ADVISORY BOARD

Eight Working Groups

- Commercial Building Technology & Pathways
- Multi-family Building Technology & Pathways
- Carbon Accounting
- Energy Grid
- Communications
- Hospitals
- Economic Impact
- Implementation

LL97 ADVISORY BOARD

Topics of the Work

- Tenant-controlled energy
- Adjustments to the metrics
- Alternative Compliance Paths
- Energy Coefficients for 2030 – 2034, Time of Use
- Renewable Energy Credits
- Future GHG limits for 2030 – 2034 and beyond
- Potential changes to LL87 of 2009
- Achieving reductions from hospital buildings
- Incentives for peak-demand and electrification
- Carbon Trading

OPEN ISSUES BEING ADDRESSED BY THE DEPARTMENT

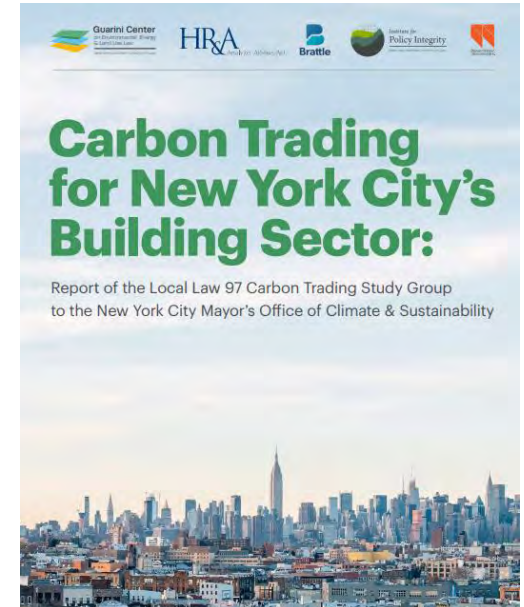
- Reporting requirements beyond Energy Star Portfolio Manager using DOB NOW
- Reporting requirements for Campus properties
 - Multiple buildings on a lot
 - Buildings that share systems
- Reporting requirements for Article 321
- Deductions
 - RECs
 - GHG Offsets

OPEN ISSUES BEING ADDRESSED BY THE DEPARTMENT

- Mapping of LL97 Building Limits to the Energy Star Portfolio Manager Property Types, see Section 28-320.3.1
 - Law has 10 established limits, for 2024 – 2029, with 18 building types referencing the Building Code
 - New mapping will assign approximately 60 ESPM Property Types to those 10 limits for 2024 – 2029
 - DOB will also map ESPM property types to limits for 2030 – 2034, but the law allows new limits to be established for that compliance period

CARBON TRADING STUDY

- Required by Section 320.3.11, the study was released on November 15, 2021
 - Examines the potential for GHG reductions and affordability of LL97 with and without a carbon trading study
 - Examines impact on environmental justice communities (EJCs)
 - Study suggests that carbon trading can advance the City's goals
 - Coming soon to DOB's Sustainable Buildings Website





LL 97 RESOURCES

AMENDMENTS TO LL97

- Local Law 147 of 2019 - various updates (clean-up bill)
- Local Law 95 of 2020 - added that the energy coefficient for Natural Gas powered Fuel Cells should be credited compared to grid marginal emissions, until January 1, 2023

AMENDMENTS TO LL97

- Local Law 116 of 2020 - Changed the definition of rent regulated accommodation, Section 28-320.1-
 - “a building in which more than 35% of dwelling units are required by law or by an agreement with a governmental entity to be regulated in accordance with the emergency tenant protection act of 1974, the rent stabilization law of 1969, or the local emergency housing rent control act of 1962...”
 - Means that properties that have 35% or less of their dwelling units in rent regulation are now subject to Article 320.

AMENDMENTS TO LL97

- Local Law 117 of 2020 - Changed the reporting requirements
 - Owners of properties that move from non-compliance to compliance must report on what changes were made that helped the property to comply
 - Added additional annual reporting requirements for DOB

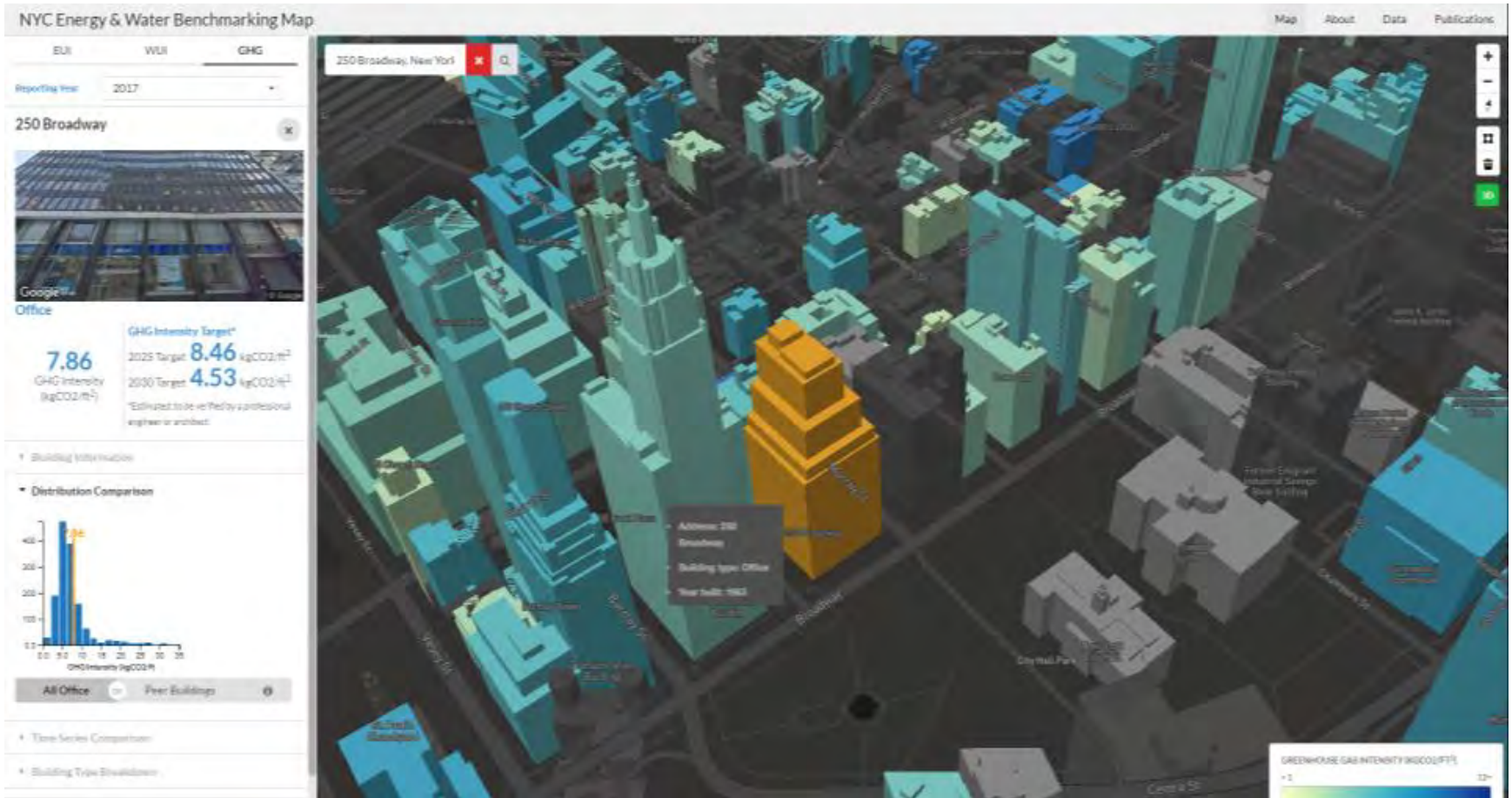
AMENDMENTS TO LL97

- Local Law 97 has changed and may change again!
 - Owners and service providers need to stay informed of the changes
 - Refer to the Administrative Code rather than copies of the law when planning for compliance:
https://www1.nyc.gov/assets/buildings/apps/pdf_viewer/viewer.html?file=2014CC_AC_Chapter3_Maintenance_of_Buildings.pdf§ion=conscode_2014

DOB WEBSITES

- General LL97 Information on the main DOB website
 - <https://www1.nyc.gov/site/buildings/codes/greenhouse-gas-emission-reporting.page>
- DOB Sustainable Buildings Micro-site
 - <https://www1.nyc.gov/site/sustainablebuildings/index.page>

BENCHMARKING MAP



LL97 AFFORDABLE HOUSING GUIDANCE

- DOB, HPD, and MOCS developed and released plain language guidance for affordable housing in 2021
 - Buildings with more than 35% units in rent regulation, Housing Development Fund Cooperatives (HDFC), and HUD project-based assistance must follow Article 321 with reporting due in 2025
 - Owners have the option of meeting Article 320 limits for 2030 - 2034

LL97 AFFORDABLE HOUSING GUIDANCE

- DOB, HPD, and MOC&S developed and released plain language guidance for affordable housing in 2021
 - Buildings with up to 35% rent regulated units follow Article 320 but start reporting in 2027 (see [Section 28-320.3.10.1](#))
 - These properties will be subject to the same requirements as other covered buildings in 2030
 - Income-restricted housing, including Mitchell-Lama, begins reporting in 2036 (see [Section 28-320.3.9](#))
 - Does not include Inclusionary-Housing Programs required by zoning
 - <https://www1.nyc.gov/site/sustainablebuildings/requirements/affordable-housing.page>

ARTICLE 32I PRESCRIPTIVE MEASURES

- Adjusting temperature set points for heat and hot water
- Repairing all heating system leaks
- Maintaining heating systems
- Installing individual temperature controls or insulated radiator enclosures with temperature controls
- Insulating all pipes for heating and/or hot water
- Insulating steam system condensate tank or water tank
- Installing indoor and outdoor heating system sensors and boiler controls
- Replacing or repairing all steam traps
- Installing or upgrading steam system master venting
- Upgrading lighting
- Weatherizing and air sealing
- Installing timers on exhaust fans
- Installing radiant barriers behind all radiators.

ARTICLE 321 PRESCRIPTIVE MEASURES

- Reporting requirements will be addressed by future rulemaking
 - DOB will be considering the overlap between LL97 requirements and the requirements of LL87 of 2009
- HPD will be working on programs to assist owners with the prescriptive measures
- While LL97 requires one-time reporting in 2025, all buildings that are regulated under Article 321 will need to do more to help the City reach its carbon reduction goals



LL97 ASSISTANCE AND FUNDING

WHAT IS NYC ACCELERATOR?



- A City program to help control costs, meet local law compliance, boost building performance, increase energy savings, and reduce carbon emissions across NYC buildings
 - Provides free technical guidance to help the market transform how our buildings operate and are built
 - Identifies building upgrade projects to help meet emissions limits established under the Climate Mobilization Act
 - Provides no-cost building operator trainings and supports green workforce development
 - Connects building decisionmakers directly with service providers to implement decarbonization projects

WHAT IS NYC ACCELERATOR?



- Who is eligible?
 - Any privately owned NYC building $\geq 5,000$ ft² (new or existing)
 - Smaller buildings referred to partner organizations
- How does it work?
 - Call us and get connected with a dedicated account manager
 - Receive objective advice customized to your needs
- **How much does it cost and what's the catch?**
 - No catch, no cost, no sign-up or commitment

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ACCELERATOR

WHAT SERVICES DOES NYC ACCELERATOR PROVIDE?



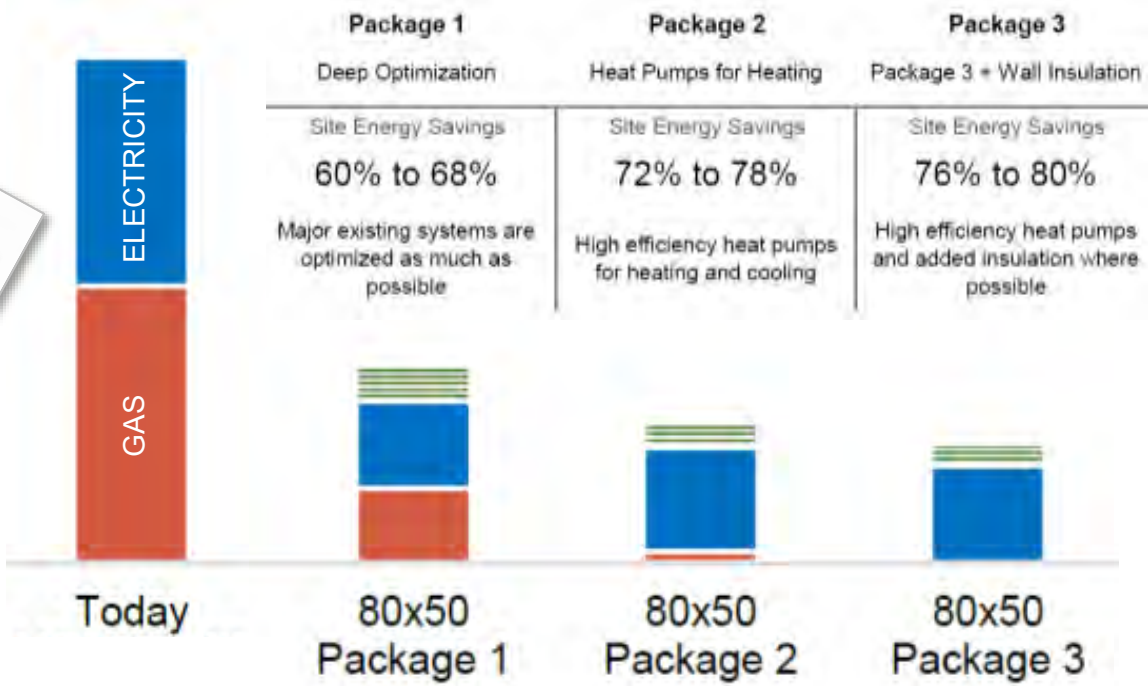
- Identify applicable financial incentives and financing programs, such as NYC PACE
- Provide technical assistance for building upgrades
- Offer expert advice to determine requirements and help meet local energy laws
- Find service providers for energy/carbon reduction projects
- Deliver no-cost online trainings for building operators and stakeholders

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Potential Site Energy Use Reductions for Your Building
850 WEST 553 STREET



NYC ACCELERATOR



Contact NYC Accelerator



Web: www.nyc.gov/accelerator

Email: info@accelerator.nyc

Phone: (212) 656-9202

FUNDING & INCENTIVES

New York State Energy Research and Development Authority (NYSERDA)

- Commercial Buildings Programs
<https://www.nyserda.ny.gov/ny/PutEnergyToWork>
- Multifamily Buildings Programs
<https://www.nyserda.ny.gov/PlanAhead>

FUNDING & INCENTIVES

Utilities Programs

- ConEd Incentives
 - conEd.com/LargeCommercial
 - conEd.com/Multifamily
- National Grid Incentives
 - <https://www.nationalgridus.com/energy-saving-programs>

LOCAL LAW 96 OF 2019

PACE Financing

Financing for energy efficiency and renewable energy projects with long terms and little or no money down



LOCAL LAW 96 OF 2019

- Loans are made using private funds through pre-qualified capital providers
- Loans are repaid as a charge on the property tax bill of the building
- Debt service is sized to the savings from the efficiency/clean energy project
- Debt remains on the property and is transferrable upon sale of the property
- <https://www1.nyc.gov/site/nycaccelerator/resources/pace.page>

ADDITIONAL INFORMATION

For further questions and information, please send queries to GHGEmissions@Buildings.nyc.gov.

An aerial, high-angle photograph of a construction site. The image shows a complex network of steel reinforcement bars (rebar) laid out in a grid pattern across a concrete slab. Several vertical concrete columns are visible, some with rebar protruding from their tops. The overall scene is a dense, organized structure of steel and concrete, typical of a multi-story building's foundation or floor slab preparation. The image has a blue color cast.

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