NYC BUILDING EMISSIONS LAW FAQs

November 2020

1. What is the Climate Mobilization Act?

The Climate Mobilization Act is the name of a package of laws passed by the New York City Council on April 18, 2019. Local Law 97 (the building emissions law) is the centerpiece of the package and by far the most impactful. The package includes other important laws related to reducing greenhouse gas emissions, including on sustainable energy loans (called PACE financing), mandatory green roofs and an assessment of energy storage. You can read more about the Climate Mobilization Act on the New York City Council landing page and press release.

2. How do I determine if my property is subject to Local Law 97?

In general, if a property is subject to the NYC Benchmarking Law (requiring annual energy and water use reporting), it is subject to the building emissions law. The city issues an annual Covered Buildings List here.

3. What's the emissions limit for my building?

The building emissions law sets emissions intensity limits (metric tons of CO2e per square foot) for 10 building categories based on Building Code occupancy groups. But the answer for each individual building is complex.

Many, such as those with more than 35 percent rent-regulated units, are not subject to emissions limits at all (see more below). And mixed-use buildings, such as a residential apartment building with a ground floor supermarket or retail store, will have limits that reflect their unique blend of occupancy groups.

Below are the 2024 and 2030 carbon emissions limits for multifamily apartments, offices and hotels. The law provides limits in *metric tons* of carbon dioxide equivalent; the following table and Metered.nyc express these numbers in *kilograms* of carbon dioxide equivalent (one metric ton equals 1000 kg). Limits for other building types are listed in the law.

	2024-29 limit (kg of CO_2e per SF)	2030-34 limit (kg of CO_2e per SF)
Occupancy Group **R-2** (includes apartments)	6.75	4.07
Occupancy Group **B** (includes offices)	8.46	4.53
Occupancy Group **R-1** (includes hotels)	9.87	5.26

4. How much carbon does my building emit?

To see a building's annual emissions intensity based on the most recent benchmarking submissions, search by borough-block-lot (BBL) number or type in your street address at Metered.nyc. Scroll down to "GHG Emissions / sq.ft." which is highlighted in green. Multiply that emissions intensity by a building's total area (in square feet) to determine annual carbon emissions for the applicable year.

Calculating total building emissions depends on an "emissions factor" applied to each source of energy (e.g. natural gas, electricity or district steam) based on its associated carbon pollution (see #14 below for more). The benchmarking platform and Metered.nyc use emissions factors from the EPA's Portfolio Manager tool.

5. How do I reduce my building's carbon emissions?

Saving energy will be the most effective way to reduce a building's carbon emissions. Different fuel sources have different carbon intensities, so targeting the most carbon-intensive fuels will yield the biggest carbon savings (see #14 below for details on how much carbon comes from each type of energy).

A low-cost first step is training building operations staff on energy efficiency best practices. Changes to equipment schedules, temperature setpoints and other characteristics can reduce energy use without added cost. Urban Green's GPRO Operations & Maintenance Essentials will help enable building staff to make these adjustments and save energy immediately.

Operational changes can yield at least 5 percent overall energy savings, but if bigger cuts are required then a building audit should be conducted.[1] A licensed consultant will perform the audit to identify equipment for replacement, and potential upgrades that can save more energy from the building's heating, cooling and lighting systems. For example, many steam heat systems throughout NYC offer significant fuel-saving opportunities. Our 2019 report, Demystifying Steam, outlines changes and upgrades that can cut building energy use by 20 percent or more.

Once a list of capital improvements is known, then planning and implementation can begin. The city's

Retrofit Accelerator is a free program for building owners who need assistance with their project. Their efficiency advisors can help plan the sequence of work and explain financing options.

[1] *Operations and Maintenance Best Practices: A Guide to Achieving Operational Efficiency. Prepared by Pacific Northwest National Laboratory for the Federal Energy Management Program U.S. Department of Energy. Read more from the DOE: https://www.energy.gov/sites/prod/files/2013/10/f3/omguide_complete.pdf*

6. Does the law include new financing options to help pay for energy efficiency work?

Along with the building emissions law, the City Council passed Local Law 96 to establish a loan program called Property Assessed Clean Energy (PACE) financing. PACE loans fund energy efficiency and renewable energy projects. They have low (or no) upfront cost, low interest rates and longer terms, and they are repaid through a building's property tax bill.

NYC's PACE program is sponsored by the Mayor's Office of Sustainability (MOS) and administered by the New York City Energy Efficiency Corporation (NYCEEC) and the New York City Department of Finance. Read more about the PACE program, including eligibility and terms, on the NYCEEC website.

7. What if I can't comply by reducing energy use alone?

In addition to energy efficiency, the law provides some flexibility for buildings to comply with any of the following:

- Achieving some or all of the required reductions by purchasing credits for renewable energy generated in NYC or directly sinking into the NYC grid;
- Deducting up to 10 percent of the annual emissions limit by purchasing greenhouse gas offsets (details to be determined by rule, but typically includes measures like credits for planting trees); and
- Building carbon trading, where buildings that surpass the goal can sell to buildings that cannot. The city is required to study and recommend a program by 2021.

A new department within the NYC Department of Buildings will also have the authority to grant exceptions, for reasons such as financial hardship and practical constraints (like lack of access to building systems due to existing leases).

Ultimately, failure to comply will result in fines.

8. Which renewable energy credits or greenhouse gas offsets can I purchase?

Renewable energy credits (RECs) are limited to energy generated or sinking into the NYC grid. The law allows up to 100 percent offset of building emissions through the purchase of RECs from a source "located in, or whose output directly sinks into, the zone J load zone," which is NYC's electric grid zone. Further details will be specified in Department of Buildings rules.

Greenhouse gas offsets (like credits for planting trees) have no express geographic limitation, though they are capped at 10 percent of a building's annual emissions limit. Again, further details will be specified in Department of Buildings rules.

9. Are new buildings built to the most recent energy code required to comply?

Yes. Covered buildings are required to comply with emissions limits or other applicable requirements regardless of energy code compliance.

10. How large are the fines?

The law creates fines for two types of violations, with a third type also considered a misdemeanor:

Violation Type	Maximum Fine
Failure to file a report	$0.50 per building square foot, per month
Exceeding emissions limit	$268 for each metric ton over the building's limit
False statement (misdemeanor)	$500,000

For example, a 50,000 square-foot multifamily residential building emitting 350 metric tons of carbon would be 12.5 metric tons over its 2024-2029 limit and pay a fine of not more than $3,350.

Fines are assessed on an annual basis.

11. What about affordable housing?

The law includes different requirements for many types of affordable or income-limited housing. For example, income-restricted buildings owned by qualifying limited-profit housing companies are exempt from annual emissions limits until 2035. Buildings with more than 35 percent rent-regulated units, HDFC cooperatives, and buildings that participate in project-based federal housing programs are not subject to emissions limits. Instead, these buildings are required

to implement a prescriptive package of energy savings measures listed in section 28-321.2.2 of the law *or* choose to meet their later 2030 cap in the year 2024.

12. Are hospitals given different requirements?

Yes. Owners of nonprofit hospitals and healthcare facilities have the option to apply for a percent reduction requirement rather than a cap. If they apply by July 2021, they are required to reduce carbon emissions 15 percent below 2018 levels for 2024-2029, and 30 percent below 2018 levels for 2030-2034.

13. What's the difference between "carbon emissions" and "energy use"?

Buildings use many forms of energy, including electricity, natural gas, various types of fuel oil and district steam. Carbon emissions come primarily from burning fossil fuels.[1]

These different forms of energy use release different amounts of carbon. To calculate building carbon emissions, each type of energy use must be multiplied by an "emissions factor" (also called a "greenhouse gas coefficient") to convert from energy use to carbon emitted (see #14 below for the specific emissions factors in the law).

One of the key reasons this matters is that changes to the source of electricity flowing into the NYC electrical grid will change the emissions coefficient for electricity. Right now, carbon-free nuclear power from Indian Point provides about 25 percent of NYC's electricity. When this facility shuts down in 2021, more carbon-intensive sources will fill the gap until clean energy like offshore wind can be brought online.

[1] In this context, carbon emissions are synonymous with greenhouse gas emissions. A greenhouse gas is any gas with potential to trap warmth in the atmosphere. Carbon dioxide is a greenhouse gas and it serves as the basis for measuring the impact of all greenhouse gases. Read more from the EPA: https://www.epa.gov/ghgemissions/overview-greenhouse-gases

14. How much carbon comes from each type of energy?

The building emissions law sets specific emissions factors for the 2024-2029 limits. It also requires that emissions factors applicable for the 2030 limits be set by rule no later than January 1, 2023.

For the 2024-2029 limits, the law sets electricity as the most carbon-intensive energy source per unit of on-site energy. These coefficients, except for district steam, align with the coefficients used in the EPA's Portfolio Manager and the EPA eGRID 2016 coefficients**,** shown in the following table.

Energy Source	2024 Carbon Intensity Factors (kg of CO_2e per kbtu)	EPA Carbon Intensity Factors (kg of CO_2e per kbtu)	Percent Difference from EPA
Electricity (NYC)	.08469	.0847	equivalent
No. 4 Fuel Oil	.07529	.07529	equivalent
No. 2 Fuel Oil	.07421	.07421	equivalent
Natural Gas	.05311	.05311	equivalent
District Steam	.04493	.0664	32.3% lower

Owners will also have the option to calculate electricity carbon intensity based on time of use. Further details will be specified in Department of Buildings rules.

15. Where can I find the text of the legislation?

The original building emissions law is available on the New York City Council website here. A number of its provisions were amended in July 2019, September 2020 and November 2020.