### Climate Mobilization Act Series: Following the Rules; Unpacking LL97 Rulemaking

At this Climate Mobilization Act Series event, hosted by Building Energy Exchange with support from the Natural Resources Defense Council, learn about these proposed rules and their impact on New York City climate policy compliance.

**Opening Remarks** 

Donna de Costanzo, Director, Eastern Region, Climate & Clean Energy Program, NRDC

Moderator Adam Hinge, Founder, Sustainable Energy Partnerships

#### Speakers:

Gina Bocra, Chief Sustainability Officer, New York City Department of Buildings Marc Zuluaga, Co-Founder, Cadence OneFive Molly Dee-Ramasamy, Director, Deep Carbon Reduction Group, Jaros, Baum & Bolles

November 29, 2022 | 9 to 10:30 am | 1.5 AIA LU|HSW Building Energy Exchange | be-exchange.org



## **PROPOSED RULES FOR LL97**

### November 29, 2022

presented by Gina Bocra, RA, LEED Fellow



# **RULE 103-14**





### **RULEMAKING AND CAPA PROCESS**

- Proposed Rule 103-14
  - Certified and published in the public record on October 11, 2022
  - Public hearing was on November 14
  - Published in the public record again after the hearing
  - Rule becomes effective 30 days after second publishing



### **RULEMAKING CONTENT**

- Guidance on calculations
  - Annual GHG emissions
  - Gross floor area
  - Annual GHG emissions limit
- Guidance on reporting
  - Reporting GHG emissions for multiple buildings and campuses





### **RULEMAKING CONTENT**

- Compliance requirements
  - New buildings
  - Changes in ownership
  - Buildings undergoing full demolition
  - Buildings with property type changes
- Building emission limits
  - Transition to ESPM Property Types
  - Establishing limits beyond 2029



# **EMISSION LIMITS IN LL97**



### **HOW LIMITS WERE ESTABLISHED**

- Using 2017 benchmarking data (LL84)
- Path to 80x50 charted from 2005
- Established a building categorization
- 2024-2029 "warm up" period
- 2030 limits closer to 80x50 path



### **TRAJECTORY TO 80 X 50**





### **BUILDING EMISSION LIMITS**

Limit Groups 28-320.3.1 – Items 1 through 10, Ten Limit Groups for 2024 - 2029

		GHGI Limit
Group	Occupancy Type	(tCO2e/ft <sup>2</sup> )
1	A: Assembly	0.01074
2	B: Business	0.00846
3	E: Educational & I-4: Custodial Care Facilities	0.00758
4	I-1: 24 Hour Residential Care	0.01138
5	F: Factory and Industrial	0.00574
6	B: emergency services, non-production laboratory, ambulatory health care, H: high hazard, I-2: 24 hour medical, I-3: 24 hour under restraint	0.02381
7	M: Mercantile	0.01181
8	R-1: transient residential	0.00987
9	R-2: apartments	0.00675
10	S: Storage and U: Utility and Miscellaneous	0.00426

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# **LIMITS BASED ON ESPM**



### **ASSIGNING PROPERTY TYPES**

Find Products



ABOUT FOR PARTNERS

SEARCH

Q

Industrial Plants

Save at Home New Homes Commercial Buildings

#### https://www.energystar.gov/buildings/benchmark/understand\_metrics/property\_types

Commercial Buildings	Property Types in Portfolio Manager	Retail
Benchmark Get Started Understand Metrics Property Types in Portfolio Manager Property Types Eligible to Receive a 1-100 ENERGY STAR Score	You can use Portfolio Manager to benchmark the performance of any type of building. There a more than 80 choices for building type. This makes it easy for you to identify and compare sim Click on the category below that best describes the use for the majority of your building. From types within each category and how they're defined. Twenty-one of the more than 80 property types are also eligible to receive a 1 – 100 ENERGY S are eligible to receive a 1 – 100 ENERGY STAR score. Choose your category • Banking/financial services	<ul> <li>Automobile Dealership</li> <li>Convenience Store with Gas Station</li> <li>Convenience Store without Gas Station</li> <li>Enclosed Mall</li> <li>Lifestyle Center</li> <li>Retail Store</li> <li>Strip Mall</li> </ul>
How the 1-100 ENERGY	Education	0

#### **Retail Store**

Retail Store refers to individual stores used to conduct the retail sale of non-food consumer goods such as Department Stores, Discount Stores, Drug Stores, Dollar Stores, Hardware Stores, and Apparel/Specialty Stores (e.g. books, clothing, office products, sporting goods, toys, home goods, and electronics). Buildings containing multiple stores should be classified as enclosed mall, lifestyle center, or strip mall.

	Scores	Once
		Parking
	What is Energy Use	Public services
	Intensity (EUI)?	Religious work lip
	The Difference Between	• Retail
	Source and Site Energy	Iechnology/stence
	How Portfolio Manager Calculates Greenhouse Gas Emissions	Services
		Utility
		Warehouse/storage
	animent Derformance	Other (select this option if your property doesn't fit into any of the categories above – read more)



#### **IMPACT ON EMISSIONS LIMITS**

- Assigned limits from the law to each of the ESPM Property Types (PTs)
- Primary criteria for assignment:
  - Aggregate environmental benefit consistent with Building Code based limits
  - Percentile compliance is equal across PTs
- Emissions limits may vary based on BC versus PTs



#### **IMPACT ON EMISSIONS LIMITS** FOR PROPERTIES

#### **Emissions Limits**

• Emissions limits may change

#### Compliance

• Compliance may change

#### **Penalty Amount**

• Penalties may change



### **IMPACT ON 2024-2029 LIMITS**

#### **Limits Increase**

**6%** of Properties see lower limits under ESPM PT than under the BC limits

#### **Limits Decrease**

**23%** of Properties see lower limits under ESPM PT than under the BC limits

**Limits Unchanged** 

**71%** of Properties see no change in their limits based on ESPM PTs

Buildinas

### **IMPACT ON 2024-2029 COMPLIANCE**





# **LIMITS BEYOND 2029**



### **2050 TRAJECTORY**

Carbon neutral by 2050 recognizes ...

- NYC commitment to carbon neutrality
- CLCPA commitment to carbon neutrality
- UNEP direction of Net-zero GHG vs 80% reduction



### **TRAJECTORY TO 2050**

**Comparison of GHG Reduction Trajectories** 



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#### **2030 - 2034 EMISSIONS LIMITS**

- Trajectory of carbon neutral by 2050
- Moving forward with limits based on ESPM PTs
- Updated coefficients for electricity and steam
- 2030 limits updated to maintain ...
  - Consistent compliance across PTs
  - Get on the path to carbon neutral
- Overall compliance rate achieved 24%



### **EMISSION LIMITS**

- Rulemaking includes limits out to 2050
  - Targeting carbon neutral by 2050
- Limits consider improving coefficients:
  - Electricity
    - $\odot~2030$  ... 50% of the 2024 coefficient
    - 2035+ ... Clean grid by 2040
  - Steam
    - $\odot~2030$  ... 96% of the 2024 coefficient
    - 2035+ ... Clean steam by 2050



### **RULEMAKING- CONTENT**

- GHG coefficients for energy sources not in the law
  - 2024 2029 and 2030 2034
  - Rule provides a path for establishing a coefficient for a fuel not covered in the law or rule
- GHG coefficient for utility electricity based on time of use
  - Rule provides a set of calculations and resources; City will continue to look at ways to simplify TOU reporting
- GHG coefficient for campus-style electric systems and other campus-style energy systems
- **GHG coefficient for certain distributed energy resources** 
  - Cogeneration, microturbines, fuel cells, on- or off-site solar, on- or off-site energy storage
  - Note that DER and Clean DER are different



### **RULEMAKING- CONTENT**

- Deductions for Renewable Energy Certificates (RECs)
  - Clarifying that RECs apply only to emissions from electricity consumption
- Deductions for certain clean distributed energy resources
  - On-site Solar
  - On-site Energy Storage (electric)
  - Deduction for these sources is taken against electricity emissions, rewards owners for installing critical infrastructure



### **DOB OUTREACH**

- DOB Communication Channels
  - Service notice will be issued later this year
  - Bulletin or Filing Guide, and detailed report on methodology coming
  - Buildings News
  - Sustainability newsletter
  - DOB Websites
  - Training
- Partnerships ... Urban Green, BEEx, Accelerator, Sust. Help Center, HPD etc.
  - **Targeted outreach** to ~700 impacted properties



# WHAT'S NEXT?





### **EMISSION LIMITS**

- DOB is still planning to study how the limits and reduction targets might be affected by:
  - Introduction of an additional and overlayed "efficiency" metric
  - Researching normalization, such as methods to take density into account
  - Potential impact of RECs
    - City is working with NYSERDA to explore whether additional limits are necessary



### **LL97- MORE TO COME**

- Determination of Penalties, including good faith effort and other mitigating factors
- Requirements for GHG Offsets
- Article 321 implementation
- Advisory Board report



#### CONTACT US AT: GHGEMISSIONS@BUILDINGS.NYC.GOV

#### NYC ACCELERATOR: HTTPS://ACCELERATOR.NYC/

#### PROPOSED RULE: <u>HTTPS://WWW1.NYC.GOV/SITE/BUILDINGS/C</u> <u>ODES/PROPOSED-RULES.PAGE</u>



# Buildings

build safe live safe

myc.gov/buildings

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building energy exchange

# discuss.

#### Moderator

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submit questions via slido.com code: #BEEx



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# thank you.



<u>Urban Green Council</u>