



NYC BUILDING EMISSIONS LAW SUMMARY

April 18, 2019

Groundbreaking climate legislation sets carbon emissions caps for energy use in NYC’s large buildings starting in 2024.

HIGHLIGHTS

- Affects buildings greater than 25,000 square feet
- Sets increasingly stringent limits on carbon emissions per square foot in 2024 and 2030
- Flexibility to comply through renewable energy credits and/or emissions offsets
- Specifies low-cost energy-saving measures (not emissions limits) for some affordable housing
- New Office of Building Energy and Emissions Performance at Department of Buildings
- Strong advisory board mandate to help refine emissions metrics and limits
- Carbon trading study and implementation plan
- Penalties for non-compliance and variances for financial hardship

IMPACT

- Covers ~50,000 buildings and nearly 60 percent of the city’s building area: 59 percent residential and 41 percent commercial (Fig 2).
- Requires 40 percent citywide emissions reductions by 2030 from a 2005 baseline.
- For covered buildings, that’s a 26 percent carbon cut (5.3 million metric tons) from today, the equivalent of shutting down three gas-fired peaker plants like the Ravenswood Generating Station.
- Many buildings are significantly above emissions limits and will require comprehensive retrofits or alternate compliance by 2030.

URBAN GREEN’S ROLE

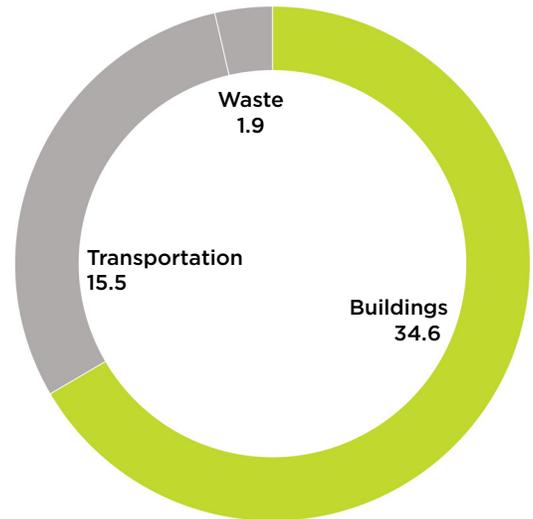
In August 2018, Urban Green’s **80x50 Buildings Partnership** released the *Blueprint for Efficiency*, with consensus recommendations on a building emissions policy from the city’s leading building, energy and environmental stakeholders. Urban Green advanced the *Blueprint* priorities in pursuit of the most equitable and effective law to deliver on the city’s emissions goals.

This law reflects many elements from the *Blueprint*, including: a study of carbon or efficiency credit trading; a timeline that allows efficiency upgrades to align with financing; equipment replacement and tenant turnover; an advisory board to refine mandate metrics and requirements; flexibility to buy green power; a higher bar for city buildings; and unique paths for special cases like rent-regulated buildings and houses of worship.

FIGURE 1

Citywide Carbon Emissions Sources

Building upgrades would transform the carbon landscape since they are responsible for two-thirds of NYC’s annual emissions.

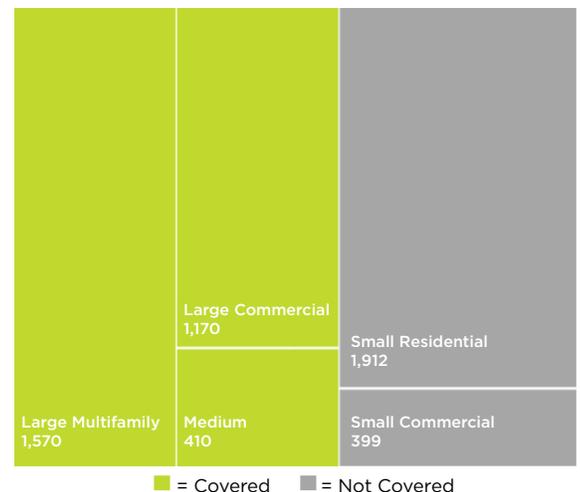


*Millions of metric tons of CO₂e by source
SOURCE: NYC GREENHOUSE GAS INVENTORY 2016

FIGURE 2

Citywide Building Areas

Nearly 60 percent (3.15 billion SF) of NYC building area will be covered by the emissions law. Medium buildings are between 25,000 SF and 50,000 SF.



*Millions of square feet
SOURCE: NYC DEPARTMENT OF PLANNING PLUTO DATASET 2017

BUILDING CARBON EMISSIONS LIMITS

- Limits from 2024-2029 will affect the most carbon-intensive 20 percent of buildings (Fig 3).
- Limits from 2030-2034 are set to affect the most carbon-intensive 75 percent of buildings, with 25 percent under the cap, if based on current Portfolio Manager emissions factors for energy sources (actual impact depends on emissions factors specified in rules no later than Jan. 1, 2023).
- How are building emissions limits determined?
 - Law sets emissions intensity limits (**metric tons of CO₂e per square foot**) for 10 building categories based on Building Code occupancy groups.
 - A building's annual emissions limit equals its emissions intensity limit multiplied by its gross floor area.
- Flexibility for future rulemaking to include more building categories from EPA's Portfolio Manager.
- Very wide distribution in the emissions intensity of covered buildings means significant variation in carbon reduction requirements.

FLEXIBILITY

- Up to 100 percent deduction from annual emissions limit for purchase of credits for renewable energy in NYC or feeding directly into NYC.
- Deductions for purchase of greenhouse gas offsets (up to 10 percent) and peak energy storage for 2024-2029 limits.
- Potential adjustments for buildings more than 40 percent over the 2024-2029 limits based on density or other factors.
- City will study and develop implementation plan for carbon trading by Jan. 1, 2021.

ALTERNATIVE REQUIREMENTS

- Earlier timeline for NYC government buildings: 40 percent emissions reductions by 2025 and 50 percent by 2030.
- Prescriptive path requiring energy savings measures (not emissions limits) for rent-regulated, low-income and subsidized housing and houses of worship.
- Adjustment available for hospitals and healthcare facilities to a percent reduction framework.

FIGURE 4
Implementation Timeline

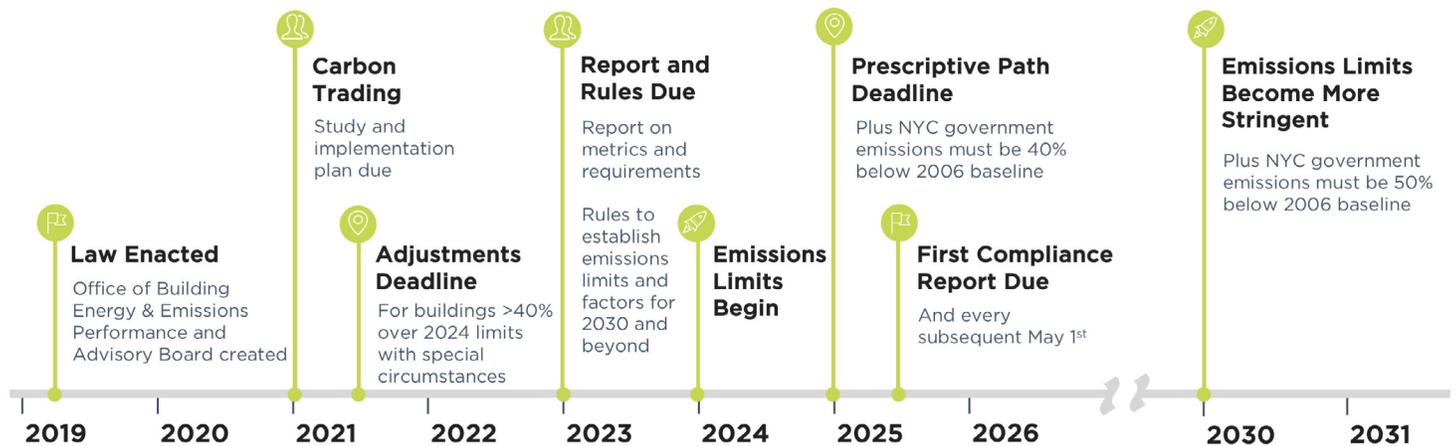
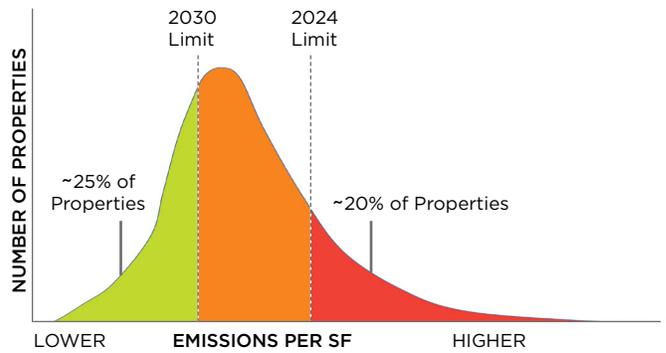


FIGURE 3
Emissions Distribution of Covered Properties



This graph is meant as a conceptual aid and does not represent actual properties or emissions limits.

OFFICE OF BUILDING ENERGY AND EMISSIONS PERFORMANCE

- A new office within the NYC Department of Buildings.
- Oversees implementation of the law, including creating a method for assessing building energy use.
- Works with Department of Buildings to develop rules.

FINES AND COMPLIANCE

- Maximum penalty is the difference between a building's annual emissions limit and its actual emissions multiplied by \$268.
- Penalties for buildings subject to prescriptive path to be determined by rule.
- First compliance report due May 1, 2025 (and every May thereafter).

SUPPORT

- Low-interest loans will be available through a new Property Assessed Clean Energy (PACE) program to finance energy efficiency and green energy through a special assessment on a building's property tax bill.
- Mandated outreach, education and assistance programs, and an expansion of the city's Retrofit Accelerator program is underway.
- Training such as Urban Green's **GPRO** to help building owners and operators improve building efficiency, reducing carbon emissions and energy expenses.